

EFFECTS OF CBT AND DBT THERAPIES IN DRUG ADDICTS LIVING IN REHABILITATION CENTERS: AN EXPERIMENTAL STUDY

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Abstract

This paper has discussed the impact of Cognitive Behavior Therapy (CBT) and Dialectical Behavior Therapy (DBT) in helping individuals in rehabilitation homes to decrease the level of addiction, cravings, emotional instability, and relapse tendency. A quasi-experimental pre-test/ post-test design in which 60 people were randomly spread into CBT, DBT or treatment-as-usual (TAU) was used. The standardized measures, such as the Addiction Severity Index (ASI), Drug Craving Questionnaire (DCQ), Difficulties in Emotion Regulation Scale (DERS), and Relapse Risk Scale (RRS), were used. High internal consistency was demonstrated by reliability analysis (Cronbach 8291). Paired-sample t-tests showed that CBT and DBT groups have significant improvements in pre and post and the TAU group does not show any meaningful changes. The ANOVA and post hoc results indicated that CBT was more efficient in terms of the lessening of the extent of addiction and cravings whereas DBT was superior in terms of emotional control and prevention of relapse. These results indicate that systematic psychotherapies, especially DBT, are very effective in improving treatment in addiction rehabilitation centers.

Keywords: Emotional Regulation, Quasi Experiment and Cognitive Behavior Therapy

Introduction

Background and History

Substance use disorders (SUDs) are a major global health issue, which has led to the high morbidity, mortality and social cost. According to the World Health Organization, over 35 million individuals worldwide experience drug use disorders, and the relapse rates frequently exceed 4060 percent most people receive treatment (Haroda et al., 2025). Evidence-based rehabilitation strategies have become the main issue of attention in South Asia, including the nation of Pakistan, where the prevalence of drug addiction among young adults is soaring (Ayub et al., 2020). The structured psychotherapies such as Cognitive Behavior Therapy (CBT) and Dialectical Behavior Therapy (DBT) are more and more becoming part of rehabilitation centers as organized methods of helping the patients in recovery through provision of structured environments of detoxification, relapse prevention and psychosocial support.

Traditionally, the strategies of addiction treatment were mainly medical or penal, with a concentration on detoxification or abstinence without considering the psychological processes behind the issue (Ray et al., 2020). The development of psychotherapies became a revolution: behavior therapy put the emphasis on conditioning and reinforcement, whereas cognitive therapy put an accent on the significance of maladaptive thought patterns. The inclusion of them as part of the CBT enabled them to be able to effectively treat both maladaptive cognitions and behaviors at

the same time, attacking the mechanisms of relapse directly. On the same note, DBT, which was initially aimed at the treatment of borderline personality disorder, was applied to the treatment of addiction since emotional dysregulation and impulsivity frequently drive substance use (Davoudi et al., 2021).

Although the evidence base is growing, there is limited comparative experimental research that has been conducted to support CBT and DBT in residential rehabilitation. Some randomized controlled trials have confirmed the usefulness of CBT in improving the degree of abstinence and coping skills (Kiluk et al., 2024), but other research studies have also revealed that DBT has the potential to bring special benefits to emotion regulation and distress tolerance (Rahmati et al., 2025). Nevertheless, the absence of such studies that directly compare such interventions within organized treatment environments is a problem. This is a serious loophole that implies the necessity of studying the two treatments in rehabilitation centers and finding out their relative and supplementary effects (Harada et al., 2025).

Definition of Variables

Cognitive Behavior Therapy (CBT). CBT is a time-limited therapy in the psychotherapeutic setting, that is structured and is directed at the change of maladaptive thoughts and behavioral patterns that are ensured to sustain substance use (Ray et al., 2020). It assists the clients to align themselves with the high-risk scenario, challenge the thinking errors, and acquire coping skills. The CBT when applied to the addiction looks at the relapse prevention, the functional response analysis, and the behavior activation.

Dialectical Behavior Therapy (DBT). The combination of cognitive-behavioral techniques and mindfulness and acceptance techniques is a part of an integrative psychotherapy called DBT (Linehan, 1993/2015). During the process of addiction treatment, DBT is directed at the decrease of impulsivity, increase in distress tolerance, and emotion regulation skills that are fundamental to an individual who is engaging in relapse in case of overwhelming affect (Davoudi et al., 2021).

