Transdiagnostic family-focused therapy for youth with recent-onset bipolar disorder and schizophrenia: A pilot study in Türkiye

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SUMMARY

Objective: Bipolar disorder and schizophrenia are severe disorders that often begin in adolescence and affect both youth and caregivers. Although interest in transdiagnostic psychosocial approaches has grown in recent years, few studies have examined the same structured family-based intervention across these diagnostic groups, particularly in non-Western settings. This single-arm pilot study evaluated the preliminary clinical and family-related outcomes of a brief, manual-based Family-Focused Therapy (FFT) program delivered in routine outpatient youth mental health care.

Method: Adolescents aged 15-19 years diagnosed with bipolar disorder (n=10) or schizophrenia (n=10), along with their caregivers, received a 9-session FFT program. Overall, 87% completed the intervention and were included in analyses. Primary outcomes included depressive symptoms, psychosocial functioning, and illness insight. Secondary outcomes included caregiver depressive symptoms, caregiver burden, and family functioning. Pre-post changes and exploratory group x time patterns were examined using within-group tests and repeated-measures models.

Results: Depressive symptom severity decreased and psychosocial functioning improved in both diagnostic groups, with substantial within-group standardized mean change effects. Illness insight also showed pre-post improvement. Caregiver burden decreased in both groups, whereas caregiver depressive symptoms decreased only among parents of adolescents with bipolar disorder. Family functioning changes differed across diagnostic groups and informants.

Discussion: A brief transdiagnostic FFT program was associated with pre-post improvements across multiple clinical and family-related domains. Although conclusions are limited by the single-arm design, findings provide preliminary evidence suggesting the potential clinical relevance of FFT in routine outpatient care and warrant larger controlled trials of transdiagnostic family interventions in diverse clinical contexts.

Key Words: Family-focused therapy, bipolar disorder, schizophrenia, transdiagnostic approach, early intervention, adolescents

INTRODUCTION

Bipolar disorder and schizophrenia are among the most severe psychiatric conditions, characterized by a chronic course and significant functional impairment. Although traditionally classified as distinct diagnostic entities, these disorders share substantial overlap in symptom expression, genetic vulnerability, and neurobiological mechanisms (1). This overlap is already evident during the prodromal stages of illness, when young people may present with subthreshold mood, anxiety, sleep, and psychotic-like symptoms together with emerging functional decline (2–5). Symptom co-occurrence frequently persists following diagnosis: anxiety and depressive symptoms commonly accompany psychotic disorders, while psychotic features may also emerge during mood episodes (6,7). This clinical overlap complicates early differentiation of illness trajectories and highlights the limitations of rigid categorical distinctions between mood and psychotic disorders (8).

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The overlap between bipolar disorder and schizophrenia is also reflected in the psychosocial challenges experienced by families. Caregivers of individuals with severe mental illness frequently report elevated stress, depressive symptoms, and subjective burden, particularly during the early stages of illness when uncertainty regarding diagnosis, prognosis, and treatment is high (9–11). A recent systematic review indicates that caregivers of individuals with bipolar disorder and schizophrenia spectrum disorders experience similarly high levels of burden, which are more closely associated with symptom severity and functional impairment than with diagnostic category (12). These findings suggest that caregiver support needs may be shaped more by shared clinical challenges than by specific diagnostic distinctions.

In parallel with these observations, there has been growing interest in transdiagnostic psychosocial interventions that target shared mechanisms across diagnostic categories. Recent studies indicate that such approaches are feasible and show encouraging preliminary outcomes across internalizing disorders, bipolar disorder, and the psychosis spectrum (13–17). Rather than focusing on diagnosis-specific symptom clusters, transdiagnostic interventions aim to address common processes such as mood dysregulation, psychosocial functioning, illness insight, and treatment adherence. This perspective may be particularly relevant in youth mental health, where early-stage clinical presentations are often mixed, comorbid, and diagnostically fluid (18–20).

Late adolescence represents a developmental period during which many young people remain highly dependent on their families for emotional, financial, and practical support. In the context of severe mental illness, families often become central to treatment engagement, symptom monitoring, and crisis management. Consequently, family members frequently assume multiple roles as caregivers, supporters, and collaborators in care during the early stages of illness. These developmental and contextual factors highlight the importance of involving families in psychosocial interventions for youth with bipolar disorder and schizophrenia (21,22). Although family interventions for bipolar disorder and schizophrenia have typically been examined within separate diagnostic literatures, systematic reviews consistently demonstrate benefits for symptom outcomes, relapse prevention, psychosocial functioning, and caregiver well-being across both conditions (23–25).

Family interventions aim to improve patient and caregiver outcomes by enhancing illness understanding, reducing family stress and caregiver burden, improving communication patterns, strengthening problem-solving skills, and supporting families' roles in illness management (26,27). Among these approaches, Family-Focused Therapy for Early-Onset Youth and Young Adults (FFT-EOY) is a structured, manualized family intervention that integrates psychoeducation, communication skills training, and problem-solving strategies within a vulnerability-stress framework (28). By targeting shared processes such as depressive symptoms, psychosocial functioning, illness insight, and family communication, FFT represents a promising candidate for transdiagnostic application in early-stage severe mental illness.

Despite increasing evidence for family-based psychosocial interventions for severe mental illness, most studies have been conducted in high-income Western settings, and evidence from low- and middle-income countries remains limited (22). Moreover, existing family-intervention studies have generally been developed and evaluated within diagnosis-specific frameworks, leaving uncertainty about whether the same structured family-based intervention can be applied across early-stage bipolar and psychotic disorders. In Türkiye, Ozerdem et al. applied Family-Focused Therapy (FFT) in a series of cases with established bipolar disorder and demonstrated that the intervention could be implemented with minimal modification in a cultural context characterized by strong family interconnectedness and high levels of family involvement in care, supporting the cultural feasibility of FFT in a non-Western setting (29). However, to date, FFT has not been examined as a transdiagnostic intervention for youth in the early stages of bipolar disorder and schizophrenia in the Turkish setting.

