HPR
http://www.jhpr.ir
Hosp Pract Res. 2024 June;9(2):462-468
doi 10.30491/hpr.2024.478027.1450
Original Article
Hospital Practices and Research

The Impact of Intensive Short-Term Dynamic Psychotherapy on Ego Strength and Gastrointestinal Dysfunctions in Psychosomatic Patients with Gastrointestinal Symptoms

Mohammad Arash Rostami Ravari [1], Shahram Vaziri [1*], Amin Rafiepoor [2], Mahdireza Sarafraz [3]

[1] Department of Psychology, Roudehen Branch, Islamic Azad University, Roudehen, Iran
[2] Department of Psychology, Payame Noor University, Tehran, Iran
[3] Department of Clinical Psychology, University of Shiraz, Shiraz, Iran

***Corresponding Author:** Shahram Vaziri, Ph.D., Department of Psychology, Roudehen Branch, Islamic Azad University, Roudehen, Iran. Tel: +98-2176505891, Email: shahram.vazri@gmail.com

Received April 11, 2024; **Accepted** June 19, 2024; **Online Published** June 20, 2024

Abstract

Background: Psychosomatic disorders, characterized by the interplay of psychological and physical factors, often manifest as gastrointestinal symptoms, and traditional medical treatments alone may not effectively address the underlying psychological factors, leading to persistent or recurring issues.

Objectives: The present study aimed to investigate whether Intensive Short-Term Dynamic Psychotherapy (ISTDP) is more efficacious than a control group in enhancing ego strength and alleviating gastrointestinal symptoms in individuals diagnosed with psychosomatic disorders.

Methods: A quasi-experimental study with pre- and post-assessments, a two-month follow-up, and a control group was conducted on 32 randomly assigned participants in District 3 of Tehran in 2020. The experimental group received 15 sessions of 90-minute ISTDP, while the control group received no intervention. Participants were assessed using the Psychological Inventory of Ego Strength (PIES) and the Gastrointestinal Symptom Rating Scale (GSRS). Repeated measures ANOVA was used to analyze the data using SPSS-22. Bonferroni post hoc tests were conducted to compare the experimental and control groups at each time point (pre-test, post-test, and follow-up).

Results: Findings revealed a significant difference between the experimental and control groups in terms of ego strength and gastrointestinal dysfunctions at the post-test (P<0.001). ISTDP led to a significant improvement in ego strength and a reduction in gastrointestinal symptoms in psychosomatic patients with gastrointestinal complaints at post-test (P<0.001).

Conclusion: ISTDP is a promising treatment for psychosomatic disorders, particularly those involving gastrointestinal symptoms. ISTDP effectively enhances ego strength, a key factor in mental health, and can also alleviate physical symptoms.

Keywords: Psychotherapy, Ego, Psychosomatic, Gastrointestinal Symptoms

1. Background

Psychosomatic disorders, characterized by the intricate interplay of psychological and physiological factors, often manifest as gastrointestinal symptoms, such as abdominal pain, diarrhea, constipation, bloating, nausea, and vomiting.[1] These conditions, commonly referred to as mental-somatic disorders or somatoform disorders, pose a significant challenge in healthcare due to the complex interplay of psychological and physiological factors.[2] According to the World Health Organization (WHO), psychosomatic disorders, including those with gastrointestinal symptoms, are prevalent worldwide, affecting millions of individuals.[3] Patients with mental-somatic disorders experiencing digestive symptoms often report a range of complaints, including abdominal pain, bloating, nausea, and diarrhea. These symptoms can significantly impair their quality of life, leading to social isolation, reduced productivity, and increased healthcare utilization.[4]

Functional gastrointestinal disorders, such as functional dyspepsia, constitute the most common gastrointestinal disorders, accounting for approximately 54% of referrals to specialized gastroenterology centers.[4] Functional dyspepsia, characterized by symptoms like upper abdominal pain, bloating, early satiety, and nausea, significantly impacts health-related quality of life.[5] The importance of quality of life in patients with functional dyspepsia is so significant that many healthcare professionals prioritize care and education to improve it, and this construct is indicative of the quality of healthcare provided to them.[6] Although the course of functional dyspepsia is not associated with mortality, it significantly impacts patients' quality of life and is associated with substantial healthcare costs.[7]

