


# Rational emotive health therapy for the management of depressive symptoms among parents of children with intellectual and reading disabilities in English language

Leonard Tochukwu Ugwuanyi, PhD<sup>a</sup>, Cajetan Ikechukwu Egbe, PhD<sup>b,\*</sup>, Amuche Patricia Nnamani, PhD<sup>b</sup>, Josephine Chioma Ubah, PhD<sup>a</sup>, Terfa Ahon Adaka, PhD<sup>c</sup>, Grace Ngozi Adama, PhD<sup>d</sup>, Afusat B. Ejide, MED<sup>e</sup>, Annah Chinyeaka Uloh-Bethels, PhD<sup>b</sup>, Ngozi Ugonma Emelogu, MED<sup>b</sup>, Rosemary Chidimma Ossai, MED<sup>b</sup>, Ngozi Georgina Okoyeukwu, MED<sup>b</sup>, Philomina Akudo Agbo, MED<sup>b</sup>, Mkpoikanke Sunday Otu, PhD<sup>a</sup> 

## Abstract

**Background:** There is little data in developing countries such as Nigeria with regard to the impact of caring for their children with intellectual and reading disability (IRD) on the quality of life of the parents and the risk of psychopathology.

**Objective:** The main objective of the study was to assess the level of psychopathology, i.e., depression among parents of children with intellectual and reading disabilities.

**Methods:** This was pretest/posttest control group design with 198 parents (99 fathers/99 mothers) of 100 children with the diagnosis of IRD. The measures used in this study for data collection was Beck Depression Inventory (BDI). Repeated measures analysis of variance (ANOVA) was employed for data analysis.

**Results:** Result obtained showed a significant high proportion of depressive symptoms among parents of children with intellectual and reading disabilities at initial assessment. Furthermore, the REHT intervention resulted in a significant reduction in depression of parents in treatment group as compared to those in the control group.

**Conclusion:** The presence of a child with intellectual and reading disabilities does not cause parents to become depressed but irrational beliefs about their children's mental and reading deficiencies may contribute to unhealthy thinking and feelings about the future of their children. REHT is very effective in assisting depressed parents of children with intellectual and reading disabilities to think rationally about their children and work towards overcoming disability-related as well as behavior-related irrational beliefs. The mental health providers, therapists and counselors should apply the REHT in managing people with psychological distress especially parents of children with intellectual and reading disabilities who may have psychological diagnosis of depression.

**Abbreviations:** CIRD = Children with Intellectual and Reading Disabilities, ID = Intellectual Disability, IRD = Intellectual and Reading Disabilities, REHT = Rational Emotive Health Therapy, BDI = Beck Depression Inventory

**Keywords:** depression, intellectual and reading disabilities, parents, psychological distress.

## 1. Introduction

Parents assume a critical source of support for children with special needs because they absorb the added demands on time, emotional and financial resources of their children.<sup>[1]</sup> Previous studies have indicated that the presence of a child with special needs such as a child with intellectual disability (ID) is likely to trigger off psychological distress among parents.<sup>[2,3]</sup> Intellectual and reading disability (IRD) is a serious source of

concern for language and special educators as well as guidance counselors.

According to Masito, Warnick and Esambe<sup>[4]</sup> intellectual disability involves impairments that significantly affect one's ability to read, write and reason. It also affects one's social judgement and interpersonal communication skills as well as one's ability to take care of oneself. Those suffering from ID include those with down syndrome, fragile X syndrome or Rett syndrome. This is because reading is a cognitive function and people with

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<sup>a</sup> Department of Educational Foundations, University of Nigeria, Nsukka,

<sup>b</sup> Department of Arts Education, University of Nigeria, Nsukka, <sup>c</sup> Federal University of Lafia, <sup>d</sup> Department of Educational Foundations, University of Nigeria Nsukka,

<sup>e</sup> College of Education, Zuba.

\*Correspondence: Cajetan Ikechukwu Egbe, Department of Arts Education, University of Nigeria, Nsukka.

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intellectual disabilities do not have such intelligent quotient to navigate through reading. However, those with reading difficulties do not necessarily suffer from intellectual disabilities. In this study, reading disability is not studied on its own but is taken as a fallout of intellectual disability.

Children with IRD are children with special needs. Most parents of children with intellectual and reading disability (CIRD) suffer from psychological distress.<sup>[5]</sup> In addition to these psychological distresses, most parents of children with at least severe IRD tend to be marked with pessimism, anhedonia and tendency for lack of initiative and feeling of hopelessness.<sup>[6]</sup> In psychological diagnosis, such distresses often fall under the umbrella of depressive illness.<sup>[6]</sup> Studies have also indicated that parents of CIRD tend to exhibit a higher magnitude of various spectra of depressive symptoms according to<sup>[7]</sup> which included; hypersomnia, poor concentration, social isolation, anger, frustration, unrealistic expectations, poor appetite, and loss of interest in previously enjoyed activities and motivation.

