

أثر العلاج النفسي بالقرآءة في تخفيض قلق الامتحان  
لدى طلبة جامعة اليرموك

عدنان محمد فرح  
قسم الصحة النفسية  
فراس حموري  
قسم علم النفس  
جامعة اليرموك  
جامعة قطر

جاءت هذه الدراسة نتيجة لاستمرار وجود الوصمة الاجتماعية المصاحبة للإرشاد والعلاج النفسي في المجتمعات الشرقية. حيث حاولت الكشف عن فاعلية استخدام المواد المكتوبة أو ما يعرف بإستراتيجية العلاج بالقرآءة في تخفيض قلق الامتحان لدى عينة من الطلبة الجامعيين. وبشكل محدد حاولت الدراسة التعرف على درجة الاختلاف في درجة قلق الامتحان في الاختبار البعدي بين أفراد المجموعة التجريبية التي تعرضت للمعالجة وأفراد المجموعة الضابطة التي لم تتعرض للمعالجة. تكونت عينة الدراسة من (٥٥) طالبا وطالبة من طلبة البكالوريوس في جامعة اليرموك تم اختيارهم بناء على حصولهم على أعلى درجات في مقياس ساراسون لقياس قلق الاختبار. وقد تم توزيعهم الى مجموعتين، تجريبية تكونت من (٢٨) طالبا وطالبة وضابطة تكونت من (٢٧) طالبا وطالبة. كما تم إعداد دليل لعلاج قلق الامتحان اعتمادا على عدد من المصادر العربية والأجنبية حيث وزع على أفراد المجموعة التجريبية أثناء فترة المعالجة. أظهرت النتائج وجود فروق ذات دلالة إحصائية لصالح المجموعة التجريبية تفرد بشكل رئيسي لتعرض أفرادها للمعالجة. أوصت الدراسة بضرورة تعميم إستراتيجية العلاج النفسي بالقرآءة على المختصين في الإرشاد والعلاج النفسي للاستفادة منها في علاج قلق الامتحان والمشكلات التكيفية المشابهة. كما أوصت بضرورة إجراء المزيد من الدراسات حول فاعلية هذه الطريقة مقارنة بالطرق التقليدية المعروفة في العلاج النفسي.

## The Effect of Bibliotherapy in Reducing Test Anxiety Among Jordanian College Students

Adnan M. Farah\*

Firas A. Hammouri\*\*

### Abstract

The purpose of this study was to investigate the effect of bibliotherapy upon reducing test anxiety among Jordanian college students. Fifty five (55) Participants were randomly assigned either to experimental or controlled group. Students in the experimental group were exposed to a specially designed self-help bibliotherapy training program. The content of the program includes six areas thought to be important to overcome test anxiety. The study called for pre-post two group experimental design. An adapted Arabic version of Sarason's Anxiety Test was administered as a pre and post test to all participants. T-Test was used to determine the equivalence of the experimental and the control groups before treatment. Analysis of Covariance was used to test differences between groups at the post and follow-up test. statistical analysis revealed a significant difference between the two groups on the post test sores. The results of this study indicated that the bibliotherapy program did significantly help the experimental group to lower their test anxiety. The findings also suggest that test anxiety can be effected by various means of counseling and psychotherapy.

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### Introduction

During the last few years, several studies have documented that people in nonwestern countries underutilized mental health services (Tsai, Teng, & Sue, 1980; Atkinson, Ponterotto, & Sanchez 1984; Tracey, Leong, & Glidden, 1986; Atkinson, Whiteley, & Gim, 1990; and Farah, 1992). One explanation for the under utilization of mental health services in these countries is the shame and stigma associated with psychological problems that leads to

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\* Dept. of Mental health University of Qatar

\*\* Dept. of Psychology Yarmouk University

seek help from other help providers (Atkinson et al. 1990).

Therefore, to provide psychological help, it is very important for counselors and psychologists in these countries to utilize different types of interventions and techniques other than individual or group psychotherapy.

