Effectiveness of Jungian psychotherapy in supervised training settings

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ABSTRACT

Jungian psychotherapy (JP) is an established treatment modality in modern healthcare systems, yet empirical validation remains a key requirement for its continued recognition and insurance coverage. This study aimed to assess the effectiveness of JP by evaluating pre- and post-treatment changes in psychological symptoms, personality structure, and quality of life among 104 participants undergoing supervised therapy at a German training institute. Using a pre-post design, participants completed standardized psychometric assessments, including the International Classification of Diseases – 10th Revision (ICD-10) Symptom Rating (ISR), the *Fragebogen zur Lebenszufriedenheit* (FLZ; Life Satisfaction Questionnaire), and the Operationalized Psychodynamic Diagnosis - Structure Questionnaire (OPD-SQ), before and after therapy. Results from paired samples t-tests and Wilcoxon signed-rank tests indicated significant improvements across multiple domains. Participants experienced notable reductions in symptom burden, particularly in depression, anxiety, and obsessive-compulsive symptoms, with effect sizes ranging from moderate to large (d=0.555 to d=1.174). Improvements were also observed in self-perception, interpersonal contact, and relational experiences. However, eating disorder symptoms did not show significant improvement (p=.275), likely due to the need for specialized interventions. Future research should employ randomized controlled trials (RCTs) and long-term follow-ups to establish the durability of treatment effects.

Key words: Jungian psychotherapy, psychodynamic therapy, symptom reduction, training analysis, treatment outcomes.

Introduction

Carl Gustav Jung is one of the founding fathers of modern psychotherapy. After an initial phase of intense collaboration with Freud, they split in 1912, and from then on, Jung developed his own school of psychodynamic psychology, called Analytical Psychology (AP), with its own approach to psychotherapy. Jungian psychotherapy (JP) today is widely recognized as a contemporary mental health treatment and has become part of the health care systems in many countries, with worldwide training institutions and professional organizations (Roesler & Reefschläger, 2022). Despite this worldwide dissemination and its long tradition, the evidence base for JP is still weak, and practitioners in several countries have recently faced growing pressure to provide empirical evidence validating its effectiveness (Roesler, 2019). On this background, a group of German analysts and researchers (Inter-

national Network for Research and Development in Analytical Psychology, Tri-Country Group [INFAP3]; www.infap3.eu), some years ago, initialized a system of standardized measures (BADO, base documentation) for the investigation of Jungian psychotherapies and applied it to therapies conducted in the ambulatories of Jungian training institutes (Keller, 2018). Another aim of this initiative was to create an attitude of greater openness towards research in the Jungian community, since one of the problems found in earlier studies was the reluctance of many analysts to participate in empirical studies (Roesler, 2021a). So, the application of this documentation system was made compulsory for training candidates in the Jungian training institutes in Germany, to be applied to their training cases. The present paper reports the findings of a study with Jungian psychotherapists in training at a German Jungian institute, which made use of the BADO in a naturalistic pre-post-test design. This aims at contributing to the evidence base for the effectiveness of JP and at the same time sheds light on the efficacy of psychotherapies conducted by therapists in training.

Jungian psychotherapy

In Jung's view, the unconscious is not just a container for repressed drives and conflicts, but it also contains constructive forces (Jung, 1966). The unconscious consists not only of a personal sphere but also of a collective part that contains the archetypes, universal psychological structures that influence the formation of the personality (Jung, 1959). Archetypal structures are activated during periods of crisis or when in need of a psychological transformation, as if the unconscious wanted to support the personality on the way to integration (Roesler, 2021b). Archetypal elements come to mind by symbols, which contain condensed information about the direction the person has to take towards greater wholeness (Jung, 1959). According to Jung's meta-psychology, the archetypal symbols contain universal information and can be interpreted by referring to cultural knowledge from mythology, religious and spiritual traditions, anthropology, *etc*. (Jung, 1959). Psychological disorders are explained as being an expression of a strong tension between the direction of ego consciousness on the one hand and, on the other hand, the unconscious/the Self with its tendency to strive towards greater wholeness of the personality (Jung, 1960b). If the ego becomes one-sided and splits off other parts of the psyche so that they become incompatible with conscious functioning, the tension thus created can lead to neurotic suffering (Jung, 1966). In this respect, Jung follows the tradition of Pierre Janet with his theorizing around dissociation; thus, the neurotic person is an internally divided person, and psychotherapy needs to foster integration.

In AP, the unconscious is thus seen as a helpful force in the psychotherapeutic process that tries to support ego consciousness in integrating split-off parts of the psyche (Jung, 1966). The unconscious in this process produces symbols and presents them to the ego consciousness through dreams, fantasies, spontaneous creative acts, and symptoms (Jung, 1959). Therefore, JP makes use of dream interpretation and imagination techniques and offers different kinds of creative methods to give the unconscious the possibility to express itself. These symbolic expressions are then interpreted to make these impulses usable for the process of psychotherapy. This process is seen as a continuous dialogue between the conscious ego and the unconscious, and it is the therapist's task to support this process. The focus of therapeutic work in AP is on internalized relationship representations that were formed in (early) childhood in relations with primary caregivers. In particular, conflictual or frustrating experiences with primary caregivers lead to unresolved inner conflicts, referred to in AP as complexes, in which the experience of frustration of basic needs is reactivated and which are therefore associated with suffering and form the basis for the development of mental disorders (Jung, 1960a). The relationship patterns contained in the complexes tend to re-enact themselves in current relationships in a stereotypical manner. On the one hand, this leads to neurotic suffering, but on the other hand, it can also be used in psychotherapy because the relationship pattern is also restaged in the therapeutic relationship in the form of transference. The therapeutic use of countertransference, in which therapists examine their emotional reaction to the patient, also contributes to identifying the underlying pathological complex, which represents the core of the problem to be treated (Papadopoulos, 2006). These pathological complexes also manifest themselves in dreams as well as in spontaneous fantasies/daydreams and guided imaginations (Jung, 1960a). Two mechanisms in particular are considered to be therapeutically effective in dealing with the pathological complexes that appear in the transference/countertransference: firstly, insight into the biographical background and the repetitive nature of these relationship patterns, but above all, a corrective emotional experience in the therapeutic relationship. Principles of change are making the unconscious conscious in order to promote insight and focusing on affects, as these enable access to unconscious patterns or complexes. AP shares this perspective with all other psychodynamic methods.