The present single-arm pilot study aimed to examine preliminary pre-post changes following par-

ticipation in a brief transdiagnostic FFT program among clinically stable youth (aged 15-19 years) with recent-onset bipolar disorder or schizophrenia and their caregivers. The study focused on youth depressive symptoms, psychosocial functioning, and illness insight, as well as caregiver depressive symptoms, caregiver burden, and family functioning assessed through both youth and caregiver reports. Based on the shared clinical and family-level targets of FFT, we anticipated favorable pre-post changes across these domains and explored whether patterns of change differed descriptively by diagnostic group. Given the exploratory pilot design, the study was intended to provide preliminary evidence regarding the feasibility and potential clinical relevance of applying a brief transdiagnostic FFT program in routine outpatient youth mental health care, and to inform future controlled and longitudinal trials.

METHOD

Study design and ethical considerations: This study was designed as a prospective, single-arm, pre-post exploratory pilot investigation examining changes following participation in Family-Focused Therapy (FFT). The study is reported in accordance with the Transparent Reporting of Evaluations with Nonrandomized Designs (TREND) guidelines for nonrandomized intervention studies (30). The study was conducted between April 2022 and September 2023 at Dokuz Eylül University. The study protocol was approved by Dokuz Eylul University Non-Interventional Research Ethics Committee, approval no. 2022/11-07, ClinicalTrials.gov registration no. NCT05809193. Registration occurred after enrollment began due to administrative procedures; no changes were made to the protocol or prespecified outcomes after registration.

Recruitment and eligibility: Eligibility criteria permitted inclusion of youth aged 15-21 years; however, all participants who enrolled during the recruitment period were between 15 and 19 years of age. Participants were diagnosed with bipolar disorder type I-II or schizophrenia according to DSM-5 criteria using age-appropriate structured diagnostic interviews: the Schedule for Affective Disorders and Schizophrenia for School-Age Children Present and Lifetime Version, DSM-5 Turkish Adaptation (K-SADS-PL-DSM-5-T) for participants younger than 18 years, and the Structured Clinical Interview for DSM-5 Disorders Clinician Version, Turkish Adaptation (SCID-5/CV) for participants aged 18 years or older (31,32). Recent-onset illness was defined as ≤24 months since symptom onset at enrollment. Inclusion criteria required:

1) Clinical stability, defined as the absence of an acute mood or psychotic episode and the ability to participate in outpatient psychotherapy (HDRS ≤ 21, YMRS ≤ 14);

2) Absence of neurodevelopmental disorder, intellectual disability, alcohol/substance abuse or dependence; and

3) Availability of at least one participating parent/caregiver who was literate and had no cognitive impairment or current severe psychiatric disorder that would interfere with participation.

Following the informational briefing, 12 adolescents with bipolar disorder (BD) and 11 adolescents with schizophrenia (SCZ), together with their parents, volunteered to participate. Of these, 10 adolescents in each diagnostic group and their parents completed the FFT program and were included in the final analyses. Participants who discontinued participation did so due to logistical reasons (e.g., scheduling/transportation) rather than clinical deterioration. Retention rate was calculated as the proportion of enrolled families who completed all post-treatment assessments and was used as a pragmatic indicator of feasibility.

Assessment: Informed consent was obtained from both patients and parents. Clinical follow-up and pharmacological treatment continued as usual and were not modified by the study protocol. Baseline pharmacological treatments were recorded during the baseline interview and summarized descriptively. Medication changes during the intervention period were not systematically monitored as a study variable and therefore were not included in the statistical analyses. Baseline and post-treatment clini-

cal assessments were conducted by two independent child and adolescent psychiatry residents who were not involved in the treatment process or the therapy sessions N.G.K./Z.E.A.

The adolescents' current symptoms and functioning were assessed using the Hamilton Depression Rating Scale (HDRS) (33), Young Mania Rating Scale (YMRS) (34), Scale for the Assessment of Positive Symptoms (SAPS) (35), Brief Negative Symptom Scale (BNSS) (36), Personal and Social Performance Scale (PSP) (37), and Scale of Unawareness of Mental Disorder (SUMD) (38). Adolescents completed the McMaster Family Assessment Device (39). Simultaneously, parents completed the Beck Depression Inventory (BDI) (40), Zarit Burden Interview (ZBI) (41) and McMaster Family Assessment Device. The BDI was used to assess caregiver depressive symptom severity and was not intended to establish a clinical diagnosis of parental depression. Assessments were conducted before and after the therapy sessions. If both parents attended therapy, they were asked to decide which parent would complete the questionnaires, and the same parent completed both baseline and post-treatment assessments.

Outcome Measures: Primary outcomes were depressive symptom severity assessed with the Hamilton Depression Rating Scale (HDRS), psychosocial functioning assessed with the Personal and Social Performance Scale (PSP), and illness insight assessed with the Scale of Unawareness of Mental Disorder (SUMD; lower scores indicate greater insight). Secondary outcomes included caregiver depressive symptoms and caregiver burden assessed with the Beck Depression Inventory (BDI) and the Zarit Burden Interview (ZBI), as well as family functioning assessed with the McMaster Family Assessment Device (FAD; adolescent and parent reports). Because the FAD includes multiple subdomains of family functioning, subscale analyses were considered exploratory. Additional clinician-rated symptom measures (manic, positive, and negative symptoms) and detailed family functioning results are reported in the Supplementary Material.

Therapy Sessions: FFT sessions were conducted following the manual "Family-Focused Therapy (FFT) for Youth with Mood and Psychotic Disorders: Clinicians' Treatment Manual (CHAMP Version, 2020) (28). In our study, for practical purposes, FFT was revised to 9 sessions, including 3 sessions each on psychoeducation, communication, and problem-solving skills. The revision received written approval from Prof. Dr. David Miklowitz.

The therapy was delivered as a combined program for youth diagnosed with bipolar disorder or schizophrenia, using the same manualized FFT protocol across diagnostic groups. Importantly, the psychoeducation module was delivered using a shared transdiagnostic framework emphasizing common mechanisms across mood and psychotic disorders (e.g., stress reactivity, sleep disruption, depressive symptoms, and relapse prevention). The intervention was delivered with the participating youth and at least one parent/caregiver. When available, both parents were allowed to attend sessions; however, siblings were not included as regular participants in the therapy program.

