

Effectiveness of the Rational Emotive Education Model in Reducing Cognitive Distortions: Demands, Awfulizing, Low Frustration Tolerance, and Depreciation in Prospective Teachers

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Abstract

This study evaluates the effectiveness of the Rational Emotive Education Model (REEM) in reducing cognitive distortions—demands, awfulizing, low frustration tolerance, and depreciation—among prospective teachers in Kerala, India. Employing a quasi-experimental pretest-posttest non-equivalent group design, the study involved an experimental group receiving REEM-based training and a control group engaged in standard classroom activities. Findings revealed significant reductions in irrational beliefs across all measured components for the experimental group, as confirmed by ANCOVA results. The intervention notably decreased rigid demands, catastrophic thinking, discomfort intolerance, and self-deprecating beliefs. These results underscore REEM's potential to enhance emotional resilience and rational thinking among future educators, equipping them to manage classroom challenges effectively. The study highlights the importance of integrating structured mental health programs into teacher education to foster well-being and professional competence. Recommendations for curriculum integration and future research directions are also discussed.

Key Words: Rational Emotive Education Model, Irrational Beliefs

Introduction

In today's educational landscape, prospective teachers face increasing cognitive and emotional challenges that can hinder their professional growth and classroom effectiveness. Cognitive distortions such as demands, awfulizing, low frustration tolerance, and depreciation—key components of irrational beliefs—are significant barriers to maintaining mental well-being and fostering positive interpersonal relationships. According to Albert Ellis's Rational Emotive Behavior Therapy (REBT), irrational beliefs stem from rigid and absolutist thinking patterns that lead to emotional disturbances and self-defeating behaviors. Rational Emotive Education (REE), the educational application of REBT, has shown promise in equipping individuals with the skills to challenge and replace irrational thoughts with rational alternatives.

While REE has been extensively studied and applied in Western educational contexts, there is a noticeable gap in its application and evaluation within the Indian educational system, particularly among aspiring educators. By investigating how well the Rational Emotive Education Model (REEM) reduces particular cognitive biases in aspiring teachers in Kerala, India, this study seeks to close this gap. The findings are expected to provide valuable insights into how REEM can enhance emotional resilience and rational thinking, equipping future educators to navigate the complexities of teaching with greater confidence and competence.

Review of Literature

Theoretical Foundations of Irrational Beliefs Rigid, unrealistic, and absolutist thought patterns that cause emotional and behavioural problems are hallmarks of irrational beliefs. (Ellis, 2001). These beliefs often manifest as cognitive distortions such as demands ("should" or "must" statements), awfulizing (catastrophizing situations), low frustration tolerance (an inability to cope with discomfort), and depreciation (undervaluing oneself or others). Ellis's REBT posits that such beliefs are significant contributors to psychological distress and maladaptive behaviors (Dryden, 2002).

The widespread impact of illogical ideas on mental health is highlighted by empirical research. Chang and Bridewell (1998) discovered, for example, that emotional outcomes like pessimism and anxiety are correlated with strong support of erroneous ideas. In a similar vein, Interventions that tackle these cognitive distortions are necessary, as Malouff, Schutte, and McClelland (1992) showed that irrational beliefs worsen stress and impair emotional control.

Rational Emotive Education (REE) in Educational Contexts REE applies REBT principles to educational settings, aiming to foster rational thinking and emotional regulation among students and educators. Research has demonstrated how well it works to improve emotional health and lessen erroneous beliefs. For example, REE therapies dramatically reduced stress and illogical beliefs among Malaysian schoolchildren, according to Mahfar et al. (2014). In a similar vein, Robertson and Dunsmuir (2013) discovered that instructors who had higher levels of self-efficacy and fewer illogical beliefs also had lower stress levels and improved classroom management.

In addition to addressing emotional challenges, REE has demonstrated positive effects on social skills and interpersonal relationships. Popa and Bochis (2012) observed that REE programs improved peer relationships and socio-metric status

among children. Moreover, Sharp and McCallum (2005) highlighted the utility of REE in reducing aggressive behaviors among middle school students. Despite these findings, there is limited research on REE's application in India, particularly among prospective teachers, emphasizing the need for localized studies.

Need and Significance of the Study

The teaching profession demands a high level of cognitive, emotional, and social competence. Cognitive distortions, if unaddressed, can impair teachers' ability to manage stress, build positive relationships, and create effective learning environments. Furthermore, teachers' mental health significantly impacts students' emotional well-being and academic success. Despite the growing awareness of these challenges, there is a lack of structured interventions tailored to the Indian context that address the cognitive and emotional needs of prospective teachers.

