

Impact of integrated psychiatric-psychotherapeutic treatment on coping methods and life satisfaction in patients with depressive and anxiety disorders

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Abstract

Aim of the study: The aim of the study was to evaluate the impact of integrated psychiatric-psychotherapeutic treatment on coping methods and life satisfaction, and to compare the effect of integrated approaches and standard psychotherapeutic methods on the aforementioned psychological measures.

Subject or material and methods: Patients diagnosed with depressive disorders (F32 and F33 according to ICD-10) and anxiety and neurotic disorders (F40 – F48 according to ICD-10) between the ages of 18 and 60 were eligible to participate in the study. Participants were randomly divided into two groups: study group, which underwent a process of standardized integrated psychiatric-psychotherapeutic treatment (for the period of 12 weeks) (n = 32), and control group, whose course of treatment lacked a standardized integrated treatment involving direct cooperation between a psychiatrist and a psychotherapist (regular/standard psychotherapy for 12 weeks). All study participants (both the study and control group) had the following psychological questionnaires administered at three points in time (at inclusion in the study, after 6 weeks of psychotherapy, and after 12 weeks): CECS – Courtauld Emotional Control Scale, GSES – General Self-Efficacy Scale, BHI – Basic Hope Inventory, and SWLS – Satisfaction with Life Scale.

Results: Statistical analysis of the collected data demonstrated a positive impact of integrated psychiatric-psychotherapeutic treatment on life satisfaction and the level of basic hope measured by the BHI scale.

Conclusions: The use of an integrated psychotherapeutic model can be beneficial in patients with anxiety and depressive symptoms, however further studies on larger cohorts are needed.

psychotherapy; life satisfaction; coping methods

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INTRODUCTION

The contemporary approach to treatment increasingly emphasizes the necessity of employing an integrated strategy in the management of mental disorders. This approach combines pharmacotherapy with psychotherapy, aiming to enhance treatment effectiveness, improve pa-

tients' quality of life, and reduce the risk of relapse [1]. Pharmacotherapy plays a crucial role in stabilizing symptoms and improving patient functioning, particularly in the treatment of major depressive disorders [2]. However, pharmacological therapy alone does not always lead to sustained remission and may be associated with adverse effects, indicating the need to complement it with psychotherapy.

Psychotherapy, in turn, enables patients to understand the underlying causes of their problems, develop coping skills, and improve interpersonal relationships [3]. The combined use of both methods increases treatment efficacy, particularly in disorders such as depression, anxiety disorders, and PTSD [4].

An integrated approach allows for a holistic view of the patient, taking into account the biological, psychological, and social aspects of the illness. Research shows that patients treated with both pharmacotherapy and psychotherapy achieve better outcomes in terms of symptom remission, social functioning, and quality of life [5]. However, in our view, close collaboration between psychiatrists and psychotherapists is also of critical importance – sharing a common understanding of the patient's psychopathology, its origins, and the therapeutic process. Moreover, this integration reduces the risk of relapse and the need for hospitalization. According to meta-analyses, the combination of pharmacological therapy and psychotherapy in the treatment of depression significantly improves treatment effectiveness and shortens recovery time [6].

Integrated psychiatric and psychotherapeutic treatment is currently considered the standard of care for many mental disorders. Supporting this approach requires appropriate training for medical staff, improved access to psychological therapies, and the individual tailoring of methods to the patient's needs. Future research should focus on optimizing integrative protocols and evaluating the long-term effects of such treatment [7].

The aim of the study was to evaluate the impact of integrated psychiatric-psychotherapeutic treatment on coping strategies and life satisfaction, and to compare the effects of integrated approaches with those of standard psychotherapeutic methods on the aforementioned psychological measures.

MATERIAL AND METHODS:

Patients diagnosed with depressive disorders (F32 and F33 according to ICD-10) and anxiety and neurotic disorders (F40 – F48 according to ICD-10) between the ages of 18 and 60 were eligible to participate in the study. Exclusion criteria included: psychoactive substance addiction (defined as less than one year of abstinence or abstinence without participation in addiction therapy), the presence of psychotic symptoms, organic disorders (caused by brain dysfunction, disease, damage, or injury), and a long history of psychotherapeutic treatment (more than three years) without visible progress, as well as a lack of motivation to undertake psychotherapeutic treatment.

Participants were randomly assigned (non-replacement randomization) to one of two groups:

- **Study group:** Received a standardized, integrated psychiatric-psychotherapeutic treatment over a period of three months.
- **Control group:** Received a standard psychotherapeutic treatment for three months without a standardized integrated approach or direct collaboration between psychiatrist and psychotherapist.

Psychotherapeutic treatment was based on the psychodynamic paradigm. Each session lasted 40 minutes and was held twice per week. The core premise of the psychodynamic approach is that the therapeutic relationship reflects the patient's past experiences – experiences that influence the development of dysfunctional adaptive strategies. Therapeutic interventions aim to expand the patient's psychological insight, enabling a better understanding of previous functioning and the development of pro-health solutions.

The standardization of the integrated psychiatric-psychotherapeutic treatment followed a protocol designed to ensure repeatability and structure. This protocol included a fixed study timeframe, regular meetings with specialists, predefined meeting content, and consistent use of assessment tools at each stage.