Ego strength, a core construct in psychodynamic theory, refers to an individuals' capacity to cope with stress, regulate emotions, and maintain a sense of self-coherence in the face of adversity.[8] It is often described

Copyright © 2024 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

as a combination of traits, including self-awareness, self-esteem, resilience, and the ability to tolerate frustration and delay gratification. Ego strength plays a crucial role in personality development and mental health, influencing how individuals perceive and interact with the world.[9,10] On the other hand, functional dyspepsia is a type of disorder in which some studies have confirmed psychosomatic somatization.[11] One of the signs of mental health is possessing empowering internal traits or strong internal resources. These internal resources enable individuals to continue their adaptive growth and maintain their mental health despite adverse conditions and negative events.[12,13] Given the role of ego strength in mental health, it is hypothesized that individuals with higher levels of ego strength may be better equipped to cope with the psychological distress associated with functional dyspepsia.

Intensive Short-Term Dynamic Psychotherapy (ISTDP) is rooted in Freud's psychoanalytic model and was designed and developed by Davanloo.[14] In this approach, the long-term, ineffective, disorganized, and unclear psychoanalytic method has been transformed into a short-term, effective, organized, and clear method.[15,16] This therapy helps patients regulate their anxiety and challenge their defenses so that they can confront the emotions they have been avoiding.[17] The superiority of short-term dynamic psychotherapy over other psychotherapies lies in the experience of deep emotions during therapy sessions, high levels of therapist activity, encouragement of client collaboration, active attention to time limits, as well as a specific therapeutic focus and selection criteria, and the therapist's ongoing efforts to facilitate a deep emotional experience as a healing element.[18,19]

ISTDP, rooted in psychoanalytic theory, is a form of intensive short-term psychotherapy that emphasizes the exploration of unconscious emotions and the development of ego strength. The psychoanalytic model posits that individuals are often unaware of the underlying psychological factors that contribute to their symptoms. Through a process of experience and reflection, ISTDP aims to bring these unconscious emotions to consciousness, allowing patients to develop a greater understanding of themselves and their patterns of relating to others.[20] STDP differs from other forms of psychotherapy in its intensity and focus on uncovering deep-seated emotions. The therapist actively challenges the patient's defenses, drawing their attention to bodily sensations and emotional expressions.[21] This process enables patients to experience their emotions more fully and to develop a greater awareness of their unconscious conflicts. By strengthening the ego, ISTDP aims to equip patients with the necessary tools to manage these conflicts and improve their overall well-being. A deeper understanding of ISTDP requires a familiarity with psychoanalytic concepts, such as the unconscious, defense mechanisms, and transference. By exploring these concepts, patients can gain insights into their own psychological processes and develop a greater appreciation for the therapeutic process.[22]

Despite the prevalence of mental-somatic disorders with digestive symptoms, traditional medical approaches frequently fall short in addressing the underlying psychological factors, leading to persistent or recurring symptoms, despite the use of various medications and treatments. While existing research has explored the effectiveness of psychotherapy for psychosomatic disorders, there is a lack of studies specifically investigating the impact of ISTDP on ego strength and functional gastrointestinal disorders in this population.

2. Objectives

Given the potential role of ego strength in coping with psychological distress and the prevalence of functional gastrointestinal disorders among individuals with psychosomatic symptoms, this study aimed to fill this research gap by examining the effectiveness of ISTDP in improving ego strength and reducing gastrointestinal symptoms in this population.

3. Methods

3.1. Design and Participants

A quasi-experimental design was utilized, incorporating pre- and post-intervention assessments and a two-month follow-up period, with a control group for comparison. The population of this study consisted of patients with psychosomatic disorders and gastrointestinal symptoms who were referred to Bujika Counseling Center in Tehran's District 3 in 2020. A sample size of 16 participants per group was calculated using a power analysis conducted with G*Power, based on an effect size of 1.080, an alpha level of 0.05, and a power of 0.90. A total of 32 participants were selected using a simple random sampling method. The sample group was randomly assigned to the experimental (ISTDP) and control groups (16 participants in each group) and was assessed before and after the intervention using research questionnaires. The inclusion criteria for this study were: at least a middle school education, age between 18 and 60 years, patients with functional gastrointestinal disorders based on the Gastrointestinal Symptom Rating Scale (GSRS), and patients with psychosomatic disorders based on clinical interview. The exclusion criteria were: absence from more than two sessions during the training program, use of medical or psychiatric medications for other disorders, and simultaneous participation in other training courses. Prior to participation, all participants provided informed consent, ensuring they understood the nature of the study, its potential risks and benefits, and their right to withdraw at any time. Confidentiality was maintained throughout the study, with participant data handled anonymously and securely. The potential risks associated with participating in the study were minimal,