One Technique that could be utilized to overcome the cultural barriers and stigma associated with seeking psychological help is bibliotherapy. Bibliotherapy is defined as "The application of selected literature as a therapeutic tool to help individuals develop desirable attitudes and make satisfying personal and social adjustments" (Corsini, 1987). The process of Bibliotherapy consists of three stages: (1) identification- readers see a character, setting, or situation as being real; (2) catharsis- readers recognize that others have problems or questions similar to their own; (3) insight-readers realize that something can be done and one or more solutions are possible ( Baruth & Phillips, 1976). The focus of bibliotherapy can be remedial or developmental (Schrank, 1980). Remedial bibliotherapy involves the clinical use of guided reading with individuals experiencing emotional or behavioral problems. Developmental bibliotherapy refers to the use of guided reading with regular readers as a dynamic interaction between a reader's personality and literature.

Historically, bibliotherapy has been practiced in two distinct forms. The first, and oldest, was classified as the reactive form of bibliotherapy (Gladding & Gladding, 1991). It dates back to 1930s, where any written material that helps individuals modify their thoughts, feelings, or behaviors was considered potentially therapeutic (Gambrill, 1985). The second and the newer form of bibliotherapy according to Hynes and Hynes-Berry (1986) is the

interactive bibliotherapy, where the process of growth, change and healing that occur in clients is attributed not so much in reading of material by individuals as in the guided dialogue about the material between the client and the counselor.

Bibliotherapy first gained popularity in counseling and psychotherapy as a technique used by trained counselors and psychotherapists to treat hospital patients (Lindemann & Kling, 1968-69). More recently, however, bibliotherapy has become an important technique in Counseling and Psychotherapy to help individuals who seem to be reluctant or angry and refuse to talk about personal issues. It is also considered helpful with students who are shy or quiet and need information to begin talking more fully about what they consider a sensitive topic. Therefore, using books within school guidance and counseling program can be a valuable aid for the school counselor who can have a readily available library that includes a widely varied topics to help students to develop better understanding of themselves and their problems (Timmerman, Martin, & Martin, 1989).

Interest in the field of bibliotherapy has largely grown out of its promise and cost effectiveness in terms of staff, time and money. Further, the potential stigma attached to traditional psychotherapeutic technique may be prevented because most of the work is completed away from therapy or counseling sessions and therapeutic encounters are brief.

The field of Bibliotherapy is expanding and appears to be gaining wider acceptance as a therapeutic tool. During the last few years, the mental health and counseling literature (Craighead, McNamara, & Horn, 1984; Riordan, & beggs, 1987; Timmerman,

Martin, & Martin, 1989; Daisy, 1993) has reflected greater recognition of Bibliotherapy.

Bibliotherapy is sometimes practiced on a one-to-one or group basis in hospitals, schools, clinics, and in gerontological, mental health, and correctional settings. It has been employed to overcome several adjustment and psychological problems including depression, self-concept, stress management, maturation, alcohol abuse (Mahalik & Kivlighan, 1988; Calhoun, 1987; Powell, & Enright, 1990; Jalongo, 1983; and Gaydish, 1988)

Although several studies have been conducted on Bibliotherapy, no attempts have been made to investigate its use in the Arab world. On the other hand, the phenomenon of test anxiety has been investigated by many researchers and several intervention strategies have been used to help students overcome this problem (e.g., Hembree, 1988; Hill & Wigfield, 1984; D'Alelio & Murray, 1981; and Tryon, 1980).

In Middle East, several studies have been carried out on test anxiety as related to different variables such as achievement motivation (Alsafti, 1995), muscle relaxation (Alrehani, 1981), rational and irrational beliefs (Farah, Atoum, and Al-Ali, 1992), and self-esteem (Shuaib, 1988).