The protocol incorporated three measurement points:

1. Initial meeting (upon admission): First joint session between psychiatrist and psychotherapist. Treatment stage: after diagnosis by psychiatrist, prior to psychotherapy commencement. Psychiatrist presents the pharmacological treatment plan. Psychotherapist provides psychotherapy guidelines. Joint conceptualization of the patient's condition and development of the integrated treatment plan. Joint meeting with the patient to communicate the integrated treatment approach.
2. Midpoint meeting (after six weeks of treatment): Follow-up session between psychiatrist and psychotherapist to exchange information about the course of pharmacological and psychotherapeutic treatment. Adjustment of further therapeutic guidelines. Joint meeting with the patient to review the treatment progress.
3. Final meeting (after twelve weeks of treatment): Summary of the integrated treatment course. Joint recommendations for the patient.

All participants (both study and control groups) completed a sociodemographic questionnaire on the day of enrollment. The questionnaire included questions regarding age, level of education, prior therapeutic experiences, and reasons for seeking psychotherapy.

Additionally, the following psychological questionnaires were administered to all participants at three points in time (baseline, after six weeks, and after twelve weeks):

CECS – Courtauld Emotional Control Scale. Consists of 21 statements measuring overall emotional control, with **three subscales** for **anger control**, **depression control**, and **anxiety control**.

GSES – General Self-Efficacy Scale. Assesses the strength of an individual's belief in their ability to cope with difficult situations and obstacles.

BHI – Basic Hope Inventory. Based on E. Erikson's theory and measured by the BHI-12 questionnaire, Basic Hope reflects the belief that the world is orderly, meaningful, and benevolent. This belief is a key factor in constructive responses to change and irreversible loss. The questionnaire contains 12 statements rated on a scale from 1 (strongly disagree) to 5 (strongly agree).

SWLS – Satisfaction with Life Scale. Includes five statements used to assess overall life satisfaction. Respondents indicate the degree to which each statement applies to their lives. Average survey time: 2 minutes.

All subjects were under the psychiatric care (minimum of 3 visits or as required).

Participation in the study was not associated with a change in prescribed pharmacotherapy.

The results of the present study on the evaluation of the effects of integrated psychiatric-psychotherapeutic treatment in patients diagnosed with anxiety or depressive disorders are presented below. To empirically verify the research problems, corresponding hypotheses were formulated, as outlined below.

Main research question: Does integrated psychological-psychiatric treatment affect the psychological variables of the participants, such as: Satisfaction with Life; Anger Control; Depression Control; Anxiety Control; Overall Emotional Control Score; Sense of Self-Efficacy; Basic Hope.

General hypothesis, which should be specified depending on the selected variables:

As the duration of integrated psychological-psychiatric treatment increases, changes occur in life satisfaction (i.e., an improvement in life satisfaction is observed).

To verify these hypotheses, the following statistical tests were applied:

- Repeated measures ANOVA
- Bonferroni post hoc test
- Pearson's chi-squared test

Statistical analyses were conducted using the Statistica 13.3 software package.

In order to estimate the required sample size, a power analysis of the test was performed using the G*Power 3.1 programme [8]. The analysis was based on an analysis of variance with repeated measures, for three measurements. The significance level was set at $\alpha = 0.05$, the expected power of the test ($1 - \beta = 0.80$) and a mean effect size was assumed ($f = 0.25$). The results of the analysis showed that the minimum sample size needed to detect an effect was $n = 27$ participants.

The first step involved testing the assumption of normality of the distribution of quantitative variables for the entire sample. For this purpose,

the Shapiro–Wilk test was conducted [9]. Variables for which the distribution analysis yielded statistically significant results ($p < 0.05$) were considered to deviate from a normal distribution (see Table 1). The groups compared in terms of the variable *gender* (n women = 21; n men = 11; Chi-square = 3.13; $p = 0.077$) were numerically balanced, whereas in terms of the variable *education*, the groups were not equivalent in size (Chi-square = 22.50; $p < 0.001$) [10].

Table 1. Descriptive statistics

Education	Count	Percentage
B	19	59.4
C	7	21.9
A	5	15.6
D	1	3.1

Descriptive statistics for the variable *education* ($n = 32$),
Chi-square = 22.50; $p < 0.001$
Source: author’s own analysis

The variable *age*, as a quantitative variable, was examined for normality of distribution \

Additionally, verification of other assumptions required for statistical tests was conducted, including the assumptions of homogeneity and sphericity of variances. Based on the outcomes, appropriate statistical tests were selected, corresponding to the type of variables used in the hypotheses. At the beginning of the section, descriptive statistics for the dependent variables are presented, broken down by measurement time.

RESULTS

Descriptive statistics for the quantitative variables in the study group ($n = 32$) at the respective time points (T1 – first measurement, at study enrollment; T2 – second measurement, after 6 weeks of treatment; T3 – third measurement, after 12 weeks of the study) are presented in the tables below (Table 2-4).

Table 2. Descriptive statistics of the examined variables along with the Shapiro–Wilk test results ($n = 32$) – first measurement (at study enrollment)

Variable	<i>M</i>	<i>Min</i>	<i>Max</i>	<i>SD</i>	<i>As</i>	<i>K</i>	<i>W</i>	<i>p</i>
Satisfaction with Life SWLS	11.50	5.00	19.00	3.64	0.25	-0.93	0.95	0.193
Anger Control CECS	19.00	7.00	28.00	5.46	-0.55	-0.35	0.95	0.191
Depression Control CECS	20.63	10.00	28.00	4.76	-0.37	-0.35	0.97	0.387
Anxiety Control CECS	19.47	8.00	28.00	5.38	-0.25	-0.84	0.96	0.330
Overall Emotional Control Score CECS	59.09	28.00	84.00	12.43	-0.57	0.54	0.97	0.487
Self-Efficacy GSES	23.25	10.00	37.00	6.74	-0.24	0.37	0.94	0.057
Basic Hope	26.53	14.00	35.00	5.24	-0.52	0.15	0.95	0.172
age	32.38	19.00	57.00	11.51	0.77	-0.66	0.89	0.003

Source: author’s own study

Explanations: *M* – mean; *SD* – standard deviation; *As* – skewness; *K* – kurtosis; *Min* – minimum value; *Max* – maximum value; *W* – Shapiro–Wilk test statistic; *p* – statistical significance.

