Evaluating Data from A Work Engagement Intervention among Nigerian History Lecturers

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ABSTRACT: History lecturers who approach their work positively are more likely to be more engaged in their work than those who do not. Nigerian history lecturers have not been examined in terms of how psychological interventions can improve their work engagement. The present research examined the research dataset of an online rational emotive behavior therapy (online REBT) on work engagement among Nigerian history lecturers at higher education institutions. The sample consisted of 31 history lecturers, 16 of whom were randomly assigned to the online REBT group and 15 to a waiting-list control group. A repeated measures ANOVA was conducted at a level of 0.05 probability using IBM Statistical Package for Social Sciences software. Comparing the two groups, the dataset shows that history lecturers in the online intervention group exhibited significantly higher work engagement scores than those in the waiting list control group (p=.000). The one-month follow up dataset reveal that history lecturers who participated in the online REBT intervention continued to feel engaged at work compared to those in the waiting list control group (p=.000). Thus, a significant improvement in work engagement scores of history lecturers was associated with the online REBT intervention. Future studies with a larger sample size are needed.

KEYWORDS: Dataset, Employees, History Lecturers, Online Intervention, Online REBT, Work Engagement

INTRODUCTION

Work engagement is a positive affective-motivational state characterized by high levels of energy, devotion and absorption at work (Schaufeli et al., 2002; Schaufeli & Bakker, 2010). When employees are engaged at work, they are emotionally committed, persistent, intrinsically motivated, proactive, and constantly striving to improve their performance and achieve their goals (Bailey et al., 2017; MacLeod & Clarke, 2011; Markos & Sridevi, 2010). Work engagement is a possible indicator of high levels of innovation and performance (Bakker et al., 2008). Research has shown that work engagement impacts job performance (Anyalor et al., 2018; Bakker & Bal, 2010). There is a relation between job performance and work engagement, according to a previous study (Khusanova et al., 2021). In terms of intervention research, Knight et al. demonstrate that a participatory intervention increases work engagement (Knight et al., 2017). Research suggests that higher education institutions in Nigeria are experiencing declining levels of performance and engagement among lecturers (Alabi, 2017). However, lecturers who approach their jobs positively are more likely to be more engaged in their work (Alabi, 2017). The present research examined the research dataset of an online rational emotive behavior therapy (online REBT) on work engagement among Nigerian history lecturers at higher education institutions.
higher education institutions. Online counseling interventions can be provided via websites, e-mail, video conferencing, instant messaging, and social media applications (Haryati, 2020).

In higher education institutions, history lecturers are the subject specialists who teach students who are majoring in history and international studies (Alabi, 2017; Bruno-Jofré & Schiralli, 2002). In addition to conducting independent historical research, they collaborate with colleagues from other institutions to carry out research (Alabi, 2017; De Oliveira, 2008). Most history lecturers interpret their work conditions in a way that negatively impacts their work engagement (Aggarwal, 2020; Alabi, 2017; Fru, 2015; van Hover & Yeager, 2004). It has been reported that history lecturers are more likely to be more engaged at work if they view their role positively (Alabi, 2017; Fru, 2015). However, Nigerian history lecturers have not been examined in terms of how psychological interventions can improve their work engagement.

Researchers found that psychological intervention containing rational emotive behavioral therapy (REBT) content can increase engagement at school (Asogwa et al., 2020). The REBT intervention has been shown to improve well-being, performance, and work ability in a number of studies (Ogbuanya, Eseadi, Orji, Ede, et al., 2017; Ogbuanya, Eseadi, Orji, Ohanu, et al., 2017; Turner & Barker, 2013). The present research examined the research dataset of an online rational emotive behavior therapy (online REBT) on work engagement among Nigerian history lecturers at higher education institutions. Due to this, the researchers expected that by the end of the online REBT intervention, the work engagement outcome of history lecturers in the intervention group would be significantly higher than that of the control group, and such engagement would continue through follow-up.

**METHODS**

**Study Participants**

Study participants were history lecturers in higher education institutions in Nigeria. The preliminary stage of the study examined 120 history lecturers for eligibility. Among the 31 history lecturers in the eligible sample, 16 were randomly assigned to participate in the online REBT, while 15 were placed on a waiting-list control group. The socio-demographic details of the history lecturers based on group did not differ significantly based on age \[ t(29) = -0.697, \ p = 0.49 \], gender \[ \chi^2 (1) = 0.267, \ p = 0.44 \], educational degree \[ \chi^2 (2) = 1.928, \ p = 0.38 \], and number of years teaching experience \[ \chi^2 (2) = 1.455, \ p = 0.53 \]. On average, history lecturers in the online REBT group were 45.56±9.41 years old, and that of the waiting-list group was 47.80±8.39 years old (See Table 1).

