Effects of Bibliotherapy Counselling Techniques on Stress Management among Students in Schools of Nursing in Kaduna State, Nigeria

Muhammad Lawal Habibu (PhD)¹; Zohaib Hassan Sain²; Zainab Zubairu (PhD)³; and Uthman Shehu Lawal (PhD)³

¹Department of Psychosocial Rehabilitation, Shehu Idris Institute of Health Sciences and Technology, Kaduna State University, Makarfi Campus, Nigeria. ²Superior University, Punjab, Pakistan. ³Department of Educational Foundations, Kaduna State University, Kaduna, Nigeria.

DOI: https://doi.org/10.62154/e3w9j879

Abstract
This study investigated the effects of bibliotherapy counselling techniques on stress among students in nursing schools in Kaduna state, Nigeria. Two hypotheses were formulated and tested. A quasi-experimental design involving pre-test and post-test was adopted for the study. The population consisted of 3 Schools of Nursing, from which a sample size of 2 schools was selected. A purposive sampling technique was used to select 30 participants with a medium stress level. Fifteen (15) participants were selected from each school, totalling 30. The Stress Scale adapted from Balarabe (2007) was the instrument used to collect data. Descriptive statistics were used to analyse the demographic data of the participants. The hypotheses were tested using a paired sample t-test at a 0.05 significance level. Findings revealed a significant effect of the Bibliotherapy Counselling Technique on the emotional (p=.000) and psychological (p=.000) components of stress. Based on the findings, it was concluded that bibliotherapy counselling techniques effectively reduced the emotional and psychological components of stress among students. The study recommended that counsellors collaborate with librarians to create a specialized collection of books and materials that support BTCT. This ensures students have easy access to high-quality resources tailored to their needs. Government and research centres should encourage ongoing research into BTCT within nursing schools to explore new and innovative ways to apply bibliotherapy. This could include studying the effects of different genres of literature, varying lengths of interventions, and combining BTCT with other stress reduction techniques.

Keywords: Bibliotherapy Counselling Techniques, Emotional Components, Psychological Components, Stress Reduction, Students.

Introduction
Nursing students worldwide face significant stress due to demanding academic schedules, clinical placements, and emotional burdens associated with patient care (Bruneau & Pehrsson, 2016). This has led to a growing interest in exploring alternative stress-reduction techniques, with bibliotherapy emerging as a promising and accessible intervention (Neeraja, 2023). Studies have shown that bibliotherapy can effectively reduce stress in students by providing emotional support, promoting coping mechanisms, and fostering
self-awareness (Tandon et al., 2023). Using bibliotherapy for stress reduction among nursing students is also gaining traction in Africa. Research suggests that bibliotherapy can be a culturally sensitive and cost-effective approach to addressing stress in this population (Akinbode, 2022). However, more research is needed on bibliotherapy for African nursing students.

Further studies are needed to explore the effectiveness of bibliotherapy programs tailored to African nursing students' unique experiences and contexts (Akinbode, 2022). More research needs to directly investigate the effects of bibliotherapy counselling on stress reduction among nursing students in Nigeria. However, the Nigerian context presents a fertile ground for exploring bibliotherapy due to the high prevalence of stress among nursing students (Adewale et al., 2021). Studies investigating bibliotherapy in other student populations within Nigeria have shown promising results, suggesting its potential application for nursing students (Eke et al., 2020).

Bibliotherapy is generally defined as the purposeful selection of reading materials to achieve therapeutic goals (Devi & Rajkumar, 2020). This can include fiction, non-fiction, poetry, and even graphic novels (Crockett, 2022). The therapeutic process is facilitated by discussion, reflection, and creative activities prompted by the reading material (Zhang et al., 2021). Counselling techniques utilizing bibliotherapy can be broadly categorized into two main approaches: directive and non-directive (Devi & Rajkumar, 2020). Directive techniques involve the counsellor actively selecting and assigning readings based on the client's specific needs (Crocker & Schaefer, 2021). Non-directive techniques allow the client more autonomy in choosing materials that resonate with them, with the counsellor facilitating discussion and reflection (Epston et al., 2021).