This study aims to evaluate the effectiveness of the Rational Emotive Education Model in reducing cognitive distortions among prospective teachers. By targeting demands, awfulizing, low frustration tolerance, and depreciation, the study seeks to promote rational thinking and emotional resilience among aspiring educators in Kerala. The findings will not only contribute to the body of knowledge on REE but also provide practical implications for integrating rational thinking frameworks into teacher training programs. This, in turn, will equip future educators to handle the multifaceted challenges of teaching with greater confidence, emotional stability, and effectiveness.

Purpose of the Study

The study's objective is to assess how well the Rational Emotive Education Model reduces teacher candidates' irrational beliefs.

Objectives

1. To find out the effectiveness of Rational Emotive Education Model on decreasing Irrational Beliefs of teacher trainees for total sample.
2. To find out the effectiveness of Rational Emotive Education Model on decreasing component behaviours of Irrational Belief of teacher trainees for total sample

Hypotheses

1. There is significant effect of Rational Emotive Education Model on decreasing Irrational Beliefs of Teacher trainees for the total sample.
2. There is significant effect of Rational Emotive Education Model on decreasing component behaviours of Irrational Belief of teacher trainees for the total sample

Method

Techniques

A quasi-experimental research design was employed, specifically using a pretest-posttest non-equivalent group approach, to examine the impact of the intervention across non-randomly assigned groups. This design was chosen to mirror real-world educational environments, where random assignment is often impractical, and to ensure the intervention's applicability and relevance to current teacher training frameworks. The study included two existing groups: an experimental group that participated in the REEM-based intervention and a control group that carried out standard classroom activities without any additional treatment. To account for initial differences, Analysis of Covariance (ANCOVA) was utilized, thus improving the validity of the findings.

Variables of the Study

Independent Variable

The training given using Rational Emotive Education Model is the independent variable.

Dependent Variables

In this study the dependent variable was Irrational Beliefs of prospective teachers.

Population

The research targeted teacher trainees from various areas in Kerala State. The sample comprised individuals who had finished their undergraduate studies at different universities throughout Kerala. Participants for both the experimental and control groups were chosen from two teacher training colleges in the state.

Samples

The two teacher training colleges designated as the experimental and control groups were selected using convenient sampling. The experimental group was S.N.M. Training College in Moothakunnam, where the researcher is employed, while the control group was H.D.P.Y. College of Education in Mattupuram, North Paravur, which was the nearest

accessible institution to the researcher. This strategy made it easier to access participants and ensured the practicality of finding suitable individuals for the study.

Tools and Materials Used in the Research

In light of the current study, the investigator used the following materials and tools.

1. Rational Emotive Education Model (Musthafa & Bisini, 2013)
2. Irrational Beliefs Inventory (Musthafa & Bisini, 2012)

Rational Emotive Education Model

A systematic three-month program called the Rational Emotive Education Model (REEM) aims to improve students' mental health and life skills by using the concepts of Rational Emotive Behavior Therapy (REBT) in educational settings. The curriculum, which is designed for secondary school students, gives teachers the cognitive, behavioral, and emotional tools they need to help them develop resilience, positive self-acceptance, logical thinking, stress management, and problem-solving skills. The model emphasizes the value of finishing assignments for successful learning and combines Socratic and didactic teaching approaches.

REEM is divided into three stages: Group Intervention, which entails challenging irrational beliefs and cultivating unconditional self-acceptance; Teacher Intervention, which emphasizes self-help techniques and acceptance principles; and Theoretical Orientation, where students study the ABC Model and the effects of rational and irrational beliefs. The program uses a variety of strategies to help students develop their emotional health and adaptive coping mechanisms. These include cognitive strategies like active disputing and cognitive homework, emotive strategies like role play and rational-emotive imagery, and behavioral approaches like skill training and reinforcement.

Irrational Beliefs Inventory

The **Irrational Beliefs Inventory** was developed to assess the level of irrational beliefs among students, focusing on four dimensions: **Demands**, **Awfulizing Beliefs**, **Discomfort Intolerance**, and **Depreciation Beliefs**. Total ratings ranged from 53 to 265; responses were rated on a scale of 1 (strongly disagree) to 5 (strongly agree). Through the test-retest technique, the tool had a reliability coefficient of 0.81, demonstrating its consistency and reliability, and it showed good construct and face validity.

