Effect Of Rational Emotive Behaviour Therapy On Depression Of Students With Hearing Impairment In Enugu State, Nigeria

Ezema Edith Obianuju[1], Animba Ijeoma Evelyn[1], UGWU, Agatha Chinwe[2], Agbo Okechukwu Emmanuel[3], Ameh Alison Otini Patience[2], Osim Happiness Ukamaka[1], Omeje Martina Onyemaechi[2], UGWU, Ndidiamaka Cynthia[2], Ishiwu Evelyn Nkeiruka[2], Ogugua Chioma Maryann[2], V. C.Onu[2] & Amaeze, Fidelis Eze[2]

[1]Enugu State University of Science and Technology.
[2]University of Nigeria Nsukka.
[3]Federal College of Education, Eha-Amufu.
Amaeze, Fidelis Eze (Corresponding Author) fidelis.amaeze@unn.edu.ng

Abstract
The study investigated the effects of rational emotive behaviour therapy (REBT) on depression of students with hearing impairment in Enugu State, Nigeria. The study was guided by three research questions and three hypotheses. The study employed quasi-experimental research design. Specifically, the non-equivalent pretest posttest control group design was employed. The population of the study comprised 49 SS-two students drawn from the two secondary schools, out of which 32 are males; while 17 are females. The entire population was used as the study sample. This is because the population is small and of manageable size and thus requires no sampling. Students Depression Questionnaire (SDQ) adapted from Goldberg Depression Questionnaire. The SDQ was face validated by three experts. The experiment lasted for six weeks. Cronbach's Alpha was used to establish the internal consistency co-efficient of SDQ to be 0.881. Mean and Standard Deviation for research questions while Analysis of Covariance (ANCOVA) was used to test the hypotheses at 0.05 level of significance. The effect size of the treatment was determined using the partial eta value which was subjected to Cohen's decision (1988) which is given thus: 1.00 (Very Large), 0.80 (Large), 0.50 (medium) and 0.20 (small). It was found that Rational Emotive Behaviour Therapy is effective in the reduction of depression in students with hearing impairment compared to those in the conventional counseling. The effectiveness of REBT is irrespective of the gender of people with hearing impairment. It was recommended that the guidance counsellors should be properly trained through the intervention of REBT experts using the principals of REBT in order to properly apply these principles in reducing depression of students with hearing impairment. The male and female students who have manifestations of depression and its symptoms should be subjected to the principles of REBT by the guidance counsellors.

Keywords: Ratinal Emotive Behaviour Therapy, Depression and Students with Hearing Impairment.

Introduction

The rise in depression cases among students with hearing impairments is becoming a serious concern for those involved in education. This issue stems from the various socio-psychological challenges these students face, often linked to difficulties in communication. Impairment refers to damage to a part of the body, representing a biological condition that indicates a loss or dysfunction in anatomy and physiology (Ozoji, 2010). It can also be viewed as an individual's inability to effectively use a malformed part of their body (Onwubulu, 2017). When this impairment affects the ears, it's classified as hearing impairment. This term broadly encompasses individuals who are deaf or hard of hearing (Ozoji, Unachukwu & Kolo, 2016). Essentially, hearing impairment exists on a spectrum, ranging from those who cannot hear at all to those

who can hear somewhat, often with the assistance of hearing aids. It represents a total or partial loss of hearing ability in one or both ears (World Health Organization WHO, 2020).

It is a defect in one or more parts of sensory organ of hearing, which can be the nerve that delivers the sound to the brain or the part that interprets the sound (Onwubolu, 2017). The implication is that, when the part of the ear that receives sounds is effective and part of the brain that interprets it is not, hearing impairment can also occur. The president of Speech Pathologist and Audiologists Association in Nigeria (SPAAN) Julius Ademokeyo during a news conference to commemorate the 2020 month of hearing and speech, reported that globally about 466 million people are suffering hearing impairment and 8.5 million Nigerians also suffer hearing impairment as against 7.3 million in 1999 (Premium Times, 2020). It is also estimated that by 2050, close to 2.5 billion individuals may have some degree of disabling hearing loss. (WHO,2024).

Hearing impairment can stem from issues in one or more parts of the auditory system, whether it's the nerve that transmits sound to the brain or the brain's ability to interpret those sounds (Onwubolu, 2017). This means that if the part of the ear responsible for picking up sounds is functioning well, but the brain isn't processing them correctly, hearing loss can still happen. During a news conference marking the 2020 month of hearing and speech, Julius Ademokeyo, the president of the Speech Pathologist and Audiologists Association in Nigeria (SPAAN), shared that around 466 million people worldwide are dealing with hearing impairment, with 8.5 million of those being Nigerians up from 7.3 million in 1999 (Premium Times, 2020). Furthermore, projections suggest that by 2050, nearly 2.5 billion people could experience some level of disabling hearing loss (WHO, 2024).