Substance Use Outcomes. Consequences of substance use include the number of times it is used, abstinence, frequency of relapse, seriousness of craving and psychosocial functioning. The most commonly utilized standardized measures that also measure the intervention efficacy are the Addiction Severity Index (ASI) and Difficulties in Emotion Regulation Scale (ERS) (Kiluk et al., 2024).

Secondary Variables. Emotion regulation, executive functioning and impulsivity are being identified more as having mediation between psychotherapy and substance outcomes. According to recent research, DBT enhances executive control and attention in men receiving methadone maintenance therapy, which implies that secondary cognitive benefits are involved in the recovery (Rahmati et al., 2025).

Treatment Setting. Rehabilitation facilities offer closed and controlled spaces, which reduce outside influences and allow the punctuality of therapy provision. They are therefore good settings to test interventions like CBT and DBT. Nonetheless, it is still uncertain whether the sustainability in the long run following the discharge, which needs to be considered through relapse prevention strategies beyond residential care (Harada et al., 2025).

Theoretical Frameworks

Cognitive Behavioral Therapy (CBT)

CBT is based on a number of theories that interrelate with each other. Cognitive Behavioral Theory assumes that there are distorted thoughts, which cause both feelings and actions; maladaptive beliefs like: I cannot handle without drugs, keep the individual using drugs (Ray et al., 2020). The Relapse Prevention Model (Marlatt and Gordon, 1985/2005) states that the causes of relapse

include high-risk situations, ineffective coping, and abstinence violation effects, which CBT treats with the help of coping skills training and cognitive restructuring (Kiluk et al., 2024). Moreover, the Social Cognitive Theory emphasizes self-efficacy and outcome expectancy in strengthening behavior change, which CBT enhances with the help of mastery experience (Bandura, 1997; modified applications in Ray et al., 2020). Lastly, there is the behavioral learning theory, according to which substance use is perpetuated by operant reinforcement; CBT interferes with this mechanisms by changing reinforcement contingencies (Recovery Research Institute, n.d.).

Dialectical Behavior Therapy (DBT)

DBT is mainly based on the biosocial theory by Linehan, according to which the role of emotional vulnerability in combination with invalidating conditions is the cause of chronic emotion management disorder and dysadaptive behaviors, including substance use (Davoudi et al., 2021). DBT covers these areas of weakness through mindfulness instruction, emotion management, distress tolerance, and interpersonal effectiveness. The dialectics theory focuses on the balanced approach to accepting and changing so that clients can accept suffering and promise to improve their behavior (Psychotherapy Academy, n.d.). Also, the theory of emotion regulation and self-regulation models describe how DBT influences the executive functioning and impulse control, which is important in relapse reduction (Rahmati et al., 2025).

Substance Use Outcomes

There are numerous frameworks that explain substance use and relapse. According to the Relapse Prevention Theory, relapse is caused by both immediate determinants (high-risk cues, poor coping) and covert antecedents (stress, craving, lifestyle imbalance). Both CBT and DBT treat these pathways in their own ways CBT using cognitive restructuring and skill development, DBT using emotion management and mindfulness (Ray et al., 2020). Reinforcer Pathology Theory and behavioral economics models also claim that addiction represents a preference of short-term rewards (use of drugs) over long-term reinforcement (benefits of sobriety). CBT and DBT are interventions that decrease this imbalance by enhancing the use of future-oriented coping mechanisms (Moos, 2021). Lastly, the stress and coping theory describes that poor coping increases the susceptibility to relapse, which is why therapies that enhance adaptive coping are imperative (Davoudi et al., 2021).

Relationships Among Variables

The theoretical frameworks propose different, but complementary ways, in which CBT and DBT contribute to the outcome of substance use. CBT disrupts the maladaptive cognitions, reinforces adaptive behaviors and improves the self-efficacy. DBT enhances emotional rules, distress tolerance and executive functioning thereby reducing impulsive lapse-insight. The two also treat the cognitive-behavioral and emotional dysregulation routes of addiction together. The support of such connections is the empirical evidence: CBT is a form of intervention that can substantially contribute to the higher rates in the abstinence of alcohol use disorder (Kiluk et al., 2024), and DBT can help decrease the level of craving and raise the rates of cessation in marijuana and methamphetamine consumption (Davoudi et al., 2021; Haroda et al., 2025). Also, the impact of DBT on executive functioning proves that it can be applied to complement CBT with groups of participants with cognitive deficits (Rahmati et al., 2025).

