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THE EFFECTIVENESS OF AUTOGENIC RELAXATION THERAPY IN REDUCING ANXIETY AND PAIN IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION: A LITERATURE REVIEW

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ABSTRACT
Autogenic Therapy (AT) is a relaxation technique widely used for stress and anxiety reduction, pain management, and psychological well-being. However, variations in its duration, frequency, and effectiveness across different populations remain unclear. Objective: This review aims to synthesize the available evidence on AT's impact on psychological well-being and chronic pain management. A systematic review was conducted on studies evaluating AT interventions across different populations, including healthy individuals, cardiovascular patients, stroke survivors, cancer patients, individuals with chronic pain and type 2 diabetes, and those affected by crises. Data on intervention duration, session frequency, and health outcomes were extracted and analyzed. Findings indicate that AT interventions range from one week to several months, with session frequencies between two and five times per week. Short-term programs (1–4 weeks) are common in perioperative settings, while medium-term programs (6 – 12 weeks) are typically used for patients with cardiovascular, neurological, or diabetic conditions. Long-term interventions (⩾12 weeks) are preferred for chronic pain and general anxiety. Higher session frequencies correlate with greater psychological and physiological benefits. AT is an effective intervention across diverse populations, but its efficacy is influenced by intervention length and session frequency. Tailored programs based on patient needs and conditions may enhance therapeutic outcomes. Future research should standardize protocols to optimize AT effectiveness.

Keywords: autogenic training; anxiety reduction; pain management; relaxation therapy; systematic review

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INTRODUCTION

Autogenic therapy (AT) is a self-relaxation technique that has gained attention as a nonpharmacological intervention for managing psychological and physiological conditions (Breznoscakova et al., 2023). Rooted in self-hypnosis and guided relaxation, AT has been applied in various healthcare settings to reduce stress, manage chronic pain, and improve emotional resilience (Kohlert et al., 2022). Given the increasing prevalence of anxiety disorders, cardiovascular diseases, and chronic pain conditions worldwide, there is a growing interest in mind-body therapies as complementary treatments (Kohlert et al., 2022). AT has shown promising effects in promoting psychological well-being and enhancing functional recovery in clinical populations, including stroke survivors, hypertensive patients, and individuals experiencing chronic stress (Mohd Nordin et al., 2025). However, despite its potential benefits, AT remains underutilized in mainstream healthcare due to inconsistencies in research findings and a lack of standardized protocols. Existing literature on AT presents mixed results, primarily due to methodological variations across studies. The duration, frequency, and delivery method of AT interventions differ significantly, making it difficult to establish a universally accepted protocol. Furthermore, outcome measures vary widely, with some studies focusing on subjective self-reported anxiety and stress levels, while others assess physiological markers such as blood pressure, heart rate variability, and neuroimaging data (de Rivera et al., 2021; Kanji et al., 2004; Minowa & Koitabashi, 2013; Stanton & Meston, 2017). The lack of standardized methodologies and long-term follow-up studies limits the generalizability of findings, raising questions about the sustained effects of AT. Additionally, while some meta-

analyses suggest a significant reduction in anxiety and pain, the overall quality of evidence remains inconsistent, with many studies suffering from small sample sizes and limited control over confounding variables.

Another critical gap in the literature is the underexplored mechanisms through which AT exerts its therapeutic effects. Although some studies have investigated neurophysiological responses using functional magnetic resonance imaging (fMRI) and biochemical markers of stress regulation, the precise pathways by which AT influences the autonomic nervous system and emotional regulation remain unclear jelas (Naglatzki et al., 2012). This gap hinders the clinical integration of AT, as healthcare professionals often require a clear understanding of an intervention's physiological basis before recommending it as a standard treatment. Moreover, the lack of awareness and training among medical professionals contributes to the limited application of AT in routine healthcare settings.

Given these challenges, a systematic review of AT's effectiveness across different populations and health conditions is necessary. This review aims to synthesize the available evidence on AT's impact on psychological well-being and chronic pain management. Additionally, it seeks to evaluate the methodological rigor of existing studies, identify gaps in research design, and explore the potential mechanisms underlying AT's effects. By addressing these issues, this review will provide a comprehensive understanding of AT's therapeutic potential and offer recommendations for future research and clinical implementation. Establishing a more standardized and evidence-based approach to AT could enhance its integration into holistic healthcare strategies, benefiting individuals seeking non-invasive and accessible interventions for stress and disease management. This review aims to synthesize the available evidence on AT's impact on psychological well-being and chronic pain management.

