



Rational emotive behavior therapy for psychological well-being in adolescents with cerebral visual impairment in Saudi Arabia

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ABSTRACT

Adolescents with Cerebral Visual Impairment (CVI) face heightened risks to psychological well-being due to social barriers, reduced independence, and negative self-perception. This study investigated the efficacy of Rational Emotive Behavior Therapy (REBT) in enhancing psychological well-being among this population in Saudi Arabia. A quasi-experimental design with pre-test, post-test, and follow-up assessments was employed. Thirty adolescents (aged 16–18; 15 males, 15 females) with CVI and documented well-being deficits from Al Noor Institute for the Blind, Buraidah, were purposively sampled. Participants were divided into experimental (REBT intervention) and control groups ($n = 15$ each). The intervention comprised 27 REBT sessions delivered thrice weekly, targeting cognitive restructuring, emotional regulation, and behavioral skills (e.g., relaxation, assertiveness). Psychological well-being was measured using a researcher-adapted version of Ryff's Psychological Well-Being Scales (PWB). Mann-Whitney U and Wilcoxon signed-rank tests analyzed between-group and within-group differences, respectively. Post-test results revealed statistically significant improvements ($p < .001$) across all PWB dimensions (self-acceptance, positive relations, autonomy, environmental mastery, purpose in life, personal growth) for the experimental group versus controls, with large effect sizes ($r = 1.0$). Within-group analysis confirmed significant pre-post gains ($p = .001$) in all dimensions. Follow-up assessments (vs. post-test) showed no significant decline ($p > .05$) in well-being scores, indicating sustained intervention effects. The REBT program effectively enhanced psychological well-being in adolescents with CVI, with benefits persisting post-intervention. Findings support REBT's applicability in mitigating cognitive and emotional challenges specific to visual impairment. Integration of REBT into support frameworks for visually impaired adolescents in educational and therapeutic settings is recommended. Future research should validate these outcomes in larger cohorts and explore long-term impacts on academic and social functioning.

Keywords: cerebral visual impairment, rational-emotive-behavioral therapy, psychological well-being, adolescents, Saudi Arabia

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INTRODUCTION

Mental health is crucial for everyone, allowing individuals to navigate challenges, maintain positive emotions, and achieve well-being (Alzeer et al., 2023; Muslihati et al., 2023). The process includes understanding oneself and others, developing one's potential, and cultivating resilience (Pitanupong et al., 2023; Tang, 2023). Importantly, positive psychology aims to equip individuals with tools to manage stress and foster mental strengths like hope, happiness, and self-compassion (Shen, 2023; Wibowo et al., 2021). However, adolescents with cerebral visual impairment (CVI) face unique challenges that can impact their psychological well-being (Caron et al., 2023). Their visual impairment can hinder social interaction, limit independence, and contribute to feelings of

isolation and inadequacy (Jiang et al., 2016; McDowell, 2023). This vulnerability can lead to anxiety, depression, and difficulty coping with new situations (Bakhla et al., 2023; Duke et al., 2022).

One promising approach to address these challenges is rational emotive behavior therapy (REBT). REBT helps individuals identify and challenge negative thought patterns that contribute to emotional distress and unhealthy behaviors (Henry, 2023). By learning to reframe their thinking, adolescents with CVI can develop greater self-esteem, manage anxiety, and navigate life's challenges more effectively. REBT is a particularly well-suited intervention for adolescents with CVI because it emphasizes cognitive restructuring (Ede et al., 2022). Unlike therapies that require physical skills, REBT focuses on verbal communication and mental imagery, making it accessible despite visual limitations. This approach can help adolescents with CVI challenges and replace negative thought patterns that contribute to emotional distress and unhealthy behaviors (El-Azzab et al., 2022). By identifying and disputing irrational beliefs, REBT empowers them to improve social interactions, manage the psychological effects of CVI, and develop more rational responses to challenging situations. Ultimately, REBT aims to enhance psychological well-being and foster a sense of self-acceptance, satisfaction with life, and harmony with their disability (Lievense et al., 2021).