Table 3. Descriptive statistics of the examined variables along with the Shapiro–Wilk test results ($n = 32$) – second measurement (after six weeks of treatment)

Variable	<i>M</i>	<i>Min</i>	<i>Max</i>	<i>SD</i>	<i>As</i>	<i>K</i>	<i>W</i>	<i>p</i>
Satisfaction with Life SWLS	13.81	5.00	26.00	4.80	0.34	-0.22	0.97	0.455
Anger Control CECS	19.09	7.00	28.00	5.73	-0.25	-0.63	0.97	0.431
Depression Control CECS	18.16	7.00	27.00	4.92	0.01	-0.24	0.97	0.486
Anxiety Control CECS	18.31	7.00	28.00	5.82	0.01	-0.92	0.97	0.479

Overall Emotional Control Score CECS	55.56	22.00	82.00	15.04	0.01	-0.06	0.96	0.213
Self-Efficacy GSES	25.53	10.00	36.00	6.19	-0.55	0.41	0.94	0.087
Basic Hope	28.88	19.00	37.00	4.42	-0.19	-0.39	0.98	0.837

Source: author's own study

Explanations: *M* – mean; *SD* – standard deviation; *As* – skewness; *K* – kurtosis; *Min* – minimum value; *Max* – maximum value; *W* – Shapiro–Wilk test statistic; *p* – statistical significance.

Table 4. Descriptive statistics of the examined variables along with the Shapiro–Wilk test results (*n* = 32) – third measurement (after twelve weeks of treatment)

Variable	<i>M</i>	<i>Min</i>	<i>Max</i>	<i>SD</i>	<i>As</i>	<i>K</i>	<i>W</i>	<i>p</i>
Satisfaction with Life SWLS	16.97	5.00	38.00	6.65	0.86	1.76	0.95	0.121
Anger Control CECS	18.28	8.00	28.00	5.54	0.09	-0.84	0.95	0.199
Depression Control CECS	17.84	7.00	28.00	5.61	0.35	-0.72	0.95	0.124
Anxiety Control CECS	17.31	8.00	28.00	5.43	0.17	-0.70	0.97	0.448
Overall Emotional Control Score CECS	53.44	23.00	81.00	13.92	0.45	-0.26	0.93	0.036
Self-Efficacy GSES	27.31	12.00	37.00	5.47	-0.75	0.84	0.95	0.140
Basic Hope	30.69	18.00	38.00	4.86	-0.79	0.06	0.93	0.049

Source: author's own study

Explanations: *M* – mean; *SD* – standard deviation; *As* – skewness; *K* – kurtosis; *Min* – minimum value; *Max* – maximum value; *W* – Shapiro–Wilk test statistic; *p* – statistical significance.

The results of the Shapiro–Wilk test for the analyzed quantitative variables across the different time points indicated that some variables exhibited distributions approximating normality ($p > 0.005$), while others deviated from a normal distribution ($p < 0.005$). Therefore, the skewness and kurtosis values of the analyzed variables were also examined. As a result, it was determined that these values exceeded an absolute

value of 1 for only a few variables. These distribution analyses justify the use of parametric tests for statistical analyses involving the variables presented in Tables 2-4.

The following table (Table 5) presents aggregated results of the statistical analysis. The dependent variables in the presented model were the psychological variables, while the independent variable was the time of measurement.

Table 5. The impact of integrated psychiatric-psychotherapeutic treatment on psychological variables

Dependent variable	T1 (<i>n</i> = 32)		T2 (<i>n</i> = 32)		T3 (<i>n</i> = 32)		<i>F</i>	<i>df</i>	<i>p</i>	η^2_{partial}
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
Satisfaction with Life SWLS	11.50	3.64	13.81	4.80	16.97	6.65	19.80	2, 62	< 0.001	0.389
Anger Control CECS	19.00	5.46	19.09	5.73	18.28	5.54	0.436	2, 62	0.648	0.014
Depression Control CECS	20.63	4.76	18.16	4.92	17.84	5.61	6.48	2, 62	0.002	0.173
Anxiety Control CECS	19.47	5.38	18.31	5.82	17.31	5.43	3.12	2, 62	0.051	0.092
Overall Emotional Control Score CECS	59.09	12.43	55.56	15.04	53.44	13.92	4.19	2, 62	0.019	0.119
Self-Efficacy GSES	23.25	6.74	25.53	6.19	27.31	5.47	10.92	2, 62	< 0.001	0.260
Basic Hope	26.53	5.24	28.88	4.42	30.69	4.86	16.59	2, 62	< 0.001	0.349

Source: author's own study

SATISFACTION WITH LIFE (SWLS)

The statistical analysis of the collected data demonstrated the effect of integrated psychiatric-psychotherapeutic treatment on **Satisfaction with Life**. A significant main effect was found: $F(2, 62) = 19.80$; $p < 0.001$; $\eta^2_{\text{partial}} = 0.389$. Bonferroni test results indicated that the improvement effect was statistically significant between

the first ($M = 11.50$; $SD = 3.64$) and the second measurement ($M = 13.81$; $SD = 4.80$); $p = 0.031$, between the first ($M = 11.50$; $SD = 3.64$) and the third measurement ($M = 16.97$; $SD = 6.65$); $p < 0.001$, as well as between the second ($M = 13.81$; $SD = 4.80$) and the third measurement ($M = 16.97$; $SD = 6.65$); $p = 0.002$ (Tab.6).