as ISTDP is generally considered a safe and effective form of psychotherapy. However, participants were informed about the possibility of experiencing temporary emotional discomfort during the therapeutic process.

3.2. Intervention

The experimental group received 15 ninety-minute sessions of ISTDP. A summary of the content of ISTDP sessions is presented in Table 1. A waiting list control group was used, ensuring that participants in this group did not receive any form of intervention during the study period. This allowed for a comparison of the effects of ISTDP to those of no intervention. A summary of the content of ISTDP sessions is presented in Table 1.

Table 1. A Summary of ISTDP Sessions

Sessions	Content
1	In the first session, the rules of therapy sessions were explained, and an initial interview was conducted using a dynamic sequence to assess the patient's initial problem.
2	In this session, appropriate and effective interventions were used based on the patient's defense mechanisms.
3	Working with tactical defenses (used to keep the therapist at a distance), such as vagueness, generalization, and euphemisms.
4	Examining tactical defenses used by the patient, such as avoidance and diversification.
5	Working with repressive defenses (used to keep feelings at bay), exploring avoidance and denial, and informing the patient about the consequences of avoiding their feelings and remaining trapped in suffering.
6	Examining the repressive defenses of rationalization and justification. Demonstrating the difference between thoughts and feelings to the patient and helping them to differentiate between these two in the defense of rationalization. Additionally, assisting the patient in distinguishing reasons from emotions in the defense of justification and helping them to let go of these defenses and confront their true feelings.
7	Examining the defense of displacement. Informing the patient that when using this defense, they express their feelings towards a person or object other than the person to whom the feeling is directed. Helping them to abandon this defense and experience their true feelings in the session.
8	Examining the repressive defense of identification with the aggressor. Informing the patient that to avoid experiencing anger towards someone who has harmed them, they identify with that person and turn their anger inward. Assisting the patient in differentiating themselves from the aggressor.
9	Examining the defense of isolation of affect. Making the patient aware that they can identify their feelings but cannot experience the physical sensation of them in their body and helping them to achieve this.
10	Examining the repressive defense of minimization. Helping the patient understand that they acknowledge their feelings but minimize them, and encouraging them to express their feelings without diluting or censoring them.
11	Examining the repressive defense of reaction formation. Clarifying that the patient acts opposite to how they feel and helping them to experience their true, repressed feelings instead of acting in opposition to them.
12	Examining the repressive defense of suppression. Clarifying that feelings are not forgotten by trying not to think about them, and that the suffering will continue. Helping the patient to let go of this defense and confront their feelings.
13	Informing the patient about the consequences of using these defenses and helping them to abandon them. Managing the patient's anxiety and encouraging them to experience their feelings deeply in the session.
14 & 15	During sessions 14 and 15, the patient was helped to become aware of the conflict triangle (feelings, anxiety, defenses) that was the source of the problems presented by the patient.

3.3. Instruments

3.3.1. The Psychosocial Inventory of Ego Strength (PIES)

The Psychosocial Inventory of Ego Strength (PIES), developed by Markstrom and Marshall,[23] is a 64-item self-report measure designed to assess eight dimensions of ego strength: hope, desire, goal, competence, loyalty, love, care, and wisdom. The questionnaire employs a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The total score is calculated by summing the scores of all items, with a possible range of 64 to 320. Higher scores indicate greater ego strength. In this study, Cronbach's alpha for the scale was found to be 0.86, suggesting a high degree of internal consistency.