METHOD

Study Design

This study employs a systematic literature review methodology to synthesize existing research on the effectiveness of AT in managing anxiety, chronic pain, cardiovascular health, stroke rehabilitation, cancer-related distress, diabetes-related psychological stress, and COVID-19-related psychological well-being (Ferrari, 2015).

Search Strategy

A comprehensive search of electronic databases was conducted to identify relevant studies published between 2000 and 2023. The databases searched included PubMed, Scopus, Web of Science, ScienceDirect, and Google Scholar.

Search Terms

The search strategy combined Medical Subject Headings (MeSH) terms and keywords related to autogenic training and its applications. The Boolean operators AND and OR were used to refine the search. The key search terms included:

1. Intervention-related terms: "autogenic training," "autogenic relaxation," "mind-body therapy"
2. Outcome-related terms: "anxiety," "stress," "pain," "hypertension," "stroke rehabilitation," "cancer-related distress," "chronic pain," "diabetes psychological stress"
3. Study type filters: "randomized controlled trial (RCT)," "meta-analysis," "systematic review," "clinical trial," "longitudinal study"

Eligibility Criteria

Studies were selected based on the following inclusion and exclusion criteria. The inclusion was 1) Study type: Peer-reviewed articles, systematic reviews, meta-analyses, randomized controlled trials (RCTs), observational studies, and experimental studies; 2) Intervention: The study must examine

autogenic training as the primary or adjunct intervention; 3) Population: Studies on healthy individuals or clinical populations experiencing anxiety, chronic pain, cardiovascular conditions, stroke rehabilitation needs, cancer-related distress, or diabetes-related stress; 4) Outcome Measures: Studies assessing psychological (e.g., anxiety, stress reduction, emotional regulation) and physiological (e.g., blood pressure, pain perception) effects of AT; 5) Publication Period: 2000–2023; 6) Language: Articles published in English.

Meanwhile, exclusion criteria were 1) Non-peer-reviewed sources, including dissertations, conference abstracts, and opinion pieces; 2) Animal studies or studies on non-human subjects; 3) Studies with insufficient methodology (e.g., lack of control groups, inadequate sample size, missing statistical results).

Data Extraction

Key information from the selected studies was extracted using a structured data extraction form to ensure consistency. The extracted data included: 1) Authors and year of publication; 2) Country of study; 3) Study design (RCT, systematic review, meta-analysis, observational study, etc.); 4) Sample size and population characteristics; 5) Intervention details (AT techniques, duration, frequency); 6) Outcome measures (anxiety, stress, pain, physiological effects, etc.); 7) Key findings; 8) Study limitations.

Ethical Considerations

As this study is a secondary analysis of published literature, no ethical approval was required. However, ethical principles such as transparent reporting, accurate data representation, and proper citation of sources were strictly adhered to.