A special feature that distinguishes AP from other psychodynamic approaches is a positive viewpoint on the unconscious. In AP, it is assumed that the unconscious takes on a constructive role in transformation processes and, with appropriate attention, offers the conscious mind images and symbols that can be used in the therapeutic process and even contain solutions to problems – in contemporary language, AP could therefore be described as a resource-oriented approach to psychodynamic therapy. A constructive process (individuation process), in the sense of a self-healing/self-regulation process, emanates from the unconscious, which can be used in psychotherapy to navigate the therapeutic process and promote the integration of the personality (Jung, 1966). This support provided by the unconscious is expressed through symbols and images, which appear in particular in dreams but also in fantasies and daydreams, and can also be targeted in the form of guided imagination (Jung, 1959). For this reason, JP makes use of a specific form of dream interpretation; images and symbols from dreams, fantasies, and daydreams are worked on therapeutically in the form of active imagination; finally, patients are asked to actively create images and symbols that emerge from the unconscious in so-called therapeutic painting or painting from the unconscious, for which a specific interpretation methodology is available (there are also manualized handbooks for the treatment of specific disorders, *e.g.*, Meier & Roth 2022). With JP, it is assumed that they can be used for diagnostic purposes because patients represent their inner world in symbolic form, but also that the processing of the inner themes in the pictures has a constructive effect on the psyche.

Research on the effectiveness of Jungian psychotherapy

Since the 1990s, a growing body of empirical research in Germany, Switzerland, and the United States has provided robust evidence supporting the effectiveness of JP. These studies consistently demonstrate that JP leads to significant reductions in psychological symptoms, improvements in interpersonal relationships and social functioning, and enhanced overall well-being,

with effects often persisting for years after treatment. One of the earliest contributions came from Dührssen's (1962) longitudinal study, which laid the foundation for empirical psychotherapy research in Germany and contributed to the eventual inclusion of analytical psychotherapy in public insurance schemes. Building on this foundation, large-scale naturalistic studies such as the Berlin Jungian Study (Keller *et al.*, 1998) monitored outcomes of 111 patients six years after treatment and found substantial long-term improvements in mental health, life satisfaction, and symptom reduction, with 86.6% of participants reporting good to very good well-being. The study also revealed a marked decrease in healthcare utilization, including fewer medical consultations, hospital admissions, and reduced consumption of psychotropic medication, thereby highlighting the cost-efficiency of JP. Similarly, the Konstanz Study (Breyer *et al.*, 1997), which adapted Seligman's Consumer Reports methodology, examined the effectiveness of psychodynamic therapies with a focus on JP in a large sample (N=979) and found persistent improvements in psychological health and significant reductions in healthcare use. Additional support comes from the *Praxisstudie Analytische Langzeittherapie* (PAL) *Schweiz* (Outpatient Analytical Long-Term Psychotherapy Switzerland) (Mattanza *et al.*, 2006; Rudolph *et al.*, 2004), a prospective naturalistic study in Switzerland, which reported large effect sizes (d=0.71-1.48) for symptom reduction, suggesting the sustained effectiveness of long-term Jungian therapy. Complementary findings emerged from the San Francisco Psychotherapy Research Project (Rubin & Powers, 2005), which followed 39 patients in a naturalistic design and reported statistically significant improvements in both psychological distress and interpersonal functioning. On a broader scale, the PAP-S Study (Tschuschke *et al.*, 2014), which compared outcomes across eight different psychotherapeutic modalities in Switzerland (N=379), demonstrated that all approaches – including JP – were highly effective, confirming the therapeutic value of JP in diverse clinical settings. Health insurance data further reinforce these outcomes, revealing that former patients of JP not only experience symptom relief but also show a notable decline in long-term healthcare usage and medication dependence (Keller *et al.*, 2015). Nevertheless, despite the breadth and consistency of this naturalistic and longitudinal evidence, the absence of randomized controlled trials (RCTs) continues to limit full scientific recognition and broader institutional acceptance of JP (Roesler, 2018). Still, the cumulative empirical findings underscore the clinical validity, long-term benefits, and cost-effectiveness of JP as a distinctive and evidence-supported psychotherapeutic approach within the broader field of depth psychology.

As the above studies are only naturalistic studies, it can be said that at least there is evidence for the effectiveness of JP in practice settings. As there are no randomized controlled trials and the internal validity of the above-mentioned studies can be questioned, currently, there is no conclusion possible regarding the efficacy of JP. Retrospective studies are affected strongly by bias through selection effects; thus, the results have to be interpreted in the background of limitations of the design. On the other hand, the reported studies, due to their naturalistic designs, have to be considered high in external validity. All the studies report positive effects on a wide variety of disorders and found significant improvements on the dimensions investigated: symptom reduction, well-being, interpersonal problems, change of personality structure, reduction of health care utilization, and changes in everyday life conduct. These effects are stable in follow-up up to seven years after therapy. There are even further positive changes between termination and follow-up. The majority of patients seem to have benefited from JP; health care utilization parameters were significantly reduced, indicating cost-effectiveness. With an average of only 90 sessions, JP is a very time- and cost-effective form of long-term psychodynamic psychotherapy. Where effect sizes were computed, they range from moderate to very large (for more details, see Roesler, 2021a). Collectively, these studies provide empirical evidence for the effectiveness of Jungian psychotherapy; yet, methodological limitations, including limited sample sizes, absent data, and issues of generalizability, underscore the necessity for additional efforts in evaluation.

In addition to the need for more empirical studies outlined above, a severe problem that comes to light in the overview of the studies is the fact that Jungian analysts tend to be very reluctant to participate in empirical studies. As a consequence, in the German-speaking countries (Germany, Austria, and Switzerland), the professional societies have decided to introduce the above-mentioned set of empirical measures, BADO (Keller, 2018), to form a database and to make ongoing quality management possible. As part of this initiative, it was made compulsory for training candidates in the training institutes to apply these measures to their cases. The present paper reports findings on the effectiveness of these training cases.

Aim of the study

The German healthcare system requires empirical confirmation of Jungian psychotherapy to sustain insurance coverage, leading to initiatives aimed at scientifically proving its effectiveness. In 2012, INFAP3, comprising Germany, Switzerland, and Austria, was founded to enhance empirical research and methodological standards in JP. The BADO system was established at three German Jungian training centers (Stuttgart, Munich, and Berlin) to carefully monitor patient data pre- and post-therapy, evaluating alterations in symptoms, personality structure, and quality of life (Keller, 2018). Data collection commenced in 2015, with the intention of amalgamating datasets from all centers to improve statistical analysis and fulfill insurance policy mandates. This study presents data collected from the C. G. Jung-Institute Stuttgart as part of the legally mandated quality assurance measures. In collaboration with INFAP3, the basic documentation system for psychotherapy procedures was implemented to ensure compliance with national healthcare standards.

This system consistently captures patients' sociodemographic data and tracks their condition before and after therapy, providing a quality monitoring tool for trainee therapists. The BADO system evaluates the success of supervised therapies by documenting individual therapy outcomes, with data collected from 2015 to 2021, providing valuable insights into the effectiveness of outpatient psychotherapy care delivered by trainee therapists.

This study aims both to improve the evidence base for JP and to fill the research gap on supervised treatments in German training institutions by examining whether supervised therapy leads to significant symptom reduction, the extent of observable change post-treatment, and the impact of these improvements on patients' overall and health-related quality of life.