Parents of CIRD report more psychological distress when their children begin to display dysfunctions such as communication difficulties, lack of social skills, practical skills, as well as delay or limited mental functioning.<sup>[8]</sup> CIRD seems to be a source of disappointment, unhappiness, and regret to parents<sup>[9]</sup> and due to ignorance of Nigerian citizens, CIRD are abused, discriminated, unaccepted, and a show of negative attitude towards the children and their families.<sup>[10]</sup> These reactionary tendencies and unfavorable comments are likely to trigger off depressive symptoms among parents. Symptoms of depression may not necessarily signify a diagnosis of depression but they definitely show a red flag.

Nigeria has one of the highest reported rates of childhood intellectual disability in the world with 75/1000 for mild ID.<sup>[11]</sup> In other developing countries such as Pakistan, the rate of childhood ID is 65/1000 for mild ID.<sup>[12]</sup> Studies conducted in developing countries such as Nigeria have indicated reasonable consistently high rates of depression and anxiety disorders where 10–44% of people suffer from depression and anxiety.<sup>[13]</sup> In addition, about 50 million people suffer from depression and other related disorders due to kidnapping, insurgency and starvation in North-East and other parts of Nigeria. The Federal Neuro-psychological Hospital, Nigeria reported that about 60% of Nigerians attending primary healthcare have mental disorders ranging from depression, psychosis to posttraumatic disorders.<sup>[13]</sup> These mental disorders apart from insurgency may be as a result of the presence of a child with IRD in the family.<sup>[14]</sup>

The prevalence of depression appears to be skewed towards higher magnitude among parents of CIRD while it is widely reported that parents of CIRD have more mental distress than other parents with different disabilities,<sup>[15]</sup> and one empirical question stands as to whether psychological disorders stem from preexisting mental distress or trigger off from the burden of caring for the child with IRD.<sup>[6]</sup> Studies have indicated that rather than preexisting mental illness the burden of caring for the child with IRD has direct bearing on the development of psychological disorders among parents.<sup>[16,17]</sup>

There is a vast research database comparing psychological distress among parents of CIRD with other parents of children without ID. For instance, Keskin<sup>[18]</sup> reported high traits of depression and anxiety in parents. Mirza and Jenkins<sup>[19]</sup> reported prevalence rates of 34%. Heller, Hsieh & Rowitz,<sup>[20]</sup> Saloviita, Italunia & Levionen,<sup>[17]</sup> Simmerman, Blacher & Baker<sup>[21]</sup> reported increased burden and stress, Kersh, Hedvat, Hauser-Crawn and Warfield<sup>[22]</sup> reported poorer parenting efficacy. Herring, Gray, Taffe, Tonge, Sweeney and Simmerman,<sup>[23]</sup> and Blacher and Baker<sup>[1]</sup> reported poorer marital adjustment. These findings have important implications for therapists working in behavioral intervention as they suggest that improvement in the child's behavior may lead to decrease in parents' stress and improved parental mental health.<sup>[24]</sup>

Aside from behavior, other types of care demands can create distress and depression for parents<sup>[24,25]</sup> which included adaptive behavior deficits<sup>[17,26]</sup> and medical needs.<sup>[24]</sup> All these have been associated with negative parents' impact, stress and burden. Thus, the researchers suggest that parents' outcomes may not be determined by simply the presence or absence of a disability but maladaptive behavior and care needs may be the important risk factors for parents' impact and stress.<sup>[27]</sup>

In comparing the care for CID and other disabilities, mothers are usually the primary caregivers.<sup>[28]</sup> However, fathers also share the task of care responsibilities with their spouses.<sup>[29]</sup> In this regard, it is worthwhile to note that father's support can lead to significant improvement in maternal well-being and lower levels of psychological distress of parents.<sup>[29]</sup> So, including fathers in this research is necessary to give a complete picture about parental mental health and to compare psychological stress such as depression between both parents in the families having a child with CIRD.