**Material**

We collected data about age, gender, highest educational qualification, and years of teaching experience. The lecturer’s work engagement was assessed using the Utrecht Work Engagement Scale (UWES) (Schaufeli & Bakker, 2003). The scale has 17 items measuring vigor (6 items), absorption (6 items), and dedication (5 items). Each item is rated on a 7-point scale, from 0 (never) to 6 (always). This rating scale has been validated by other researchers (Schaufeli et al., 2002; Schaufeli & Bakker, 2004; Storm & Rothmann, 2003; Yi-wen & Yi-qun, 2005). The UWES’s total Cronbach’s alpha value in this study is 0.75.
Table 1. The participating lecturers’ demographic profile

| Characteristics | Category            | Intervention Group M (SD) | Waiting-list Group M (SD) | test value | P  |
|-----------------|---------------------|---------------------------|---------------------------|------------|----|
| Age             |                     | 45.56 (9.41)              | 47.80 (8.39)              | -0.697     | .49|
|                 |                     | n (%)                     | n (%)                     |            |    |
| Gender          | Male                | 6 (46.2)                  | 7 (53.8)                  | .267       | .44|
|                 | Female              | 10 (55.6)                 | 8 (44.4)                  |            |    |
| Educational     | Bachelor’s degree   | 5 (71.4)                  | 2 (28.6)                  | 1.928      | .38|
| Qualification   | Master’s degree     | 4 (57.1)                  | 3 (42.9)                  |            |    |
|                 | Doctorate degree    | 7 (41.2)                  | 10 (58.8)                 |            |    |
| Years of Teaching | < 5 years        | 6 (66.7)                  | 3 (33.3)                  | 1.255      | .53|
| Experience      | 5-10 years         | 4 (50)                    | 4 (50)                    |            |    |
|                 | >10 years           | 6 (42.9)                  | 8 (57.1)                  |            |    |

Procedure

An experimental design involving a controlled group approach was used in this study for data collection. The online REBT intervention consisted of an 8-week program delivered via telegram. Once a week, participants met for the online intervention program. During each meeting, the participants discussed work engagement issues with their peers for 45 minutes. In the first and second sessions, the intervention incorporated REBT principles to discuss topics such as how to understand work engagement, the importance of work engagement, understanding how work engagement impacts relationships with co-workers, and strategies to improve and maintain work engagement. Between the third and sixth sessions, REBT-specific methods were used to increase work engagement. Each participant provided feedback on his or her progress between the seventh and eightieth sessions. One month after the treatment concluded, a follow-up period of two weeks was conducted. A repeated measures ANOVA was conducted at a level of 0.05 probability using IBM Statistical Package for Social Sciences software. In order to test for sphericity, Mauchly’s test was applied. For violations of the sphericity assumption, Greenhouse-Geisser estimations of sphericity are used if epsilon is less than or equal to 0.75, but if epsilon exceeds 0.75, Huynh-Feldt correction is used (Field, 2008). Sidak was used to perform posthoc analyses.

RESULTS AND DISCUSSION

Pre-test UWES data were similar between history lecturers in the online REBT group (M=19.50, SD=1.75), and those on the waiting list (M=19.07, SD=1.71). Since the sphericity assumption was violated by Mauchly’s test [x² (2)=64.74, p=.000, ε=.53], researchers used the Greenhouse-Geisser correction for data interpretation. The dataset revealed that group had a significant effect on UWES scores of the history lecturers [F (1, 29) =546.71, p=.000, η²=.95]. Statistically significant effects of time on UWES scores of history lecturers were found [F (1.05, 30.51) =453.37, p=.000, η²=.94]. In addition, the dataset show a significant group and time interaction effect on the UWES scores of the history lecturers [F (1.05, 30.51)=446.56, p=.000, η²=.94] (See Table 2). This significant group and time interaction effect on history lecturers’ work engagement scores is shown in Figure 1.
Table 2. Repeated measures ANOVA results for history lecturers’ work engagement (effect of group, time, and interaction effects)

| Variables    | Intervention Group | Control Group | rmAnova | Effect | F-ratio | df | $\eta^2$ | 95%CI       |
|--------------|--------------------|---------------|---------|--------|---------|----|---------|-------------|
| UWES         | M  | SD  | M  | SD  |         |     |         |             |
| Pre-test     | 19.50 | 1.75 | 19.07 | 1.71 | G      | 546.71* | 1, 29 | .95      | [18.65, 19.92] |
| Post-test    | 45.69 | 4.09 | 19.20 | 1.32 | T      | 453.37* | 1.05, 30.51 | .94      | [31.31, 33.58] |
| Follow-up    | 45.94 | 3.94 | 19.13 | 1.46 | G x T  | 446.56* | 1.05, 30.51 | .94      | [31.43, 33.64] |