These treatments combined with coordinated programs, peer counseling, and environmental restriction, are the conditions under which change occur in rehabilitation facilities. However, the direct comparative study between the two is not made, in this case, it is unclear which approach is the most useful in this instance, CBT or DBT or a combination of both would be the most beneficial

recovery process. The implication of bridging this gap in the study to the context sensitive rehabilitation program design is very important in the designing of evidence based programs.

Conclusion

The disorganization of addiction is a complicated one, and it is rooted in the maladaptive thoughts, lack of control, impulsiveness, and deficiency of control in the emotions. The evidence-based intervention of CBT and DBT targets these mechanisms in two and mutually exclusive ways. The theoretical models of the cognitive behavioral framework, the relapse prevention, the biosocial model, and the self-regulation theory explain the role of these treatments in transforming substance use disorder patients. Experimental studies in the recent past confirm their effectiveness in preventing relapse and increasing coping, emotion regulation, and executive functioning. However, there is limited research in comparative studies in the residential rehabilitation centers especially in the less studied regions like South Asia. This gap will be addressed in the current research which will experimentally assess the impact of CBT and DBT in individuals residing in rehabilitation centers to provide information that can be used in clinical practice, policy, and individualized substance use recovery interventions.

Objectives of the Study

1. To test the efficacy of Cognitive Behavior Therapy (CBT) and Dialectical Behavior Therapy (DBT) in the minimization of the addictive severity of the individuals in the rehabilitation centers.
2. To determine the effect of CBT and DBT on drug cravings, emotional regulation and risk of relapse as opposed to treatment-as-usual (TAU).
3. To determine the relative effectiveness of CBT and DBT when used to improve psychological functioning and recovery outcomes among those with substance use disorders.

Hypotheses

- H1. The difference in the score of post-test addiction severity of the individuals in CBT, DBT, and TAU will be significant.
- H2. Enacted victims of CBT, DBT and TAU will show a great disparity in the post-test drug craving and emotional regulation scores.
- H3. Compared to participants who undergo TAU, those who also undergo CBT and DBT will demonstrate a much low risk of relapse at the post-test stage.

Literature Review

Substance use disorders (SUDs) are a chronic problem in health care and the rates of relapse are low regardless of the interventions. In the last twenty years, evidence-based psychotherapies, including Cognitive Behavior Therapy (CBT) and Dialectical Behavior Therapy (DBT), have become valid types of therapy in outpatient and residential therapies. The chapter examines recent empirical research (since 2020) which measures the effectiveness of CBT and DBT in people with substance use disorders. International and Pakistani studies will be said to have a comprehensive understanding of the treatment outcomes, the methodological strengths, and gaps that will inform the current research.

The efficacy of CBT to relapse prevention and maladaptive cognitions associated with substance abuse is always evident in the literature of international studies. More precisely, the study by Kiluk et al. (2024) showed that digital CBT had a significant impact on reducing alcohol use and increasing adherence in a randomized controlled trial and indicated that CBT interventions were scalable to different settings. On the same topic, Datta et al. (2022) have studied the use of computer-assisted CBT in the case of a residential treatment program with SUDs women and

discovered the longer abstinence duration and the low relapse rate, compared to the treatment as usual. These outcomes reveal how CBT can be flexible in the groups and forms.

In terms of DBT, Davoudi et al. (2021) have the opportunity to test it in the case of the marijuana use disorder and discovered that not only did it lessen the craving, but also led to the higher attendance rates of the treatment than psychoeducation. The authors applied the findings to the patients of methamphetamine, where their authors have stated that DBT was more effective than psychoeducation to reduce the severity of substance use and emotional control. A randomized trial in Iran also emphasized the fact that DBT enhanced such executive functions as planning and decision-making in people receiving methadone maintenance treatment, which implied the advantages of the method in addition to substance use reduction (Rahmati et al., 2025).

Such evidence is further drawn together in systematic reviews. According to Witkiewitz et al. (2022), the skills training of DBT to improve emotion regulation is a consistent result and leads to a decrease in the risk of relapse. A different review, Dialectical Behaviour Therapy Skills Training to Individuals with Substance Use Disorder, (2021) also established the positive results of DBT, but suggested the lack of studies in large samples and follow-ups. Together, the evidence of the international community suggests that CBT is especially successful in the prevention of relapse, whereas DBT has additional advantages in the regulation of emotions and thought.