Hearing impairment can impact individuals in various ways, which is why it's categorized into different types. These include conductive hearing loss, sensorineural hearing loss, mixed hearing loss, and central hearing loss (Onwubolu, 2017). Conductive hearing loss happens when there's an obstruction in air conduction, hindering the proper transmission of sound waves through the external auditory canal and middle ear. On the other hand, sensorineural hearing loss results from damage to the cochlea or the inner ear, and unfortunately, this type is permanent. Mixed hearing loss is a combination of issues affecting the outer, middle, and inner ear simultaneously. Lastly, central hearing loss arises from damage to the brain, leading to central deafness. In this case, while the peripheral ear and auditory nerve might be functioning, the central connections and auditory pathways could be compromised. Consequently, students with hearing impairments may experience any of these types of hearing disabilities mentioned above.

Students with hearing impairments often show a range of behaviors, such as struggling to understand spoken words or sometimes completely ignoring them. They might also display behavioral issues or have a hard time adjusting socially. You might see them scream to express feelings like joy, frustration, or a need for something. They often imitate their peers' responses and may occasionally tilt their heads toward their better ear. Additionally, they can have a short attention span, which can lead to further behavioral challenges (Onwubolu, 2017).

Hearing impairment comes in various degrees. A study by Simens Hearing Aids (2017) categorizes these levels as none, mild, moderate, moderate to severe, severe, and profound. For someone with normal hearing, the threshold is between 0-25 dB, meaning they can hear sounds without any trouble. Mild hearing impairment ranges from 26-40 dB, where individuals may struggle to hear soft speech but can catch sounds in a quiet environment. Moderate impairment falls between 41-55 dB, making it tough to hear sounds when there's background noise. Those with moderate to severe impairment have a threshold of 56-70 dB and can only hear loud speech. Severe impairment ranges from 70-90 dB, where individuals typically need hearing aids or loud voices to hear anything. Finally, profound hearing impairment is classified as 91 dB and above, meaning the person cannot hear at all, even with hearing aids.

This study will look at hearing impairment as a significant factor. Each category and degree of hearing loss can deeply impact a person's life. As a result, students with hearing impairments often find themselves facing isolation, rejection, and even hostility from their hearing peers. This can lead to feelings of loneliness, low self-esteem, and, most importantly, depression. These challenges can have serious repercussions on their cognitive, social, and emotional growth (Traci & Koester, 2003; Sudmand, Movallali, Abedi, Dadkhah, Rostami & Pultan, 2020). When students struggle with their cognitive, social, and emotional

development, they become more susceptible to depression, which can hinder their overall life, including their academic pursuits. Depression is the inability of one to feel happy that can happen for no clear or cogent reasons. It is different from grief and other emotions. It is a common mental disorder characterized by sadness, loss of interest, loss of appetite, feeling of tiredness and poor concentration (World Health Organization WHO 2012). It is a common and serious medical health challenge that negatively affects how one feels, thinks and acts (American Psychological Association APA, 2020). Depression is also seen as multi-factorial disorder in which the person loses reinforcement from its context and presents difficulties in adapting to everyday life (Jose, 2018). It is a mood disorder that causes a persistent feeling of sadness and loss of interest (Sawchuk, 2022); and this affects how one feels, thinks and behaves. These often lead to a lot of emotional and physical problems. In the context of this study, depression is a mental health condition characterized by negative view about life, which can hurt the health, academic performance and stability of students with hearing impairment. It is also associated with symptoms such as poor concentration, excessive guilt or low self-worth, hopelessness about future, death thoughts or suicide intensions, disrupted sleep, loss of appetite, loss of interest in activities once enjoyed, sadness, low self-esteem and tiredness, which can become chronic or recurrent.

It is heartbreaking to think about the struggles of a depressed student, who often feels utterly devastated. These individuals may grapple with feelings of deep sadness, hopelessness, and, in some cases, even thoughts of suicide (Zwart, 2018). Shockingly, over 264 million people around the world, regardless of age, are battling depression (WHO, 2017). In fact, during its 2017 World Health Day message, the World Health Organization highlighted that around 7,079,815 Nigerians are affected by this often overlooked and misunderstood mental health issue. This accounts for 3.9 percent of the entire population, making Nigeria, based on current statistics, the most depressed country in Africa. Tragically, about 100,000 people lose their lives to suicide each year in Nigeria, with depression being one of the leading causes (Ezediuno, 2022). According to a study by Ottman, Wahid, Flynn, Momodu, Fisher, Kieli, and Kohrt (2022), experts in the field believe that by better understanding depression and offering therapy to those in need, we can help curb the rising trend of suicide in the country..