Table 6. Bonferroni test results for comparisons between T1, T2, T3 dependent variable: Satisfaction with Life SWLS. Post-hoc test significance values

Dependent variable: Satisfaction with Life SWLS	T1 (n = 32)		T2 (n = 32)		T3 (n = 32)	
	M	SD	M	SD	M	SD
	11.50	3.64	13.81	4.80	16.97	6.65
T1			0.031		< 0.001	
T2	0.031				0.002	
T3	< 0.001		0.002			

Source: author's own study

EMOTION CONTROL SCALE (CECS)

Moreover, no effect of integrated psychiatric-psychotherapeutic treatment was found on the CECS **Emotional Control Scale – Anger subscale**. There was no main effect $F(2, 93) = 6.203$; $p = 0.648$; $\eta^2_{\text{partial}} = 0.014$. The results of the ANOVA test showed that anger control remained at the same level in the first and second measurements. Although the score was lowest in the third measurement, the difference was not statistically significant. Therefore, no further post hoc analyses were conducted.

In the subsequent part of the statistical analysis, an effect of integrated psychiatric-psychotherapeutic treatment was revealed on the CECS **Emotional Control Scale – Depression subscale**. A significant main effect was observed: $F(2, 62) = 6.48$; $p = 0.002$; $\eta^2_{\text{partial}} = 0.173$.

Bonferroni test results showed that depression control significantly decreased ($p = 0.015$) after the first measurement ($M = 20.63$; $SD = 4.76$) and remained at a similar level in the second ($M = 18.16$; $SD = 4.92$) and third measurements ($M = 17.84$; $SD = 5.61$), both differing significantly from the first measurement ($M = 20.63$; $SD = 4.76$; $p = 0.005$) (Tab. 7).

Table 7. Bonferroni test results for comparisons between T1, T2, T3 dependent variable: Depression Control CECS. Post-hoc test significance values

Dependent variable: Depression Control Scale CECS	T1 (n = 32)		T2 (n = 32)		T3 (n = 32)	
	M	SD	M	SD	M	SD
	20.63	4.76	18.16	4.92	17.84	5.61
T1			0.015		0.005	

T2	0.015		1.000
T3	0.005	1.000	

Source: author's own study

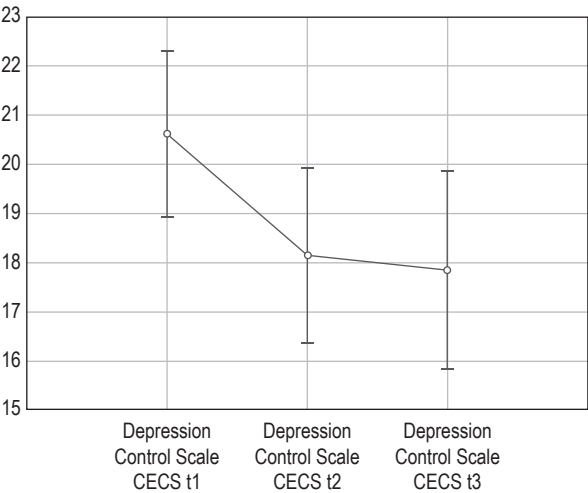


Figure 1. Results for comparisons between T1, T2, T3 dependent variable: Depression Control CECS in the study group with integrated psychiatric-psychotherapeutic treatment

Next, the effect of integrated psychiatric-psychotherapeutic treatment on the CECS **Emotion-**

al Control Scale – Anxiety subscale was examined. The analysis revealed no significant main effect: $F(2, 62) = 3.12$; $p = 0.051$; $\eta^2_{\text{partial}} = 0.092$.

The ANOVA results indicated that anxiety control decreased after the first measurement, and this trend persisted through the final measurement. However, the difference was not statistically significant. Therefore, no further post hoc analyses were conducted.

The impact of integrated psychiatric-psychotherapeutic treatment on the CECS **Emotional Control Scale – Total Score** was also analyzed. The analysis revealed a main effect $F(2,62) = 4.19$; $p = 0.019$; $\eta^2_{\text{partial}} = 0.119$.

Bonferroni test results showed that emotional control decreased after the first measurement ($M = 59.09$; $SD = 12.43$), and this difference was statistically significant when compared to the third measurement ($M = 53.44$; $SD = 13.92$); $p = 0.017$. This downward trend persisted through the final measurement (Tab. 8).