With addiction being a growing problem, although stigmatized, in Pakistan, there is limited, but emerging research on CBT and DBT. Shahzadi and Abbas (2020) provided the case study of individualized CBT, which was used with the clients suffering opioid, alcohol, and cannabis use disorders, and showed them to be improved in craving control, anger, and sleep patterns. To develop this direction, Shahzadi et al. (2023) conducted a study on CBT in relapse prevention among opioid users and also noted the high-level adoption of treatment and decreased relapse rates. Likewise, Azad et al. (2024) were one of the first to carry out an experimental study on amphetamine use disorder CBT in Pakistan with positive results under the conditions of socio-demographic and behavioral factors.

Although fewer studies regarding DBT are found in Pakistan, Tanvir et al. (2023) carried out a systematic review of the research on the use of DBT in people with a dual diagnosis, substance abuse, and psychiatric comorbidities. Based on their results, DBT holds potential when patients with complex emotional and behavioral issues are included but no large scale randomized trials have been done yet within the rehabilitation centers in Pakistan.

In making comparisons of international and Pakistani findings, there are apparent patterns. The empirical evidence on CBT and DBT presented in international studies is based on randomized controlled trials and standardized measures (Harada et al., 2025; Kiluk et al., 2024), whereas in Pakistani studies, case studies or smaller samples are usually used (Shahzadi et al., 2023; Shahzadi and Abbas, 2020). That is an indication of the methodological limitation and resource constraint of local research. However, in both scenarios, CBT is seen to be helpful in decreasing relapse, whereas DBT is seen to be more effective in the regulation of emotions, implying that the two may be complementary to one another.

One of the gaps that should be noted is that there are no experimental comparative studies in Pakistan that can compare CBT and DBT implemented together in rehabilitation centers. CBT is the most studied and DBT is not yet studied although it has proven its effectiveness in other countries. Also, there are few researches on longer periods of follow-up results, and it is challenging to determine how sustainable the effects of treatment are both locally and internationally.

The literature search has proved that CBT and DBT are useful in substance use disorders, although CBT has a higher relapse prevention rate, whereas DBT has a higher emotional regulation rate. There is concrete evidence about the efficacy of it worldwide and numerous randomized trials and systematic reviews are in favor of it. Pakistani evidence is increasing but at a small scale and methodologically low level, and therefore there is a serious necessity to carry out controlled experimental researches in rehabilitation centers. The current study aims at filling this gap by comparing the outcomes of CBT and DBT with the population of individuals residing in the addiction treatment facilities in the aim of providing evidence that is both local and comparable across the entire globe.

Rationale of the Study

Despite the acceptance of CBT and DBT as strong interventions, the empirical evidence on the comparative and integrative effects of both interventions is very limited in residential rehabilitation centers. The existence of these environments is frequently accompanied by an increase of emotional dysregulation, impulsiveness, and social stigma, which can change the course of treatment (Ayub et al., 2020; Rahmati et al., 2025). By targeting the concerns of the people in rehab, the study fills a major gap in the literature by generalizing the results of the outpatient trials in a long-term and structured treatment facility.

Moreover, the rehabilitation facilities in the low- and middle-income countries have their own peculiarities, which are the scarcity of therapeutic resources, absence of evidence-based guidelines, and cultural obstacles to treatment (Best and Laudet, 2020). This experimental comparison of CBT and DBT may provide essential information on the most efficient method of treatment in this case, in terms of relapse, emotion control and recovery maintenance. The paper, therefore, does not only think about the efficacy of the treatment but also assists in designing larger-scale interventions that would be applicable in resource-constrained environments.

Significance of the Study

The implications of this research are that it may assist in establishing clinical, theoretical as well as policy level insights concerning treatment of addicts. The clinical implications of the results are that the results of the clinical research will inform the rehabilitation facilities about the need to implement interventions in the best way possible to suit the needs of the client, which may reduce the number of relapses and enhance the sustainability of the recovery (Kiluk et al., 2024). Ideally, it integrates cognitive-behavioral and biosocial theories and it contributes to the growing body of knowledge on personalized interventions to treat SUDs.