The present study was conducted to assess the efficacy of bibliotherapy in aiding a sample of Jordanian college students to reduce their test anxiety. The purpose of the current study was to examine the effect of bibliotherapy in reducing test anxiety. More specifically, the study addressed the following two questions:

1. Are there any significant differences between the experimental and the control groups on post-test anxiety scores as a result for the application of self-help Bibliotherapy training program.
2. Are there any significant differences between the experimental and the control groups on the follow-up test anxiety scores as a result for the application of self-help Bibliotherapy training program.

## METHOD

### Participants

Potential participants for this study were 329 undergraduate students at Yarmouk University who were screened for test anxiety by completing an adapted version of Sarason test Anxiety Scale (STAS) (Sarason, 1980). To be eligible, the participant had to indicate interest in participating in a self-help treatment program on reducing test anxiety, not to be involved in psychotherapy during the time of the study, and meet the STAS criterion cutoff score of 22. Because the mean score for the overall sample was (17.64) with a standard deviation of (4.72).

The final sample included 55 participants (17 men and 38 women). Six different majors were represented and class distribution was as follows: 9 % freshmen, 26 % sophomores, 38 % juniors, and 27 % were seniors. The participant's average age was 19.5 years. The participants were randomly assigned either into an experimental group (N=28), or a control group (N=27).

## **Measures**

An adapted Jordanian version of Sarason test Anxiety Scale (STAS) (Oadeh,1988) was used as a pretest ,post-test and a follow-up assessment instrument. The test is a 33-item scale designed to measure test anxiety. The mode of response to items was a yes/no format, with 1=Yes, 0=No . Scores range from 0 (the lowest level of test anxiety) to 33 the highest level of test anxiety.

The Cronbach alpha reliability for the STAS was reported to be .81 . Evidence of criterion validity was obtained by correlating the STAS with an adapted version of Suinn Test Anxiety Behavior Scale (Suinn, 1969) The correlation was 0.73 .

## **Manual**

The bibliotherapy manual consisted of six subjects thought to be important to overcome test anxiety. The content was implemented on the basis of the reactive form of bibliotherapy, where participants did not meet with researchers while using the self-help manual. The manual included the following components:

- (a) the nature of test anxiety and stress management (Powell & Enright, 1990).
- (b) Relaxation training (Cormier, 1992).
- (c) Presentation of cognitive strategies, namely positive self-talk (Rathus, 1987); distraction (Powell & Enright, 1990) and thought stopping (Cormier, 1992).
- (d) time management (Suttertley & Donnelly, 1981).
- (e) Good and bad reading habits (Hamam, 1984).
- (f) test taking strategies (Sumner, 1985).

## **Procedure**

Participants were randomly assigned either into an experimental group (N=28) or a control group (N=27). Both groups were administered the STAS as a pre assessment measure prior to 1st college exam. Participants in the experimental group received the treatment manual, and were informed by written memorandum that the manual is a self-help bibliotherapy manual especially designed to reduce the level of test anxiety they have demonstrated previously on the test anxiety scale.

After 5 weeks, prior to 2nd exam, the treatment manual was drawn and participants were retested with the STAS. Additionally, participants were given the STAS again prior to the final exam as a follow-up assessment to determine the long-term effectiveness of treatment.

## **Research Design and Data Analysis**

This Study used a pre-post two group experimental design (Campbell & Stanley,1966) .T-test was utilized to determine the equivalence of the experimental and the control groups before treatment. Analysis of Covariance (ANCOVA) was conducted to test differences between the two groups at the post-test and follow-up test, using the pretest scores as the covariate (Porter & Raudenbush,1987).

## **RESULTS**

Means and standard deviations of the experimental and the control groups for test anxiety scores at the three assessment times are presented in table 1.



**TABLE 1**  
**Means and Standard Deviations for Test Anxiety Scores**  
**at Three Times of Assessments for**  
**the Experimental and the Control Groups**

Times of Assessment	Experimental		Control	
	M	SD	M	SD
Pretest	24.61	1.75	24.44	1.81
post-test	20.57	3.12	23.63	2.57
follow-up	19.89	3.64	23.19	2.99

Table 1 shows that the mean total scores for the experimental group in the post-test (M=20.57) and follow-up test (M=19.89) were lower than those scores for the control group in both assessment times (M=23.63) at the post-test, (M=23.19) at the follow-up test.