This study investigates the effectiveness of a program based on REBT in improving the psychological well-being of adolescents with CVI in Saudi Arabia. Adolescents with CVI often face challenges due to their limitations, leading to negative thoughts and feelings. These can include low self-esteem, a sense of dependence on others, and a diminished sense of overall well-being. REBT addresses these issues by helping adolescents identify and challenge irrational beliefs that contribute to their emotional distress. By developing more realistic and positive thinking patterns, adolescents with CVI can improve their ability to cope with challenges and achieve greater well-being. This study aims to determine if an REBT program can significantly improve psychological well-being scores for adolescents with CVI compared to a control group. Additionally, the research will investigate whether the program's effects are lasting by comparing pre-test, post-test, and follow-up scores. This research has the potential to be valuable in both theory and practice. In terms of theory, it contributes to our understanding of how REBT can benefit a specific population, adolescents with CVI, and emphasizes the importance of addressing psychological well-being during adolescence. From a practical standpoint, the findings can inform the development of effective intervention programs in Saudi Arabia to improve psychological well-being and support the social and emotional development of adolescents with CVI. Ultimately, the study has the potential to help visually impaired adolescents develop a more positive outlook and improve their overall quality of life.

Existing research highlights the unique challenges faced by this population and the importance of addressing their psychological needs. Like sighted individuals, CVI adolescents crave independence, a key factor contributing to their overall well-being (Kúld et al., 2021). This includes aspirations for careers, social integration, and fulfilling personal lives (Citrawathi et al., 2022; Sacks & Wolffe, 2006). Notably, their visual impairment may heighten their awareness of these needs, making social acceptance and support even more crucial. Studies show that feeling accepted by sighted peers fosters a sense of belonging and purpose, positively impacting their social and psychological well-being (Jessup, 2022). Vision plays a dominant role in information processing (Pennartz et al., 2023). CVI can create significant barriers to acquiring social skills, a vital aspect of adolescent development (Palan, 2021). This challenge is compounded by the typical difficulties faced by teenagers in general (Das et al., 2019). The limitations imposed by CVI can hinder socialization and negatively impact self-perception, ultimately affecting psychological well-being (Robertson et al., 2021).

Research suggests that CVI can lead to a range of psychological and social issues, including low self-efficacy, difficulty interacting with others, negative self-image, isolation, and feelings of worthlessness (Alsamiri & Alduaylij, 2025; Mullins, 2019). The psychological burden associated with visual impairment can significantly impact personality traits and an adolescent's ability to connect with others and their environment, potentially leading to a decline in psychological well-being (Bystrova et al., 2021). The following hypotheses would be tested in this study: 1)

Hypothesis 1: Adolescents with CVI participating in the REBT program (experimental group) will exhibit statistically significant improvements in psychological well-being compared to the control group, as measured by the post-test. 2) Hypothesis 2: Adolescents in the REBT program will show statistically significant improvements in their psychological well-being scores from pre-test to post-test. 3) Hypothesis 3: There will be no statistically significant difference in psychological well-being scores between experimental group members at the post-test and follow-up measurement, indicating sustained improvement.

METHOD

This section outlines the research design, participants, instruments, and data analysis procedures employed in the study investigating the effectiveness of a REBT program on the psychological well-being of adolescents with CVI in Saudi Arabia.

A quasi-experimental design with a two-group (experimental and control) pre-test and post-test design was employed. This allowed for the comparison of changes in psychological well-being between the groups after the intervention (REBT program) in the experimental group. Additionally, a one-group pre-test and post-test design was used within the experimental group to assess the program's sustainability with a follow-up measurement.

The study population consisted of all adolescents with CVI enrolled at the Al Noor Institute for the Blind in Buraidah, Saudi Arabia. A purposive sampling technique was used to select a sample of 30 participants with CVI who experienced psychological well-being deficiencies as per reports of the teachers. The sample included 15 girls, and 15 boys with age range of 16-18 years. The sample was divided into two equal groups ($n = 15$) – experimental and control.

To ensure ethical conduct, the study received formal approval from the university's ethics committee, adhering to all relevant guidelines for research with minors. After obtaining parental consent, informed assent was sought from each participating adolescent. This process involved explaining the study in a child-friendly manner, guaranteeing their right to ask questions and choose not to participate. This approach ensured both parental permission and the children's understanding and voluntary participation in the research.

Two measures were used in the study. The first one is Ryff's (1989) Psychological Well-Being Scales (PWB). This validated scale measures psychological well-being across six dimensions: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. The scale consists of 48 items with a 7-point Likert scale response format.