Methods

Participants

The study included a total of 104 participants (N=104) who had both pre- and post-treatment scores. There was no attrition

due to the fact that completion of data collection was compulsory for the therapists in training as soon as patients agreed to participate. However, 26 individuals were excluded due to missing data in either the pre-test (T1) or post-test (T2). The study did not impose rigid eligibility requirements for participation. Individuals were selected based on their presence at the clinic for treatment, without any predefined exclusion criteria regarding health conditions, language proficiency, or demographic factors. All participants were patients receiving treatment at the clinic and were invited to take part in the study through a convenience sampling approach. Participants provided informed consent and did not receive any form of compensation for their participation in the study.

The duration of therapies ranged from 18 to 306 sessions, with a mean of 70.63. This shows a wide variety in the sample regarding treatment duration. Nevertheless, this is in line with JP's view that each therapy has to be tailored individually to the specific case, and therapists in this model are asked to shape the treatment and also its duration according to the individual process, which may take more time in some cases and less in others. This means that even though some treatments lasted considerably shorter than others, this does not mean that these processes were not completed. Training in JP also supports candidates in learning to understand these different pathways and take the responsibility to make their own treatment decisions accordingly, as this is a core element of the JP model.

The dataset included diagnostic information for 60 individuals. Among them, 28 persons had comorbid diagnoses, with 20 being female and 8 male. Mood (affective) Disorders were the most prevalent, with a total of 63 cases (47 female, 16 male). The most common specific diagnosis was F33.1 – *Recurrent depressive disorder, current episode moderate*, observed in 31 individuals (21 female, 10 male). Anxiety and Related Disorders accounted for 16 cases (9 female, 7 male), while Stress-Related Disorders were present in 13 individuals (12 female, 1 male). Somatoform and Dissociative Disorders appeared in 3 female patients, and Eating Disorders were recorded in 3 cases (2 female, 1 male). Substance Use Disorders were represented by a single male patient. Personality Disorders were seen in 2 females. Obsessive-Compulsive and Related Disorders appeared in 2 individuals (1 female, 1 male). Finally, there was 1 male patient with an Other/Atypical Diagnosis. In terms of gender distribution, females show higher diagnostic rates across nearly all categories, particularly in mood, anxiety, stress-related, and somatoform disorders, summing up to approximately 76 diagnoses. Males are primarily present in mood and anxiety disorders, with fewer cases in other categories, totaling around 28 diagnoses.

The demographic information obtained from the participants is reported in Table 1.

Sociodemographic characteristics of participants

The participants ranged in age from 19 to 77 years (M=37.79, SD=12.79). Among the participants, 74 identified as female, 29 as male, and one participant did not disclose their gender. Ninety-four participants identified as German, three as ethnic German resettlers, five had other nationalities, and eight did not disclose their ethnicity. The majority of participants (60.6%) had higher secondary education, while 28.8% had an intermediate diploma, and a smaller group (8.7%) had lower secondary education. Most were employed (65.4%), with 43.3% working full-time and 20.2% part-time. A small portion (1.9%) worked occasionally, while 16.3% were engaged in non-traditional activities like early retirement or informal work. Additionally, 6.7% were students or in vocational training, and 11.5% were unemployed or had an unclear employment status.

Based on the standard documentation used for all the cases treated at the institute's clinic, it could be established that there are no systematic differences between the participants of the study and the total patient population.

Therapists

A total of 36 therapists participated in the study, each contributing between one and eight cases. All participating therapists were candidates at a Jungian training institute and held basic qualifications as either psychologists or physicians. The training procedures followed the guidelines of the German Society for Psychoanalysis, Depth Psychology, and Psychosomatic Medicine (DGPT) and were officially accredited by health administration authorities. After two years of theoretical instruction, candidates have to take a first exam and are then allowed to begin treating their own cases under supervision for an additional four years. This second phase of the training focuses on the practice of JP, with theoretical as well as clinical seminars; candidates must present their cases in case seminars in addition to undergoing individual and group supervision. In parallel, candidates have to study the specific Jungian therapy methods (dream interpretation, working with symbolic material/paintings/artistic creations and fairy tales, active imagination, *etc.*), and their competencies are tested in exams specific to each method.

The training cases must include a defined number of treatments with more than 120 sessions. To reach these required session numbers, all the candidates begin their treatment cases as soon as possible after the intermediate exams; this results in a certain uniformity of the training level of the candidates who participated in the study, though this was not systematically evaluated. Throughout the entire training period, candidates also undergo their own training analysis. For each training case, candidates are required to meet with their supervisor after every four sessions to

Table 1. Sociodemographic characteristics of participants.

Sample characteristics	Full sample (N=104)	
	N	%
Gender		
Female	74	71.2
Male	29	27.9
Other/prefer not to say	1	1.0
Nationality		
German	94	90.4
Other nationalities	5	4.8
German resettler	3	2.9
No response	2	1.9
Employment status		
Full-time employed	45	43.3
Part-time employed	21	20.2
Not traditional employment but active	17	16.3
Unemployed or unclear	12	11.5
Student and training	7	6.7
Occasional employment	2	1.9
Educational qualifications		
Higher secondary education	63	60.6
Intermediate secondary education	30	28.8
Lower secondary education	9	8.7
Other/unspecified education	2	1.9

discuss the case. Although the therapies do not follow a strict manual, this close and continuous supervision ensures a high level of adherence to the Jungian therapy model.

Study design and procedure

This study employs a pre-post measurement design to evaluate the effectiveness of therapy by assessing changes in symptom burden and other psychological variables between intake and discharge. Patients provided informed consent before participation. Data were collected at the beginning of therapy and reassessed at the end of treatment to determine the magnitude of change. Sociodemographic data were collected at the beginning. Participants received standardized psychometric assessments after their first session to measure baseline symptom severity, which they completed and returned before their second session. These responses were recorded in an Excel database and stored in the patient's file for the candidate therapist. Each patient followed an individualized treatment plan tailored to their specific psychological needs. Weekly therapy sessions were conducted according to the treatment protocol. At the conclusion of therapy, patients were again asked to complete the same standardized assessments, which were returned to their therapist one to two sessions before treatment ended.

Measures

The International Classification of Diseases – 10th Revision (ICD-10) Symptom Rating (ISR), the *Fragebogen zur Lebenszufriedenheit* (FLZ), the Operationalized Psychodynamic Diagnosis - Structure Questionnaire (OPD-SQ), and a demographic questionnaire were used in this study.