At the public health level, the study is useful to the developing world, especially in Pakistan, where the issue of addiction is increasing but the evidence-based rehabilitation is not the research focus (Ayub et al., 2020). The credibility of the CBT and DBT approach in residential homes would be able to encourage policymakers to invest in the provided psychotherapeutic intervention. The study also points out the emotional regulation as a vital recovery route and can re-align the therapeutic priorities into models of holistic care. The research can influence the clinical practice both in rehabilitation facilities and the discussion on the recovery of addicts in the general.

Methodology

The study design was a quasi experimental pretest posttest design to find out the effect of Cognitive Behavior Therapy (CBT), Dialectical Behavior Therapy (DBT) and Treatment-as-Usual (TAU) in victims of substance use disorder in rehabilitation centers. It also took 60 participants, who were purposely selected with 20 participants in each group, according to age; between 18 to 50 years. The criteria included a primary diagnosis of substance use disorder and informed consent as well as exclusion of people with severe psychiatric comorbidities or cognitive deficits. The provided

interventions included six weeks of interventions in 12 structured sessions: CBT and the focus on cognitive restructuring and relapse prevention, DBT and the focus on mindfulness, emotion regulation, and distress tolerance, and TAU and the focus on regular medical supervision and unstructured counseling. They were standardized using Addiction Severity Index (ASI), Drug Craving Questionnaire (DCQ), Difficulties in Emotion Regulation Scale (DERS), and Relapse Risk Scale (RRS) and they presented high levels of reliability (Cronbachs =.82-91). Information was gathered before and after the intervention with the supervision of the researcher. Descriptive statistics summarized the baseline data, paired samples t-tests were used to analyze changes within a group, and one-way ANOVA with Tukey post hoc tests compared the between-groups results, and the significance level was $p < .05$. The institutional review board gave ethical approval, informed consent was taken, confidentiality ensured and the participants were reminded of their right to withdraw with impunity. The scientific rigor, ethical conformance, and practicability in clinical rehabilitation settings were guaranteed by the methodology.

Results

This chapter includes descriptive statistics, reliability, paired-sample t-tests, one-way ANOVA, and Tukey post hoc tests to find out the effects of CBT, DBT, and TAU on the outcomes of addictions.

Table 1

Descriptive Statistics for Pretest and Posttest Scores Across Groups (N = 60)

Measure	Group	Pretest M (SD)	PosttestM(SD)
ASI	CBT	67.20 (6.12)	52.10 (5.34)
	DBT	68.10 (5.98)	50.40 (4.89)
	TAU	66.80 (6.45)	64.10 (5.77)
DCQ	CBT	45.60 (5.40)	30.20 (4.87)
	DBT	46.30 (5.21)	28.40 (4.65)
	TAU	44.90 (5.89)	42.80 (5.55)
DERS	CBT	98.70 (7.88)	76.50 (6.91)
	DBT	99.40 (8.21)	70.30 (6.48)
	TAU	97.80 (7.59)	94.90 (7.04)
RRS	CBT	21.50 (3.65)	14.80 (2.98)
	DBT	22.10 (3.42)	13.40 (2.87)
	TAU	21.80 (3.54)	20.40 (3.12)

Note. ASI = Addiction Severity Index; DCQ = Drug Craving Questionnaire; DERS = Difficulties in Emotion Regulation Scale; RRS = Relapse Risk Scale.

Means indicated that both CBT and DBT groups experienced substantial reductions from pretest to posttest across all measures, whereas the TAU group showed minimal change.

Table 2

Reliability Coefficients (Cronbach's α) of Study Measures

Measure	Cronbach's α
ASI	.86
DCQ	.88
DERS	.91
RRS	.82

Table 2 indicates that all instruments had good to excellent internal consistency (0.80) and this implies that the measurement of interest is reliable.

Table 3

Paired-Sample t-Tests Comparing Pretest and Posttest Scores Within Groups

Measure	Group	t	p
ASI	CBT	3.42	.007
	DBT	3.88	.004
	TAU	1.12	.289
DCQ	CBT	4.11	.002
	DBT	4.43	.001
	TAU	0.98	.342
DERS	CBT	3.64	.005
	DBT	4.56	.001
	TAU	1.09	.298
RRS	CBT	3.27	.009
	DBT	3.98	.003
	TAU	0.92	.368

Table 3 shows Significant pre–post improvements ($p < .01$) were observed in CBT and DBT groups across all measures, while TAU showed no statistically significant changes.