To date, literature evidence has shown that there is the need to address depressive symptoms of parents of CIRD as medical condition to ameliorate depressive disorders of parents.<sup>[23]</sup> Different treatment measures including cognitive restructuring, setting goals, respite care, cognitive and behavioral problem solving, and in particular, cognitive therapy are usually being used to assist those suffering from depressive symptoms. Previous studies have indicated that 1 form of therapy, which had been proved effective in addressing many types of psychological distress, is rational emotive behavior therapy (REBT). For instance, Ellis and Griegre<sup>[7]</sup> explain that emotional disturbance is connected with dysfunctional cognitive behavior known as irrational beliefs. Ellis<sup>[30]</sup> informed that irrational beliefs may include catastrophizing a situation, judging oneself as worthless or not competent or despair, and turning them into problems. In regard to depressive symptoms, the irrational beliefs may include; "I do not see my child as a worthy child". "I cannot go along with my child in the public to avoid social stigma". "I am not emotionally strong enough to see my child being an object of ridicule". "I am horribly ashamed of myself whenever I see my child's disability". "I feel disappointment when I ever see my child with normal children from other parents". REBT assists to reduce emotional stress of parents by promoting more realistic, logical and flexible thinking.<sup>[17,31,32]</sup> Ellis<sup>[33]</sup> maintains that if individuals experience negative behavioral and emotional consequences, more positive consequences will emerge once irrational beliefs are disputed and replaced with new effective beliefs, as can be seen in case of depressive symptoms.

The present study demonstrates the development of rational emotive health therapy (REHT) from the principles of REBT. REHT is a form of cognitive behavioral health therapy for the management of depressive symptoms. Omeje et al<sup>[32]</sup> who used REHT in the treatment of alcohol use disorder among community-dwelling HIV- positive patients in Enugu revealed a significant reduction in the use of alcohol by the participants. It is possible that REHT may assist parents who are depressed due to behavioral issues and care demands to reduce their irrational thinking about their children. In this regard, therefore, the objective of this study was to ascertain the effect of REHT on depressive symptoms among parents of children with intellectual disability. The researchers, however, hypothesized that there will be a significant effect of REHT on measurable depressive symptoms among fathers and mothers of children with intellectual and reading disabilities.

## 2. Methods

### 2.1. Ethical approval

The Department of Educational Foundations at the University of Nigeria, Nsukka provided the researchers with approvals to conduct the study. The researchers conformed to the Helsinki ethical principles of psychological research with human participants.<sup>[34]</sup>

**2.2. Area of the study**

The study was conducted in Enugu State of Nigeria

**2.3. Design of the study**

This was a pretest/posttest control group design

**2.4. Participants**

The participants were 200 parents who self-reported never to have experienced symptoms of depression and related psychological distresses prior to their children being diagnosed of ID. The study sample included 198 parents (99fathers/99mothers) of 100 children aged 5–20 years who met other inclusion criteria for the study. Participants were randomized into experimental and control groups using Random Allocation Software.<sup>[35]</sup> The mean age for the group was 40.16 years (SD = 8.8) ranging from 24 to 45 years. After getting written informed consent, the participants were recruited from 3 health institutions in Enugu. About 98% of the parents that the researchers approached willingly gave consent to participate in the study. The parents were assessed for depression from Beck Depression Inventory (BDI).

Furthermore, 62.6% of the participants were self-employed; 20.2% were civil servants, and 17.2% were not doing any meaningful jobs. All the participants met the Medical Research Ethics Committee at the College of Medicine and Health Sciences diagnostic criteria. Parents of CID were selected for treatment and control groups, 99 mothers for treatment and 99 fathers for control groups.

**2.5. Measures**

**2.5.1. Beck depressive inventory.** This is a 21-item multiple choice self-report inventory of 1961- that measures the intensity, severity and depth of symptoms of depression in parents of CIRD. The BDI takes about 10 minutes to complete. The internal consistency for BDI ranges from R = .93 and a mean of .86. The BDI also had high internal consistency with alpha coefficients of .86 and .81 for psychological and nonpsychological patients. The internal consistency of BDI for the present study is .84. The demographic characteristics are shown in Table 1.

**2.6. Procedures**

The researchers advertised the study in the place of the study between November 2016 and June 2017. A total of 198 parents with a high score (≥ 28) on the BDI showing the presence of severe depressive symptoms with irrational beliefs were selected and randomly assigned into treatment and control groups.

The treatment process of managing depressive symptoms was based on REHT Treatment Manual for Depressive Symptoms (RTMDS) adapted from REBT Depressive Manual (RDM) developed by David et al (2004). Participants (n = 99) in the treatment and participants in the control group (n = 99) took a pretest before the intervention (Time 1) in REHT program. The participants in the treatment group received REHT intervention program. Ten sessions which lasted for 50 minutes each, were held once per week for 5 consecutive weeks for those in the treatment group. Participants (n = 99) in the control group received conventional counseling for ten sessions that lasted for 50 minutes each and were held once per week for 5 consecutive weeks. After the end of the intervention period, a posttest (Time 2) for depression was administered using the same measure to both groups after 2 months of completing the study.