The researcher prepared a modified version of the PWB scale based on the study sample (see Appendix A). The psychometric properties of the modified scale were assessed by calculating internal consistency (Cronbach's alpha) and test-retest reliability (split-half method) for each dimension and the total score. High and statistically significant correlations indicated the scale's reliability and validity for use in the current study.

The second measure is a program based on rational emotive behavior therapy (REBT). The researcher developed a 27-session REBT program delivered across three weekly sessions. The program targeted adolescents with CVI and aimed to improve their psychological well-being by 1) enhancing their internal locus of control; 2) developing skills in relaxation, cognitive restructuring, and social interaction, and 3) fostering self-acceptance, goal setting, and positive self-reliance.

The program incorporated various techniques, namely 1) cognitive techniques: unconditional acceptance, discussion, cognitive restructuring, refutation, persuasion, stopping thoughts, and the abc model; 2) emotional techniques: role-playing, humor, and modeling; 3) behavioral techniques: relaxation, assertiveness training, and visualization.

Before implementing the program, the researcher conducted a Mann-Whitney U test to ensure equivalence between the experimental and control groups regarding age and psychological well-being. This ensured the baseline comparability of the groups, strengthening the internal validity of the study.

The Mann-Whitney U test results indicated no significant differences between the experimental and control groups in terms of age ($U = 112.50$, $p = 1.00$) and various dimensions of psychological well-being. Specifically, self-acceptance ($U = 102.50$, $p = 0.67$), environmental mastery ($U = 85.50$, $p = 0.25$), purpose in life ($U = 84.50$, $p = 0.24$), personal growth ($U = 91.50$, $p = 0.37$), and the total psychological well-being score ($U = 99.50$, $p = 0.58$) showed no significant differences. Positive relations with others ($U = 73.50$, $p = 0.10$) and autonomy ($U = 73.00$, $p = 0.09$) approached significance but were not statistically significant. This finding assures the researcher of the homogeneity of the two samples prior to applying the program. The calculated Z values for the total score and all sub-dimensions fall below the critical value of 1.96.

FINDINGS AND DISCUSSION

Findings

The Mann-Whitney U test and Z value were employed as non-parametric methods to assess the significance of differences between the mean ranks of post-test scores on PWB scale for adolescents with CVI in control and experiment groups. This analysis aimed to test the first hypothesis of the study. Additionally, the researcher calculated the rank correlation coefficient to determine the effect size of the program on psychological well-being in the context of the Mann-Whitney test for two independent samples (see Table 1).

Table 1. Differences between mean ranks of post test scores and effect size for experimental versus control groups on pwb scale for adolescents with CVI

Dimensions of Well-being	Groups	<i>n</i>	Mean Rank	Sum of Ranks	Mann-Whitney <i>U</i>	<i>Z</i>	Asymp. Sig. (2-tailed)	Effect size
Self-Acceptance	Experimental	15	23.00	345.00	0.000	-4.68	0.000	1.0
	Control	15	8.00	120.00				
	Total	30						
Positive Relations with others	Experimental	15	23.00	345.00	0.000	-4.70	0.000	1.0
	Control	15	8.00	120.00				
	Total	30						
Autonomy	Experimental	15	23.00	345.00	0.000	-4.68	0.000	1.0
	Control	15	8.00	120.00				
	Total	30						
Environmental Mastery	Experimental	15	23.00	345.00	0.000	-4.67	0.000	1.0
	Control	15	8.00	120.00				
	Total	30						
Purpose in life	Experimental	15	23.00	345.00	0.000	-4.67	0.000	1.0
	Control	15	8.00	120.00				
	Total	30						
Personal Growth	Experimental	15	23.00	345.00	0.000	-4.68	0.000	1.0
	Control	15	8.00	120.00				
	Total	30						
Total	Experimental	15	23.00	345.00	0.000	-4.67	0.000	1.0
	Control	15	8.00	120.00				
	Total	30						

The results presented in Table 1 indicate statistically significant differences between the experimental and control groups on the post-test scores for psychological well-being ($\alpha \leq .05$). These differences confirm the first research hypothesis, suggesting that the experimental group, which received the REBT program, achieved higher levels of well-being compared to the control group that did not receive the program. This pattern was observed across all dimensions of the psychological well-being scale, including self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth.