Sessions 1-3 consisted of a shared psychoeducation module delivered in a small multi-family format, with two families (i.e., two youth and their participating caregivers) attending each session. Families were grouped irrespective of diagnosis, such that each multi-family session could include any combination of BD and SCZ families. This module focused on goal setting, treatment overview, symptom recognition (including manic, depressive, positive, negative, and anxiety symptoms), the vulnerability-stress model, stress and coping strategies, sleep regulation, relaxation exercises, optimization of family support, relapse prevention planning, and medication adherence. This initial multi-family format was selected to enhance feasibility in routine outpatient care and to facilitate normalization and shared learning across families facing early-stage severe mental illness.

From session 4 onward, therapy was delivered in an individual family format. Sessions 4-6 focused on communication skills training, including expressing positive feelings, active listening, making positive requests for change, improving communication

Figure 1. Structure of the Family-Focused Therapy Sessions

clarity, and expressing negative emotions in a constructive manner. Sessions 7-9 were dedicated to problem-solving skills training, including introduction to the problem-solving framework, guided practice, consolidation of skills, and termination of treatment. A schematic overview of the session content is provided in Figure 1.

During the therapy process, an interactive approach was adopted to actively engage adolescents and their parents. To minimize variability in practice, the primary therapist remained the same throughout the entire process, with additional support provided by co-therapists when necessary. The therapy sessions occurred on a weekly basis with the primary therapist (E.S.) and co-therapists (B.A., G.K. or S.A.). The duration of each session was approximately 60-90 minutes. Sessions were supported with visual presentations, and participants were provided with session notes, reminder materials, and homework assignments as specified in the therapy manual. If the interval between sessions exceeded two weeks, the subsequent session began with a brief review to reinforce previously covered material and re-establish treatment continuity. Although the therapists did not have formal certification in family therapy, the primary therapist had clinical experience in child and adolescent psychiatry and family-based psychosocial care, and the therapy team reviewed the FFT manual and session materials before implementation. Formal supervision or independent fidelity assessments were not conducted; however, the intervention was delivered in accordance with the manualized FFT protocol to support treatment consistency.

Statistical analyses

Statistical analyses were conducted using SPSS (version 29.0). Baseline differences between diagnostic groups were examined using independent samples t-tests for continuous variables and Fisher's exact test for categorical variables. Within-group pre-post changes were examined using paired samples t-tests, and group × time patterns were tested using repeated-measures ANOVA. Given the small sample size and exploratory pilot design, statistical significance testing was considered descriptive rather than confirmatory, and interpretation emphasized the direction and magnitude of effects rather than p-values alone.

Given baseline differences in psychosocial functioning, post-intervention PSP scores were additionally analyzed using ANCOVA, with diagnostic group as the fixed factor and baseline PSP score entered as a covariate. Homogeneity of regression slopes was assessed by testing the baseline PSP × group interaction. Other baseline variables, including psychiatric comorbidity and pharmacological treatment, were summarized descriptively but were not entered as covariates because of the small sample size and the risk of model overfitting.

Within-group effect sizes were computed as Hedges' g for standardized mean change (gΔ), calculated as the mean within-participant change divided by the standard deviation of individual

change scores, with the small-sample correction applied (42). Effect sizes were coded such that positive values indicated improvement; therefore, for outcomes in which lower scores reflected better clinical status, change-score signs were reversed before calculating Hedges' g/\. Ninety-five percent confidence intervals for Hedges' g/\ were derived using bootstrap resampling with 1,000 resamples. No formal correction for multiple comparisons was applied; analyses involving multiple FAD subscales were considered exploratory and hypothesis-generating. All tests were two-tailed. Analyses were conducted as complete-case analyses including participants who completed post-treatment assessments, and no imputation was applied.

RESULTS

Sociodemographic Variables: Of 23 eligible families who enrolled in the study (BD=12, SCZ=11), 20 (87%) completed all post-treatment assessments (BD=10, SCZ=10). Discontinuations were due to scheduling or transportation difficulties rather than clinical worsening. No statistically significant baseline differences were observed between the BD and SCZ groups with respect to age, sex, years of education or parental education level. Mean illness duration was comparable between groups (BD: 13.5 months; SCZ: 12.6 months). Psychiatric comorbidity was common in both groups and was numerically more frequent in the SCZ group than in the BD group (70% vs. 30%), although this difference was not statistically significant. Patterns of baseline pharmacological treatment differed between groups. Mood stabilizer use was more frequent in the BD group than in the SCZ group, whereas antidepressant use was observed only in the SCZ group. These medication variables were summarized descriptively and were not included as covariates in inferential models because of the small sample size. Baseline characteristics are presented in Table 1.

Table 1: Sociodemographic characteristics and illness history of youth with BD and SCZ

	BD *(n=10)* Mean (SD)	SCZ *(n=10)* Mean (SD)	p
Age	16.50 (0.85)	16.45 (1.50)	0.93
Sex (F/M) (n)	6/4	5/5	1.0
Years of education	11.2 (0.79)	10.3 (1.25)	0.07
Mother education level	12.1 (3.6)	10.5 (4.4)	0.38
Father education level	9.4 (5.1)	11.7 (4.9)	0.32
Duration of illness (months)	13.5 (6.88)	12.6 (6.92)	0.77
Baseline medications (n, %)			
Antipsychotic	9 (90.0)	10 (100.0)	1.0
Mood stabilizers	6 (60.0)	0 (0.0)	0.011
Antidepressant	0 (0.0)	4 (40.0)	0.087
Anxiolytic	1 (10.0)	2 (20.0)	1.0
Psychiatric comorbidity (n, %)			
Total	3 (30.0)	7 (70.0)	0.179
Generalized anxiety disorder	1 (10.0)	3 (30.0)	
Social anxiety disorder	1 (10.0)	2 (20.0)	
Obsessive-compulsive disorder	1 (10.0)	2 (20.0)	

Note. Categorical variables were compared using Fisher s exact test.