**2.7. Intervention**

Rational emotive health therapy treatment manual for depressive symptoms was used for the intervention. This manual was adapted from REBT principles developed by David et al<sup>[36]</sup> that are used for depressed people. The RTMDS is based on the framework of rational emotive and cognitive behavior therapy. Before using this manual, the researchers created rapport with the participants. At this point, the rules of the therapy, the rationale behind the use of REHT for depressive reduction, as well as the goals for the study were vividly explained to them. The RTMDS is focused on problematic beliefs such as self-downing, catastrophizing, and low frustration tolerance. In this regard, however, the cognitive behavioral and emotive techniques were used to change the target problematic beliefs of the participants related to depressive disorders. Cognitive techniques included thinking on how to manage their depressive symptoms and for disputing their unhealthy thoughts about their children. Behavioral techniques were instructing the participants on practical steps to help them cope with depressive symptoms such as hiding the child from people and having horrible feelings for the child. Emotive techniques involved were used to assist the participants to change their negative thoughts on an emotional level: humorous stories, child related poems and negative satiric songs were used to generate feelings to assist to change negative thoughts towards children with disabilities.

Following the principles of rational emotive health therapy, the researchers disputed the disability related irrational thoughts of the participants which included; ‘I do not see my child as a worthy child’, ‘I cannot go along with my child to avoid social stigma; ‘I am not emotionally strong enough to see my child being an object of ridicule; ‘I am horribly ashamed of myself whenever I see my child’s disability; ‘I feel disappointed when I see normal children from other parents’ ‘Giving my child out to motherless babies’ home is a big relief to my problem’ and others. Participants were taught to do away with the discomfort and distress caused by irrational beliefs through the following ways: they were taught that a child is a gift from God

**Table 1**  
**Demographic characteristics of the participants.**

Group	N	Average age, M (SD)	Depressive symptoms	N %
Treatment	99	37.42 + 8.8years	Anhedonia	28 (28.3)
Control	99	42.9 + 8.8 years	Gloomy mood pessimism	26 (26.3)
			Lack of initiative	25 (25.3)
			Anhedonia	20 (20.2)
			Gloomy mood	29 (29.3)
			Pessimism	27 (27.3)
			Lack of initiative	23 (23.2)
				20 (20.2)

Mean, standard deviation, analysis of variance, showing the effect size of REHT on depressive symptoms of the parents.

whether disabled or not, and to be patient and wait for God's intervention, they were taught to dispute the irrational beliefs that brought about the discomfort and distress and have rational beliefs such as: "I can accept my child no matter the disability" and "I can now plan for my child's future". The participants were taught to do away immediately with the discomfort and distress by eliminating the predisposing factors that caused the distress. The RTMDS served as an immeasurable guide for the REHT intervention in the treatment group.

## 2.8. Data analysis

The researchers employed IBM SPSS statistics 20 to carry out statistical analysis- including screening for missing values and violation of assumptions. A repeated measures analysis of variance (ANOVA) was employed to ascertain the effect of REHT on depressive symptoms in the treatment group as compared to the control group. Partial eta Squared was used as a measure of effect size for this design.

## 3. Results

In Table 2, the results of the analysis are presented. It was indicated that there were no baseline differences on depressive symptoms between participants in the treatment ( $M = 57.37, SD = 3.68$ ) and control group ( $M = 55.38, SD = 2.23$ ) conditions,  $F(1, 196) = 11.917, P = .692, \eta^2_p = 0.690$ . The  $\eta^2_p$  value of 0.690 indicates a burden of depressive symptoms between the treatment and control groups at pretest. This showed that depressive symptoms of the parents were significantly high across the treatment and control group at baseline.

As shown in Table 2, a repeated measures analysis of variance (ANOVA) revealed a significant treatment by time interaction effect for depression  $F(1, 196) = 4.994, P = .000, \eta^2_p = 0.889$ . The results showed a significant reduction from time 1 to time 2 on depression ( $P = .000$ ) for REHT group, and for the control group there was no significant change over the same period. In line with the researchers' prediction, REHT significantly reduced depressive symptoms of mothers in the treatment group ( $M = 17.71, SD = 2.21$ ) as compared to fathers in the control ( $M = 36.81, SD = 4.11$ ).

In Figure 1, it revealed how REHT significantly reduced depressive symptoms of mothers in the treatment as compared to fathers in the control group over time.