ICD-10 Symptom Rating

The ICD-10 Symptom Rating (ISR) is a standardized self-report instrument developed to measure psychological symptoms in accordance with the ICD-10 classification system (World Health Organization, 1992). Created by Tritt *et al.* (2008), it is extensively utilized in clinical settings and psychotherapy research to assess symptom severity and monitor treatment progress. The ISR has 29 items allocated among six fundamental subscales. Each subscale addresses a distinct symptom cluster: the Depressive Syndrome scale (4 questions) assesses prevalent signs of depression, including low mood, lack of interest, exhaustion, and diminished self-worth; the Anxiety Syndrome scale (4 items) addresses symptoms like irrational fear, somatic anxiety responses, avoidance, and fear of future anxiety; the Compulsive-Obsessive Syndrome scale (3 items) examines intrusive thoughts or compulsive actions, resistance difficulties, and their interference with daily functioning; the Somatoform Syndrome scale (3 items) identifies ongoing physical complaints and illness concerns without medical explanation; the Eating Disorder Syndrome scale (3 items) focuses on disordered eating behaviors, including restrictive practices, fixation on weight, and excessive concern with food. The 12 supplementary items, while not forming a separate scale, are factored into the overall score and serve to screen for additional concerns such as sleep disturbances, dissociative symptoms, sexual issues, trauma responses, cognitive difficulties, and suicidal thoughts, aligning with relevant ICD-10 diagnostic codes (Tritt *et al.*, 2013). Responses are recorded on a 5-point Likert scale (0 = *does not apply* to 4 = *applies extremely*), where higher scores signify greater psychological distress (Tritt *et al.*, 2013). The ISR has demonstrated strong psychometric properties, with high internal consistency (Cronbach's α=0.78-0.92) and test-retest reliability between 0.70 and 0.94 (Fischer *et al.*, 2010; Fischer *et al.*, 2011). It exhibits high correlations with the Symptom Checklist-90-Revised (SCL-90-R) (r=0.78 to 0.37) and aligns with key ICD-10 diagnostic dimensions, including depression, anxiety, obsessive-compulsive disorder, somatization, and eating disorders. Additionally, the ISR is highly responsive to therapeutic change, effectively capturing symptom improvement in psychotherapy patients, with standardized effect sizes (SES) ranging from 0.27 to 0.83 (Fischer *et al.*, 2011). The measure includes cut-off values established by Tritt *et al.* (2010), which were derived from comparisons between clinical and non-clinical samples and provide standardized thresholds for interpreting ISR scores.

The Fragebogen zur Lebenszufriedenheit

The *Fragebogen zur Lebenszufriedenheit* (FLZ) is a standardized self-report questionnaire developed by Fahrenberg *et al.* (1986) to assess subjective life satisfaction across multiple domains. It consists of 32 items covering ten specific life domains, including health, financial situation, work, leisure, partnerships, personal competence, relationships with children, sexuality, friendships, and housing. Factor analysis confirmed this ten-factor structure, supporting its theoretical foundation (Henrich & Herschbach, 2000). Respondents rate their satisfaction on a 7-point Likert scale, ranging from *very satisfied* (1) to *very dissatisfied* (7). The total score represents overall life satisfaction. The FLZ consists of two subscales, each with 7 items, designed to assess subjective satisfaction in specific life domains. In this scale, lower scores indicate higher levels of satisfaction. The subscale Satisfaction with One's Self measures how individuals perceive their abilities, strengths, and self-image, offering insight into their self-worth and confidence. The Health subscale assesses satisfaction with physical well-being, including overall health, physical functioning, and the impact of health on daily life. Lower scores suggest a more favorable assessment of one's health, while higher scores may indicate dissatisfaction or perceived health issues (Fahrenberg *et al.*, 2000; Henrich & Herschbach, 2000). The FLZ demonstrates high internal consistency (Cronbach's α=0.82-0.89), and test-retest reliability over one week confirmed its stability (r=0.85-0.87). The FLZ-General Life Satisfaction correlated significantly with the General Well-Being Schedule (r=0.63) and Beck Depression Inventory (r=−0.51), while FLZ-Health showed strong associations with the Short Form (SF)-36 (r=0.40-0.64) and SCL-90-R Depression Scale (r=−0.59). The subscales have also demonstrated strong psychometric properties, with high internal consistency across domains and significant correlations with related constructs, confirming their validity. The questionnaire effectively distinguished between different populations and demonstrated sensitivity to change, responding to therapeutic interventions (Henrich & Herschbach, 2000). To ensure a weighted assessment of life satisfaction, this study applies a weighting formula to correct for potential biases in paired-sample t-tests. The formula used is: $gZ=(W-1)\times(Z\times2-5)$ where W represents importance, and Z denotes satisfaction (Henrich & Herschbach, 2000). The formula is based on the premise that dissatisfaction in life areas deemed personally important has a more substantial negative effect on overall well-being compared to dissatisfaction in less important domains. In contrast, satisfaction in highly valued areas contributes more significantly to well-being (Henrich & Herschbach, 2000). The formula is designed so that unimportant domains (where W=1) do not influence the result, and the satisfaction score is adjusted using the transformation (2Z−5), which

converts a 1-5 Likert scale into a −3 to +5 range. This structure results in a possible item score ranging from −12 to +20, capturing variation that is clinically meaningful. This method has been utilized in multiple studies, including those by Henrich and Herschbach (2000), Daig *et al.* (2011), and Goldbeck *et al.* (2007).

The Operationalized Psychodynamic Diagnosis - Structure Questionnaire

The Operationalized Psychodynamic Diagnosis - Structure Questionnaire (short form) (OPD-SQS) is a concise self-report measure designed to evaluate personality structure, focusing on self-awareness, relational dynamics, and social interactions (Ehrenthal *et al.*, 2015). The OPD-SQK is a brief 12-item version of the original 95-item OPD-SQ (full version) and assesses three core dimensions of personality structure: self-perception, encompassing the capacity to identify and manage one's emotions as well as maintain a coherent sense of self; relational patterns, describing ingrained expectations and templates for interacting with others; and interpersonal behavior, reflecting the ability to form and maintain meaningful social connections (Ehrenthal *et al.*, 2015). It serves as a valuable clinical tool for treatment planning in psychotherapy, psychosomatic medicine, and psychiatry. Comprising 12 items adapted from the original 95-item OPD-SQ, the OPD-SQK uses a 5-point Likert scale (0 = *does not apply* to 4 = *fully applies*), where higher scores reflect greater structural impairments. The instrument exhibits strong psychometric properties, with high internal consistency (Cronbach's α=0.87-0.89) and validated factor structure (Tucker-Lewis Index [TLI]=0.95, Comparative Fit Index [CFI]=0.96, Root Mean Square Error of Approximation [RMSEA]=0.08) (Ehrenthal *et al.*, 2015). Additionally, it correlates strongly with the full OPD-SQ (r=0.62) and external observer ratings (Dinger *et al.*, 2014), effectively differentiating between clinical and non-clinical groups.

Demographic questionnaire

A structured demographic questionnaire was administered to collect sociodemographic and socioeconomic characteristics of the participants. The questionnaire included 14 items, covering the following key aspects: basic information, including gender, age, and nationality; relationship status; household composition; housing situation; education level; occupational status, including highest vocational qualification, employment status, current inability to work, and ongoing pension procedures.