Primary Outcomes: Depressive Symptoms (HDRS): Both diagnostic groups demonstrated significant reductions in depressive symptom severity from pre- to post-intervention (BD: $p = 0.003$; SCZ: $p = 0.001$) (Table 2). No significant group × time interaction was detected ($F(1,18) = 0.06$, $p = .81$, partial $\eta^2 = .003$), providing no evidence of differential pre-post change between diagnostic groups.

Psychosocial Functioning (PSP): At baseline, PSP scores were significantly higher in the BD group than in the SCZ group ($p = 0.002$). Improvements in psychosocial functioning were observed in both groups from pre- to post-intervention (both $p < 0.001$; Table 2), with large standardized mean change effect sizes. The mean absolute increase in PSP was 16.0 points in the BD group and 7.8 points in the SCZ group. A significant group × time interaction was detected ($F(1,18) = 14.22$, $p = 0.001$, partial $\eta^2 = .44$), suggesting an exploratory group × time pattern in PSP change.

Given the substantial baseline difference in functioning, post-treatment PSP scores were additionally examined using ANCOVA adjusting for baseline PSP. In this baseline-adjusted exploratory model, diagnostic group was associated with post-treatment PSP scores, $F(1,17) = 25.44$, $p < 0.001$. Adjusted mean PSP scores were higher in the BD group ($M = 66.31$, $SE = 1.56$) than in the SCZ group ($M = 53.79$, $SE = 1.56$), with an estimated adjusted mean difference of 12.51 points (95% CI [7.28, 17.74]).

Illness Insight (SUMD): Significant within-group pre-post improvements in illness insight were observed in both diagnostic groups (BD: $p = 0.014$; SCZ: $p = 0.004$) (Table 2). No significant group × time interaction was detected, providing no evidence of differential pre–post change between diagnostic groups ($F(1,18) = 1.067$, $p = .315$, partial $\eta^2 = .056$).

Within-group standardized mean change effect

Table 2: Primary outcomes (HDRS, PSP, SUMD)

Outcome	Group	Baseline Mean (SD)	Post-therapy Mean (SD)	p (within group)	Hedges g (95% CI)
HDRS	BD (n=10)	12.7 (8.49)	2.7 (4.08)	0.003	1.14 [0.56, 1.68]
	SCZ (n=10)	13.4 (6.52)	4.2 (3.05)	0.001	1.34 [0.79, 1.93]
PSP	BD (n=10)	56.0 (9.19)	72.0 (4.83)	<0.001	2.58 [1.98, 3.15]
	SCZ (n=10)	40.3 (10.01)	48.1 (10.35)	<0.001	1.84 [1.27, 2.39]
SUMD	BD (n=10)	6.2 (3.29)	3.4 (0.70)	0.014	0.89 [0.36, 1.42]
	SCZ (n=10)	8.6 (4.14)	4.3 (1.38)	0.004	1.10 [0.51, 1.66]

Note. Baseline PSP scores differed significantly between groups, with higher functioning in the BD group. Effect sizes are reported as Hedges g for standardized mean change (g $\underline{\Delta}$), calculated using the standard deviation of individual change scores. Ninety-five percent confidence intervals were derived using bootstrap resampling of the mean change. The direction of change is indicated by the pre- and post-treatment means.

sizes were large across primary outcomes, and the 95% confidence intervals indicated improvement (Table 2).

Secondary Outcomes: Caregiver Depression and Burden: Among parents of adolescents with BD, depressive symptoms assessed with the Beck Depression Inventory showed a significant pre-post decrease ($p = 0.009$), whereas no significant change was observed among parents of adolescents with SCZ ($p = 0.22$). Baseline BDI scores among parents of adolescents with SCZ showed substantial variability, indicating heterogeneity in depressive symptom severity within this small subgroup. Caregiver burden, assessed with the Zarit Burden Interview, decreased significantly in both diagnostic groups (BD parents: $p = 0.004$; SCZ parents: $p = 0.022$) (Table 3). No significant group × time interaction was observed for caregiver depressive symptoms or caregiver burden (both $p > .05$). Overall, caregiver burden showed pre-post reductions in both diagnostic groups, whereas caregiver depressive symptoms showed a statistically significant pre-post reduction only among parents of adolescents with BD.

Family Functioning (FAD): Family functioning results are presented descriptively due to multiple subdomain analyses. At baseline, no significant differences were observed between the BD and SCZ groups in family functioning domains. However, patterns of change differed notably between adolescent and parent reports across diagnostic groups.

Among adolescents with BD, significant within-group pre-post changes indicating improvement were observed in the problem-solving ($p = 0.012$) and general functioning ($p = 0.016$) subdomains of the Family Assessment Device. In contrast, adolescents with SCZ showed significant within-group changes across multiple family functioning domains, including problem-solving ($p = 0.032$), communication ($p = 0.011$), roles ($p = 0.025$), affective responsiveness ($p = 0.021$), behavior control ($p = 0.009$), and general functioning ($p = 0.003$). Between-group comparisons revealed a significant group × time interaction only for the behavior control subdomain ($F(1,18) = 5.26$, $p = 0.03$, partial $\eta^2 = 0.226$). Adolescent-reported outcomes are summarized in Supplementary Table 2s.

Parent-reported family functioning showed a different pattern. Among parents of adolescents with BD, significant within-group improvements were found in problem-solving ($p = 0.013$), communication ($p = 0.023$), and general functioning ($p = 0.015$). In contrast, parents of adolescents with SCZ demonstrated a significant improvement only in the behavior control subdomain from pre- to post-intervention ($p = 0.002$). Parent-reported outcomes are presented in Supplementary Table 3s.

Across informants, problem-solving and general functioning showed significant within-group changes in the BD group, whereas behavior control was the only subdomain showing significant change in both adolescent and parent reports in the SCZ group.