To assess if the REBT program improved well-being within the experimental group (second hypothesis), the Wilcoxon signed-rank test, a non-parametric alternative to the paired t-

test, was used. This test analyzes the ranks of pre-test and post-test scores for each participant on the well-being scale and its dimensions. A significant Wilcoxon Z statistic indicates a difference between pre-test and post-test scores. Additionally, the rank correlation coefficient was calculated to determine the program's effect size (see Table 2).

Table 2. Pre-test and post-test scores on well-being dimensions for experimental group

Dimensions	Ranks	<i>n</i>	Mean Rank	Sum of Ranks	<i>Z</i>	<i>p</i>	Effect Size
Self-Acceptance	Negative Ranks	0	0	0	-3.41	0.001	1.0
	Positive Ranks	15	8	120			
	Ties	0					
Positive Relations with others	Negative Ranks	0	0	0	-3.41	0.001	1.0
	Positive Ranks	15	8	120			
	Ties	0					
Autonomy	Negative Ranks	0	0	0	-3.41	0.001	1.0
	Positive Ranks	15	8	120			
	Ties	0					
Environmental Mastery	Negative Ranks	0	0	0	-3.41	0.001	1.0
	Positive Ranks	15	8	120			
	Ties	0					
Purpose in Life	Negative Ranks	0	0	0	-3.41	0.001	1.0
	Positive Ranks	15	8	120			
	Ties	0					
Personal Growth	Negative Ranks	0	0	0	-3.41	0.001	1.0
	Positive Ranks	15	8	120			
	Ties	0					
Total	Negative Ranks	0	0	0	-3.41	0.001	1.0
	Positive Ranks	15	8	120			
	Ties	0					

Table 3. Comparison of post-test and follow-up test scores on well-being dimensions

Dimensions	Ranks	<i>n</i>	Mean Rank	Sum of Ranks	<i>Z</i>	<i>p</i>
Self-Acceptance	Negative Ranks	4	6.63	26.5	-1.90	0.056
	Positive Ranks	11	8.5	93.5		
	Ties	0				
Positive Relations with others	Negative Ranks	8	8	64	-0.22	0.819
	Positive Ranks	7	8	56		
	Ties	0				
Autonomy	Negative Ranks	2	11.25	22.5	-1.90	0.056
	Positive Ranks	12	6.88	82.5		
	Ties	1				
Environmental Mastery	Negative Ranks	8	9.13	73	-1.29	0.196
	Positive Ranks	6	5.33	32		
	Ties	1				
Purpose in Life	Negative Ranks	4	9.75	39	-0.45	0.647
	Positive Ranks	9	5.78	52		
	Ties	2				
Personal Growth	Negative Ranks	8	7.69	61.5	-0.08	0.932
	Positive Ranks	7	8.36	58.5		
	Ties	0				
Total	Negative Ranks	6	6.42	38.5	-0.88	0.379
	Positive Ranks	8	8.31	66.5		
	Ties	1				

Table 2 presents statistically significant differences between the experimental group's pre-test and post-test scores on the psychological well-being scale ($\alpha \leq .05$). These findings support the second hypothesis, suggesting that the REBT program led to improvements in all dimensions of well-being (self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth) within the experimental group.

To assess the persistence of the program's effects, a non-parametric test was employed. The Wilcoxon signed-rank test, along with its corresponding Z value, was used to evaluate the significance of differences between the experimental group's scores on the psychological well-being scale at post-test and follow-up measurement. This analysis examined whether the improvements observed after the program (post-test) were maintained over time (see Table 3).

Table 3 shows no statistically significant differences ($\alpha \leq .05$) in the mean ranks of the experimental group's scores on the psychological well-being scale between the post-test and follow-up measurements. This suggests that the improvements observed after the REBT program (post-test) were maintained to a similar degree in the follow-up. Overall, the table suggests the REBT program might have had some lasting positive impacts on self-acceptance and autonomy in adolescents with CVI. However, for other dimensions, there isn't enough evidence to definitively say whether the program's effects were maintained.

Discussion

The findings of this study provide compelling evidence for the effectiveness of REBT in enhancing the psychological well-being of adolescents with CVI in Saudi Arabia. Significant improvements across all dimensions in the experimental group compared to the control group highlight REBT's potential as a targeted intervention for this population.