Using reading materials to promote mental well-being, bibliotherapy offers a promising approach to addressing this stress (Lin et al., 2020; Green & Myrick, 2020). Several studies have shown positive outcomes. A 2021 study by Kim et al. found that a bibliotherapy intervention incorporating self-help books on stress management significantly reduced stress levels in nursing students compared to a control group. Similarly, a 2020 study by Lin et al. demonstrated that bibliotherapy combined with group discussions on self-care practices decreased stress and improved emotional awareness in nursing students. These findings suggest that bibliotherapy is an effective tool for stress reduction, promoting emotional well-being in this population. The effectiveness of bibliotherapy interventions may be influenced by the specific techniques employed. Studies by Chang et al. (2021) and Park et al. (2022) utilized bibliotherapy programs that included cognitive-behavioural therapy (CBT) principles. CBT helps individuals identify and modify negative thought patterns that contribute to stress. The positive outcomes observed in these studies suggest that incorporating CBT elements into bibliotherapy interventions mainly benefits nursing students' stress reduction.

The benefits of bibliotherapy extend beyond just stress reduction. Studies by Xu et al. (2020) and Yang et al. (2022) suggest that bibliotherapy interventions can also enhance
self-esteem and empathy in nursing students. These findings highlight the potential of bibliotherapy to promote not only stress management but also overall well-being. Added to this, studies of McEwan et al. (2022), Corey (2021), Ellis et al. (2021), Firth et al. (2020), Gibson and Stuart (2020), Yalom (2020), Farber and McMahon (2019) revealed that bibliotherapy combined with counselling techniques significantly reduced stress and anxiety symptoms in medical students. In other words, there is a positive association between bibliotherapy interventions and reductions in anxiety and depression symptoms, factors that contribute to the emotional component of stress among medical students. Moreover, research conducted by Okeke et al. (2024), Park et al. (2023), Li et al. (2022), Nguyen et al. (2022), Mendes et al. (2021, Abubakar (2021), Martins et al. (2020); Lopez et al. (2019); Hridy (2015) found that BTCT as a significant intervention in reducing psychological distress, academic stress and improving self-efficacy as well as physical stress reduction. However, some research suggests the need for further exploration and refinement of bibliotherapy techniques. A study by Chen et al. (2022) found that while bibliotherapy showed promise in reducing stress, the effects were not significantly different from traditional group counselling. This suggests that the specific counselling techniques employed alongside bibliotherapy may be crucial in maximizing effectiveness. Additionally, research exploring the bibliotherapy interventions for nursing students in Kaduna state, Nigeria, still needs to be completed.

Problem Statement
Students in nursing schools, particularly in Kaduna State, Nigeria, face significant academic pressures and emotional challenges that can lead to high stress levels. Traditional counselling approaches may not always be accessible to all students. Bibliotherapy, a counselling technique that uses guided reading to address emotional concerns, presents a potentially cost-effective and accessible alternative. However, the effectiveness of bibliotherapy counselling techniques in specifically managing stress among nursing students in Kaduna State still needs to be explored. Furthermore, research on stress management for nursing students in Nigeria has primarily focused on traditional counselling methods or general stress management techniques in student populations. While there is some research on bibliotherapy in educational settings within Nigeria, studies must investigate its efficacy for stress management in nursing schools, particularly in Kaduna State. This research gap leaves unanswered questions about the following:

i. What is the difference between the pre-test and post-test emotional component of stress among students in nursing schools exposed to the bibliotherapy counselling technique in Kaduna State, Nigeria?

ii. What is the difference between the pre-test and post-test physical component of stress among students in schools of nursing exposed to Bibliotherapy counselling technique in Kaduna State, Nigeria?
Objectives
The objectives of the study are to:
   i. Find out the effect of bibliotherapy counselling techniques on the emotional component of stress among students in Schools of Nursing, Kaduna State, Nigeria.
   ii. Determine the effect of Bibliotherapy counselling technique on physical component of stress among students in Schools of Nursing, Kaduna State, Nigeria.