DISCUSSION

The present single-arm pilot study examined pre-post changes following a brief, transdiagnostic Family-Focused Therapy (FFT) program in youth with recent-onset bipolar disorder (BD) or schizophrenia (SCZ) and their caregivers in a Turkish outpatient setting. Overall, the findings

Table 3. Caregiver outcomes (BDI, ZBI)

Outcome	Group	Baseline Mean (SD)	Post-therapy Mean (SD)	p (within group)	Hedges g (95% CI)
BDI	BD-P (n=10)	14.7 (9.07)	8.6 (4.20)	0.009	0.95 [0.41, 1.50]
	SCZ-P (n=10)	16.6 (14.03)	13.7 (11.75)	0.22	0.38 [-0.13, 1.00]
ZBI	BD-P (n=10)	29.3 (13.35)	23.8 (14.44)	0.004	1.10 [0.62, 1.67]
	SCZ-P (n=10)	36.1 (18.03)	27.5 (16.71)	0.022	0.80 [0.27, 1.37]

Note. Effect sizes represent standardized mean change (Hedges g $\underline{\Delta}$) calculated using the standard deviation of individual change scores; 95% confidence intervals were derived using bootstrap resampling of the mean change. Effect sizes are reported such that positive values indicate improvement.

suggest preliminary improvements across several youth and caregiver outcomes and support the practicality of delivering a 9-session FFT program within routine care, although controlled trials are needed to determine efficacy and durability of effects.

Depressive Symptoms, Psychosocial Functioning, and Illness Insight

Pre-post reductions in depressive symptoms were observed in both the BD and SCZ groups following participation in the FFT program. These findings are consistent with prior research demonstrating associations between family-based interventions and improvements in depressive symptoms in bipolar disorder (43,44). In bipolar disorder, depressive symptoms, particularly subsyndromal depression, are a major determinant of functional impairment and suicide risk. Persistent depressive symptoms have been identified as one of the strongest predictors of poor functional outcomes in BD, even during periods of symptomatic stability (45).

Beyond bipolar disorder, depression is also highly prevalent in schizophrenia and may occur throughout the course of the illness, including during the early stages and following a first psychotic episode (46,47). However, evidence regarding the impact of psychosocial interventions on depressive symptoms in schizophrenia remains limited (48). In clinical practice, treatment approaches for schizophrenia often prioritize positive symptoms, while depressive symptoms may be underrecognized or misattributed to negative symptomatology. This diagnostic overlap may complicate both assessment and intervention (48). Early psychosocial interventions that incorporate family involvement may therefore play an important role in addressing depressive symptomatology alongside core illness features. In this context, structured psychosocial interventions that address depressive symptoms within the family environment may be particularly relevant for supporting functional recovery across the mood-psychosis spectrum.

In parallel, improvements were observed in both psychosocial functioning and illness insight across diagnostic groups. Illness insight is recognized as a key factor influencing treatment adherence and long-term outcomes; however, its development is shaped by complex cognitive, emotional, and social processes (49). The specific mechanisms underlying these changes remain unclear and warrant further investigation in controlled longitudinal studies.

The larger functional gains observed in the BD group should be interpreted in the context of their higher baseline functioning, and baseline differences may have partially contributed to the observed group × time interaction. Although post-treatment PSP scores were additionally examined using ANCOVA adjusting for baseline PSP, the small sample size limits conclusions regarding differential functional change between diagnostic groups. In addition, the higher psychiatric comorbidity rate in the SCZ group and baseline differences in pharmacological treatment may have contributed to clinical heterogeneity and influenced pre-post change patterns. Future trials may benefit from larger samples that allow stratification or adjustment for baseline functioning, comorbidity, and medication-related variables using analytic approaches such as mixed-effects models.

Caregiver Depression and Burden

Baseline levels of caregiver depressive symptoms and burden were numerically higher in the SCZ-parent group, although between-group differences were not statistically significant. Pre-post reductions in caregiver burden were observed in both groups; however, caregiver depressive symptoms showed a statistically significant decrease only among parents of adolescents with BD. This pattern may suggest that caregiver burden and caregiver depressive symptoms do not change uniformly following a brief family-focused intervention. In particular, the absence of a statistically significant change in BDI scores among SCZ parents should be interpreted cautiously, given the substantial variability in baseline BDI scores and the use of a self-report symptom measure rather than a structured diagnostic interview.

Previous research indicates that improvements in patient symptoms do not necessarily translate into

improved caregiver well-being, particularly in psychotic disorders characterized by persistent functional impairments (50). Parental mental health may represent an important and clinically relevant moderator of psychosocial intervention outcomes and therefore warrants greater attention in early intervention frameworks.

These findings highlight the potential importance of routinely considering caregiver depressive symptoms within early family-based intervention pathways. In families affected by schizophrenia, future studies could examine whether augmenting FFT with brief caregiver-focused modules (e.g., mood monitoring, stress management, or referral pathways) improves the sustainability of family-level gains in early intervention settings. Overall, these findings provide preliminary support for the clinical relevance of family-based interventions during the early stages of severe mental illness.

Family Functioning

Family functioning showed descriptively different patterns of pre-post change across diagnostic groups and informants, highlighting distinct patterns of perceived change within families. Adolescents with SCZ reported pre-post improvements across multiple family functioning domains, whereas adolescents with BD reported more limited changes. Parent reports revealed a different pattern, with broader improvements observed among parents of adolescents with BD. These findings are consistent with previous studies suggesting that adolescents and caregivers may perceive changes in family dynamics differently and that families affected by psychotic disorders may require longer follow-up periods to recognize meaningful changes (51,52). This informant-specific pattern highlights the value of multi-informant assessment in family-based interventions and suggests that adolescents and caregivers may attend to different aspects of family functioning during early intervention.

Several limitations should be considered when interpreting the findings of this study. The sample size was small, reflecting the pilot and exploratory nature of the investigation, which limited statistical power and generalizability and increased uncertainty around effect estimates. Participation was voluntary, and some eligible families declined participation, potentially introducing selection bias. The absence of a control or waitlist comparison group also precludes causal inference regarding observed changes. Therefore, pre-post improvements cannot be attributed specifically to FFT, and alternative explanations such as natural clinical recovery, regression to the mean, nonspecific therapeutic factors, or concurrent clinical care cannot be excluded. The inclusion of clinically stable youth with recent-onset illness may also have influenced the observed pre-post changes, as newly diagnosed youth and their families may differ from more chronic samples in psychosocial support needs, family involvement, treatment engagement, and natural recovery trajectories.