Table 8. Bonferroni test results for comparisons between T1, T2, T3 dependent variable: Emotion Control Scale CECS. Post-hoc test significance values

Dependent variable: Emotion Control Scale CECS	T1 (n = 32)		T2 (n = 32)		T3 (n = 32)	
	M	SD	M	SD	M	SD
	59.09	12.43	55.56	15.04	53.44	13.92
T1			0.235		0.017	
T2	0.235				0.858	
T3	0.017		0.858			

Source: author's own study

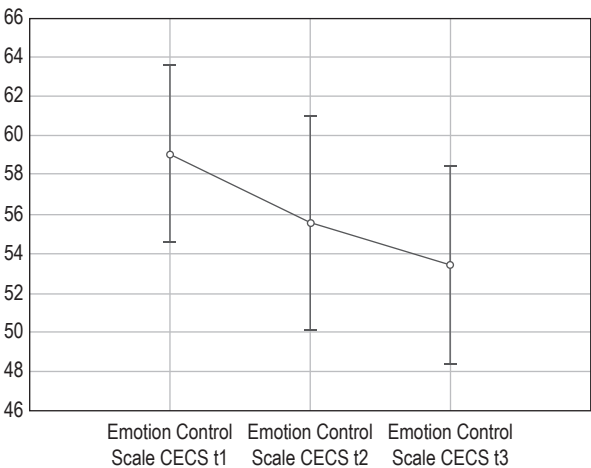


Figure 2. Results for comparisons between T1, T2, T3 dependent variable: Emotion Control Scale CECS in the study group with integrated psychiatric-psychotherapeutic treatment

SELF-EFFICACY (GSES)

In the subsequent analysis, the effect of integrated psychiatric-psychotherapeutic treatment on **GSES – Self-efficacy** was examined. A significant main effect was observed: $F(2, 62) = 10.92$; $p < 0.001$. ANOVA results indicated that self-efficacy scores increased as a result of the treatment. Bonferroni test results showed that the improvement effect was statistically significant between the first ($M = 23.25$; $SD = 6.74$) and the second measurement ($M = 25.53$; $SD = 6.19$); $p = 0.033$, and between the first ($M = 23.25$; $SD = 6.74$) and the third measurement ($M = 27.31$; $SD = 5.47$); $p < 0.001$. The difference between the second ($M = 13.81$; $SD = 4.80$) and the third measurement ($M = 16.97$; $SD = 6.65$) was not statistically significant (Tab. 9).

Table 9. Bonferroni test results for comparisons between T1, T2, T3 dependent variable: General Self-Efficacy Scale (GSES). Post-hoc test significance values

Dependent variable: GSES	T1 (n = 32)		T2 (n = 32)		T3 (n = 32)	
	M	SD	M	SD	M	SD
	23.25	6.74	25.53	6.19	27.31	5.47
T1			0.033		< 0.001	
T2	0.033				0.136	
T3	< 0.001		0.136			

Source: author’s own study

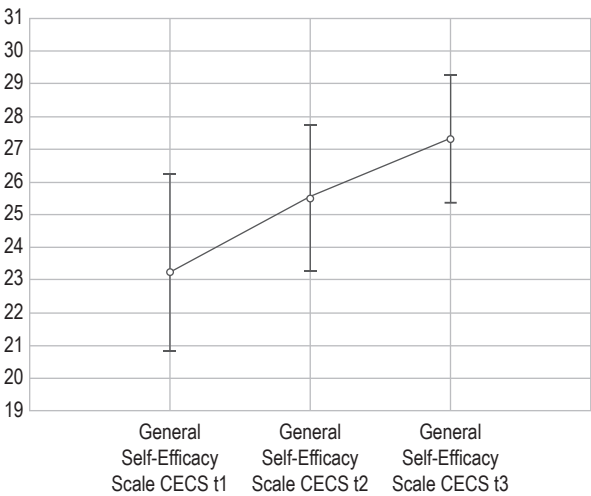


Figure 3. Results for comparisons between T1, T2, T3 dependent variable: General Self-Efficacy Scale (GSES) in the study group with integrated psychiatric-psychotherapeutic treatment

BASIC HOPE (BH)

The analysis also revealed the effect of integrated psychiatric-psychotherapeutic treatment on **Basic Hope**. A significant main effect was found: $F(2, 62) = 16.59$; $p < 0.001$; $\eta^2_{\text{partial}} = 0.349$. ANOVA results indicated that basic hope increased as a result of the treatment. Bonferroni test results showed that the improvement effect was statistically significant between the first ($M = 26.53$; $SD = 5.24$) and the second measurement ($M = 28.88$; $SD = 4.42$); $p = 0.006$, between the first ($M = 26.53$; $SD = 5.24$) and the third measurement ($M = 30.69$; $SD = 4.86$); $p < 0.001$, as well as between the second ($M = 28.88$; $SD = 4.42$) and the third measurement ($M = 30.69$; $SD = 4.86$); $p = 0.045$.

Table 10. Bonferroni test results for comparisons between T1, T2, T3 dependent variable: Basic Hope. Post-hoc test significance values.

Dependent variable: Basic Hope	T1 (n = 32)		T2 (n = 32)		T3 (n = 32)	
	M	SD	M	SD	M	SD
	26.53	5.24	28.88	4.42	30.69	4.86
T1			0.006		< 0.001	
T2	0.006				0.045	
T3	< 0.001		0.045			

Source: author's own study

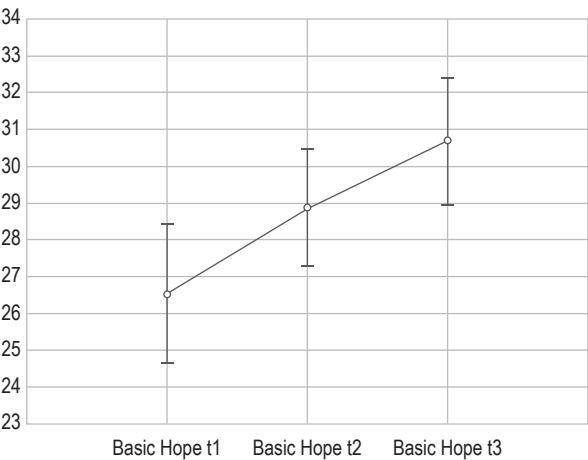


Figure 4. Results for comparisons between T1, T2, T3 dependent variable: Basic Hope in the study group with integrated psychiatric-psychotherapeutic treatment

influence on the changes in these psychological variables over time.