Data analysis

Pre- and post-treatment scores were compared to evaluate therapy effectiveness, with statistical analyses assessing changes in symptom burden and psychological well-being. A paired t-test was used to compare mean values, ensuring the appropriateness of parametric testing. Normality was checked using the Kolmogorov-Smirnov (KS) test, which indicated no significant deviations for ISR (p=.073), OPD-SQ (p=.200), and FLZ (p=.200). The Shapiro-Wilk test showed a mild deviation for OPD-SQ (p=.029); however, with a large sample (N=104), the Central Limit Theorem ensures this does not impact results. Since paired t-tests are robust to minor normality violations in large samples, parametric analysis remains valid. The findings are presented in Table 2.

Normality tests for the subscales showed mixed results. While some met the normality assumption, others, including OPD-Self-Perception, ICD-10 Anxiety, Eating Disorder, Somatoform, and supplementary subscales, exhibited significant deviations (p<.05) in KS and SW tests. Due to these violations, a Wilcoxon signed-rank test was used instead of a paired t-test for subscale comparisons. Descriptive statistics (means, standard deviations) were reported for all variables, and effect sizes were calculated to assess the magnitude of change. Statistical analyses were conducted using SPSS (Version 27, IBM Corp.), with p<0.05 as the significance threshold. Missing data were imputed using the series mean. The study examined three psychological scales: ISR, OPD-SQ, and FLZ. Total and subscale scores were computed based on established scoring methods. To control for the risk of Type I error due to multiple comparisons, Bonferroni corrections were applied to the results of all paired t-tests and Wilcoxon signed-rank tests assessing changes in psychometric measures from pre- to post-intervention. All tests remained statistically significant following the corrections, indicating that the observed effects were robust.

Results

Results of the paired t-test for total scores

A series of paired samples t-tests was conducted to examine differences between pre-test (T1) and post-test (T2) scores for five total scores: FLZ-Life Satisfaction, FLZ-Health-Related Quality of Life, FLZ Total Score, ICD-10 Total Score, and OPD-SQ Total Score. The results, including means, standard deviations, t-values, significance levels, and effect sizes, are presented in Table 3. The results of the paired t-tests indicate significant improvements (p<.001) across all five measures, as post-test scores were significantly better than pre-test scores. The effect sizes (Cohen's d) range from 0.555 to 1.174, indicating moderate to large effects.

For Life Satisfaction, post-test scores (M=41.15, SD=36.31) were significantly higher than pre-test scores (M=17.14, SD=31.96), t (103)=−7.58, p<.001, d=0.743. The 95% confidence interval (CI) for the mean difference ranged from 17.72 to 30.29. Similarly, for Health-Related Quality of Life, post-test scores (M=54.53, SD=43.41) were significantly higher than pre-test scores (M=34.11, SD=44.17), t (103)=−5.68, p<.001, d=0.557,

Table 2. Normativity tests.

Variable	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ICD-10 total score	.083	104	.073	.989	104	.538
FLZ total score	.061	104	.200	.973	104	.029
OPD-SQ total score	.067	104	.200	.978	104	.077

ICD-10, International Classification of Diseases – 10th Revision; FLZ, *Fragebogen zur Lebenszufriedenheit* [Life Satisfaction Questionnaire]; OPD-SQ, Operationalized Psychodynamic Diagnosis - Structure Questionnaire.

with a 95% CI of 13.29-27.54. The FLZ Total Score also showed a significant increase from pre-test (M=51.25, SD=64.98) to post-test (M=95.68, SD=71.94), t(103)=−7.86, p<.001, d=0.771, with a 95% CI of 33.21-55.63. The ICD-10 Total Score, which reflects psychological symptoms, showed a significant reduction from pre-test (M=1.42, SD=0.59) to post-test (M=0.85, SD=0.55), t (103)=11.97, p<.001, d=1.174, with a 95% CI of 0.47-0.66. Finally, the OPD-SQ Total Score significantly decreased from pre-test (M=25.93, SD=8.10) to post-test (M=20.32, SD=8.61), t (103)=7.51, p<.001, d=0.736, with a 95% CI of 4.13-7.09.

Table 4 shows an independent t-test conducted to determine whether there was a difference in pre-test and post-test change scores for FLZ-Life Satisfaction, FLZ-Health-Related Quality of Life, FLZ Total Score, ICD-10 Total Score, and OPD-SQ Total Score based on gender.

Information regarding the number of therapy sessions was available for 60 participants. To explore whether the number of therapy sessions was associated with the degree of therapeutic change, regression analyses were conducted using session number as a covariate for changes in FLZ Total, OPD-SQ Total, and ICD-10 Total scores. Specifically, the difference scores (T2–T1) for each scale were used as dependent variables. The models showed very low correlations between session number and change scores (FLZ Total Change: r=.004, p=.976; ICD-10 Total Change: r=.079, p=.566; OPD-SQ Total Change: r=.072, p=.601). These results indicate that the number of therapy sessions was not significantly associated with therapeutic change as measured by these instruments.

Independent t-test for gender differences in pre- and post-test score changes

The results indicated no significant gender differences in any of the measured change scores between pre-test and post-test. Change in Life Satisfaction scores for men (M=24.06, SD=29.75) and women (M=25.02, SD=38.67) did not differ significantly, t (101)=0.135, p=.893, d=-0.032. Change in Health-Related Quality of Life scores for men (M=20.34, SD=37.10) and women (M=20.07, SD=36.82) also showed no significant difference, t (101)=0.034, p=.973, d=0.007. Change in Total FLZ Scores for men (M=45.36, SD=66.90) and women (M=44.13, SD=54.50) did not differ significantly, t (101)=0.097, p=.923, d=0.021. Change in ICD-10 Total Scores for men (M=−0.50, SD=0.45) and women (M=−0.59, SD=0.49) also did not significantly differ, t (101)=0.808, p=.421, d=0.176. Finally, change in OPD-SQ Total Scores for men (M=−6.15, SD=7.49) and women (M=−5.43, SD=7.76) did not show a significant difference either, t (101)= −0.422, p=.674, d=−0.093.

The Cohen's d effect sizes for all comparisons were close to zero, indicating a negligible effect of gender on changes in psychological outcomes. These results suggest that gender does not significantly influence the degree of change observed between pre-test and post-test scores.

Results of the paired t-test for subscales

A series of paired samples t-tests was conducted to examine differences between pre-test (T1) and post-test (T2) scores for five subscales: OPD-Self-Perception, OPD-Interpersonal Contact, OPD-Relationship, ICD-10 Depression Score, and ICD-10 Obsessive-Compulsive Score. The results demonstrated in Table 5 indicate statistically significant improvements across all subscales (p<.001), suggesting meaningful changes in self-perception, relationship experiences, interpersonal contact, and reductions in depressive and obsessive-compulsive symptoms.

For Self-Perception, post-test scores (M=5.35, SD=3.63) were significantly lower than pre-test scores (M=7.99, SD=3.65), t (103)=7.71, p<.001, d=0.756. The 95% CI for the mean difference ranged from 1.96 to 3.32, indicating a moderate effect size. Similarly, for Interpersonal Contact, post-test scores (M=7.11, SD=3.31) were significantly lower than pre-test scores (M=8.55, SD=3.16), t (103)=5.77, p<.001, d=0.566, with a 95% CI of 0.95-1.95, also reflecting a moderate effect size.