Baseline differences between diagnostic groups may also have influenced the observed patterns of change. The BD and SCZ groups differed in psychosocial functioning at baseline, psychiatric comorbidity was numerically more frequent in the SCZ group, and baseline pharmacological treatments differed between groups. Although baseline PSP was adjusted for in an ANCOVA analysis, the small sample size did not permit broader multivariable adjustment for comorbidity or medication-related variables. In addition, medication changes during the intervention period were not systematically monitored, limiting the ability to disentangle pharmacological and psychosocial influences.

Caregiver depressive symptoms were assessed using a self-report measure rather than structured diagnostic interviews; therefore, BDI scores should be interpreted as indicators of depressive symptom severity rather than diagnoses of parental depression. The substantial variability in baseline BDI scores among parents of adolescents with SCZ further limits conclusions regarding caregiver depressive symptom change in this subgroup. Finally, therapists delivering the intervention were not blinded, formal fidelity ratings or independent supervision procedures were not conducted, and the absence of follow-up assessments limits conclusions regarding the durability of observed changes.

This pilot study provides preliminary findings regarding the potential relevance of Family-Focused Therapy for youth with recent-onset bipolar disorder and schizophrenia using a transdiagnostic approach. To our knowledge, this is among the first pilot studies to apply the same structured family-focused intervention to early-stage bipolar disorder and schizophrenia in youth while simultaneously examining patient, family, and caregiver outcomes using a multi-informant design.

The findings highlight the potential value of early family-based psychosocial interventions for addressing both core clinical symptoms and family-level processes during the early stages of severe mental illness. Although diagnosis-specific conclusions cannot be drawn from this pilot study, the observed patterns are consistent with the relevance of targeting shared mechanisms across the mood-psychosis spectrum, including depressive symptomatology, psychosocial functioning, illness insight, family communication, and caregiver burden. These findings provide preliminary support for the potential role of transdiagnostic, family-based interventions as scalable components of early intervention strategies in severe mental illness.

Future research should prioritize larger, controlled, and longitudinal studies with systematic medication monitoring to evaluate the durability of observed changes, clarify causal effects, and identify moderators and mediators of treatment response. Such studies should also examine which youth and caregiver characteristics predict response to transdiagnostic family-based treatment.

In particular, the differential patterns observed in caregiver burden and caregiver depressive symptoms raise the possibility that caregiver mental health may represent a distinct and clinically relevant treatment target. Incorporating targeted support for caregivers, especially those experiencing depressive symptoms, may further strengthen the clinical utility and sustainability of early family-based interventions for both bipolar disorder and schizophrenia.

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethics approval: The study protocol was approved by the Dokuz Eylul University Non-Interventional Research Ethics Committee; approval no. 2022/11-07.

Trial registration: ClinicalTrials.gov identifier: ClinicalTrials.gov identifier: NCT05809193.

Informed Consent: All participants and their parents/legal guardians were informed about the study, and written informed consent was obtained.

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Data Availability: The data can be made available upon reasonable request by contacting the corresponding author.

AI Use Statement: AI-based tools were used only for language editing. No AI tools were used for data analysis, interpretation, or generation of scientific content.

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REFERENCES

1. Murray RM, Sham P, Van Os J, Zanelli J, Cannon M, McDonald C. A developmental model for similarities and dissimilarities between schizophrenia and bipolar disorder. Schizophr Res 2004;71:405–16. https://doi.org/10.1016/j.schres.2004.03.002.

2. McNamara RK, Nandagopal JJ, Strakowski SM, DelBello MP. Preventative Strategies for Early-Onset Bipolar Disorder. CNS Drugs 2010;24:983–96. https://doi.org/10.2165/11539700-000000000-00000.

3. Rosen JL, Miller TJ, D'Andrea JT, McGlashan TH, Woods SW. Comorbid diagnoses in patients meeting criteria for the schizophrenia prodrome. Schizophr Res 2006;85:124–31. https://doi.org/10.1016/j.schres.2006.03.034.

4. Léger M, Wolff V, Kabuth B, Albuisson E, Ligier F. The mood disorder spectrum vs. schizophrenia decision tree: EDIPHAS research into the childhood and adolescence of 205 patients. BMC Psychiatry 2022;22:194. https://doi.org/10.1186/s12888-022-03835-0.

5. Mennigen E, Bearden CE. Psychosis Risk and Development: What Do We Know From Population-Based Studies? Biol Psychiatry 2020;88:315–25. https://doi.org/10.1016/j.biopsych.2019.12.014.

6. Stochl J, Khandaker GM, Lewis G, Perez J, Goodyer IM, Zammit S, Sullivan S, Croudace TJ, Jones PB. Mood, anxiety and psychotic phenomena measure a common psychopathological factor. Psychol Med 2015;45:1483–93. https://doi.org/10.1017/S003329171400261X.

7. Wilson RS, Yung AR, Morrison AP. Comorbidity rates of depression and anxiety in first episode psychosis: A systematic review and meta-analysis. Schizophr Res 2020;216:322–9. https://doi.org/10.1016/j.schres.2019.11.035.

8. Phalen P, Millman Z, Rouhakhtar PR, Andorko N, Reeves G, Schiffman J. Categorical versus dimensional models of early psychosis. Early Interv Psychiatry 2022;16:42–50. https://doi.org/10.1111/eip.13128.

9. Perlick DA, Jackson C, Grier S, Huntington B, Aronson A, Luo X, Miklowitz DJ. Randomized trial comparing caregiver-only family-focused treatment to standard health education on the 6-month outcome of bipolar disorder. Bipolar Disord 2018;20:622–33. https://doi.org/10.1111/bdi.12621.

10. Perlick DA, Miklowitz DJ, Lopez N, Chou J, Kalvin C, Adzhiashvili V, Aronson A. Family-focused treatment for caregivers of patients with bipolar disorder. Bipolar Disord 2010;12:627–37. https://doi.org/10.1111/j.1399-5618.2010.00852.x.

11. Ma CF, Chien WT, Bressington DT. Family intervention for caregivers of people with recent-onset psychosis: A systematic review and meta-analysis. Early Interv Psychiatry 2018;12:535–60. https://doi.org/10.1111/eip.12494.