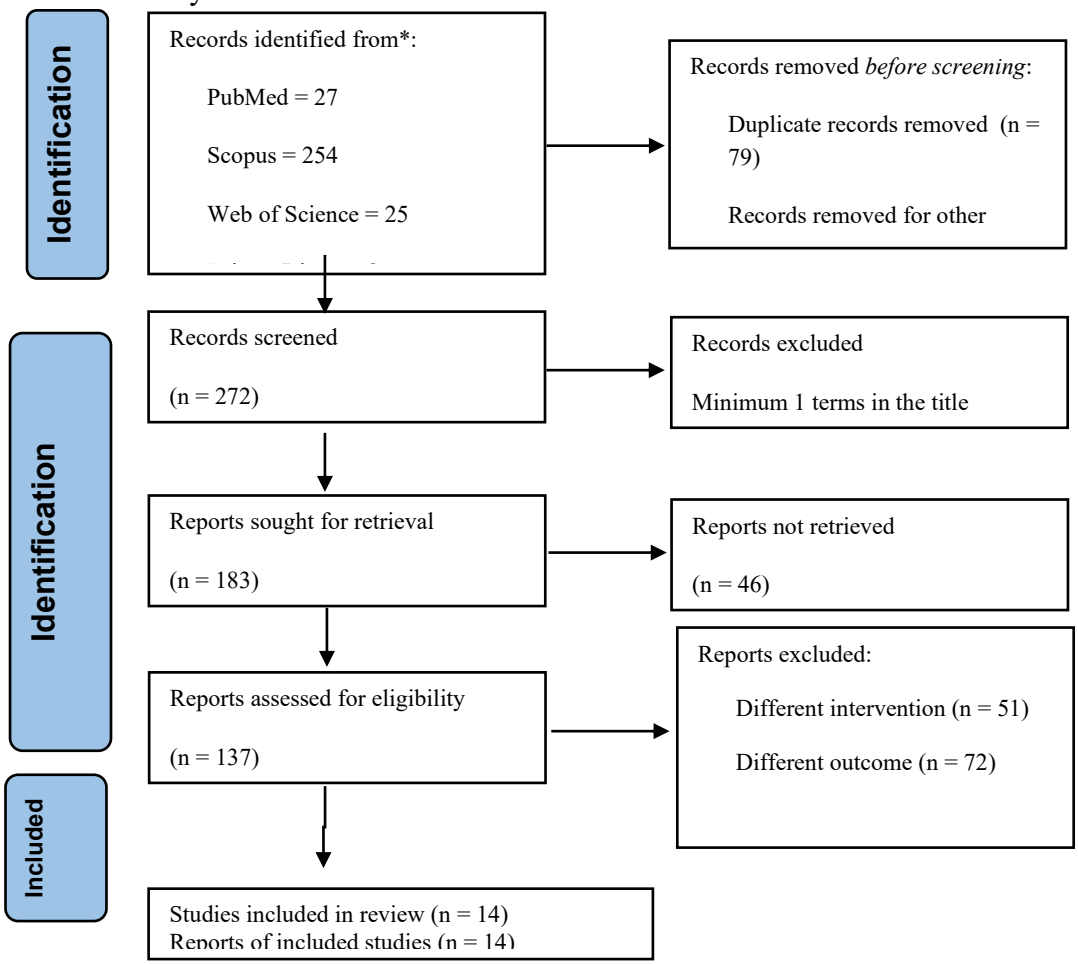

Figure 1. Literature search procedures

RESULT

Based on a review of 14 studies, several key thematic focuses were identified regarding the effectiveness of Autogenic Therapy (AT) in various contexts.

Mental and Emotional Health

Most studies highlight the benefits of AT on psychological aspects, both in the general population and in patients with certain medical conditions such as stroke, dialysis, HIV, heart disease, and athletes. Autogenic therapy has been consistently proven to reduce anxiety, depression, and stress, as well as increase self-confidence. These results are reflected in various studies (Studies 1, 2, 3, 4, 5, 6, 8, 9, 12, 13, 14) that reinforce AT's position as an effective non-pharmacological psychotherapeutic intervention.

Physical Function and Rehabilitation

In addition to psychological benefits, AT also shows positive effects in supporting physical rehabilitation. In stroke patients, for example, AT plays a role in improving functional independence (Study 2). A number of studies have also found that AT can help reduce physical pain and psychosomatic symptoms (Studies 4, 7, 8, 10, 12). Furthermore, AT has been shown to contribute to increased Heart Rate Variability (HRV) and sexual function in women (Study 11), indicating the potential of AT to improve physiological aspects closely related to general health.

Specific Populations

Research on AT has mostly been conducted on patients with chronic diseases, including stroke patients, dialysis patients with kidney failure, type 2 diabetes patients, people with HIV, chest pain (angina/syndrome X) patients, and breast cancer patients. Beyond that, AT has also been studied in healthy or general populations, such as athletes, young adult women, and patients with stomatopyrosis complaints. This variation in population shows the breadth of AT's potential applications, although it also indicates limitations in cross-group generalization.

AT Learning Process

In addition to clinical aspects, there is also a qualitative study (Study 9) that explores the AT learning process. This study highlights how HIV patients begin the learning process, internalize it, and feel the benefits of AT on their health. These findings provide a new perspective that AT is not only useful as an intervention technique but also involves important psychosocial dimensions in the success of its practice.

Table 1.
Overview of the Study

No	Title, Author, Year	Objective	Method (Dsvia)	Findings
1	Autogenic Training Improves the Subjective Perception of Physical and Psychological Health and of Interpersonal Relational Abilities: An Electronic Field Survey During the COVID-19 Crisis in Spain (de Rivera et al., 2021)	This study investigated the effectiveness of a self-relaxation technique known as autogenic training.	Design: Electronic field survey Sample: 75 Variable: Subjective perception of autogenic therapy Instrument: Ad-hoc questionnaire Analysis: descriptive	Autogenic therapy improves subjective perception of physical and psychological health and interpersonal relationship skills.
2	Effectiveness of autogenic relaxation training in addition to usual physiotherapy on emotional state and functional independence of stroke survivors (Vasu et al., 2021)	This study aimed to evaluate the effectiveness of AT and conventional physiotherapy in improving the emotional state and functional level of stroke survivors during	Design: Experimental study Sample:70 Variable : IV: Autogenic therapy DV: Anxiety, Functional independence, general health Instrument: Hospital anxiety and depression scale (HADS), Barthel index, and EuroQol-5	Autogenic relaxation therapy improves emotional state and functional independence in stroke survivors.