The Relationship subscale showed a significant reduction

Table 3. Paired t-test for total scores.

Pair	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD	t	df	p	Cohen's d
FLZ-Life Satisfaction	17.141	31.9578	41.1492	36.30934	-7.575	103	<.001	0.743
FLZ-Health	34.1139	44.16899	54.5288	43.41468	-5.682	103	<.001	0.557
FLZ Total	51.2548	64.98203	95.678	71.94495	-7.86	103	<.001	0.771
ICD-10 Total	1.415	0.59025	0.8473	0.54753	11.969	103	<.001	1.174
OPD-SQ Total	25.9283	8.09632	20.3173	8.60601	7.506	103	<.001	0.736

SD, standard deviation; FLZ, *Fragebogen zur Lebenszufriedenheit* [Life Satisfaction Questionnaire]; ICD-10, International Classification of Diseases – 10th Revision; OPD-SQ, Operationalized Psychodynamic Diagnosis - Structure Questionnaire.

Table 4. Independent t-test for gender differences in pre- and post-test score changes.

Variables	Men (M±SD)	Women (M±SD)	t(df)	p	95% CI	Cohen's
FLZ-Health	20.34±37.10	20.07±36.82	0.034 (101)	.973	[−15.76, 16.31]	0.007
FLZ-Life Satisfaction	25.02±38.67	24.06±29.75	0.135 (101)	.893	[−13.15, 15.07]	0.030
FLZ Total	45.36±66.90	44.13±54.50	0.097 (101)	.923	[−24.06, 26.53]	0.021
OPD Total	−6.15±7.49	−5.44±7.76	−0.422 (101)	.674	[−4.05, 2.63]	−0.093
ICD Total	−0.50±0.45	−0.59±0.49	0.808 (101)	.421	[−0.12, 0.29]	0.177

SD, standard deviation; CI, confidence interval; FLZ, *Fragebogen zur Lebenszufriedenheit* [Life Satisfaction Questionnaire]; OPD, Operationalized Psychodynamic Diagnosis; ICD, International Classification of Diseases.

from pre-test (M=9.15, SD=3.88) to post-test (M=7.87, SD=3.73), t (103)=4.01, p<.001, d=0.393, with a 95% CI of 0.65-1.92, indicating a small effect size. In contrast, ICD-10 Depression Score demonstrated the largest effect size among all subscales, with post-test scores (M=1.29, SD=0.90) significantly lower than pre-test scores (M=2.29, SD=0.88), t (103)=11.26, p<.001, d=1.104, with a 95% CI of 0.83-1.18. This indicates a large effect size, suggesting a strong reduction in depressive symptoms.

Similarly, the ICD-10 Obsessive-Compulsive Score exhibited a substantial reduction from pre-test (M=1.75, SD=1.16) to post-test (M=0.80, SD=0.66), t (103)=9.70, p<.001, d=0.951, with a 95% CI of 0.75-1.14. The large effect size (d=0.951) suggests a strong reduction in obsessive-compulsive symptoms.

Results for the Wilcoxon signed-rank test

Since the ICD-10 Anxiety, Eating Disorder, Somatoform, and supplementary subscales exhibited significant deviations from normality (p<.05) in Kolmogorov-Smirnov and Shapiro-Wilk tests, a Wilcoxon signed-rank test was conducted instead of a paired samples t-test to assess changes in pre-test (T1) and post-test (T2) scores.

Wilcoxon signed-rank test results, demonstrated in Table 6, revealed that ICD-Anxiety scores were significantly lower after the intervention (Mdn=1.33, interquartile range [IQR]=1.05, N=104) compared to before (Mdn=2.01, IQR=1.14, z=−6.078, p<.001), indicating a significant reduction in anxiety symptoms with a large effect size (r=−0.60). Similarly, ICD-Somatoform scores were significantly lower at post-test (Mdn=4.90, IQR=0.67) compared to pre-test (Mdn=7.88, IQR=0.86, z=−4.633, p<.001), reflecting a moderate effect size (r=−0.45). ICD-Supplementary scores were also significantly reduced following the intervention (Mdn=0.75, IQR=0.55) compared to pre-test (Mdn=1.24, IQR=0.62, z=−7.441, p<.001), with a large effect size (r=−0.73). In contrast, ICD-Eating Disorder scores showed no significant difference between pre-test (Mdn=5.74, IQR=0.81) and post-test (Mdn=4.90, IQR=0.71, z=−1.092, p=.275), with a small effect size (r=−0.11), indicating that the intervention did not significantly impact eating disorder symptoms.

The findings indicate that participants experienced statistically significant reductions in anxiety, somatoform symptoms, and overall psychological distress following the intervention.

Remission rates

The categorization of symptom severity for each ISR subscale (depression, anxiety, obsessive-compulsive, somatoform, eating disorders, and total score) was based on the validated cut-off values established by Tritt *et al.* (2010). These cut-off points were derived from comparisons between clinical and non-clinical samples and provide standardized thresholds for interpreting ISR scores. The categorization includes five levels: no symptoms, subclinical, mild, moderate, and severe. The thresholds used in the present study were obtained from the ISR norming manual provided by the *Institut für Qualitätsentwicklung in der Psychotherapie und Psychosomatik* (Institute for Quality Development in Psychotherapy and Psychosomatics) (Tritt *et al.*, 2010). The cut-off values established by the ISR were applied to distinguish between non-clinical presentations and subclinical or clinically relevant symptom levels across all measured domains. Remission was defined as a shift from subclinical or clinical symptom levels at pre-assessment to the non-clinical range

Table 5. Paired t-test for subscales.

Pair	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD	t	df	p	Cohen's d
OPD-Self-Perception	7.9904	3.65103	5.3462	3.62507	7.71	103	<.001	0.756
OPD-Interpersonal Contact	8.5533	3.15507	7.1058	3.31492	5.77	103	<.001	0.566
OPD-Relationship	9.1538	3.87616	7.8654	3.73141	4.007	103	<.001	0.393
ICD-Depression	2.2933	0.88299	1.2861	0.89796	11.262	103	<.001	1.104
ICD-Obsessive-Compulsive	1.7532	1.16031	0.8045	0.65614	9.696	103	<.001	0.951

SD, standard deviation; OPD, Operationalized Psychodynamic Diagnosis; ICD, International Classification of Diseases.

Table 6. Wilcoxon signed-rank test results.