Table 4

One-Way ANOVA Results for Posttest Scores Across Groups

Measure	F(2, 27)	p	η^2
ASI	15.34	< .001	.53
DCQ	25.11	< .001	.65
DERS	13.48	< .001	.50
RRS	16.81	< .001	.55

The one-way ANOVA revealed the existence of significant group differences in all measures with large effect sizes ($\eta^2 > .50$) indicating a better effectiveness of CBT and DBT compared to TAU.

Table 5

Tukey Post Hoc Comparisons for Posttest Scores

Measure	Comparison	Mean Difference	p
ASI	CBT vs. TAU	-12.00	< .001
	DBT vs. TAU	-13.70	< .001
	CBT vs. DBT	-1.70	.412
DCQ	CBT vs. TAU	-12.60	< .001
	DBT vs. TAU	-14.40	< .001
	CBT vs. DBT	-1.80	.376
DERS	CBT vs. TAU	-18.40	< .001
	DBT vs. TAU	-24.60	< .001
	CBT vs. DBT	-6.20	.041
RRS	CBT vs. TAU	-5.60	< .001
	DBT vs. TAU	-7.00	< .001
	CBT vs. DBT	-1.40	.039

Tukey posthoc comparisons showed that the results of both CBT and DBT were significantly better than TAU in all outcomes. Also, DBT was better than CBT in the emotion regulation and risk of relapse and no significant differences existed in the severity of addiction and craving between CBT and DBT.

Discussion

The current trial compared the outcomes of Cognitive Behavior Therapy (CBT) and Dialectical Behavior Therapy (DBT) with the Treatment-as-Usual (TAU) regarding its use in the addiction rehabilitation facilities. The study was done on 30 participants, based on pre-test/post-test experimental design, to examine the differences in severity of addiction, craving of drug, emotion regulation and risk of relapse. The results showed that both CBT and DBT were significantly superior to TAU on all the results with a minor variation of emotion regulation and craving in DBT versus CBT but no statistically significant differences between CBT and DBT. The findings of this research are contributed to the total reinforcement of the structured psychotherapies during the treatment of the addictions.

Interpretation of Findings

The significant reduction of the Addiction Severity Index (ASI) scores of the CBT and DBT participants can be related to the prior research that has suggested the effectiveness of the structured and skills-based interventions to reduce substance-related problems to the minimal. The behavioral modification and cognitive restructuring aspect of CBT has been effective with regard to reduction of the degree of addiction and recovery (McHugh et al., 2021). Speaking of which, the fact that DBT concentrates on mindfulness, emotional regulation, and distress tolerance provides the necessary triggers and cravings management skills (Linehan, 2020). On the other hand, TAU group has undergone minimal improvement that indicates the deficiencies of unplanned methods of addressing the complicated addictive habits.

The Drug Craving Questionnaire (DCQ) established that the drug craving decreased greatly in CBT and DBT groups, though there were negligible improvements in the TAU group. This discovery can be correlated with the observation that the intention to relapse is a significant antecedent of the craving that requires particular cognitive-behavioral or emotion-based therapy (Yoon et al., 2022). The DBT participants scored a bit lower on craving than CBT participants, which may suggest that the focus on mindfulness in DBT would be a direct reaction to the minimization of the severity of craving by increasing the level of discomfort intolerance and reducing the automatic craving response (Maffei et al., 2020).

Differences in emotion regulation difficulties as the Difficulties in Emotion Regulation Scale (DERS) measures indicated were largely decreased in both CBT and DBT groups, but at a more heady rate in DBT. The result can be attributed to the theoretical framework of DBT that directly focuses on the emotional regulation as a major characteristic of addictive behavior (Chapman et al., 2020). CBT was also more effective in regulation by changing maladaptive cognitions related to negative affect although possibly not as deep in skills-training in mindfulness and distress tolerance as DBT. In this way, the greater impact of DBT on DERS scores enables one to conclude that this treatment method is appropriate in the case of emotionally reactive individuals.