Hypotheses
The following null hypotheses were formulated and tested in this study:
Ho1: There is no significant difference between the pre-test and post-test mean score of emotional components of stress among students in schools of nursing exposed to Bibliotherapy counselling technique in Kaduna State, Nigeria.
Ho2: There is no significant difference between the pre-test and post-test mean scores of physical stress components among students in nursing schools exposed to the bibliotherapy counselling technique in Kaduna State, Nigeria.

Materials and Methods
This research employed pre-test and post-test quasi-experimental research to investigate the effect of the bibliotherapy counselling technique on stress reduction among students in nursing schools in Kaduna state, Nigeria. Pre-test post-test design is one of the most frequently used quasi-experimental research designs in which a group of research participants or subjects is presented, given some treatment or independent variable manipulation, and then post-tested. If the pre-test and post-test scores differ significantly, the difference may be attributed to the independent variable (Colman, 2015). The pre-test and post-test design, as depicted by Emmanuel (2013), is presented as follows.
Research Design Illustration:
EG1== O1==X1== O2
Key to the Illustration:
EG1 = Experimental Group One (Bibliotherapy Counselling Technique Group)
O1 = Pre-Treatment Observation for Bibliotherapy Counselling Technique.
O2 = Post-Treatment Observation for Bibliotherapy Counselling Technique
X1 = Treatment for Group One
The population of this study comprised all the public schools of nursing identified with stress (200-level students) in Kaduna State, Nigeria. The general population of the students was two hundred and fourteen (214), but the target population was fifty (50) students. Altogether, 30 married and unmarried students from two schools were identified as samples. The assumption adherents guided the choice of 200-level students who had stayed in the school for more than a year, were familiar with it, and were not in the final year. The sample size for this study consists of 30 participants. A purposive sampling method was used to select two (2) schools of nursing (i.e. 200 level students with both
married and unmarried) out of three (3) schools of nursing in Kaduna state. Again, the purposive sampling method was used to select the sample based on their characteristics/symptoms of stress. Fifteen (15) participants (8 married and seven unmarried) were selected in each sample school, making a total number of thirty (30) students. After the selection, the researcher assigned fifteen (15) students to self-management counselling techniques for treatment group A. This is because the researcher used group counselling exercises, which interestingly corresponds to the view of Egbochuku (2008) and Gravetter and Forzano (2009), who strongly uphold that there is no consensus regarding the specific number deemed appropriate for group counselling. Ezhumalai (2018) similarly suggested a sample size of 3 to 12, which relates to the assertion of Ray (2000), who emphasized the advantage of smaller sample sizes. Cohen and Marison (2000) have also indicated the appropriateness of smaller groups in counselling interventions. The selection of subjects was made based on the scores of the Stress Scale (SS). Those who scored marks from 41 to 80 met the inclusion criteria and were selected for the study.

The research instruments used in this study are Stress and its Effects on Adjustment and Performance (SEAP) and Stress Scale (SS), adapted from Balarabe's (2007) self-rating scale, which was used as a screening instrument to identify individuals with the presence of vulnerable/severe stress. SS is a thirty (30) items questionnaire measured on four (4) scale where 4 = Always (A), 3 = Most of the Time (MT), 2 = Sometimes (ST), and 1 = Rarely (R). Each item represents diagnostic criteria for the component of stress. The researcher modified and used it to assess the participants' stress before and after treatment and examine the effect of the two treatment techniques used in this study. SS comprises two sections. The first is the bio-data, and the second is designed to elicit the participants' emotional, physical and psychological stress components. The Stress Scale has 30 items where participants can score a minimum of 30 points and a maximum of 120. The items are to be measured as follows:

4 Points stand for Always (A)
3 Points stand for Most of the Time (MT)
2 Points stand for Sometimes (ST)
1 Point stands for Rarely (R)

A score from 0 to 30 indicates low stress; scores between 31 and 60 reveal vulnerability to stress, while scores from 61 to 90 reveal seriously vulnerable stress 91 and above are extreme stress indicators. The SS responses ranged from low-stress to medium-stress and high-stress.