Domain	Ranks	N=104	Mean rank	Sum of ranks	z	p
ICD-Anxiety Score	Negative ranks	74	50.89	3766	−6.078	<.001
	Positive ranks	19	31.84	605		
	Ties	11				
ICD-Eating Disorder Score	Negative ranks	33	30.17	995.50	−1.092	.275
	Positive ranks	25	28.62	715.50		
	Ties	46				
ICD-Somatoform Score	Negative ranks	51	37.80	1928	−4.633	<.001
	Positive ranks	17	24.59	418		
	Ties	36				
ICD-Supplementary Score	Negative ranks	83	52.56	4362.50	−7.441	<.001
	Positive ranks	13	22.58	293.50		
	Ties	8				

ICD, International Classification of Diseases.

at post-assessment (Tritt *et al.*, 2010). The remission rate was calculated using the following formula:

Remission rate =
(number of participants with clinical/subclinical scores at pre-test and non-clinical scores at post-test)/
(total number of participants with clinical/subclinical scores at pre-test)
x 100

Remission rates:

- For the Total Score, participants with pre-scores of 0.50 or higher were considered in the clinical range. Among them, 24 out of 96 participants remitted, yielding a remission rate of 25%.
- In the Depression subscale, participants scoring 0.75 or above at pre-assessment were classified as clinical or subclinical. Nineteen out of 100 participants met the criteria for remission (19%).
- For Anxiety, using the same 0.75 cut-off, 19 of 89 participants remitted (21.35%).
- In the Obsessive-Compulsive subscale, scores of 0.67 or above indicated clinical relevance. Thirty-eight of 85 participants moved into the non-clinical range, resulting in the highest remission rate of 44.71%.
- For Somatoform Symptoms, participants with scores of 0.33 or above were considered clinical. Here, 23 out of 70 participants achieved remission (32.86%).
- Lastly, in the Eating Disorder subscale, the cut-off for clinical relevance was also 0.33 or above; 12 out of 51 participants remitted (23.53%).

Discussion

The results of this study demonstrate significant improvements in psychological well-being, life satisfaction, and symptom reduction across most measured domains following the intervention. The paired samples t-tests for the total scores of the FLZ, ICD-10, and OPD-SQ revealed statistically significant pre-to-post improvements, with moderate to large effect sizes (d=0.555 to d=1.174). These findings suggest that Jungian therapy was effective in facilitating psychological change.

In addition to total score improvements, significant changes were observed across multiple subscales. The OPD-Self-Perception, Interpersonal Contact, and Relationship subscales all exhibited statistically significant reductions in impairment, suggesting that participants experienced positive changes in their personality structure and relational patterns. The ICD-10 Depression and Obsessive-Compulsive subscales demonstrated the largest effect sizes, with depression symptoms showing the most substantial decline (d=1.104). These effect sizes are comparable to those found in the above-mentioned PAL study (Mattanza *et al.*, 2006), which investigated the effectiveness of JP in a naturalistic design with experienced analysts, demonstrating that therapists in Jungian training can reach the same improvement in their patients as experienced therapists. This also speaks for the high quality of training structures at the Jungian training institute.

However, not all symptom domains exhibited significant change. The ICD-10 Eating Disorder subscale did not show a statistically significant improvement (p=.275). While the presence of extreme outliers may have contributed to the lack of significance, the median and interquartile range analysis suggest that most participants did not experience substantial symptom changes in eating disorders. Despite the overall positive findings, the lack of significant improvement in eating disorder symptoms suggests that JP alone may not be sufficient for this population. Therefore, more research in this field is needed.

JP's non-directive, insight-focused methodology frequently lacks the behavioral framework essential for addressing acute symptoms like purging or restrictive eating. Furthermore, its emphasis on symbolic and unconscious content may provide challenges for persons with vulnerable ego systems. The lack of empirical research and defined treatment protocols limits its clinical application. Jungian therapy is usually practiced alone, which makes it hard to provide the kind of interdisciplinary care that eating disorder treatment often requires. While archetypal interpretations might provide valuable insights, they may distract from urgent therapeutic requirements if not incorporated into a concrete therapy framework. Zeeck *et al.* (2019) examine the factors contributing to poor treatment response in bulimia nervosa (BN) and propose strategies to improve outpatient care. Drawing on insights from 56 experienced therapists in Germany, the study highlights major obstacles such as patient ambivalence, gaps in therapist training, and the diverse presentation of BN. Experts recommend a personalized approach that integrates cognitive-behavioral and psychodynamic techniques, adapted to individual patient needs and treatment phases. Davis and Attia (2019) similarly underscore the significance of multimodal therapies that integrate psychological, nutritional, and medical care. They emphasize the efficacy of enhanced cognitive behavior therapy (CBT-E) across various diseases, family-based therapy for adolescent anorexia, and the potential benefits of third-wave therapies (*e.g.*, dialectical behavior therapy [DBT], acceptance and commitment therapy [ACT]), pharmaceutical interventions, and neuromodulation methods. Both sources advocate for additional empirical study and the formulation of more adaptable, integrated methodologies that correspond with the intricate and multifarious characteristics of eating disorders.

Comparison with previous findings and distinctive contributions

The findings of this study support previous research on Jungian psychotherapy, which consistently shows significant improvements in symptoms, interpersonal functioning, and personality structure. Like the PAL Study (Mattanza *et al.*, 2006), which reported large symptom reductions (*e.g.*, SCL-90-R Global Score Index [GSI], d=1.31), this study found similarly strong effects in depression (d=1.104) and obsessive-compulsive symptoms (d=0.951). Improvements in life satisfaction and health-related quality of life align with the Berlin Catamnestic Study (Keller *et al.*, 2002), which documented long-term psychological gains and reduced healthcare use. Importantly, structural personality change – as seen in OPD-SQ subscales such as Self-Perception (d=0.756) and Interpersonal Contact (d=0.566) – echoes the PAL study's findings (d=0.94), suggesting that intrapsychic transformation may be a core outcome of Jungian therapy. Previously, Junghan (2002) explored how well the structural axis of the OPD aligns with key Jungian ideas like the ego and the self, showing that the two frameworks are conceptually compatible. This laid important groundwork for incorporating standardized tools such as the OPD into research on JP. One of the unique contributions of this study is that it shows therapists in training, working within a structured Jungian training program, were able to help clients make meaningful psychological changes,

achieving results similar to those seen with fully qualified analysts in earlier studies. This challenges the common concern that trainee therapists may be less effective (Banham & Schweitzer, 2016), and supports recent efforts by the International Association for Analytical Psychology (IAAP) to strengthen quality assurance and monitor outcomes during training. The data suggest that Jungian training institutes are successful in cultivating clinical competence early in therapist development – an important consideration for training policy and future research.

This conclusion is backed by larger reviews of research, which show that psychodynamic therapy overall delivers strong results – comparable to, and in some cases better than, other well-known approaches like CBT. For instance, one meta-analysis found effect sizes of 0.97 for psychodynamic therapy compared to 0.88 for CBT (Steinert *et al.*, 2020). In direct comparisons with other active treatments, psychodynamic therapy performed just as well, supporting its place among evidence-based therapies. What is especially noteworthy is that the benefits of psychodynamic therapy tend to last – and may even grow – over time, unlike CBT, where the effects can sometimes fade after treatment ends.

