Effect of rational-emotive adult education intervention on burnout symptoms among primary school teachers in Southeast Nigeria

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Abstract

Objective: To determine the effect of a rational-emotive adult education intervention (REAEI) on burnout symptoms among primary school teachers in Southeast Nigeria.

Methods: Primary school teachers with burnout symptoms were randomised to treatment or control condition. Treatment was a 16-week REAEI programme delivered in 32 group therapeutic sessions. The Teachers' Burnout Inventory (TBI) score was recorded before and after therapy and at a three-month follow-up.

Results: Overall, 27% (86/320) of the sample of primary school teachers had burnout symptoms. TBI scores were statistically significantly lower in the treatment group compared with the control group both after therapy and at the three-month follow-up.

Conclusion: In this sample of primary school teachers, burnout symptoms were alleviated by use of a REAEI program.

Keywords
Rational-emotive adult education intervention, burnout symptoms, primary school teachers, Nigeria, burnout, irrational beliefs

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Introduction

First described in 1974 by Freudenberger, 'burnout' is a reaction to chronic emotional and interpersonal job stress and is characterized by exhaustion, cynicism, and professional inefficacy. Teachers have one of the most stressful occupations and their long-term work stress can lead to burnout which may affect their physical and mental health, lower the quality of their work and in turn impair their students’ professional development. Teacher stress is common in Nigerian school settings. For example, one study involving 432 teachers in Southeast Nigeria found that there was a high prevalence of burnout which manifested as symptoms of emotional exhaustion, de-personalization, reduced personal accomplishment, psychological distress and low levels of job satisfaction.

Burnout symptoms are considered to result primarily from irrational beliefs. Indeed, there is evidence to show that irrational beliefs significantly predict burnout behaviors, and maladaptive thinking patterns correlate with burnout behaviors. Therefore, rational-emotive behavior therapy (REBT) programmes may be of use in helping to reduce burnout symptoms. One study found that a rational-emotive health education intervention (REHEI) based on REBT principles was significantly effective in stress management and irrational beliefs among college teachers. Based on the procedures of REHEI, a rational-emotive adult education intervention (REAEI) program was developed to help primary school teachers reduce burnout symptoms. The purpose of this study was to investigate the effects of REAEI in a sample of primary school teachers in Southeast Nigeria.

Methods

The study took place between January and July 2019. Primary school teachers in Southeast Nigeria experiencing self-reported symptoms of burnout (e.g., emotional exhaustion, de-personalization, reduced personal accomplishment, psychological distress and/or low levels of job satisfaction) were identified following an advertising campaign. All participants provided written informed consent and written permission to conduct the study was also obtained from their relevant heads of department.

Using computer-generated random number allocation software, participants were randomly assigned to either the treatment group or the control group (no therapy). Research assistants, therapists and data analysts involved in the study were not aware of the participants’ treatment allocation. Treatment was a 16-week REAEI programme. As in a previous study, the REAEI intervention was designed to help participants acquire cognitive-behavioural skills and techniques to help reduce their burnout symptoms. The aim of treatment was to enable participants to challenge their irrational beliefs that may be the cause of their burnout symptoms. Therapeutic techniques such as relaxation, stretching, and cognitive restructuring exercises were used. The REAEI program covered 32 therapeutic sessions each lasting two hours for 16 consecutive weeks (i.e., two sessions per week. Four similar follow-up sessions over two weeks occurred three months after the last therapy session. Therapists who delivered the REAEI program had formal training as counsellors and psychologists and had expertise in the application of REBT and burnout interventions.

All participants had a pre-test (two weeks after enrolment), post-test (16 weeks) and follow-up assessment (after 3 months) and the Teachers’ Burnout Inventory (TBI) was used to assess burnout symptoms. The 21-item questionnaire was developed for this study from previous studies. The TBI assesses three areas...
of the participants’ burnout symptoms which are: exhaustion (five items); cynicism (four items); professional efficacy (six items). A 7-point scale ranging from never (0) to always (6) is used to assess symptoms. Using data from this study, the overall reliability index for TBI was estimated to be 0.88 and for exhaustion, cynicism and professional efficacy the reliability indices were estimated to be 0.73, 0.68 and 0.78.

**Statistical analyses**

Based on data from previous studies, the study aimed to recruit a representative sample of 290 teachers. G*Power analysis showed that the study had a statistical power of 0.80 with an effect size of 0.46, and alpha of 0.05. All other statistical analyses were performed using the SPSS® statistical package, version 23.0 (SPSS Inc., Chicago, IL, USA) for Windows®. Repeated measures analysis of variance was used in the analysis and a P-value ≤0.05 was considered statistically significant.

**Results**

Of the 320 teachers that provided written informed consent, 86 were selected by the investigators who used the TBI to assess burnout symptoms. Therefore, the prevalence of burnout was 27%. The subjects were randomized to treatment (n = 43; 18 males, 25 females) or control (n = 43; 16 males, 27 females). No demographic data were recorded.

At the pre-test (baseline) assessment, there was no difference between groups in burnout symptoms (mean ± SD, 95.3 ± 5.3 and 94.3 ± 6.2) for treatment and control groups, respectively. At the post-test assessment, there was a statistically significant reduction in burnout symptoms among participants in the treatment group (18.7 ± 2.8) compared with those in the control group (94.0 ± 6.0; P < 0.0001). At the follow-up assessment, there was a further reduction in burnout symptoms among participants in the treatment group (17.0 ± 1.8) when compared with participants in the control group (89.2 ± 5.4; P < 0.0001).

**Discussion**

This study showed that participation in a 16-week REAEI program produced a significant reduction in burnout symptoms among primary schools’ teachers in Southeast Nigeria when compared with no therapy. Importantly, the reduction in burnout symptoms was evident three months after the intervention had stopped. These findings support a previous study that found REBT programs had a significant beneficial effect on burnout symptoms in students.

The present results are also in accordance with a study that showed REEI was significantly effective in the stress management and irrational beliefs among college teachers in Nigeria. In addition, our findings confirm other studies that have shown burnout symptoms primarily result from irrational beliefs. Crucially, irrational beliefs can build maladaptive cognitive patterns which lead to professional burnout.

Limitations of the current study, include a small sample size and lack of demographic data which meant relationships between various factors could not be investigated. However, the REAEI program appears to produce positive results and certainly warrants further investigation in a larger study. Based on the findings of the current study, primary school teachers in Southeast Nigeria with burnout symptoms may be helped by a REAEI program.

**Declaration of conflicting interest**

The authors declare that there are no conflicts of interest.
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