Living with depression can leave a person feeling like something is missing in their life, and for students grappling with this condition, it often means a diminished quality of life (American Psychiatric Association, 2020). This struggle can take a toll on their overall health. Research by Lawrence, Blake, Jayakody, Dona, Rebecca, Bennett, Eikelboom, Robert, Gasson, Natalie, Friedland, and Peter (2020) has highlighted a connection between hearing impairment and depression. When someone has difficulty hearing, it can severely limit their ability to communicate, leading to feelings of loneliness, sadness, and social isolation, which can ultimately spiral into depression (Bury & Partners, 2020). Moreover, hearing impairment can exacerbate depressive symptoms, as it often heightens feelings of isolation (Miller, 2020). A study conducted by Stephaine, Netten, Briaries, Soede, Kuowenberg, and Frijins (2011) found that students with hearing impairments exhibited more depressive symptoms compared to their peers with normal hearing. In Nigeria, depressive disorders are notably prevalent among students with hearing impairments (Oguwale, 2016; Adigun, 2017). Oguwale's (2016) research, which involved 100 depressed students with hearing impairments in Oyo, revealed that those experiencing depressive symptoms ranging from unhappiness to anxiety were significantly more likely to contemplate suicide.

When hearing impairment goes unaddressed, it can really take a toll on various aspects of life. We're talking about challenges in communication and speech, cognitive issues, and feelings of social isolation and loneliness. This can lead to stigma, and in turn, may cause the individual to experience depression, anxiety, stress, and even thoughts of suicide. A related study highlighted that there's a notable prevalence of depression among senior secondary school students in Enugu State (Okeke et al., 2021). This suggests that students with hearing impairments often show signs of depression, and without the right support, they could end up facing severe depression. Additionally, during a pre-research visit, interactions with school authorities in the area revealed that their students display various signs of depression, including low mood, difficulty concentrating, sadness, withdrawal from friends, low self-esteem, anger, frequent absences from school, poor academic performance, and a decreased interest in activities. Therefore, this study investigated

the effects of rational emotive behaviour therapy (REBT) on depression of students with hearing impairment in Enugu State, Nigeria.

Purpose of the Study

The purpose of the study was to investigate the effects of rational emotive behaviour therapy (REBT) on depression of students with hearing impairment in Enugu State, Nigeria. Specifically, the study sought to determine the;

1. mean depression scores of students with hearing impairment exposed to REBT and those exposed to conventional counselling.
2. influence of gender on the mean depression scores of student with hearing impairment in Enugu State.
3. interaction effect of techniques and gender on depression of students with hearing impairment.

Research Questions

1. what is the difference in the mean depression scores of students with hearing impairment exposed to REBT and those exposed to conventional counseling?
2. what is the influence of gender on mean depression scores of students with hearing impairment in Enugu State?
3. what is the interaction effect of techniques and gender on depression of students with hearing impairment?

Methods

The study employed quasi-experimental research design. Specifically, the non-equivalent pretest posttest control group design was employed. The population of the study comprised 49 SS-two students drawn from the two secondary schools, out of which 32 are males; while 17 are females The entire population was used as the study sample. This is because the population is small and of manageable size and thus requires no sampling. Student Depression Questionnaire (SDQ) was used by the researcher to identify the students with depression. This was done during pre-test to identify those with depression. The students with hearing impairment who have a score above 40 in SDQ were considered to have depressive symptoms. From the result of the pre-test, two students, who were found not to suffer from depression were excluded from the final analysis.

Students Depression Questionnaire (SDQ) adapted from Goldberg Depression Questionnaire. The SDQ has two sections, A and B. Section A contained the demographic information of the students such as sex, while section B contained 20 items designed to elicit information on students' depression. Goldberg Depression Questionnaire (GDQ) originally has 18 items but the adapted one has twenty items modified to suit the context of this study. The questionnaire was used to measure the depression of the students used for the study. The original version was also modified from having 6 point scale of not a little, just a little, somewhat, moderately, quite a lot and very much to four point scale of very much often, much often, not much often, and not very much often. The response options have numerical value of 4,3,2,1. Students who scored 40 to 80 were considered depressed while students that scored below 40 were not considered as such. The procedure was done in three phases: pre-treatment, treatment and post treatment. The therapeutic manual was adapted from Rational Emotive Behavior Therapy manual by Albert Ellis in 1955. The researcher adapted the five proposed ABCDE principles of REBT with its techniques. The experiment lasted for six weeks.

The SDQ was face validated by three experts, one in Special Education Unit, Department of Educational Foundations, one from Educational Psychology, Department of Educational Foundations and one in Measurement and Evaluation from Department of Science Education all in the Faculty of Education, University of Nigeria, Nsukka. Cronbach's Alpha was used to establish the internal consistency co-efficient of SDQ to be 0.881. Mean and Standard Deviation for research questions while Analysis of Covariance (ANCOVA) was used to test the hypotheses at 0.05 level of significance.