The program's positive impact was evident in several key areas. The significant increase in self-acceptance and autonomy is particularly noteworthy. REBT's emphasis on cognitive restructuring likely helped adolescents challenge negative beliefs about their capabilities, fostering a more positive self-view and a stronger sense of personal agency. Cognitive restructuring is a core component of REBT, where individuals learn to identify and challenge irrational beliefs, replacing them with more rational and adaptive thoughts. This process is critical in improving self-acceptance as it directly targets self-defeating thoughts and promotes a healthier self-perception (Bernard, 2020; Terjesen et al., 2020).

Moreover, the improvement in positive relations suggests that REBT effectively addresses social challenges faced by adolescents with CVI. The focus on social skills and communication appears to have equipped participants to navigate social interactions better, leading to improved relationships with peers and family. Adolescents often face significant social challenges, and enhancing their social skills can lead to better peer relationships and overall social functioning. REBT's role in teaching effective communication and problem-solving skills is essential in this context (Bernard, 2020).

Additionally, increased environmental mastery and purpose in life highlight the broader impacts of REBT. By promoting goal-setting and problem-solving skills, REBT empowers adolescents with CVI to feel more competent and pursue meaningful goals, fostering resilience and long-term well-being. Goal setting and problem-solving are crucial for adolescents to manage daily challenges and stressors, contributing to a sense of purpose and direction in life (Terjesen et al., 2020).

Besides, the follow-up measurements indicate that the benefits of the REBT program were largely sustained over time. While there were some slight score reductions in certain dimensions, these changes were not statistically significant. This suggests that the positive effects of REBT persist beyond the immediate post-intervention period, providing adolescents with enduring tools for managing stress and maintaining well-being. Long-term follow-ups are essential in understanding the sustained impact of therapeutic interventions, and the results here suggest that REBT offers durable benefits (Bernard, 2020).

Given the success of this study, educational and therapeutic institutions should consider adopting similar interventions for adolescents with CVI. Tailoring REBT programs to address their specific needs can facilitate their social and emotional development, leading to improved

academic performance and life satisfaction. The results of this study align with previous research demonstrating the effectiveness of REBT in improving various aspects of psychological well-being. Ogakwu et al. (2023) found that adolescents participating in REBT had better control over academic stress and adjustment. Iyeke and Lawrence (2022) determined REBT to be an effective therapy strategy for lowering social anxiety in adolescents, regardless of gender. Onuigbo et al. (2019) suggest that exposure to rational emotional skills may help visually impaired university students manage dejection and improve academic success. Jalal and Gabel (2012) also demonstrate the success of group REBT coaching in improving psychological well-being indicators for patients with late-onset blindness. Future research could explore the long-term effects of REBT on specific outcomes like academic performance and social integration. In summation, this study contributes to the growing body of evidence supporting REBT as an effective and suitable treatment for adolescents with CVI, promoting acceptance, optimism, and resilience in the face of challenges.

CONCLUSION

This study demonstrates REBT's effectiveness in improving psychological well-being in adolescents with CVI. The structured program, with pre-test, post-test, and follow-up assessments, showed significant and sustained improvements across various well-being dimensions (self-acceptance, autonomy, relationships, mastery, and purpose). REBT empowers these adolescents by addressing cognitive, emotional, and behavioral aspects of well-being, ultimately leading to a more positive self-view, stronger social connections, and a greater sense of control over their lives. These findings support the integration of REBT into support systems for visually impaired adolescents, promoting long-term well-being and contributing to the growing body of evidence for REBT's use with adolescents.

This study boasts several key strengths. First, it employs a structured and comprehensive approach to assess the impact of REBT on adolescents with CVI. The use of pre-test, post-test, and follow-up assessments allows for capturing both immediate and sustained effects of the intervention. This longitudinal design enhances the reliability of the findings, demonstrating the lasting benefits of REBT. Second, the study addresses multiple dimensions of well-being, providing a holistic view of the intervention's impact. By focusing on areas such as self-acceptance, autonomy, positive relations, environmental mastery, and purpose in life, the research offers a broad perspective on how REBT enhances various aspects of psychological health. This comprehensive approach highlights the multifaceted nature of well-being and the wide-ranging benefits of REBT.

Despite its strengths, the study has several limitations that should be considered. One limitation is the relatively small sample size, which may affect the generalizability of the findings. While the results are promising, larger studies are needed to confirm these outcomes and ensure their applicability to a broader population of adolescents with CVI. Additionally, the study relies on self-reported measures of psychological well-being, which may introduce bias. Participants might respond in a socially desirable manner or may not accurately recall their feelings and behaviors, affecting the reliability of the data collected.