The objective of this study was to ascertain the effects of REHT on depressive symptoms among parents of CIRD in Enugu, Enugu State of Nigeria.

The result obtained showed that a significantly high proportion of parents of CIRD have psychological diagnosis of depression across the treatment and control groups at initial assessment. This finding is in congruence with the previous studies such as Floyed and Gallapher,<sup>[2]</sup> and Greenberg et al,<sup>[3]</sup> which reported that the presence of a child with intellectual and reading disabilities can trigger off psychological distress among parents of such children which may likely lead to depression. In addition, the studies of Gramm and Neibour,<sup>[37]</sup> Khamia,<sup>[38]</sup>

Saloviita, Itaalunna and Leinohe,<sup>[17]</sup> in agreement with the present study reported that the burden of caring for a child with intellectual and reading disabilities has direct bearing on the development of psychological disorders among parents. However, REHT significantly reduced the depressive symptoms of mothers in the treatment as compared to fathers in the control group.

The findings of the present study indicate that the REHT based intervention was efficacious in the treatment of depressive disorders among parents of CIRD. Omeje et al<sup>[32]</sup> who used REHT in the treatment of alcohol use among community-dwelling HIV-positive patients reported that rational emotive health therapy was efficacious in reducing the level of alcohol-related irrational beliefs among the participants. The participants who were exposed to REHT were able to recognize and change their self-defeating thoughts and beliefs, develop healthy behavior, and become more thoughtful in managing emotional behavior. REHT participants were urged to learn that their healthy thoughts, emotions and behaviors are panacea for understanding their situations. On the other hand, the control group participants did not indicate any change in depressive symptoms between baseline and follow-up.

The finding of this present study is in line with the argument that the mere presence of a child with IRD in the family alone does not cause parents to develop symptoms of depression. Rather, it is the irrational beliefs about the future of their children that lead to unhealthy thinking and self-defeating behaviors that result in depressive symptomatology. In the light of the study's result, parents are urged to support REHT interventions designed to reduce depressive symptoms in those who are already depressed.

## 4. Limitations and Suggestions for the further studies

Limitations of the study were the small sample size of the population and lack of comparison with group of parents of children without intellectual disability. Further studies are required which should include multiple studies across the state and country, comparing both rural and urban settings with a large sample size and a control group.

Although participants self-reported never to have experienced symptoms of depression and related psychological distresses prior to their children being diagnosed of ID before being included in the study, there other correlates of depression which could trigger symptoms in parents even after their children have been diagnosed of ID. Therefore, future studies should endeavor to identify ID as the central cause of the depression before intervention.

## 5. Conclusion

There was a high rate of depressive symptoms among parents of CIRD in this study. Rates of depressive symptoms were even higher among mothers as compared to fathers. Therefore, based on the findings of the study, we concluded that REHT assisted

**Table 2**

Mean, standard deviation, analysis of variance, showing the effect size of REHT on Depressive symptoms of the parents.

Outcome	Treatment group (n = 99)		control group (n = 99)					Power	
	Time 1 M (SD)	Time 2 Mobserve (SD)	Time 1 M (SD)	Time 2 M (SD)	DF	F	sig		n2p
BDI	-57.37 (3.68)	—	55.38 (2.23)	—	1, 196	11.917	0.962	0.690	1.00
BDI	11	—	17.71 (2.21)	—	36.81 (4.11)	1196	4.994	0.000	0.889

BDI = Beck's depression Inventor.

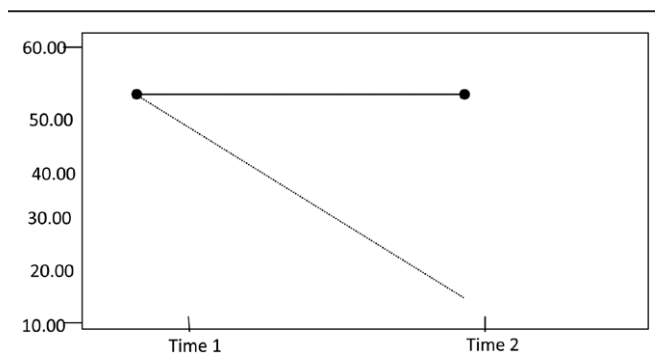


Figure 1. Graphical representation of the result.

parents of CIRD to significantly reduce their depressive symptoms as compared to the control group.

This study, however, is of benefit to different groups of people which include mental health providers, caregivers, parents, and therapists. For parents REHT may enable them to learn how to change their depressive disorders and become more thoughtful in managing their emotions.

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