The effect size of the treatment was determined using the partial eta value which was subjected to Cohen's decision (1988) which is given thus: 1.00 (Very Large), 0.80 (Large), 0.50 (medium) and 0.20 (small).

Results

Research question 1: What is the difference in the mean depression scores of students with hearing impairment exposed to REBT and those exposed to conventional counselling ?

Table 1: Mean and standard deviation depression scores of students with hearing impairment exposed to REBT and those exposed to conventional counselling.

Groups	N	Pretest		Posttest		Mean loss
		Mean	Std	Mean	Std	
Experimental	23	70.00	7.52	31.61	8.69	38.39
Control	24	69.63	4.02	69.17	6.09	0.46

Data in table 1 reveals the pre-test mean and standard deviation scores (M=70.00; SD=7.52) of the experimental group and post-test mean and standard deviation scores (M= 31.61; SD=8.69) of the same group with mean loss of 38.39. Also, the pre-test mean and standard deviation scores (M=69.63; SD=4.02) of the control group and post-test mean and standard deviation scores (M=69.17; SD=6.09) of the same group with mean loss of 0.48. The low standard deviation score reveals that the responses did not differ widely. Also, the mean loss of the two groups shows that depression of students with hearing impairment exposed to REBT reduced more than those exposed to conventional counselling.

Hypothesis 1: There is no significant difference in the mean depression scores of students with hearing impairment exposed to REBT and those exposed to conventional counselling

Table 2: Analysis of Covariance (ANCOVA) mean depression scores of students with hearing impairment exposed to REBT and those exposed to conventional counselling.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	16583.810[a]	2	8291.905	145.934	.000	.869
Intercept	1088.162	1	1088.162	19.151	.000	.303
pretestSDQ	16.749	1	16.749	.295	.590	.007
Groups	16516.509	1	16516.509	290.683	.000	.869
Error	2500.063	44	56.820			
Total	140313.000	47				
Corrected Total	19083.872	46				

a. R Squared = .869 (Adjusted R Squared = .863)

Data on table 2 shows $F(1, 44) = 290.683$, $p=.00 < 0.05$ level of significance. This shows that the hypothesis was significant. Therefore, there is a significant difference between the mean depression scores of students with hearing impairment exposed to REBT and those exposed to conventional counselling. The finding showed that the effect size of REBT on depression score of students is very high with Partial Eta value of 0.869 based on Cohen's categorization.

Research question 2: What is the influence of gender on mean depression scores of students with hearing impairment in Enugu State?

Table 3: Mean and standard deviation of influence of male and female on depression

Groups	N	Pretest		Posttest		Mean loss
		Mean	Std	Mean	Std	
Male	32	71.19	.73	49.44	3.74	21.75
Female	15	66.87	2.07	53.67	4.91	13.20

Data on table 3 shows the pre-test mean and standard deviation scores (M=71.19; SD=0.73) of the male group and post-test mean and standard deviation scores (M=49.44; SD=3.74) of the same male group with a mean loss of 21.75. Also, it was found that the pre-test mean and standard deviation scores (M=66.87; SD=2.07) of the female group and post-test mean and standard deviation scores (M=53.67; SD=4.91) of the same group with mean loss of 13.20. Therefore, the mean loss of the two groups shows that male students had reduction on depression more than their female counterparts.

Hypothesis 2: There is no significant difference in the mean depression scores of male and female students with hearing impairment.

Table 4: Analysis of Covariance (ANCOVA) of the influence of gender on depression

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	16622.310[a]	4	4155.578	70.904	.000	.871
Intercept	917.817	1	917.817	15.660	.000	.272
pretestSDQ	13.763	1	13.763	.235	.630	.006
Gender	7.911	1	7.911	.135	.715	.003
Methods	13440.631	1	13440.631	229.329	.000	.845
Gender * Methods	23.366	1	23.366	.399	.531	.009
Error	2461.562	42	58.609			
Total	140313.000	47				
Corrected Total	19083.872	46				

a. R Squared = .871 (Adjusted R Squared = .859)

Data on table 4 shows F (1, 42) = 7.911, p=0.715 > 0.05 level of significance. Therefore, the null hypothesis which states that there is no significant difference between the mean depression scores of male and female students with hearing impairment was upheld. Therefore, there is no significant difference in the mean depression ratings of male and female students with hearing impairment.

Research question 3: What is the interaction effect of techniques and gender on depression of students with hearing impairment?