Future research should focus on addressing the limitations of the current study. Larger-scale studies with more diverse populations are necessary to validate these findings and ensure their generalizability across different groups of adolescents with CVI. Moreover, further research could investigate the specific mechanisms through which REBT exerts its positive effects. Exploring how elements like cognitive restructuring, goal-setting, and problem-solving contribute to improved well-being could help refine and optimize therapeutic interventions.

The findings of this study have important implications for the field of adolescent mental health, particularly for those with visual impairments. The demonstrated effectiveness of REBT in improving various aspects of well-being suggests that this therapeutic approach should be incorporated into support systems for visually impaired adolescents. Schools, mental health professionals, and caregivers could adopt REBT techniques to help adolescents develop better coping mechanisms, enhance self-acceptance, and improve social skills.

DECLARATION OF CONFLICTING INTERESTS

The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

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REFERENCES

- Alsamiri, Y. A., & Alduaylij, A. bin A. bin A. (2025). Academic challenges of visually impaired students at Hail University. *Jurnal Cakrawala Pendidikan*, 44(1), 9–20. <https://doi.org/10.21831/cp.v44i1.77706>
- Alzeer, J., Alzeer, J., & Benmerabet, H. (2023). The development of human personality: A comprehensive overview. *Psychological Disorders and Research*, 6(1), 1–8. <https://doi.org/10.31487/j.PDR.2023.01.01>
- Bakhla, A. K., Pallavi, P., Kisku, R. R., Goyal, N., Kumar, A., & Prasad, K. (2023). Prevalence of depression in visually impaired children and adolescents: A systematic review and meta-analysis. *Indian Journal of Psychiatry*, 65(4), 396–403. https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_647_22
- Bernard, M. (2020). A compendium of REBT principles and best practices for working with children and adolescents. In *Rational-Emotive and Cognitive-Behavioral Approaches to Child and Adolescent Mental Health: Theory, Practice, Research, Applications* (pp. 51–77). Springer International Publishing. https://doi.org/10.1007/978-3-030-53901-6_3
- Bystrova, Y., Kovalenko, V., & Kazachiner, O. (2021). Social and pedagogical support of children with disabilities in conditions of general secondary educational establishments. *Journal for Educators, Teachers and Trainers*, 12(3), 101–114. <https://doi.org/10.47750/jett.2021.12.03.010>
- Caron, V., Barras, A., van Nispen, R. M. A., & Ruffieux, N. (2023). Teaching social skills to children and adolescents with visual impairments: A systematic review. *Journal of Visual Impairment & Blindness*, 117(2), 128–147. <https://doi.org/10.1177/0145482X231167150>
- Citrawathi, D. M., Abu Bakar, A. Y., Adnyana, P. B., Widiyanti, N. L. P. M., & Sudiana, I. K. (2022). Effect of the problem-based adolescent reproductive health module on students' life skills and attitudes. *Jurnal Cakrawala Pendidikan*, 41(3), 731–741. <https://doi.org/10.21831/cp.v41i3.48303>
- Das, M., Gergle, D., & Piper, A. M. (2019). "It doesn't win you friends." *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 1–26. <https://doi.org/10.1145/3359293>
- Duke, R. E., Nwachukwu, J., Torty, C., Okorie, U., Kim, M. J., Burton, K., Gilbert, C., & Bowman, R. (2022). Visual impairment and perceptual visual disorders in children with cerebral palsy in Nigeria. *British Journal of Ophthalmology*, 106(3), 427–434. <https://doi.org/10.1136/bjophthalmol-2020-317768>
- Ede, M. O., Okeke, C. I., Chinweuba, N. H., Onah, S. O., & Nwakpadolu, G. M. (2022). Testing the efficacy of family health-model of REBT on family values and quality of family life among parents of children with visual impairment. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 40(2), 252–277. <https://doi.org/10.1007/s10942-021-00409-z>
- El-Azzab, S. I., Othman, B. M., & Ali, S. H. (2022). Efficiency of rational emotive behavior therapy on anxiety traits and irrational ideas among patients with drug addiction. *Assiut Scientific Nursing Journal*, 10(33), 41–53. <https://doi.org/10.21608/asnj.2022.172063.1449>
- Henry, S. (2023). *Active imagination, wellbeing and ways of seeing: A phenomenological inquiry into experiences of adult learners with visual impairments* [Educational Studies Dissertations, 210]. https://digitalcommons.lesley.edu/education_dissertations/210
- Iyeke, P. O., & Lawrence, K. C. (2022). Reducing social anxiety among adolescents in the Covid-19 era: Rational emotive behavior therapy as a counselling approach. *International Journal*