3.3.2. The Gastrointestinal Symptom Rating Scale (GSRS)

The Gastrointestinal Symptom Rating Scale (GSRS) is a disease assessment tool developed based on gastrointestinal symptoms and clinical experience. It is used to evaluate common symptoms of gastrointestinal disorders, including abdominal pain, heartburn, reflux, diarrhea, constipation, bloating, and indigestion. The questionnaire consists of 15 items, each rated on a 7-point Likert scale ranging from no discomfort (0) to severe discomfort (6). Additionally, the GSRS includes five subscales: abdominal pain, reflux syndrome, diarrhea syndrome, constipation syndrome, and indigestion syndrome.[24] The total score is calculated by averaging the scores of each subscale, with higher scores indicating greater symptom severity. In this study, Cronbach's alpha for the scale was found to be 0.86, indicating good internal consistency.

3.4. Statistical Analysis

For data analysis, the quantitative data was analyzed in two stages: descriptive statistics (mean and standard deviation) and inferential statistics (repeated measures ANOVA). Bonferroni post hoc tests were conducted to compare the experimental and control groups at each time point (pre-test, post-test, and follow-up). Calculations were performed using SPSS version 22. The significance level of the research was considered to be $\alpha = 0.05$.

4. Results

Demographic findings revealed that the mean (standard deviation) age of participants in the ISTDP group was 34.23 (±9.76) years and 35.57 (±10.16) years in the control group. The mean duration of illness was 5.88 (±2.49) years in the ISTDP group and 7.13 (±3.70) years in the control group. Among the participants in the ISTDP group, nine (56.25%) were female and seven (43.75%) were male, while in the control group, 11

(68.75%) were female and five (31.25%) were male. The results presented in Table 2 indicates that, following ISTDP, participants in the experimental group showed a decrease in gastrointestinal dysfunction scores and an increase in ego strength. Conversely, the control group showed no significant differences in the research variables across the three time points.

Prior to conducting repeated measures ANOVA, assumptions of normality, homogeneity of variances, equality of covariance matrices, and Mauchly's sphericity were examined. Results from the Shapiro-Wilk test and Levene's test, used to assess normality and homogeneity of variances, respectively, were supported. Additionally, the Box's M test was used to examine the assumption of homogeneity of covariance matrices for the dependent variables, and the results indicated that this assumption was met. Finally, Mauchly's test of sphericity for the gastrointestinal dysfunction variable was 0.93 ($\chi^2 = 0.96$, $P = 0.620$), and for ego strength was 0.90 ($\chi^2 = 0.91$, $P = 0.550$). These results supported the assumption of sphericity.

Repeated measures analysis of variance indicated significant main effects for the within-subjects factor of time, the interaction between the within-subjects factor of time and the between-subjects factor of the group, and a main effect of the between-subjects factor of the group ($P<0.001$) (Table 3).

Table 2. Descriptive Statistics of Ego Strength and Gastrointestinal Dysfunction in Participants

Variables	Groups	Pre-test	Post-test	Follow-up	*P*
		Mean ± SD	Mean ± SD	Mean ± SD	
Ego strength	ISTDP group	173.59 ± 19.92	192.61 ± 16.22	190.31 ± 18.20	0.005
	Control group	169.64 ± 19.43	170.04 ± 20.56	168.60 ± 18.81	0.879
Gastrointestinal dysfunction	ISTDP group	64.93 ± 9.81	48.53 ± 10.09	48.70 ± 10.51	0.001
	Control group	65.40 ± 10.31	64.90 ± 10.54	65.55 ± 9.98	0.893

Table 3. Summary of Repeated Measures ANOVA Results for Ego Strength and Gastrointestinal Dysfunction

Variables	Source	SS	df	MS	F	P	η^2
Ego strength	Time	571.67	1	571.67	29.76	0.001	0.74
	Group	5250.08	1	5250.08	23.50	0.001	0.64
	Time × group	641.23	1	641.23	33.62	0.001	0.77
Gastrointestinal dysfunction	Time	585.13	1	585.13	22.02	0.001	0.61
	Group	1160.33	1	1160.33	19.98	0.001	0.56
	Time × group	508.79	1	508.79	19.14	0.001	0.58

Post hoc Bonferroni comparisons were conducted to determine the specific pairwise differences among the repeated measures of time. Results indicated that there were significant differences in gastrointestinal dysfunction and ego strength scores between the pre-test and both the post-test and follow-up assessments ($P<0.01$). However, there were no significant differences between the post-test and follow-up assessments (Table 4). Figure 1 depicts the changes in scores on ego strength and gastrointestinal dysfunction following the intervention.