12. Karambelas GJ, Filia K, Byrne LK, Allott KA, Jayasinghe A, Cotton SM. A systematic review comparing caregiver burden and psychological functioning in caregivers of individuals with schizophrenia spectrum disorders and bipolar disorders. BMC Psychiatry 2022;22:422. https://doi.org/10.1186/s12888-022-04069-w.

13. Skarphedinsson G, Karlsson GK. The Feasibility and Efficacy of a Group-Based, Brief Transdiagnostic Cognitive-Behavioral Treatment for Adolescents with Internalizing Problems. Child Psychiatry Hum Dev 2025;56:224–35. https://doi.org/10.1007/s10578-023-01552-7.

14. Bharmal H, Moore R. Evaluation of a Transdiagnostic Group Intervention in a Primary Care Mental Health Service: A Pilot Study. Int J Psychol Psychol Ther 2022;22:197–210.

15. Engen MJ, Lyngstad SH, Eikenæs E, Vøllestad J, Høegh MC, Lagerberg TV, Aminoff SR. A mixed methods pilot feasibility study of the unified protocol group psychotherapy for early bipolar disorder. Front Psychiatry 2025;16:1–11. https://doi.org/10.3389/fpsyt.2025.1524243.

16. Peláez T, López-Carrilero R, Espinosa V, Balsells S, Ochoa S, Osma J. Efficacy of the unified protocol for transdiagnostic treatment of comorbid emotional disorders in patients with ultra high risk for psychosis: Results of a randomized controlled trial. J Affect Disord 2024;367:934–43. https://doi.org/10.1016/j.jad.2024.09.036.

17. Weintraub MJ, Schneck CD, Posta F, Merranko JA, Singh MK, Chang KD, Miklowitz DJ. Effects of family intervention on psychosocial functioning and mood symptoms of youth at high risk for bipolar disorder. J Consult Clin Psychol 2022;90:161–71. https://doi.org/10.1037/ccp0000708.

18. Scott J, Iorfino F, Capon W, Crouse J, Nelson B, Chanen AM, Dwyer D, Conus P, Bechdolf A, Ratheesh A, Raballo A, Yung A, Berk M, McKenna S, Hockey S, Hutcheon A, Scott E, McGorry P, Shah J, Hickie IB. Staging 2.0: refining transdiagnostic clinical staging frameworks to enhance reliability and utility for youth mental health. Lancet Psychiatry 2024;11:461–71. https://doi.org/10.1016/S2215-0366(24)00060-9.

19. Shah JL, Scott J, McGorry PD, Cross SPM, Keshavan MS, Nelson B, Wood SJ, Marwaha S, Yung AR, Scott EM, Öngür D, Conus P, Henry C, Hickie IB. Transdiagnostic clinical staging in youth mental health: a first international consensus statement. World Psychiatry 2020;19:233–42. https://doi.org/10.1002/wps.20745.

20. Dalgleish T, Black M, Johnston D, Bevan A. Transdiagnostic approaches to mental health problems: Current status and future directions. J Consult Clin Psychol 2020;88:179–95. https://doi.org/10.1037/ccp0000482.

21. Otto MW, Miklowitz DJ. The Role and Impact of Psychotherapy in the Management of Bipolar Disorder. CNS Spectr 2004;9:27–32. https://doi.org/10.1017/S1092852900028868.

22. Morillo H, Lowry S, Henderson C. Exploring the effectiveness of family-based interventions for psychosis in low- and middle-income countries: a systematic review. Soc Psychiatry Psychiatr Epidemiol 2022;57:1749–69. https://doi.org/10.1007/s00127-022-02309-8.

23. Camacho-Gomez M, Castellvi P. Effectiveness of Family Intervention for Preventing Relapse in First-Episode Psychosis Until 24 Months of Follow-up: A Systematic Review With Meta-analysis of Randomized Controlled Trials. Schizophr Bull 2020;46:98–109. https://doi.org/10.1093/schbul/sbz038.

24. Reinares M, Bonnín CM, Hidalgo-Mazzei D, Sánchez-Moreno J, Colom F, Vieta E. The role of family interventions in bipolar disorder: A systematic review. Clin Psychol Rev 2016;43:47–57. https://doi.org/10.1016/j.cpr.2015.11.010.

25. Pharoah F, Mari J, Rathbone J, Wong W. Family intervention for schizophrenia. Cochrane Database Syst Rev 2006;12:CD000088.https://doi.org/10.1002/14651858.CD000088. pub2.

26. Bighelli I, Rodolico A, García-Mieres H, Pitschel-Walz G, Hansen W-P, Schneider-Thoma J, Siafis S, Wu H, Wang D,

Salanti G, Furukawa TA, Barbui C, Leucht S. Psychosocial and psychological interventions for relapse prevention in schizophrenia: a systematic review and network meta-analysis. Lancet Psychiatry 2021;8:969–80. https://doi.org/10.1016/S2215-0366(21)00243-1.

27. Miklowitz DJ, Chung B. Family-Focused Therapy for Bipolar Disorder: Reflections on 30 Years of Research. Fam Process 2016;55:483–99. https://doi.org/10.1111/famp.12237.

28. Miklowitz DJ, O'Brien MP, Sullivan AE, George EL, Taylor DO. Family-Focused Therapy (FFT) for Youth with Mood and Psychotic Disorders: Clinicians' Treatment Manual (CHAMP Version, 2020). 2020. Available from: https://teams.semel.ucla.edu/sites/default/files/pdf/fft_clinicians_manual_06302020.pdf. Accessed May 1, 2026.

29. Ozerdem A, Oguz M, Miklowitz D, Cimilli C. Family focused treatment for patients with bipolar disorder in turkey: A case series. Fam Process 2009;48:417–28. https://doi.org/10.1111/j.1545-5300.2009.01292.x.

30. Des Jarlais DC, Lyles C, Crepaz N. Improving the Reporting Quality of Nonrandomized Evaluations of Behavioral and Public Health Interventions: The TREND Statement. Am J Public Health 2004;94:361–6. https://doi.org/10.2105/AJPH.94.3.361.