No	Title, Author, Year	Objective	Method (Dsvia)	Findings
		rehabilitation	Analysis: ANOVA	
3	Effect of progressive muscular relaxation technique and autogenic relaxation technique on pre-competitive state anxiety and self-confidence in athletes (Sakhare et al., 2018)	This study aims to evaluate the effectiveness of progressive muscle relaxation therapy and AT on athletes' anxiety and self-confidence.	Design: Experimental study Sample:70 Variable: IV: Progressive muscle relaxation therapy, Autogenic therapy DV: Anxiety, Self-confidence Instrument: Competitive State Anxiety Inventory 2 (CSAI-2R Analysis: ANOVA	Relaxation therapy, including autogenic therapy, effectively reduces anxiety.
4	The autogenic training on dialysis as a mental place of serenity and well being (Cavallaro, 2020)	This study aims to investigate the effect of AT on reducing psychological and psychosomatic symptoms and reducing stress in dialysis patients.	Design: Experimental study Sample: 92 Variable: IV: Autogenic therapy DV: Psychological and psychosomatic factors and stress reduction Instruments: e State-HADS (Hospital Anxiety and Depression Scale) Beck Depression Inventory (BDI) Analysis: t-test and ANOVA	Autogenic therapy is effective in reducing psychological and psychosomatic symptoms and reducing stress in dialysis patients.
5	Effectiveness of autogenic training and affect regulation training on anxiety sensitivity in women with type 2 diabetes (Aliyazdi et al., 2022)	This study aims to evaluate the effectiveness of autogenic therapy and affect regulation training on anxiety sensitivity in women with type 2 diabetes.	Design: Experimental study Example: Autogenic Therapy (AT) 15 Emotion Regulation Training (ART) 15 Control Group 15 Variables: IV: AT, ART DV: anxiety Instrument: Anxiety Sensitivity Index-3 Analysis: MANOVA	Autogenic therapy and affect regulation therapy effectively reduce anxiety sensitivity in women with type 2 diabetes. Autogenic therapy is effective in managing pain.
6	Anxiolytics, Antidepressants and Autogenous training in the therapy of burning mouth syndrome (Gruden Pokupec et al., 2013)	This study aims to investigate the effects of anxiolytics, antidepressants, and AT on anxiety, depression and stress.	Design: Experimental study Sample: 92 Variable: IV: Anxiolytics, Antidepressants, Autogenic Therapy DV: Depression, Anxiety, and Stress Instrument: VAS (Visual Analog Scale) Analisis: Descriptive	Autogenic therapy is the treatment of choice for stomatopyrosis, both in eliminating problems in the oral cavity and in the emotional rehabilitation of patients.
7	Cerebral somatic pain modulation during autogenic training in fMRI (Naglatzki et al., 2012)	This study aims to investigate the modulation of brain pain activity patterns due to AT and to relate its effects to the level of experience with AT and the strength of the stimulus.	Design: fMRI study Sample: 13 Variable : IV: Autogenic therapy DV: cerebral modulation of pain activity Instrument: fMRI Analysis: t-test	Autogenic therapy reduces anxiety and perioperative pain in breast cancer patients.
8	Effects of Autogenic Training on Perioperative Anxiety and Pain in Breast Cancer Patients	This study aims to investigate the effects of AT on perioperative anxiety and pain in	Design: Experimental study Sample: 60 Variable: IV: Autogenic therapy DV:	Autogenic therapy is effective in reducing stress and anxiety.