SATISFACTION WITH LIFE (SWLS)

Table 11. The impact of integrated psychiatric-psychotherapeutic treatment on the psychological variable – Satisfaction with Life: repeated measures designs, effects, and statistical power

Satisfaction with Life SWLS	F	p	η^2_{partial}	df
Group	4.29	0.042	0.065	1
Measurement time	15.44	< 0.001	0.199	2
Group*measurement time	10.03	< 0.001	0.139	2

Source: author's own study

Comparison of the impact of the integrated approach (study group) and standard psychotherapeutic methods (control group) on the analyzed psychological aspects

The following tables (Tables 11-14) present the results of the statistical analysis conducted for both the control and study groups, taking into account the time of measurement. The dependent variables in the presented model were the psychological variables, while the independent variable was the time of measurement.

The results presented in the tables below refer to the following dependent variables:

- Satisfaction with Life (SWLS)
- Basic Hope (BHI)

Only for these variables did the statistical analysis reveal a significant interaction effect between the factors of group and time. This indicates that group membership had a meaningful

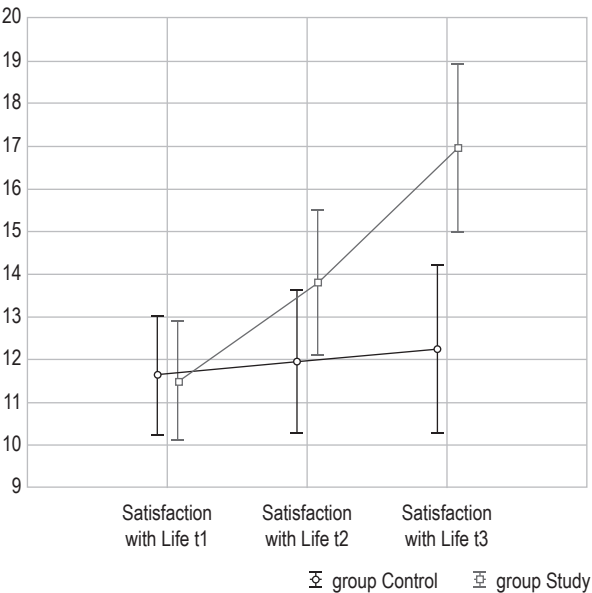


Figure 5. The impact of integrated psychiatric-psychotherapeutic treatment on the psychological variable – Satisfaction with Life

The statistical analysis of the collected data revealed differences in the level of **Satisfaction with Life** depending on group membership (main effect), time of measurement (main effect), as well as the interaction between both factors:

$F(2, 124) = 10.03; p < 0.001$. To conduct a more detailed analysis of the simple effects, post hoc analyses were performed. The results of the statistical analysis are presented below.

Table 12. Simple comparisons – factor: time of measurement and group. Dependent variable: Satisfaction with Life

Satisfaction with Life SWLS			(1)		(2)		(3)		(4)		(5)		(6)	
			M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Subclass No	gr	T	11.66	4.28	11.97	4.80	12.25	4.30	11.50	3.64	13.81	4.80	16.97	6.65
1	K	T1			1.000		1.000		1.000		1.000		< 0.001	
2	K	T2	1.000				1.000		1.000		1.000		0.001	
3	K	T3	1.000		1.000				1.000		1.000		0.002	
4	B	T1	1.000		1.000		1.000				0.051		< 0.001	
5	B	T2	1.000		1.000		1.000		0.051				0.001	
6	B	T3	< 0.001		0.001		0.002		< 0.001		0.001			

Source: author's own study

The results of the statistical analysis of simple effects revealed significant differences between the mean life satisfaction score in the study group at the third measurement ($M = 16.97$; $SD = 6.65$) and all other group–time combinations. This score was the highest and significantly different from the corresponding results in the control group: T1 ($M = 11.66$; $SD = 4.28$); $p < 0.001$; t2 ($M = 11.97$; $SD = 4.80$) ($p = 0.001$); t3 ($M = 12.25$; $SD = 4.30$) ($p = 0.002$) and the study group: t1 ($M = 11.50$; $SD = 3.64$) ($p < 0.001$); t2 ($M = 13.81$; $SD = 4.80$) ($p = 0.001$).

BASIC HOPE (BHI)

Table 13. The impact of integrated psychiatric-psychotherapeutic treatment on the psychological variable – Basic Hope: repeated measures designs, effects, and statistical power

Basic Hope	<i>F</i>	<i>p</i>	η^2_{partial}	<i>df</i>
Group	3.86	0.054	0.059	1
Measurement time	13.75	< 0.001	0.182	2
Group*measurement time	4.46	0.013	0.067	2

Source: author's own study

The statistical analysis of the collected data revealed differences in the level of **Basic Hope** depending on the time of measurement (main effect), as well as an interaction between both factors: $F(2, 124) = 4.46; p = 0.013$. To conduct a more detailed analysis of the simple effects, post hoc analyses were performed. The results of the statistical analysis are presented below.