The Stress Scale (SS) was subjected to validation after being given to five experts in the Department of Educational Psychology and Counselling, Ahmadu Bello University, Zaria; they have confirmed its face validity. Consequently, the comments, corrections and suggestions obtained from their scrutiny were incorporated into the new draft of SS and have been represented after corrections to confirm its validity quality. The pilot testing was
conducted by administering copies of the SS to 30 (thirty) students identified with stress at Kaduna State College of Nursing and Midwifery, Kafanchan. The institution was chosen because it is not part of the selected institutions used in the main study but possessed characteristics similar to those of the selected institutions. The test re-test method of reliability was employed to establish the reliability of the Stress Scale (SS). The instrument was administered twice for two weeks to the same participants identified with stress at Kaduna State College of Nursing and Midwifery Kafanchan. The two sets of scores (first and second test) were subjected to statistical analysis to arrive at Cronbach Alpha statistics, and a reliability co-efficient of 0.806 was obtained, which indicates that the instrument in use is reliable. The data collected after administering the research instrument were statistically organized and analysed. The descriptive statistics of frequency counts and percentages were used to present the participants' demographic data. Means and standard deviation were used to answer research questions. The hypotheses were analysed using paired t-test statistics at a 0.05 significance level using the Statistical Package for Social Sciences (SPSS).

Results
The results obtained from this study read as follows:

Demographic Data
Table 1: Distribution of Participants by Marital Status

<table>
<thead>
<tr>
<th>Group</th>
<th>SNABUTHZ</th>
<th>KSCNMTK</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Unmarried</td>
<td>7</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>15</td>
<td>30</td>
</tr>
</tbody>
</table>

Based on table 1, there are eight (8) married and seven (7) unmarried students in School of Nursing Ahmadu Bello University Teaching Hospital Zaria (SNABUTHZ). Similarly, there are eight (8) married and seven (7) unmarried students in Kaduna State College of Nursing and Midwifery, Tudun-wada, Kaduna (KSCNMTK). Therefore, there are thirty (30) participants for the study.

Table 2: Distribution of Participants by Treatment Group

<table>
<thead>
<tr>
<th>Group</th>
<th>SNABUTHZ</th>
<th>KSCNMTK</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMCT</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>BTCT</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

Table 2 above shows that there are fifteen (15) students in the School of Nursing Ahmadu Bello University Teaching Hospital, Zaria (SNABUTHZ), who had their treatment with self-management counselling technique (SMCT). Similarly, fifteen (15) students in the Kaduna State College of Nursing and Midwifery, Tudun-wada, Kaduna (KSCNMTK), had their
treatment with the bibliotherapy counselling technique (BTCT). Therefore, there are thirty (30) participants in the study.

**Testing of Hypotheses**

The following hypotheses were tested at a 0.05 level of significance:

**Hypothesis One:** There is no significant difference between the pre-test and post-test mean scores of emotional components of stress among students in schools of nursing exposed to the Bibliotherapy counselling technique in Kaduna state, Nigeria.

**Table 3:** Sample t-test on the Effect of Bibliotherapy Counselling Technique on the Emotional Component of Stress among Students

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>T</th>
<th>Df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>15</td>
<td>30.66</td>
<td>1.39</td>
<td>35.51</td>
<td>28</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>15</td>
<td>12.06</td>
<td>1.38</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 above indicates a mean of 30.66 for the pre-test and a mean of 12.06 for the post-test; t=35.51 and p=.000. The p-value is lower than the 0.05 level of significance. This analysis confirms that the technique effectively reduced the emotional component of stress among the students. Therefore, the null hypothesis, which states that there is no significant difference between the pre-test and post-test mean scores of emotional components of stress among students in schools of nursing exposed to the Bibliotherapy counselling technique in Kaduna state, Nigeria, is currently rejected.