- of *Psychology and Psychological Therapy*, 22(1), 77–87.
<https://www.ijpsy.com/volumen22/num1/609.html>
- Jalal, S., & Gabel, S. (2012). Physical disability, gender, and marriage in Jordanian society. *Review of Disability Studies: An International Journal (RDS)*, 10(1 & 2).
<https://www.rdsjournal.org/index.php/journal/article/view/33>
- Jessup, G. (2022). Social inclusion and high school students with vision impairment. In *Handbook of Social Inclusion* (pp. 969–987). Springer International Publishing.
https://doi.org/10.1007/978-3-030-89594-5_54
- Jiang, B., Walstab, J., Reid, S. M., Davis, E., & Reddihough, D. (2016). Quality of life in young adults with cerebral palsy. *Disability and Health Journal*, 9(4), 673–681.
<https://doi.org/10.1016/j.dhjo.2016.04.006>
- Köld, P. B., Kef, S., & Sterkenburg, P. S. (2021). Bibliometric mapping of psychological well-being among children with a visual impairment. *British Journal of Visual Impairment*, 39(2), 131–146. <https://doi.org/10.1177/0264619620915245>
- Lievense, P., Vacaru, V. S., Kruithof, Y., Bronzewijker, N., Doeve, M., & Sterkenburg, P. S. (2021). Effectiveness of a serious game on the self-concept of children with visual impairments: A randomized controlled trial. *Disability and Health Journal*, 14(2), 101017.
<https://doi.org/10.1016/j.dhjo.2020.101017>
- McDowell, N. (2023). A review of the literature to inform the development of a practice framework for supporting children with cerebral visual impairment (CVI). *International Journal of Inclusive Education*, 27(6), 718–738.
<https://doi.org/10.1080/13603116.2020.1867381>
- Mullins, C. D. (2019). *Cognitive behavioral group therapy for blind and visually impaired adults: Acceptance, problem-solving, and cognitive distortions* [PCOM Psychology Dissertations. 523]. https://digitalcommons.pcom.edu/psychology_dissertations/523
- Muslihathi, M., Hotifah, Y. none, Hidayat, W. N., Valdez, A. V, Purwanta, E., 'Ilmi, A. M., & Saputra, N. M. A. (2023). Predicting the mental health quality of adolescents with intensive exposure to metaverse and its counseling recommendations in a multicultural context. *Jurnal Cakrawala Pendidikan*, 42(1), 38–52. <https://doi.org/10.21831/cp.v42i1.54415>
- Ogakwu, N. V., Ede, M. O., Agu, P. U., Manafa, I., Ezeaku, F., Onah, S. O., Okereke, G. K. O., Omeke, F. C., Agbigwe, I. B., & Oneli, J. O. (2023). School-based intervention for academic stress management and school adjustment among industrial technical education students: Implications for educational administrators. *Medicine*, 102(2), e32547.
<https://doi.org/10.1097/MD.00000000000032547>
- Onuigbo, L. N., Eseadi, C., Ebifa, S., Ugwu, U. C., Onyishi, C. N., & Oyeoku, E. K. (2019). Effect of rational emotive behavior therapy program on depressive symptoms among university students with blindness in Nigeria. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 37(1), 17–38. <https://doi.org/10.1007/s10942-018-0297-3>
- Palan, R. (2021). “I seriously wanted to opt for science, but they said no”: Visual impairment and higher education in India. *Disability & Society*, 36(2), 202–225.
<https://doi.org/10.1080/09687599.2020.1739624>
- Pennartz, C. M. A., Oude Lohuis, M. N., & Olcese, U. (2023). How “visual” is the visual cortex? The interactions between the visual cortex and other sensory, motivational and motor systems as enabling factors for visual perception. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 378(1886), 20220336.
<https://doi.org/10.1098/rstb.2022.0336>
- Pitanupong, J., Sathaporn, K., Ittasakul, P., & Karawekpanyawong, N. (2023). Relationship of mental health and burnout with empathy among medical students in Thailand: A multicenter cross-sectional study. *PLOS ONE*, 18(1), e0279564.
<https://doi.org/10.1371/journal.pone.0279564>
- Robertson, A. O., Tadić, V., & Rahi, J. S. (2021). This is me: A qualitative investigation of young people’s experience of growing up with visual impairment. *PLOS ONE*, 16(7), e0254009.
<https://doi.org/10.1371/journal.pone.0254009>
- Sacks, S. Z., & Wolffe, K. E. (2006). *Teaching social skills to students with visual impairments:*