Table 5: Mean and standard deviation scores of methods and gender on depression

			Pretest		**Posttest**		**Mean loss**
Methods	**Gender**	**N**	**Mean**	**Std. Deviation**	**Mean**	**Std. Deviation**	
Experimental group	Male	17	72.06	1.16	31.24	2.38	40.82
	Female	6	64.17	4.48	32.67	1.89	31.50
Control group	Male	15	70.20	0.81	70.07	1.14	0.13
	Female	9	68.62	1.76	67.67	2.76	0.95

Data on table 5 reveals the pre-test mean and standard deviation depression scores (x=72.06; SD=1.16) of male students in experimental group and post-test mean and standard deviation scores (x= 31.24; SD= 2.38) of the same group with mean loss score of 40.82. Also, the table reveals the pre-test mean and standard deviation depression scores (x=64.17; SD=4.48) of female students in the control group and post-test mean and standard deviation scores (x= 32.67; SD= 1.89) of the same group with mean loss score of 31.50. Similarly, the table shows that the pre-test mean and standard deviation depression scores (x=70.20; SD=0.81) of male students in control group and post-test mean and standard deviation scores (x= 70.07; SD=1.14) of the same group with mean loss score of 0.13. More so, the table reveals the pre-test mean and standard deviation depression scores (x=68.62; SD=1.76) of male students in experimental group and post-test mean and standard deviation scores (x= 67.67; SD= 2.76) of the same group with mean loss score of 0.95. Since mean differences across gender and the methods showed that there is no interaction effect

between the methods used and gender on depression of students with hearing impairment. See figure 1 below for details.

Figure 1: Graphical representation of the Interaction effect between methods and gender on depression among students

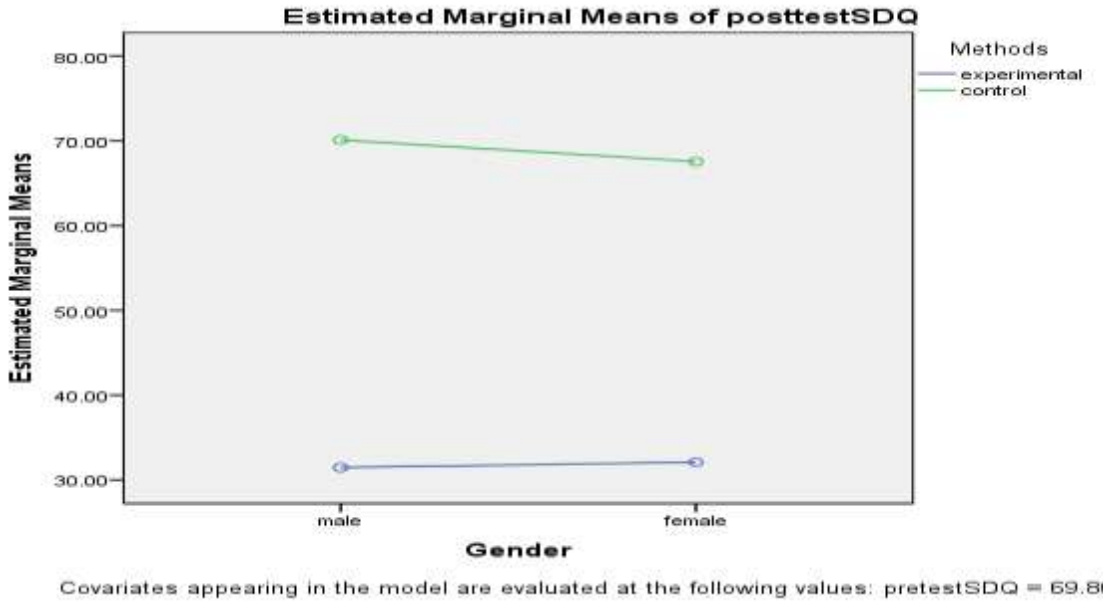

Figure 1 shows that there is no interaction effect between methods and gender on test depression of students with hearing impairment. The significance of the interaction was determined in the hypothesis testing as shown in table 10 below

Hypothesis 3: There is no significant interaction effect of techniques and gender on the depression of students with hearing impairment.

Table 6: Analysis of Covariance (ANCOVA) of method and gender on depression with hearing impairment

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	16622.310[a]	4	4155.578	70.904	.000	.871
Intercept	917.817	1	917.817	15.660	.000	.272
pretestSDQ	13.763	1	13.763	.235	.630	.006
Gender	7.911	1	7.911	.135	.715	.003
Methods	13440.631	1	13440.631	229.329	.000	.845
Gender * Methods	23.366	1	23.366	.399	.531	.009
Error	2461.562	42	58.609			
Total	140313.000	47				
Corrected Total	19083.872	46				

a. R Squared = .871 (Adjusted R Squared = .859)

Data on table 6 shows F (1, 42) = 0.399, p=0.531 > 0.05 level of significance. Therefore, the null hypothesis which states that there is no significant interaction effect of methods and gender on depression of students with hearing impairment was upheld. Therefore, there is no significant interaction effect of techniques and gender on the depression of students with hearing impairment. The effect size of REBT is 0.01 which revealed a very small effect on depression based on the Cohen's categorization.