Table 4. Results of Bonferroni Post Hoc Test for Within-Group Effects in the ISTDP

Scales	Phase A	Phase B	Mean difference (A-B)	SE	*P*
Ego strength	Pre-test	Post-test	19.02	6.42	0.005
		Follow-up	16.72	6.74	0.019
	Post-test	Follow-up	2.30	6.09	0.709
Gastrointestinal dysfunction	Pre-test	Post-test	-16.40	3.52	0.001
		Follow-up	-16.23	3.59	0.001
	Post-test	Follow-up	0.17	2.64	0.963

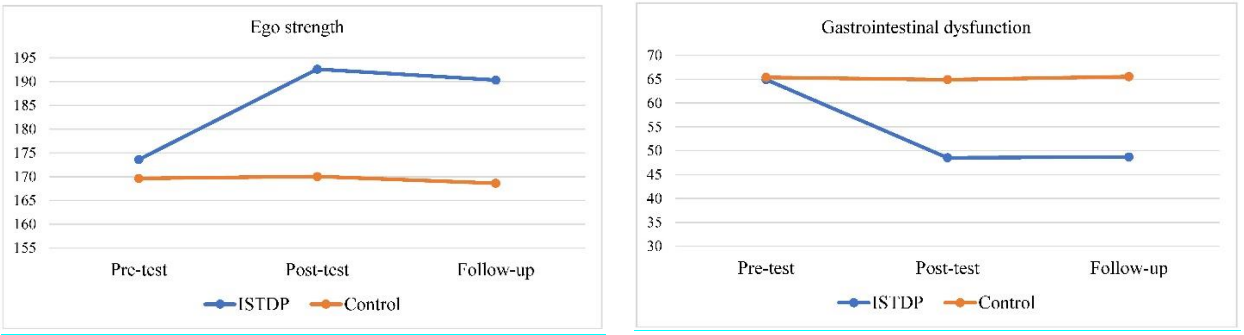

Figure 1. Changes in ego strength and gastrointestinal dysfunction scores in ISTDP and control groups.

5. Discussion

The current study was designed to examine the impact of ISTDP on gastrointestinal symptoms and ego strength in psychosomatic patients experiencing gastrointestinal complaints. Findings indicated that ISTDP was effective in reducing gastrointestinal symptoms and improving ego

strength in this population. These results align with previous research by Shafiei et al.,[19] Lilliengren et al.,[22] and Ajilchi et al.,[25] which have demonstrated the efficacy of ISTDP in treating various psychosomatic disorders. Specifically, Shafiei et al.[19] found that ISTDP was effective in improving emotion regulation, defense mechanisms, quality of life, and irritable bowel syndrome symptoms. Lilliengren et al.[22] reported that ISTDP was both clinically and cost-effective for chronic pain. Ajilchi et al.[25] demonstrated the positive impact of ISTDP on social cognition in individuals with major depression. These findings collectively support the effectiveness of ISTDP in addressing a range of psychosomatic disorders, including those with gastrointestinal symptoms. The present study further contributes to this growing body of evidence by highlighting the specific benefits of ISTDP in improving ego strength and reducing gastrointestinal symptoms in this population.

In order to explain these findings, it can be stated that ISTDP is grounded in psychoanalytic principles and primarily employs interpretation as a therapeutic tool. A key component of ISTDP is the development of a strong therapeutic alliance, which is facilitated by the emergence of transference. Transference refers to the patient's unconscious projection of feelings, attitudes, and beliefs onto the therapist, often reflecting unresolved conflicts from past relationships. In ISTDP, the therapist actively explores and interprets transference, helping the patient to understand how these unconscious patterns are affecting their current relationships and contributing to their symptoms. A strong therapeutic alliance is essential for the success of ISTDP, as it provides a safe and supportive environment for the patient to explore their emotions and develop new coping strategies. Studies have shown that patients who develop a strong therapeutic alliance are more likely to be motivated to engage in therapy and to achieve positive outcomes.[16] Psychodynamic therapies, including ISTDP, are implemented with the aim of bolstering an individual's psychological resources and enhancing their capacity to cope with challenges, thereby rendering them more resilient in the face of emotional stressors.[26] Moreover, given that psychodynamic interventions facilitate the exploration and resolution of unconscious conflicts and complexes, they are anticipated to have a beneficial impact on various indices of psychological health and well-being.[27]