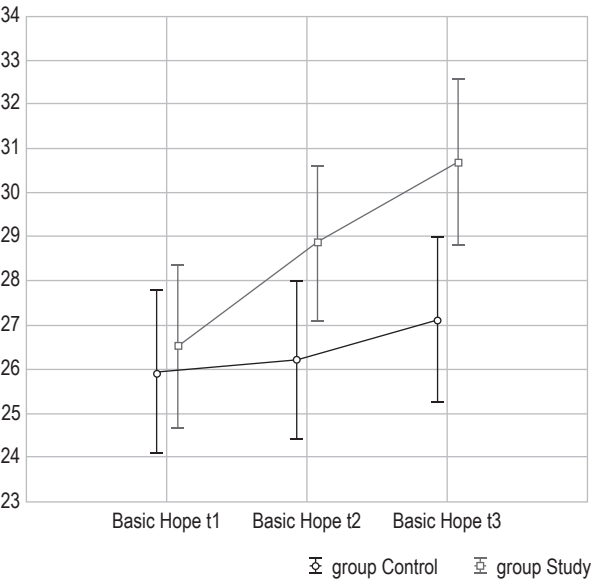


Figure 6. The impact of integrated psychiatric-psychotherapeutic treatment on the psychological variable – Basic Hope

Table 14. Simple comparisons – factor: time of measurement and group, dependent variable: Basic Hope

Basic Hope			(1)		(2)		(3)		(4)		(5)		(6)	
			M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Subclass No	gr	T	25.94	5.26	26.22	5.55	27.13	5.69	26.53	5.24	28.88	4.42	30.69	4.86
1	K	T1			1.000		1.000		1.000		0.386		0.006	
2	K	T2	1.000				1.000		1.000		0.649		0.013	
3	K	T3	1.000		1.000				1.000		1.000		0.108	
4	B	T1	1.000		1.000		1.000				0.022		< 0.001	
5	B	T2	0.386		0.649		1.000		0.022				0.198	
6	B	T3	0.006		0.013		0.108		< 0.001		0.198			

Source: author's own study

The results of the statistical analysis of simple effects revealed significant differences between the mean Basic Hope score at the first measurement in the control group (M = 25.94; SD = 94) and the third measurement in the study group, where the value of this variable significantly increased (M = 30.69; SD = 4.86; $p = 0.006$). The score in the study group at the third measurement was also significantly higher than that of the control group at the second time point (M = 26.22; SD = 5.55; $p = 0.013$), as well as higher than the study group's second measurement (M = 26.53; SD = 5.24; $p < 0.001$). A statistically significant increase was also observed within the study group between the first (M = 26.53; SD = 5.24) and the second measurement (M = 28.88; SD = 4.42); $p = 0.022$.

DISCUSSION

The conducted study indicates the presence of an effect of the integrated psychiatric-psychotherapeutic model in therapeutic work with patients. Our findings suggest that this model has a clear impact on life satisfaction, as measured in the study using the SWLS (Satisfaction With Life Scale, Z. Juczyński). A significant main effect was found: $F(2, 62) = 19.80$; $p < 0.001$; $\eta^2_{\text{partial}} = 0.389$. Bonferroni test results indicated that the improvement effect was statistically significant between the first (M = 11.50; SD = 3.64) and the second measurement (M = 13.81; SD = 4.80); $p = 0.031$, between the first (M = 11.50; SD = 3.64)

and the third measurement (M = 16.97; SD = 6.65); $p < 0.001$, as well as between the second (M = 13.81; SD = 4.80) and the third measurement (M = 16.97; SD = 6.65); $p = 0.002$. Furthermore, there was a statistically significant difference in life satisfaction scores between the study group, in which the integrated model was applied, and the control group. The results of the statistical analysis of simple effects revealed significant differences between the mean life satisfaction score in the study group at the third measurement (M = 16.97; SD = 6.65) and all other group-time combinations. This result was the highest and significantly different from all other scores in the control group: T1 (M = 11.66; SD = 4.28; $p < 0.001$); T2 (M = 11.97; SD = 4.80; $p = 0.001$); T3 (M = 12.25; SD = 4.30; $p = 0.002$), as well as in the study group: T1 (M = 11.50; SD = 3.64; $p < 0.001$); T2 (M = 13.81; SD = 4.80; $p = 0.001$).

There is a lack of studies in literature that directly address quality of life in the context of the integrated psychiatric-psychological model. However, there are studies that emphasize the importance of psychotherapy in relation to patients' perceived life satisfaction. Similar results have been reported in relation to positive psychotherapy, a new and innovative approach in psychology aimed at treating mental disorders and enhancing positive emotions. The aim of one such study was to evaluate the effectiveness of group-based positive psychotherapy in improving life satisfaction and quality of life in infertile women. In a randomized controlled tri-

al, the Beck Depression Inventory-II (BDI-II) and a clinical interview were used to assess participants in the control group before and after the intervention. The results showed that life satisfaction scores in the intervention group increased significantly from 22.66 at the pre-test to 26.13 at the post-test ($p < 0.001$), whereas this improvement was not statistically significant in the control group ($p = 0.405$). There was also a significant difference in life satisfaction scores between the intervention and control groups ($F = 8.92$, $p = 0.006$). However, no significant change was observed in quality of life scores in either the intervention or the control group ($p = 0.136$) [11]. Although these findings refer to a different therapeutic approach, they support the conclusion that psychotherapy plays a vital role in improving life satisfaction. In the case of integrated treatment, it appears to be particularly relevant for enhancing patients' sense of life satisfaction. This highlights the importance of collaboration between psychiatrists and psychotherapists to improve treatment outcomes in this critical area of patient well-being.