Discussion of Findings

The study's findings revealed that students with hearing impairments who were exposed to Rational Emotive Behavior Therapy (REBT) experienced a more significant reduction in depression compared to those who weren't. What's particularly interesting is that this suggests depression can indeed be alleviated through behavioral interventions like REBT. This makes sense, as depression is closely tied to emotions and often requires both emotional and behavioral therapies to address it effectively. The success of REBT in reducing depression likely stems from the fact that many individuals misinterpret social, emotional, and physiological pressures, leading to feelings of despair. This aligns with the research by Iremeka et al. (2021), which highlighted REBT's usefulness in managing depressive tendencies. Similarly, Ugwu et al. (2021) found that REBT is quite effective in lowering depression levels among children with special needs. Additionally, Onuigbo et al. (2018) reported significant reductions in depression following REBT treatment, both immediately after and during follow-up evaluations. Furthermore, this study supports the findings of Farnoodi et al. (2020), which indicated that REBT effectively reduced depressive symptoms in hemodialysis patients. It also echoes Ogungbande's (2019) research, which showed that both REBT and Reality Therapy (RT) were successful in decreasing aggressive behaviors in students with hearing impairments. Lastly, this study reinforces Abiogu et al. (2020), which found that REBT is effective in helping students with visual impairments reduce their negative personal value systems.

On the flip side, the results of this study didn’t quite match up with those of Qin et al. (2023), who found that REBT didn’t significantly improve depression and anxiety among older adults in nursing homes. This discrepancy might stem from the unique geographical context of the participants, considering that individuals in nursing homes may have experienced prolonged isolation. Additionally, the age of the respondents could have influenced how effective REBT was as an intervention, suggesting that further research is needed to understand why it didn’t work as well for this group. Still, the main focus of this discussion is on the idea that REBT is a valuable behavioral intervention that can help reduce depression in students with hearing impairments.

The study's findings revealed that male students experienced a greater reduction in depression compared to their female peers, although this difference wasn't statistically significant. This could stem from varying levels of emotional stability and the different ways males and females handle stress. It's often thought that males tend to have better emotional resilience, allowing them to cope with challenging situations more effectively. However, it's important to note that depression can affect anyone, regardless of gender, as the study indicates. For those who suffer from it, depression can be incredibly debilitating, leading to irritability, difficulty concentrating, and even suicidal thoughts. This highlights the reality that many students with hearing impairments struggle with depression or depressive symptoms, likely due to challenges in behavior and communication, issues in interpersonal relationships, and a lack of social skills or coping mechanisms. The results of this study align with those of Adewuya et al. (2018), which found that females reported significantly higher rates of depressive symptoms than males. Similarly, Olawande et al. (2018) identified notable differences in mental health issues between men and women. Additionally, Roli (2020) found significant gender disparities in depression levels and relationship quality among undergraduates. This study also supports Adigun's (2020) findings, which showed that both male and female students scored high on the depression scale, often marked by loss of appetite and feelings of fear. Overall, the discussion highlights that students with hearing impairments are particularly vulnerable to depression, largely due to their struggles with social interactions and negative perceptions of their surroundings.

Just like the other studies we've mentioned, it seems that female students with hearing impairments tend to experience higher levels of depression, even if the differences aren't statistically significant. Could it be that male students with hearing impairments are somehow more emotionally resilient than their female peers? This is a crucial insight that school counselors should take to heart, as it highlights the need to focus on supporting depressed female students to prevent any serious complications. If we overlook their struggles, it could lead to dire consequences, including suicidal thoughts. That said, we mustn't forget about the needs of depressed male students either; they deserve attention and support too.

The study's findings indicate that there's no interaction effect between the methods used and gender when it comes to the depression levels of students with hearing impairments. Essentially, the hypothesis confirmed that the combination of intervention techniques and gender doesn't significantly impact the depression of these students. This might be because mixing conventional and experimental methods didn't create the necessary interaction among students with hearing impairments. It reinforces the idea that instructional strategies that don't include Rational Emotive Behavior Therapy (REBT) are not effective in lowering depression levels for these students. This aligns with the research by Yang and Han (2020), which found that REBT can enhance behavior management and positively influence participants' anxiety, depression, and eating habits. This suggests that existing intervention methods fall short in reducing depression unless they incorporate REBT. Given this context, REBT has proven to be a powerful therapeutic approach for alleviating depression among students with hearing impairments. Since depression is a serious mental health issue that can hinder the educational and psychological development of these students and can even lead to suicide, which is alarmingly prevalent among them it's crucial to enhance the skills of teachers and counselors in applying REBT for managing depression. Unfortunately, many teachers and counselors are still unaware of REBT as a viable intervention strategy for addressing depression in students. If this trend continues, it's likely that educators and school counselors will stick to outdated techniques for managing these critical cases.

Conclusion

Based on the findings of this study, it was concluded that Rational Emotive Behaviour Therapy is effective in the reduction of depression in students with hearing impairment compared to those in the conventional counseling. The effectiveness of REBT is irrespective of the gender of people with hearing impairment.