Table 1 Result of Test of Significance of Difference in Mean Pre-test and Post-test scores of four component behaviours of Irrational Beliefs and total Irrational Beliefs between control and experimental groups-Total Sample

Variable	Group	No of Students	PreTest			Post Test		
			Means	Standard Deviation	Critical Ratio	Means	Standard Deviation	Critical Ratio
Demands	Control Group	50	34.98	8.69	0.85	38.08	8.05	4.176**
	Experimental Group	50	33.62	7.20		31.76	7.05	
Awfulizing Beliefs	Control Group	50	24.96	5.11	1.92	28.06	6.17	3.527**
	Experimental Group	50	23.20	4.02		24.40	3.98	
Low Frustration Belief	Control Group	50	16.28	4.14	0.48	16.72	4.53	3.624**
	Experimental Group	50	16.68	4.13		14.12	2.29	
Depreciation Belief	Control Group	50	83.32	19.14	1.29	89.08	21.58	3.892**
	Experimental Group	50	87.50	12.62		75.42	12.26	
Total Irrational Beliefs	Control Group	50	159.54	21.13	0.35	172.00	25.44	5.581**
	Experimental Group	50	161.00	20.70		145.70	21.40	

**Significant at .01 level

Pre- and post-test results for the control and experimental groups show that the Rational Emotive Education Model reduces irrational beliefs in teacher trainees. In the pre-test, both groups showed similar means across the four components of irrational beliefs (Demands, Awfulizing Beliefs, Low Frustration Belief, and Depreciation Belief) and the total irrational beliefs, with critical ratios indicating no significant difference. However, the post-test results show that the experimental group, which received the Rational Emotive Education intervention, exhibited a substantial reduction in irrational beliefs across all components compared to the control group. Significant critical ratios at the 0.01 level for Demands (4.176), Awfulizing Beliefs (3.527), Low Frustration Belief (3.624), Depreciation Belief (3.892), and Total Irrational Beliefs (5.581) indicate a meaningful decline in irrational beliefs for the experimental group. Conversely, the control group showed increases or minimal changes in these beliefs. This demonstrates that the Rational Emotive Education Model is effective in significantly reducing irrational beliefs among teacher trainees.

Table 2 Summary of Analysis of Co-variance (ANCOVA) for Irrational Beliefs and Components of Irrational Beliefs - Pretest scores as covariate for Total Sample

Variables	Source of Variance	Sum of Squares	df	Mean Squares	F	Level of Significance
Rigid Demand	Between	2907.759	1	2907.759	104.346	
	Within	2703.041	97	27.866		0
	Total	128550	100			
Awfulizing Belief	Between	934.923	1	934.923	53.224	0
	Within	1703.897	97	17.566		
	Total	71775	100			
Discomfort Intolerance	Between	208.667	1	208.667	19.228	0
	Within	1052.693	97	10.853		
	Total	25208	100			
Depreciation Belief	Between	17143	1	17143	127.551	0
	Within	13036.86	97	134.401		
	Total	711351	100			
Irrational Beliefs(total)	Between	22375.364	1	22375.364	68.282	0
	Within	31785.956	97	327.69		
	Total	2593754	100			

The ANCOVA results reveal significant reductions in irrational beliefs and their components among teacher trainees who participated in the Rational Emotive Education Model. Specifically, the Rigid Demand component shows a highly significant effect with an F-value of 104.346, indicating a substantial reduction in rigid demands among the experimental group compared to the control group. The Awfulizing Belief component also shows a significant difference with an F-value of 53.224, suggesting the intervention effectively reduced exaggerated negative thinking. For Discomfort Intolerance, the F-value of 19.228 reflects a meaningful decrease in the inability to tolerate discomfort. The Depreciation Belief component exhibits the highest impact with an F-value of 127.551, indicating a strong reduction in self-deprecating beliefs. Lastly, the overall measure of Total Irrational Beliefs shows a significant effect with an F-value of 68.282, confirming a comprehensive decrease in irrational beliefs due to the intervention. These significant F-values across all components highlight the effectiveness of the Rational Emotive Education Model in reducing irrational beliefs among teacher trainees.