31. Unal F, Oktem F, Cetin Cuhadaroglu F, Cengel Kultur SE, Akdemir D, Foto Ozdemir D, Cak HT, Unal D, Tiras K, Aslan C, Kalayci BM, Sultan Dogan B, Kutuk F, Yanar E, Karaokur R, Karabucak B, Karakok B, Karaer Y, Artik A. Reliability and Validity of the Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version, DSM-5 November 2016-Turkish Adaptation (K-SADS-PL-DSM-5-T). Turk Psikiyatri Derg 2019;30:42–50. https://doi.org/10.5080/u23408.

32. Elbir M, Alp Topbas O, Bayad S, Kocabas T, Topak OZ, Cetin S, Ozdel O, Atesci F, Aydemir O. Adaptation and Reliability of the Structured Clinical Interview for DSM-5-Disorders - Clinician Version (SCID-5/CV) to the Turkish Language. Turk Psikiyatri Derg 2019;30:1–5. https://doi.org/10.5080/u23431.

33. Hamilton M. A RATING SCALE FOR DEPRESSION. J Neurol Neurosurg Psychiatry 1960;23:56–62. https://doi.org/10.1136/jnnp.23.1.56.

34. Young RC, Biggs JT, Ziegler VE, Meyer DA. A Rating Scale for Mania: Reliability, Validity and Sensitivity. Br J Psychiatry 1978;133:429–35. https://doi.org/10.1192/bjp.133.5.429.

35. Andreasen NC. Scale for the assessment of positive symptoms. Group 1984;17:173–80.

36. Kirkpatrick B, Strauss GP, Nguyen L, Fischer BA, Daniel DG, Cienfuegos A, Marder SR. The Brief Negative Symptom Scale: Psychometric Properties. Schizophr Bull 2011;37:300–5. https://doi.org/10.1093/schbul/sbq059.

37. Morosini PL, Magliano L, Brambilla L, Ugolini S, Pioli R. Development, reliability and acceptability of a new version of the DSM-IV Social and Occupational Functioning Assessment Scale (SOFAS) to assess routine social functioning. Acta Psychiatr Scand 2000;101:323–9. https://doi.org/10.1111/j.1600-0447.2000.tb10933.x.

38. Amador XF, Strauss DH, Yale SA, Flaum MM, Endicott J, Gorman JM. Assessment of insight in psychosis. Am J Psychiatry 1993;150:873–879. https://doi.org/10.1176/ajp.150.6.873.

39. Epstein NB, Baldwin LM, Bishop DS. The McMaster Family Assessment Device. J Marital Fam Ther 1983;9:171–80. https://doi.org/10.1111/j.1752-0606.1983.tb01497.x.

40. Beck AT, Steer RA, Brown GK. BDI-II, Beck Depression Inventory: Manual. San Antonio, TX: Psychological Corporation; 1996.

41. Zarit SH, Reever KE, Bach-Peterson J. Relatives of the impaired elderly: correlates of feelings of burden. Gerontologist 1980;20:649–55. https://doi.org/10.1093/geront/20.6.649.

42. Morris SB. Estimating Effect Sizes From Pretest-Posttest-Control Group Designs. Organ Res Methods 2008;11:364–86. https://doi.org/10.1177/1094428106291059.

43. Miklowitz DJ, Chang KD, Taylor DO, George EL, Singh MK, Schneck CD, Dickinson LM, Howe ME, Garber J. Early psychosocial intervention for youth at risk for bipolar I or II disorder: a one-year treatment development trial. Bipolar Disord 2011;13:67–75. https://doi.org/10.1111/j.1399-5618.2011.00890.x.

44. West AE, Weinstein SM, Peters AT, Katz AC, Henry DB, Cruz RA, Pavuluri MN. Child- and Family-Focused Cognitive-Behavioral Therapy for Pediatric Bipolar Disorder: A Randomized Clinical Trial. J Am Acad Child Adolesc Psychiatry 2014;53:1168-1178.e1. https://doi.org/10.1016/j.jaac.2014.08.013.

45. Gitlin MJ, Miklowitz DJ. The difficult lives of individuals with bipolar disorder: A review of functional outcomes and their implications for treatment. J Affect Disord 2017;209:147–54. https://doi.org/10.1016/j.jad.2016.11.021.

46. Upthegrove R, Birchwood M, Ross K, Brunett K, McCollum R, Jones L. The evolution of depression and suicidality in first episode psychosis. Acta Psychiatr Scand 2010;122:211–8. https://doi.org/10.1111/j.1600-0447.2009.01506.x.

47. Monsonet M, Kwapil TR, Barrantes-Vidal N. Exploring the Psychometric Properties and the Factor Structure of the Calgary Depression Scale for Schizophrenia Across the Schizotypy Continuum. Assessment 2022;29:686–99. https://doi.org/10.1177/1073191120986622.

48. Upthegrove R, Marwaha S, Birchwood M. Depression and schizophrenia: cause, consequence or trans-diagnostic issue? Schizophr Bull 2017;43:240–244. https://doi.org/10.1093/schbul/sbw097.

49. Belvederi Murri M, Amore M. The Multiple Dimensions of Insight in Schizophrenia-Spectrum Disorders. Schizophr Bull 2019;45:277–83. https://doi.org/10.1093/schbul/sby092.

50. Ritsner MS, Arbitman M, Lisker A, Ponizovsky AM. Ten-year quality of life outcomes among patients with schizophrenia and schizoaffective disorder II. Predictive value of psychosocial factors. Qual Life Res 2012;21:1075–84. https://doi.org/10.1007/s11136-011-0015-4.

51. Bäckström B, Rask O, Knutsson J. Adolescent and Family-Focused Cognitive-Behavioral Therapy for Pediatric Bipolar Disorders: An Open Trial and Individual Trajectories Study in Routine Psychiatric Care. Child Psychiatry Hum Dev 2024;55:1502–13. https://doi.org/10.1007/s10578-023-01504-1.

52. Calvo A, Moreno M, Ruiz-Sancho A, Rapado-Castro M, Moreno C, Sánchez-Gutiérrez T, Arango C, Mayoral M. Intervention for Adolescents With Early-Onset Psychosis and Their Families: A Randomized Controlled Trial. J Am Acad Child Adolesc Psychiatry 2014;53:688–96. https://doi.org/10.1016/j.jaac.2014.04.004.