Recommendations

Based on the findings and conclusion of this study, it was recommended that:

1. The guidance counsellors should be properly trained through the intervention of REBT experts using the principals of REBT in order to properly apply these principles in reducing depression of students with hearing impairment.
2. Since the finding revealed no significant difference in the mean depression scores of male and female students with hearing impairment, the male and female students who have manifestations of depression and its symptoms should be subjected to the principles of REBT by the guidance counsellors.

References

1. Abiogu, G.C, Ede, M.O, Amaeze, F.E, Nnamani, O., Aga, J.J. et al,(2020). Impact of Rational Emotive Behaviour Therapy on personal value system of student with hearing Impairment. Medicine 99(45):e22333,Doi:10.1097/MD.0000000000022333.
2. Adewuya, A.O, Coker O.A, Atilola, O, Ola, B.A, Zacharia, M.P, Adewumi, T, Olugbile, L, Fascwe, A & Idris, O. (2018) Gender difference in the point, prevalence, symptoms, co morbidity, and correlates of depression. Findings from the Lags State Mental Health Survey (LSMHS), Nigeria. National Library of Medicine, DOI:10.1007/500757-018-0839-9
3. Adigun, O.T., (2017). Depression and Individuals with Hearing loss: A Systematic Review: Journal of Psychology & Psychotherapy.7,(5), ! to 6 Doi: 10.4172/2161-0487/1000323 corpus 10-52886241.
4. Adigun, O.T., (2020). Depressive symptomatology among in-school adolescents with impaired hearing. Humanities & Social Sciences Review, 8(2), 931-940 hpttps://doi.org/1018510/hssr.202082103.
5. American Psychiatric Association (APA) (2020). What is depression? Retrieved from https://ww.psychioitry.org/patients families/depression.
6. American Psychological Association APA, 2020)
7. Bury & Partners (2020). Mental health framework-thriving in bury. Retrieved December 12, 2021 from from the bury directory. Co.uk.

8. Ezediuno, F. (2022). Depression,Economic Downtown Spiking Suicide Cases in Nigeria Expert daily post Nigeria available at https://daily post.ng/2022/10/30/depressioneconomic downtown spiking sucide cases in Nigeria expert.
9. Farnoodi, Amiri, Arefi, Nia & Fard (2020). Comparing the effectiveness of Ellis Rational- Emotive-Behaviour Therapy (RT) on Reducing Depressive symptoms in Hemodialysis patients and control group. Arch Pharma Pract ,11 (51); 161-7.
10. Iremeka, F.U. Ameze, F.U, Ede, A.O., Nwamara, I. & Chukwuji, C. (2020). Impact of Rational Emotive Behaviour Therapy (REBT) on the Management of Suicidal Ideation and Depressive Tendency Among Inmates in correctional Centre in Nsukka Education Zone, Nigeria. Innovare Journal of Education 9,(1) 12-16. Doi htpps://dy-doi-org/10.22159/Ijoe.202/V9i40622.
11. Jose, E.R. (2018). Depression: A Review of its Definition. MOJ Addiction Medicine & Therapy. 5 (12) 6-7 Doi: 10.15406/mojamt.2018.05.00082.
12. Lawrence, BJ, Jaykody,D.M.P., Bennette,R. J. Eikeloom,R.H.,Gasson,N,&Friedland, P. L.(2020). Hearing loss and depression in older adults: a systematic Review and meta-analysis. The Gerontologist 60 (3) 137-154.
13. Miller, A.H. (2020). Beyond depression: The expanding role of inflammation in psychiatric disorders. World Psychiatry/ 19 (1) 108-109 .Retrieved on October 1, 2019 from https://doi.org/10.1002/wps 20723.
14. Ogungbade, O.K. (2019). Effectiveness of Rational Emotive Behaviour and Reality Therapies in Reducing Aggressive Behaviours of Hearing-impaired students in Ilorin. Unpublished Ph.D Thesis presented to the Department of guidance & counseling University of Ilorin Nigeria.
15. Oguwale, O.R, (2016). Determinant of suicidal ideation among persons with hearing impairment in federal college of education (special) oyo. Europian journal of muiltidisciplinary sciences. Retrived from http;//detdorg/10/5405/ejms(2421 8251).
16. Okeke, B.A. (2001). Essentials of special education. Nsukka: Afro-or-publishers.
17. Okeke,N.G,,Okenyi,J.O, Ohanu,E.C & Okeke, C.,(2021),Pevalence of Depression among Senior Secondary School Student In Enugu Metropolis.medrix preprint. A ph .D Thesis submitted to University of Nigeria Nsukka. doi;https://doi.org/10.1101/2023.10.12.23296984.
18. Olawande, T.I, Jegede, A.S Edawus, P.A & Fasasi, L.T. (2018). Gender differential in the perception of mental illness among the Yoruba of Ogun State, Nigeria. Ife Psycho logia 26 (1) 135-153. 100 questions & Hypothesis.
19. Oniugbo, L.N. Eseadi C, Ebifa, S., Ugwu, U.C. Onyishi C.N. & Oyeoku, E.K (2019) Effect of Rational Emotive Behaviour Therapy Program on Depressive symptoms among University students with blindness in Nigeria. Journal of Rational Emotive & Cognitive Behaviour Therapy 37 (2). Doi: 101007/510942-018-0297-3.
20. Onwubolu, C.A. (2017). Introduction to special education intervention and strategies. Asaba: Chembys Communication Ventures,
21. Ottman, K., Wahid, S. S., Flynn, R., Momodu, O., Fisher, H. L., Kieling, C., & Kohrt, B. A. (2022). Defining culturally compelling mental health interventions: A qualitative study of perspectives on adolescent depression in Lagos, Nigeria. SSM-Mental Health, 2, 100093.
22. Ozoji, D.E.(2010). The effect of hearing impairment on the social and emotional development of children in Nigeria. Journal of Deaf Studies and Deaf Education, 15(2),173-186. Doi;10.1093/deafed/enpo43.
23. Ozoji, E.D., Unachukwu, G.C., & Kolo, I.A, (2016). Modern Trends and practices in Special Education. Lagos: Foremost Education Service Ltd.
24. Premium Times (2020). 8.5 million Nigerians suffering from Hearing Loss.Expert, by Agency Report May 28, 2020. Retived from https://www.premiumtimesng.com/health/39505485million nigerias suffering from hearing impairmentexpert.htmi?tz
25. Qui, X., Li X., Wu, Y., Zhang, Y., Luo J., Dong, X., Cao, J., Liu, C. and Cheng, Q. (2023). Effects of Rational Emotive Behaviour Therapy(REBT) on Alexithyma, Anxiety, Depression and Sleep quality