Experimental and control groups were compared by means using t-test analysis based on pretest scores on the STAS. Results revealed no statistically significant differences between groups before treatment (see Table 2).  $t = 0.34$   $p < 0.736$  which indicated that the two groups were equivalent on the anxiety measure.

**TABLE 2**  
**T-Test Analysis of Test Anxiety for Experimental**  
**and Control Group on the Pretest**

Group	Mean	t-Value	p
Experimental (N=28)	24.61	0.34	0.736
Control (N=27)	24.44		

To determine the effectiveness of the treatment upon the experimental group a post-test was conducted one month after the pretest (see Table 3). the analysis of Covariance was utilized to test differences between the experimental and the control group, using the pretest scores as the covariate.

TABLE 3  
Analysis of Covariance for  
Test Anxiety Scores on the Post-Test

Source	df	SS	MS	F	p
Treatment	1	135.951	135.951	18.421	.05*
Error	52	383.769	7.38		
Total	53	563.709			

\* Significant at  $p < .05$  .

Table 3 displays the results of the ANCOVA comparing the test anxiety scores of the participants on pre and post assessment for the two groups. Inspection of results revealed a significant main effect for treatment, and the experimental group scored significantly lower on test anxiety as compared to the control group,  $F(1,52)=18.421$ ,  $p < .05$  which indicated that the treatment did lower the test anxiety level among participants in the experimental group.

Further, to determine the long-term effectiveness of the treatment upon the experimental group a follow-up test was conducted one month after the post-test and the analysis of Covariance was utilized to test differences between the experimental and the control group, using the pretest scores as the covariate.

TABLE 4  
 Analysis of Covariance for  
 test anxiety scores on the Follow-up test

Source	df	SS	MS	F	p
Treatment	1	158.63	158.63	16.38	.05*
Error	52	514.329	9.891		
Total	53	737.745			

\* Significant at  $p < .05$ .

Results as shown in table 4 revealed a significant main effect for treatment,  $F(1,52) = 16.38$ ,  $p < .05$ , which suggests that the participants in the experimental group had a lower test anxiety scores ( $M = 19.89$ ) than the participants in the control group.

## DISCUSSION

Results of this study suggests that bibliotherapy has a significant impact on reducing test anxiety. Results of ANCOVA indicated that participants in the experimental group demonstrated a lower level of test anxiety, as compared with participants in the control group.

Findings of this study are consistent with previous research such as (Cutforth, 1980; Saltzberg, 1981; and Register et al., 1991), but not with other studies such as (Kohutck, 1983; and Smith, 1992).

One of the many limitations of this study, however, was the sample size. Duplications of similar studies in a larger and different sample would further add to the significance of this effort.

Despite the limitations of the study, apparently the findings have several practical implications. First, for the counselors, there are clear implications with respect to the use of bibliotherapy as a helping tool to assist clients to overcome psychological and adjustment problems. Second, for counselor educators, self-help manuals such as that used could be incorporated into professional preparation of school counselors and other mental health professionals.

Future researchers might benefit from focusing on several issues such as: (a) the effectiveness of bibliotherapy compared with other counseling approaches such as individual or group counseling. (b) the effect of some variables on the effectiveness of bibliotherapy (i.e., self-concept, locus of control personality type). (c) the differential impact of bibliotherapy for different kinds of clients, as well as the assessment of a longer term impact of this strategy.

In conclusion, the findings of this study support the assumption that test anxiety can be effected by various means of counseling and psychotherapy. Therefore, the utilization of bibliotherapy in the helping relationship is significantly important, specially in some nonwestern cultures where the stigma is still associated with the traditional counseling techniques.

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