To further elaborate on these findings, ISTDP techniques are designed to accelerate the resolution of patients' problems and ultimately restore the psychological equilibrium between the id, ego, and superego. This is achieved through efforts to alleviate symptoms, modify character traits, and enhance interpersonal functioning.[19] By facilitating the containment of maladaptive thoughts and behaviors, ISTDP empowers individuals to exercise greater self-control. In essence, by challenging maladaptive defenses that impede the experience and expression of emotions, short-term dynamic psychotherapy can lead individuals to consciously and voluntarily regulate their thoughts, behaviors, and emotions.[15]

Furthermore, not only does the patient's response to the therapist's questions provide information about the ego's capacity for adaptation, but it also reveals the fundamental nature of the patient's problem. In essence, a part of the therapeutic process involves challenging the ego's defenses. This is accomplished by focusing on the consequences of using these defenses, emphasizing their negative impact on the patient, and highlighting the self-destructive nature of such defenses.[14] Subsequently, the therapist endeavors to clarify the consequences of these defenses through appropriate interventions, shifting the patient's psychological state from a defensive position to a therapeutic alliance.[20] In summary, this therapy involves a concentrated and intensive series of interventions that far exceed those employed in other forms of psychotherapy. These interventions aim to bring the patient closer to the core of their unconscious emotions. The therapist's focus is on the patient's emotions, and the experience of these emotions necessitates an enhancement of the patient's ego and bodily capacities. A deeper understanding of this therapeutic approach requires a comprehensive knowledge of the various types of anxiety and defense mechanisms.[18] Consequently, ISTDP can effectively reduce gastrointestinal symptoms and enhance ego strength in psychosomatic patients with gastrointestinal complaints.

Several limitations should be considered when interpreting the findings of this study. First, the small sample size may limit the generalizability of the results to larger populations. Additionally, the use of a convenience sample, rather than a random sample, may introduce selection bias, potentially affecting the representativeness of the participants. Furthermore, the participants' attitudes towards the assessments, their level of cooperation with the researcher, and their commitment to adhering to the intervention materials were beyond the researcher's control and could have influenced the findings. Moreover, the quasi-experimental design, while suitable for the research question, may introduce potential confounding variables due to the use of pre-existing groups, which can affect the results.

6. Conclusion

The findings of this study provide evidence for the efficacy of ISTDP in addressing both the psychological and physical dimensions of psychosomatic disorders, particularly those manifesting in gastrointestinal symptoms. The results demonstrate that ISTDP is effective in improving ego strength, a crucial factor in psychological resilience and well-being. Moreover, the study highlights the therapeutic potential of ISTDP in alleviating gastrointestinal dysfunctions, suggesting that it may offer

a valuable treatment option for patients suffering from psychosomatic conditions. The results of this study suggest that ISTDP may be a promising treatment option for individuals with psychosomatic disorders, particularly those experiencing gastrointestinal symptoms. By improving ego strength and alleviating physical symptoms, ISTDP can enhance overall well-being and quality of life. Healthcare providers may consider incorporating ISTDP into their treatment plans for patients with psychosomatic disorders, particularly when traditional medical treatments have proven ineffective or when psychological factors are believed to be contributing to the symptoms. These findings contribute to a growing body of literature supporting the effectiveness of psychodynamic therapies in addressing complex health issues and underscore the importance of integrating psychological interventions into the treatment of psychosomatic disorders. Further research is needed to explore the long-term effects of ISTDP and to examine its applicability to diverse populations with psychosomatic conditions.

Research Highlights

What Is Already Known?

Psychosomatic disorders, characterized by the interplay of psychological and physical factors, often manifest as gastrointestinal symptoms. Despite the effectiveness of traditional medical treatments in addressing the physical aspects of these disorders, the underlying psychological factors frequently remain unaddressed, leading to persistent or recurring issues.

What Does This Study Add?