Discussion

The findings of this study strongly support the effectiveness of the Rational Emotive Education Model (REEM) in reducing irrational beliefs among teacher trainees. The significant F-values across all components of irrational beliefs—Rigid Demand (F = 104.346), Awfulizing Belief (F = 53.224), Discomfort Intolerance (F = 19.228), Depreciation Belief (F = 127.551), and Total Irrational Beliefs (F = 68.282)—demonstrate that the intervention had a substantial impact. While the control group's unreasonable beliefs either increased or changed very little, the experimental group's irrational

beliefs significantly decreased. This shows that cognitive distortions can be effectively addressed by systematic interventions like REEM, which increase emotional resilience and rational thought. These findings are in line with earlier studies showing the beneficial effects of therapies based on rational emotive behaviour therapy (REBT) on psychological health. The experimental group's notable reduction in illogical beliefs demonstrates how beneficial the cognitive, affective, and behavioural techniques included in the REEM are for teacher candidates.

Educational Implications of the Study

The findings have significant implications for teacher education programs:

- 1. Integration into Curriculum:** Incorporating Rational Emotive Education into teacher training curricula can help future educators develop rational thinking and emotional resilience, essential for managing classroom challenges.
- 2. Mental Health Support:** Institutions should adopt structured mental health programs like REEM to support teacher trainees in managing stress, anxiety, and negative thought patterns, leading to better mental well-being.
- 3. Professional Development:** Regular workshops and training sessions on rational thinking and emotional regulation can enhance teachers' coping strategies, improving their classroom management and interpersonal relationships.
- 4. Student-Teacher Relationships:** Teachers equipped with rational thinking skills are better positioned to foster positive relationships with students, creating supportive and productive learning environments.
- 5. Policy Formulation:** Educational policymakers should consider mandating mental health interventions in teacher training programs to ensure comprehensive development.

Conclusion

This study conclusively demonstrates the effectiveness of the Rational Emotive Education Model in significantly reducing irrational beliefs among teacher trainees. The intervention led to substantial improvements across all measured components of irrational beliefs, highlighting the model's potential to foster emotional resilience and rational thinking. These findings underscore the necessity of integrating mental health and cognitive-behavioral interventions into teacher education programs. By equipping future educators with effective strategies to manage cognitive distortions, institutions can contribute to the development of emotionally resilient and effective teachers, ultimately enhancing educational outcomes. The study opens avenues for future research to further refine and expand the application of REEM in diverse educational contexts.

References

1. Bisini, P. S. (2016). *Effectiveness of rational emotive education model in terms of interpersonal skills, irrational beliefs, and tolerance for ambiguity among VIII standard students* (Doctoral dissertation, University of Calicut). University of Calicut.
2. Chang, E. C., & Bridewell, W. B. (1998). Irrational beliefs, optimism, pessimism, and psychological distress: A preliminary examination of differential effects in a college population. *Journal of Clinical Psychology*, 54(2), 137-142.
3. Dryden, W. (2002). Rational emotive behaviour group therapy: An overview. In W. Dryden & M. Neenan (Eds.), *Rational emotive behaviour group therapy* (pp. 1-27). Brunner-Routledge.
4. Ellis, A. (2001). *Overcoming destructive beliefs, feelings, and behaviors: New directions for rational emotive behavior therapy*. Prometheus Books.
5. Mahfar, M., Aslan, A. S., Noah, S. M., Ahmad, J., & Jaafar, W. M. W. (2014). Effects of Rational Emotive Education Module on irrational beliefs and stress among fully residential school students in Malaysia. *Procedia-Social and Behavioral Sciences*, 114, 239-243.
6. Malouff, J. M., Schutte, N. S., & McClelland, T. (1992). Examination of the relationship between irrational beliefs and state anxiety. *Personality and Individual Differences*, 13(4), 451-456.
7. Popa, C., & Bochis, L. (2012). The effects of a Rational Emotive Behaviour Education program on the sociometric status and interpersonal perception modification of 9-10 year old Romanian pupils. *Procedia-Social and Behavioral Sciences*, 46, 5792-5796.
8. Robertson, C., & Dunsmuir, S. (2013). Teacher stress and pupil behaviour explored through a rational-emotive behaviour therapy framework. *Educational Psychology*, 33(2), 215-232. <https://doi.org/10.1080/01443410.2012.730323>
9. Sharp, S. R., & McCallum, R. S. (2005). A rational emotive behavioral approach to improve anger management and reduce office referrals in middle school children: A formative investigation and evaluation. *Journal of Applied School Psychology*, 21(1), 39-66.