**Hypothesis Two:** There is no significant difference between the pre-test and post-test mean scores of physical components of stress among students in schools of nursing exposed to the Bibliotherapy counselling technique in Kaduna state, Nigeria.

**Table 4:** Sample T-Test on Effect of Bibliotherapy Counselling Technique on Physical Components of Stress among Students

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>T</th>
<th>Df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>15</td>
<td>27.73</td>
<td>1.16</td>
<td>40.64</td>
<td>28</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>15</td>
<td>13.06</td>
<td>2.28</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 indicated a mean of 27.73 for the pre-test and a mean of 13.06 for the post-test; t=40.64 and p=.000, which is lower than the 0.05 level of significance. The result indicates that the technique is effective in reducing the physical component of stress the students. Therefore, the null hypothesis, which states that there is no significant difference between the pre-test and post-test mean score of physical components of stress among students in
schools of nursing exposed to the Bibliotherapy counselling technique in Kaduna state, Nigeria, is currently rejected.

**Discussion of Findings**
The finding of this study revealed a significant effect of the bibliotherapy counselling technique (BTCT) in reducing the emotional component of stress among students in nursing schools in Kaduna state, Nigeria. This finding is consistent with the previous findings of McEwan et al. (2022), Corey (2021), Ellis et al. (2021), Firth et al. (2020), Gibson and Stuart (2020), Yalom (2020), Farber and McMahon (2019) which revealed that bibliotherapy combined with counselling techniques significantly reduced stress and anxiety symptoms in medical students. In other words, there is a positive association between bibliotherapy interventions and reductions in anxiety and depression symptoms, factors that contribute to the emotional component of stress among medical students. Also, the study revealed a significant effect of bibliotherapy in reducing the physical component of stress among students in nursing schools in Kaduna state, Nigeria. This finding is in agreement with the research revelations of Okeke et al. (2024), Park et al. (2023), Li et al. (2022), Nguyen et al. (2022), Mendes et al. (2021, Abubakar (2021), Martins et al. (2020); Lopez et al. (2019); Hridy (2015) which found that BTCT as a significant intervention in reducing psychological distress, academic stress and improving self-efficacy as well as physical stress reduction.

**Conclusion**
In conclusion, this study solidifies the efficacy of the Bibliotherapy Counselling Technique (BTCT) in mitigating stress among nursing students in Kaduna State, Nigeria. Aligning with prior research highlighting BTCT’s effectiveness in lessening the emotional and physical burdens of stress in medical students, this study suggests a promising link between bibliotherapy interventions and reduced anxiety, depression, and general psychological distress among students. Furthermore, considering the replicability and cost-effectiveness of bibliotherapy interventions, BTCT emerges as a desirable strategy for large-scale implementation within educational institutions, particularly in resource-constrained settings. Future research can explore the tailoring of BTCT programs to address specific student populations and stressors, along with investigating the long-term effects of BTCT on student mental health and academic performance.

**Contributions and Limitations of the Study**
Stress management is crucial for student well-being and academic success. This study sheds light on a potentially cost-effective and accessible intervention. Bibliotherapy is a less explored technique compared to traditional counselling methods. This study adds to understanding its effectiveness for stress management among nursing students in Kaduna State, Nigeria. This reaffirms previous research evidence supporting bibliotherapy as a tool for stress management in nursing students. However, the small sample size limits the
generalizability of the findings to a larger population. Thus, further studies with more participants and random assignment to groups can strengthen the evidence for bibliotherapy's effectiveness. Also, investigate the long-term effects of bibliotherapy on stress management among nursing students.

**Recommendations**

Based on the findings of this study, the following recommendations are advanced for improving the use of the bibliotherapy counselling technique (BTCT) among nursing students:

i. Counsellors should collaborate with librarians to create a specialized collection of books and materials that support BTCT. This ensures that students have easy access to high-quality resources tailored to their needs.

ii. Government and research centres should encourage ongoing research into BTCT within nursing schools to explore new and innovative ways to apply bibliotherapy. This could include studying the effects of different genres of literature, varying lengths of interventions, and combining BTCT with other stress reduction techniques.

**References**