This study demonstrates the effectiveness of ISTDP in addressing psychosomatic disorders with gastrointestinal symptoms. ISTDP has been shown to enhance ego strength, a crucial factor in mental health, and simultaneously alleviate physical symptoms. These findings contribute to a growing body of research supporting the efficacy of psychodynamic therapies in treating psychosomatic disorders.

Author Contributions

Authors contributed equally to this work.

Conflict of Interest Disclosures

All authors declared that they have no conflict of interest.

Ethical Approval

This research adhered to ethical principles and received approval from the Ethical Committee of Islamic Azad University (code: IR.IAU.R.REC.1401.057).

References

1. Feng L, Li Z, Gu X, Jiang J, Liu X. Psychosomatic Disorders in Patients with Gastrointestinal Diseases: Single-Center Cross-Sectional Study of 1186 Inpatients. Gastroenterol Res Pract. 2021;2021(1):6637084. doi:10.1155/2021/6637084
2. Geremek A, Lindner C, Jung M, Calvano C, Munz M. Prevalence of Somatic Symptoms and Somatoform Disorders among a German Adolescent Psychiatric Inpatient Sample. Children (Basel). 2024;11(3):280. doi:10.3390/children11030280
3. Staudacher HM, Black CJ, Teasdale SB, Mikocka-Walus A, Keefer L. Irritable bowel syndrome and mental health comorbidity - approach to multidisciplinary management. Nat Rev Gastroenterol Hepatol. 2023;20(9):582-96. doi:10.1038/s41575-023-00794-z
4. Shivaji UN, Ford AC. Prevalence of functional gastrointestinal disorders among consecutive new patient referrals to a gastroenterology clinic. Frontline Gastroenterol. 2014;5(4):266-71. doi:10.1136/flgastro-2013-100426
5. Hantoro IF, Syam AF, Mudjaddid E, Setiati S, Abdullah M. Factors associated with health-related quality of life in patients with functional dyspepsia. Health Qual Life Outcomes. 2018;16:83. doi:10.1186/s12955-018-0913-z
6. Kardoust M, Yazdian-Anari P, Nasiripour M, Bidaki R. Psychiatric Evaluation of Chronic Diarrhea: A Case Report. Hosp Pract Res. 2016;1(1):37-8. doi:10.20286/hpr-010137
7. Miwa H, Nagahara A, Asakawa A, Arai M, Oshima T, Kasugai K, et al. Evidence-based clinical practice guidelines for functional dyspepsia 2021. J Gastroenterol. 2022;57(2):47-61. doi:10.1007/s00535-021-01843-7
8. Ziadni MS, Jasinski MJ, Labouvie-Vief G, Lumley MA. Alexithymia, Defenses, and Ego Strength: Cross-sectional and Longitudinal Relationships with Psychological Well-Being and Depression. J Happiness Stud. 2017;18(6):1799-813. doi:10.1007/s10902-016-9800-7
9. Besharat MA, Ramesh S, Moghimi E. Spiritual health mediates the relationship between ego-strength and adjustment to heart disease. Health Psychol Open. 2018;5(1):1-8. doi:10.1177/2055102918782176
10. Lee JY, Lee YA, Yoo MS. Development of the child's ego strength scale: an observation-based assessment of the board game behaviors in play therapy in Korea. Child Adolesc Psychiatry Ment Health. 2021;15(1):20. doi:10.1186/s13034-021-00369-3
11. Dehghanizade Z, Zargar Y, Honarmand MM, Kadkhodaie A, Baygi ME. The effectiveness of cognitive behavior stress management on functional dyspepsia symptoms. J Adv Med Educ Prof. 2015;3(2):45-9.
12. Gautam S, Jain A, Chaudhary J, Gautam M, Gaur M, Grover S. Concept of mental health and mental well-being, it's determinants and coping strategies. Indian J Psychiatry. 2024;66(Suppl 2):S231-44. doi:10.4103/indianjpsychiatry.indianjpsychiatry_707_23
13. Fusar-Poli P, Salazar de Pablo G, De Micheli A, Nieman DH, Correll CU, Kessing LV, et al. What is good mental health? A scoping review. Eur Neuropsychopharmacol. 2020;31:33-46. doi:10.1016/j.euroneuro.2019.12.105
14. Davanloo H. Intensive short-term dynamic psychotherapy: selected papers of Habib Davanloo. Chichester: Wiley; 2000.
15. Johansson R, Town JM, Abbass A. Davanloo's Intensive Short-Term Dynamic Psychotherapy in a tertiary psychotherapy service: overall effectiveness and association between unlocking the unconscious and outcome. PeerJ. 2014;2:e548. doi:10.7717/peerj.548
16. Heshmati R, Wienicke FJ, Driessen E. The effects of intensive short-term dynamic psychotherapy on depressive symptoms, negative affect, and emotional repression in single treatment-resistant depression: A randomized controlled trial. Psychotherapy. 2023;60(4):497-511. doi:10.1037/pst0000500