of older people in Nursing Homes: A randomized controlled trial. Journal of Clinical Psychology, 79(1), 15-28.
26. Roli, A. J, (2020). Depression and Relationship Quality: An Empirical Analysis among undergraduates in Ogun State, Nigeria. European Journal of Scientific Research. 155 (2) 259 to 264.
27. Sawchuk, C., (2022). What is Depression?A mayo Clinic epert explains.https://www.mayo clnic.org.
28. Siemens Hearing Aid (2017). Degrees of hearing loss. Retrieved 20th November, 2021 from https://usa.bestsoundtechnology.com/hearing-loss-and-tinnitus/understanding-hearing-loss/degree-s-of-hearing-loss.
29. Stephanie C.P.M, Rieffe, C, Kouwenberg,M., Soede, W., Briaire & Frijins, J.H.M (2011). Depression on hearing impaired children. Int. Journal of Pediatric otorhinolayngol , 75 (10) 1313-1312.
30. Sudmand, N, Movallali, G., Abedi, A., Dadkhah, A, Rostami, M.& Pultan, P.R.,(2020). Improving the self - esteem and aggression control or deaf adolescent girls: the effectiveness of life skill training. Practice in Clinical Psychology. 8 (3):163 – 1.
31. Traci, M.,& Koester,l.S. (2003). Parent Infant Interaction: A Transactional Approach to Understanding the Development of Deaf Infants. In: Marschark & P.E. Spencer (eds). Oxford Handbook of Deaf Studies, Language, and Education. .(pp 190 to 202). Oxford University press.
32. Ugwu, D. T., Ugwuanyi, E. B., Okeke, C. C., Uzodinma, E. U. and Aneke, J. O.(2021). Effects of Rational Emotive Behaviour Therapy (REBT) on Depression Management among children with Learning Disabilities, 54(4), 321-323.
33. WHO (2020) Depression: Definition, Retrieved 20th November, 2021 from ww.euw.who.International
34. WHO (2024) depression and hearing loss.retrived from https//www.who.int/newsroom/fact sheets/detail/defness and hearing loss.
35. World Health Organization (2012). WHO global estimates on prevalence of hearing loss. Retrieved 20th November, 2021 from: http://www.who.int/pbd/deafness/WHO.GE HL. pdf
36. World health organization (2017). Depression and Other Common Disorders: Global Health Estimates. Retrived from https:// www.who.int/publications detail redirect/ depression global health estimates
37. Yang, S. J. and Han, K. (2020). Effects of Rational Emotive Behaviour Therapy (REBT) Based intervention for Binge Eating among Female Students in South Korea. Journal for Eating Disorders, 8(1), 1-11.
38. Zwart, R., (2018). Experiences of depression in black South African young adult men in the workplace. A mini-dissertation submitted to the Department of Counseling Psychology, University of Pretoria.