From theory to practice. APH Press.

- Shen, Y. (2023). On cognitive changes brought by positive psychology to college students based on PERMA model. *International Journal of Education and Humanities*, 7(3), 158–160. <https://doi.org/10.54097/ijeh.v7i3.6358>
- Tang, A. (2023). *The leader's guide to wellbeing: How to use soft skills to get hard results.* Pearson Education.
- Terjesen, M. D., Duhning, C., Pata, A. K., & Prizer, J. K. (2020). The current status of Rational Emotive and Cognitive Behavioral Therapy (RE-CBT) research with children and adolescents. In *Rational-Emotive and Cognitive-Behavioral Approaches to Child and Adolescent Mental Health: Theory, Practice, Research, Applications* (pp. 31–49). Springer International Publishing. https://doi.org/10.1007/978-3-030-53901-6_2
- Wibowo, Y. S., Setiawati, F. A., Qodriah, S. R., & Ayriza, Y. (2021). Positive education: Exploring students' well-being framework in Indonesia. *Jurnal Cakrawala Pendidikan*, 40(3), 762–771. <https://doi.org/10.21831/cp.v40i3.33530>

Appendix A

Adopted version of carol ryff's psychological well-being scale

Statements	strongly agree	agree moderately	agree slightly	disagree	reject slightly	reject moderately	strongly reject
My potential is clear to me.							
A successful social network of affection, understanding and respect is mine.							
The problems that I face are solvable by me.							
My own standards and convictions are established by me.							
Others are often relied on by me to manage my affairs.							
My life is not subject to my will, I believe.							
Many skills that assist me in life are pursued by me.							
Specific objectives guide my life.							
My shortcomings are monitored and overcome by me.							
My behavior is attempted to be controlled by most people.							
My tasks are accomplished successfully.							
The maximum benefit from my potential is tried to be achieved by me.							
My own criteria for judging my actions are set by me.							
Meeting new people is considered a pleasant experience that is always looked forward to by me.							
Acquiring new information and skills is cared about by me.							
The potential of the environment is utilized by me to achieve what is aspired to by me.							
No clear purpose is in my life.							
My life is felt to be trivial and worthless by me.							
I feel like a person of social value.							
A goal and a message in my life are searched for by me.							
New friendships are formed by me.							
Submissive to conforming to the society that is lived in by me is felt by me.							
What is wanted to be accomplished in my life is known by me.							

My mistake is admitted by me when it is fallen into by me.							
Broad plans and great hopes for the future are set by me.							
I am satisfied with the past, with its negatives and positives, which is felt by me.							
Uncomfortable when people are felt by me.							
Successful in my life is felt by me.							
Content with myself is felt by me.							
Responsibility for my actions and decisions is taken by me.							
Loneliness often plagues me.							
There is nothing that gives meaning to my existence.							
I engage with my friends in various activities and social occasions.							
I resist the intrusion of others into my personal affairs.							
I have not accomplished anything worthwhile in my life.							
New situations stimulate my passion and interest and enrich me.							
I am energetic and lively in executing what I have planned.							
I long for my friends when they are away.							
I am attentive to the activities and plans that fulfil my objectives.							
When things deteriorate, I am confident of surmounting them.							
I encounter difficulty organizing aspects of my life according to my preferences.							
I can demonstrate my proficiency and skills in my academic domain.							
I experience happiness when I am with my friends.							
I can apply my previous experiences to overcome challenges.							
I feel listless when performing my daily tasks.							
I attempt to manage my time as efficiently as possible.							
I can prioritize my goals and work towards them.							
Facing difficulties enhances my sense of competence.							