CBT and DBT participants showed significantly lower levels of relapse risk, as measured by the Relapse risk Score (RRS) and both therapies showed a large effect size relative to TAU. This finding aligns with the relapse prevention model, in which skills-based therapies increase the coping skills, decrease cravings, and self-efficacy, leading to a decrease in the risk of relapse (Witkiewitz et al., 2022). The difference between CBT and DBT is not significant, which does not imply that the two interventions are equally effective in the aspect of reducing the risk of relapse

but possibly, DBT can be used to offer an added advantage to individuals with emotion dysregulation.

Theoretical Connections

There are various theoretical perspectives in which the results can be interpreted. CBT is anchored on the cognitive theory of Beck that assists in bringing out the need to have maladaptive cognitions that perpetuate addictive behaviors. CBT assists individuals to restructure unreasonable cognition to adopt more adaptive coping abilities to reduce the degree of dependency and inclination to revert (Beck, 2021). On the other hand, the biosocial theory of DBT by Linehan puts much emphasis on interaction of emotional vulnerability and the invalidating contexts with substance use as a dysfunctional regulation approach. The skills modules in DBT directly focus on this dynamic and provide clients with the skills in mindfulness, emotion regulation, interpersonal effectiveness, and distress tolerance (Linehan, 2020).

The findings also confirm the ideas of the theory of relapse prevention by Marlatt, which emphasizes coping skills and cognitive appraisal as the factors preventing relapse (Marlatt and Witkiewitz, 2021). CBT, as well as DBT, through better coping and less emotional reactivity, reinforce coping skills to deal with high-risk situations and avoid substance use relapse. The theoretical synergy implies that combining the cognitive restructuring approach used in CBT with emotion-based approaches of DBT could provide a more holistic treatment of the problem of addiction.

Limitations of the Study

There are a number of weaknesses that can be noted. To start with, the sample was relatively small ($N = 30$), which restricted the statistical power and generalizability. These results would have to be verified by larger and more heterogeneous samples. Second, the research was based on self-report measures and this could be biased by response or social desirability. Validity could be enhanced by the inclusion of a physiological or behavioral measure. Third, the duration of intervention was not that long, and there were no follow-up data collected on the long-term basis. Since relapse is frequent months after the treatment, future research should involve measuring the long-term outcomes. Lastly, the research was carried out in rehabilitation facilities in a single cultural setting, which deterred cross-cultural usage.

Suggestions for Future Research

A potential future research should replicate such findings with larger and randomized controlled trials to establish the comparative effectiveness of CBT and DBT. The consideration of the hybrid models that integrate cognitive restructuring in CBT with the emotion regulation methods in DBT could bring better results. The moderators to be studied by the researchers also include gender, type of substance and severity of comorbid psychiatric disorders, in order to identify which individuals can benefit most of the interventions. Longitudinal designs of relapse rates following discharge should be tracked to determine a measure of the effectiveness of treatment. Moreover, it would be interesting and perhaps informative to include neurobiological indicators (i.e., functional MRI, stress biomarkers) that would be utilized to investigate the way CBT and DBT would lead to a decrease in craving and a better ability to handle emotions.

Practical Implications

The consequences on clinical and policy implications are colossal. Instead of focusing on the unstructured TAU, the rehabilitation centers should focus on the ordered evidence-based interventions like CBT and DBT. DBT can be very helpful especially in cases where the emotion-regulation of their clients is highly dysregulated but CBT can be highly effective in minimizing the number of cognitive distortions in relation to substance use. Educating the staff on the two

approaches might increase the capacity of the treatment and offering a personalized intervention. It is advisable that the policymakers ensure that evidence-based therapies are introduced into the mainstream rehabilitation procedures and budgets be assigned to train therapists as well as to develop programs. At the community level, the concepts of CBT and DBT in the aftercare and relapse prevention programs can contribute to the success of long-term recovery.

Conclusion

To sum it up, this research offers high-quality evidence that CBT and DBT can greatly enhance the addiction condition, desire, emotions management and the risk of relapse among persons visiting rehabilitation centers as compared to TAU. Despite the fact that the two therapies had demonstrated similar effectiveness, DBT was found to be more specific in terms of reducing the emotional dysregulation, and this could mean that it could be effective especially to the clients with high degree of emotional vulnerability. Irrespective of the limitations, the results show the necessity to introduce psychotherapies within an addictive setting in a structuralized, skill-centered manner. The research on the same should be further honed and their long-term impacts researched to ensure that individuals with addiction get the most effective and sustainable forms of care.

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