These lasting improvements include not just symptom relief, but also deeper shifts in personality and relationships – areas that are central to Jungian psychotherapy. This pattern shows up clearly in earlier studies like the PAL Study (Mattanza *et al.*, 2006) and the Berlin Catamnestic Study (Keller *et al.*, 2002), and it is reflected again in this study's OPD-SQ findings. The effect sizes found in this study (d=0.56-1.17) confirm that Jungian therapy stands on solid empirical ground as a credible and effective form of psychotherapy.

In addition, Jungian treatment focuses on structural personality transformation and relational development, which may have a wider and longer-lasting effect than therapies that only focus on symptoms. One thing that might set Jungian psychotherapy apart from other types of therapy is its focus on symbolic processes, unconscious imagery, and personality transformation. The alignment between symptom reduction and deeper structural personality shifts in this study suggests Jungian therapy's potential to offer not only symptom relief but also transformative psychological development.

Therapists in training

Therapist training programs are crucial for cultivating professional competence; nonetheless, empirical data on their efficacy, especially for client outcomes, remains insufficient. The majority of current research emphasizes seasoned therapists, whereas studies including therapists-in-training are infrequent (Hill *et al.*, 2017). This study examines the efficacy of Jungian psychotherapy administered by therapists in training.

While training is assumed to improve therapeutic competence, current assessment methods – such as knowledge tests or supervisor ratings – have notable limitations and often fail to reflect actual therapeutic outcomes (Fairburn & Cooper, 2011). Extensive initiatives such as the Society for Psychotherapy Research Interest Section on Therapist Training and Development (SPRISTAD) project have sought to monitor therapist development across different countries and training frameworks (Messina *et al.*, 2019), emphasizing a transition towards experiential learning, case supervision, and personal therapy rather than conventional academic assessments (Orlinsky *et al.*, 2024). However, studies examining whether training translates into better client outcomes remain scarce. A review of 28 randomized controlled trials found that while training tends to improve therapists' knowledge and adherence to evidence-based practices, only 11% studied how clients fared, and results were mixed (Valenstein-Mah *et al.*, 2020). Some studies have raised concerns that therapists still in training may experience higher dropout rates and less treatment success compared to their more experienced counterparts (Banham & Schweitzer, 2016). However, these outcomes often depend more on client factors and treatment settings than on therapist experience alone. In psychodynamic and psychoanalytic approaches, the lack of empirical research is even more pronounced. Jungian training in particular has rarely been systematically studied, with most discussions emerging from conferences, professional writings, and institutional traditions rather than empirical studies (Merchant, 2018). Recent developments, such as the IAAP's international Router program, reflect a growing awareness of the need to modernize Jungian training by addressing cultural diversity, academic flexibility, and the emotional realities of becoming a therapist (Merchant, 2018).

By including therapists-in-training as active treatment providers, this study offers a rare opportunity to assess the outcomes of supervised Jungian therapy in a naturalistic setting. The findings show that even therapists still in training, supported by a structured and intensive program, can help clients achieve meaningful psychological change. This contributes valuable insight to the literature on therapist training and highlights the potential of Jungian approaches to cultivate effective practitioners early in their careers. Future studies could investigate which training components are most influential in producing competent therapists early in their careers.

Methodological strengths and limitations

This study possesses several methodological strengths. The use of a pre-post design allowed for an assessment of within-subject changes, while the combination of self-report measures provided a multidimensional view of psychological functioning. Additionally, the sample size (N=104) was relatively large for a naturalistic study, increasing the generalizability of findings. The naturalistic design, high in external validity, makes the results generalizable to everyday practice.

Despite the study's strengths, several limitations warrant consideration. First, the study lacked a control group, making it difficult to determine whether the observed improvements were directly attributable to JP or influenced by other external factors (*e.g.*, spontaneous recovery, placebo effects). Future naturalistic research could take into account several approaches to improve internal validity in situations when RCTs are impracticable or morally difficult. To enable more meaningful outcome comparisons without sacrificing real-world relevance, matched comparison groups – patients from other therapeutic modalities with comparable clinical and demographic profiles – can be used as quasi-controls in future naturalistic studies.

Second, the reliance on self-report measures introduces the possibility of response biases, including social desirability effects. While validated instruments (*e.g.*, FLZ, OPD-SQ) were used, future research should integrate clinician-rated assessments and behavioral outcome measures to enhance objectivity. Another limitation of the present study is that the developmental level of the therapists was not systematically tracked. Future research should explore how therapists' stage of professional development and the progress of their personal analysis may influence the formation of the therapeutic alliance and treatment outcomes.

The absence of systematic recording of the dropout rate in

this study represents a restriction. In the absence of these data, assessing potential biases associated with treatment cessation or evaluating the representativeness of the final group becomes challenging.

Lastly, data on the number of therapy sessions were only available for 60 out of the 100 cases; moreover, the number of sessions varied considerably across participants, yet no significant association was found between session count and therapeutic change on the FLZ, OPD, or ICD measures. This constitutes a limitation in terms of data completeness and statistical power. The wide variability in session numbers further complicates the interpretation of results, potentially obscuring meaningful associations.

Future research directions

Future research should prioritize addressing the methodological gaps identified in this study to strengthen the empirical foundation of Jungian psychotherapy. RCTs are necessary to compare JP with alternative psychotherapeutic approaches. Additionally, long-term follow-up studies (*e.g.*, 6-month and 1-year post-treatment assessments) are essential to determine the durability of therapeutic effects beyond the immediate post-treatment phase. Psychotherapy research primarily emphasizes short-term treatments, with the majority (92%) of findings derived from pre-post comparisons and minimal follow-up data (Keller *et al.*, 2002). The shortage of long-term studies stems from difficulties in gathering case-control data, limited interest among psychoanalysts in empirically assessing their treatments, and methodological challenges such as participant dropouts and missing information (Keller *et al.*, 2002). Additional barriers include concerns about confidentiality, high financial costs, and the complexity of implementing controlled study criteria in private practice settings (Keller *et al.*, 2002).

Given the complex and multifaceted nature of eating disorders, further research is necessary to explore tailored therapeutic approaches, potential adjunctive treatments, and the mechanisms underlying treatment resistance in this domain.

Overall, this study adds to the empirical evidence supporting JP, demonstrating its effectiveness in reducing psychological distress and improving quality of life. However, methodological limitations highlight the need for future controlled studies and long-term follow-ups to further establish its empirical validity in modern mental health care.

Conclusions

This study provides empirical support for the effectiveness of JP in outpatient settings, even when conducted by trainees under supervision. Significant improvements were observed in psychological well-being, life satisfaction, and symptom reduction, with moderate to large effect sizes across key measures (FLZ, ICD-10, and OPD-SQ). Participants also showed notable gains in personality structure and relational functioning, particularly in self-perception, interpersonal contact, and relationships. Depression and obsessive-compulsive symptoms demonstrated the largest reductions. However, eating disorder symptoms did not significantly improve, suggesting that Jungian psychotherapy alone may be insufficient for this population and warrants further investigation. These results emphasize the clinical value of Jungian training institutes and demonstrate the feasibility of systematic outcome monitoring in depth-oriented therapies. Further research should explore long-term effects and more diverse patient populations.

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