*P<.05

Figure 1. The group and time interaction effect on the work engagement scores

Table 3. Post hoc analyses for the UWES scores by Group

| (I) Group        | (J) Group     | Mean Difference (I-J) | Std. Error | Sig. | 95% CI |
|------------------|---------------|-----------------------|------------|------|--------|
| Intervention     | Control       | 17.91*                | .77        | .000 | 16.34, 19.48 |
| Control          | Intervention  | -17.91*               | .77        | .000 | -19.48, -16.34 |

A post hoc analysis by group conducted with Sidak indicates that history lecturers in the online REBT group (Mean difference = 17.91, standard error = .77, p =.000; 95% CI: 16.34, 19.48) had significantly higher mean UWES scores at the posttest than history lecturers in the waiting-list group (see Table 3). Based on the posthoc analysis by Time, it is shown that history lecturers who participated in the online REBT intervention were able to maintain posttest work engagement scores at follow-up (Mean difference = -.092, standard error = .115, p=.818, 95%CI: -.384, .200) (see Table 4).
The Sidak post hoc technique which examined the Group x Time interaction effects data, shows that at pretest, the UWES scores of history lecturers in the intervention group were significantly alike to those of the control group ($Mean\ difference=.43$, standard error=.62, $p=.492$, 95%CI: -.84, 1.71). The posttest data for the UWES scores of history lecturers in the intervention group were significantly higher than those in the control group ($Mean\ difference=26.49$, standard error=.11, $p=.000$, 95%CI: 24.22, 28.75). Furthermore, when follow-up was carried out, data obtained show that UWES scores were significantly higher for history lecturers in the intervention group than those in the control group ($Mean\ difference=26.80$, standard error=1.08, $p=.000$, 95%CI: 24.59, 29.02) (see Table 5).

In this study, our dataset demonstrates that the online REBT intervention significantly increased work engagement scores among history lecturers. According to follow-up data, participants who had completed the online REBT intervention program continued to show positive outcomes. Recent research by Eseadi et al. (2022) show that a REBT intervention increased engagement scores of student participants from university history departments. A similar finding was reached by Asogwaa et al. (2020), who observed that psychological interventions incorporating REBT strategies can be effective in increasing engagement in school settings. Also, Bresó et al. (2011) showed that psychological interventions can be used to increase engagement at school. The study by Knight et al. (2017) illustrates how interventions can be used to increase employee engagement at work. In addition to the results of this study, it is important to mention that good leadership behavior can help maintain employee engagement (Breevaart & Bakker, 2018; Cheng et al., 2012; Vincent-Höper et al., 2012). Employee work engagement can also be affected by organizational resources (Bakker & Albrecht, 2018). The significance of the current study cannot be understated. Based on a randomized controlled trial design, dataset on the effectiveness of online REBT was obtained. We were able to compare within-group as well as between-group differences concerning the level of work engagement of the lecturers using experimental and control groups dataset. It is recommended that future studies use longitudinal design and experimental methodology to further examine changes in work engagement among history lecturers. It is essential that counselors adhere to ethical considerations when delivering their services in the context of online counseling intervention (Eseadi, 2022; Haryati, 2020).
CONCLUSION
In this study, the effectiveness of online REBT intervention on work engagement among history lecturers in Nigerian higher education institutions was determined based on the dataset obtained from the research participants. It is concluded that the online REBT intervention resulted in a significant improvement in work engagement scores among history lecturers. We must acknowledge that the lecturers' irrational beliefs were never assessed despite the fact that this was a REBT intervention. Because of this, one of the limitations of this study dataset is the fact that variables that could have provided insight into the underlying mechanisms of change have been ignored. Through assessing the irrational beliefs of history lecturers, a better understanding of the mechanism of change may be gained in future interventions. So, this can assist in the development of future interventions that will work the same way. Because the sample size is very limited, further research with a larger sample size is required. A future study would benefit from incorporating other measures of work engagement and measures of irrational beliefs among history lecturers. Structured and semi-structured interviews may prove useful in such a study.

ETHICS STATEMENT
The Faculty of Education Research Ethics Committee at the University of Nigeria approved this study. By electronically completing the informed consent form, participants indicated their willingness to participate in the study.

CONFLICT OF INTEREST
The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

AUTHOR CONTRIBUTIONS
BMD and CE initiated the research. BMD and CE designed the research method and conducted the study. All authors agree to be accountable for the content of the work.

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DATA AVAILABILITY STATEMENT
The original contributions presented in the study are included in the article. Further inquiries can be directed to the corresponding author.

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