The study results also statistically confirm a significant effect, revealing meaningful differences between the mean Basic Hope score at the first measurement in the control group ($M = 25.94$; $SD = 94$) and the third measurement in the study group, where the score for this variable increased significantly ($M = 30.69$; $SD = 4.86$; $p = 0.006$). The score in the study group at the third measurement was also significantly higher than that of the control group at the second time point ($M = 26.22$; $SD = 5.55$; $p = 0.013$), as well as higher than the study group's second measurement ($M = 26.53$; $SD = 5.24$; $p < 0.001$). A statistically significant increase was also observed within the study group between the first ($M = 26.53$; $SD = 5.24$) and the second measurement ($M = 28.88$; $SD = 4.42$; $p = 0.022$). The findings thus confirm the impact of integrated psychiatric-psychotherapeutic treatment. Basic Hope, as measured by the BHI-12 questionnaire, is understood – according to E. Erikson's theory – as an individual's belief in the orderliness and meaningfulness of the world, as well as in the benevolence of people. This belief serves as a key factor in enabling individuals to respond constructively to changes and critical life events, particularly in situations involving irreversible loss [12,13]

Numerous scientific studies confirm the effectiveness of psychotherapy. The aim of this study was to examine whether the described model of collaboration between a psychiatrist and a psychotherapist has an impact on life satisfaction, self-efficacy, emotional control (anger, depression, anxiety, and overall emotional control), and basic hope. In summary, our findings indicate that the implementation of a collaborative model had a significant impact on two dimensions in the comparative analysis. In this group of patients, a statistically significant improvement in life satisfaction was observed, which may suggest that improved mutual understanding and shared perspectives between the psychiatrist and the therapist also contribute to the patient feeling more understood.

CONCLUSIONS

There is an observable impact of integrated treatment on perceived life satisfaction and basic hope – that is, an individual's belief in the orderliness and meaningfulness of the world and its benevolence toward people. This belief serves as a key factor in enabling individuals to respond constructively to change and major life events, particularly in situations involving irreversible loss. Enhancing perceived life satisfaction and strengthening the sense of a meaningful world are essential components in fostering a sense of security and trust in interpersonal relationships. The combined involvement of both a psychiatrist and a psychotherapist may contribute to increased life satisfaction experienced by patients. Integrated psychiatric-psychotherapeutic treatment has a positive effect on the overall effectiveness of patient care. The study highlights the importance of certain contributing factors. However, further research is necessary to precisely identify and define these factors.

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REFERENCES:

1. Kishimoto, T., Malhotra, N., & Correll, C. U. (2020). Antipsychotic Polypharmacy: A Review of Evidence and Clinical Recommendations. *The World Journal of Biological Psychiatry*, 21(4), 254–266.

2. Miller, C. J., et al. (2021). Pharmacotherapy for Psychiatric Disorders: An Evidence-Based Approach. *Journal of Clinical Psychiatry*, 82(5), 21r14191.
3. Cuijpers, P., et al. (2019). The efficacy of psychotherapy and pharmacotherapy in treating depressive disorders: A meta-analysis. *Psychological Medicine*, 49(15), 2518–2531.
4. Hofmann, S. G., Asnaani, A., Vonk, I. J., Sawyer, A. T., & Fang, A. (2012). The efficacy of cognitive behavioral therapy: A review of meta-analyses. *Cognitive Therapy and Research*, 36(5), 427–440.
5. Barlow, D. H. (2014). *Anxiety and Its Disorders: The Nature and Treatment of Anxiety and Panic*. Guilford Publications.
6. Cuijpers, P., Karyotaki, E., Reijnders, M., Purgato, M., & de Wit, L. (2020). Meta-analyses of psychological treatments for depression: An update. *Psychological Medicine*, 50(3), 410–422.
7. Kazdin, A. E. (2019). *Research Design in Clinical Psychology*. Pearson.
8. Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using GPower 3.1: Tests for correlation and regression analyses.* *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
9. Stanisław, A. (2006). *Przystępny kurs statystyki z zastosowaniem STATISTICA PL na przykładach z medycyny. Statystyki podstawowe*. (T. 1). Kraków: StatSoft Polska Sp. z o.o.
10. Brzeziński, J., M. (2019). *Metodologia Badań Psychologicznych*. Warszawa: PWN
11. Seyedi Asl ST, Sadeghi K, Bakhtiari M, Ahmadi SM, Nazari Anamagh A, Khayatan T. Effect of Group Positive Psychotherapy on Improvement of Life Satisfaction and The Quality of Life in Infertile Woman. *Int J Fertil Steril*. 2016 Apr-Jun;10(1):105-12. doi: 10.22074/ijfs.2016.4775. Epub 2016 Apr 5. PMID: 27123207; PMCID: PMC4845519
12. Trzebiński J, Zięba M. *Kwestionariusz Nadziei Podstawowej – BHI-12*. Podręcznik. Pracownia Testów Psychologicznych PTP, Warszawa 2003.
13. Kaleta K, Mróz J. The Relationship between Basic Hope and Depression: Forgiveness as a Mediator. *Psychiatr Q*. 2020 Sep;91(3):877-886. doi: 10.1007/s11126-020-09759-w. PMID: 32361795; PMCID: PMC7395009.