17. Rocco D, Calvo V, Agrosi V, Bergami F, Busetto LM, Marin S, et al. Intensive short-term dynamic psychotherapy provided by novice psychotherapists: effects on symptomatology and psychological structure in patients with anxiety disorders. Res Psychother. 2021;24(1):503. doi:10.4081/ripppo.2021.503
18. Rahmani F, Abbass A, Hemmati A, Ghaffari N, Rezaei Mirghaed S. Challenging the role of challenge in intensive short-term dynamic psychotherapy for social anxiety disorder: A randomized controlled trial. J Clin Psychol. 2020;76(12):2123-2132. doi:10.1002/jclp.22993
19. Shafiei F, Dehghani M, Lavasani FF, Manouchehri M, Mokhtare M. Intensive short-term dynamic psychotherapy for irritable bowel syndrome: a randomized controlled trial examining improvements in emotion regulation, defense mechanisms, quality of life, and IBS symptoms. Front Psychol. 2024;15:1293150. doi:10.3389/fpsyg.2024.1293150
20. Caldiroli A, Capuzzi E, Riva I, Russo S, Clerici M, Roustayan C, et al. Efficacy of intensive short-term dynamic psychotherapy in mood disorders: A critical review. J Affect Disord. 2020;273:375-379. doi:10.1016/j.jad.2020.04.002
21. Malda-Castillo J, Howell B, Russell L, Town J, Abbass A, Perez-Algorta G, et al. Intensive Short-Term Dynamic Psychotherapy (ISTDP) associated with healthcare reductions in patients with functional seizures. Epilepsy Behav. 2023;141:109147. doi:10.1016/j.yebeh.2023.109147
22. Lilliengren P, Cooper A, Town JM, Kisely S, Abbass A. Clinical-and cost-effectiveness of intensive short-term dynamic psychotherapy for chronic pain in a tertiary psychotherapy service. Australas Psychiatry. 2020;28(4):414-7. doi:10.1177/1039856220901478
23. Markstrom CA, Marshall SK. The psychosocial inventory of ego strengths: Examination of theory and psychometric properties. J Adolesc. 2007;30(1):63-79. doi:10.1016/j.adolescence.2005.11.003
24. Kulich KR, Madisch A, Pacini F, Piqué JM, Regula J, Van Rensburg CJ, et al. Reliability and validity of the Gastrointestinal Symptom Rating Scale (GSRS) and Quality of Life in Reflux and Dyspepsia (QOLRAD) questionnaire in dyspepsia: a six-country study. Health Qual Life Outcomes. 2008 Dec;6:12. doi:10.1186/1477-7525-6-12
25. Ajilchi B, Kisely S, Nejati V, Frederickson J. Effects of intensive short-term dynamic psychotherapy on social cognition in major depression. J Ment Health. 2020;29(1):40-4. doi:10.1080/09638237.2018.1466035
26. Abbass A, Town J, Ogrodniczuk J, Joffres M, Lilliengren P. Intensive short-term dynamic psychotherapy trial therapy: Effectiveness and role of "unlocking the unconscious". J Nerv Ment Dis. 2017;205(6):453-7. doi:10.1097/NMD.0000000000000684
27. Thoma NC, Abbass A. Intensive short-term dynamic psychotherapy (ISTDP) offers unique procedures for acceptance of emotion and may contribute to the process-based therapy movement. J Contextual Behav Sci. 2022;25:106-14. doi:10.1016/j.jcbs.2022.07.003