No	Title, Author, Year	Objective	Method (Dsvia)	Findings
	(Minowa & Koitabashi, 2013)	breast cancer patients.	Anxiety and Pain Instrument: e State-Trait Anxiety Inventory (STAI) Japanese version visual analogue scale (VAS) Analisis: t-test and ANOVA	
9	The process of learning the autogenic training relaxation technique and its benefits on the wellness of people living with HIV (Ramirez Garcia et al., 2022)	This study aims to describe the process by which people with HIV learn AT.	Design: Qualitative study Sample: 14 Variable: the process by which people with HIV learn AT Instrument: - Analysis: Thematic analysis	The AT learning process is approached through three themes: initiating the learning process, taking ownership of the technique, and observing its benefits for health.
10	Comparison of the Effectiveness of Autogenic Training and Progressive Muscle Relaxation on Anxiety (Kazemi et al., 2023)	This study aims to compare the effectiveness of autogenic training and progressive muscle relaxation in improving anxiety components in women with chest pain.	Design: Comparative experimental study Sample: Control 20 Autogenic therapy 20 Progressive muscle 20 Variable IV: Autogenic therapy, progressive muscle DV: Anxiety Instrument: Beck's (1988) anxiety questionnaires, Tylor & Cox's (1998) revised anxiety sensitivity, and Rapee, et al. (1996) perception of anxiety control Analysis: covariance analysis and post hoc test methods	Autogenic therapy significantly reduces chronic pain.
11	A Single Session of Autogenic Training Increases Acute Subjective and Physiological Sexual Arousal in Sexually Functional Women (Stanton & Meston, 2017)	This study examines the effects of autogenic training to increase HRV on acute physiological and subjective sexual arousal in women.	Design: Experimental study Sample: 33 women Variabel: IV: Autogenic therapy DV: Heart rate variability (HRV) Genital Sexual Arousal Instrument: Heart rate is measured at a speed of 200 samples/second through electrocardiography (ECG). Vaginal pulse amplitude (VPA) Analisis: paired t test, Hierarchical linear modeling	Following autogenic training, significant improvements in VPA ($p < 0.05$) and subjective sexual arousal ($p < 0.005$) were observed. Furthermore, changes in HRV from pre-manipulation to post-manipulation significantly moderated changes in subjective sexual arousal ($p < 0.05$) when measured continuously during the administration of erotic stimuli.
12	Autogenic training to manage symptomology in women with chest pain and normal coronary arteries (Asbury et al., 2009)	To explore autogenic training (AT) as a treatment for psychological morbidity,	Design: Experimental study Sample: AT: 22 Control: 24 Variable:	Autogenic training has been shown to reduce the severity and frequency of symptoms among

No	Title, Author, Year	Objective	Method (Dsvia)	Findings
		symptomatology, and physiological markers of stress in women with chest pain, positive exercise tests for myocardial ischemia, and normal coronary arteries (X syndrome).	IV: Autogenic therapy DV: chest pain and normal coronary arteries Instrument: Symptom severity and frequency, Hospital Anxiety and Depression Scale, Spielberger State-Trait Anxiety Inventory, Cardiac Anxiety Questionnaire (CAQ), Ferrans and Powers Quality of Life Index (QLI), blood pressure, heart rate, electrocardiogram, and plasma catecholamines Analysis: t-tests and analysis of covariance	patients with syndrome X and may prove to be Autogenic training has been shown to reduce the severity and frequency of symptoms among patients with syndrome X and may prove to be an effective treatment for patients with this frustrating and debilitating condition.
13	Autogenic training reduces anxiety after coronary angioplasty: A randomized clinical trial (Kanji et al., 2004)	This study examined whether AT reduces anxiety levels experienced by patients undergoing coronary angioplasty	Design: Experimental study Sample: Intervention 30 Control 29 Variable: IV: Autogenic therapy DV: anxiety post coronary angioplasty Instrument: State Anxiety Analysis: t-test	Autogenic relaxation therapy improves sleep quality, lowers blood pressure, and reduces anxiety in hypertensive patients.
14	The Effect of Benson and Autogenic Relaxation Therapy on Sleep Quality, Blood Pressure, and Anxiety of Hypertension Patients (Sutrisno & Nursalam, 2022)	This study aims to analyze the effects of Benson and Autogenic therapy on blood pressure, anxiety, and sleep quality in hypertensive patients.	Design: Experimental study Sample: 20 Variable: IV: Benson dan autogenic Therapy DV: Blood pressure, sleep quality, anxiety Instrument: HARS (Hamilton Anxiety Rating Scale) PSQI (The Pittsburgh Sleep Quality Index) Analysis: Wilcoxon test	Autogenic therapy improves subjective perception of physical and psychological health and interpersonal relationship skills.

DISCUSSION

Mental and Emotional Health

Almost all studies confirm that Autogenic Therapy (AT) plays a significant role in reducing anxiety, depression, and stress, as well as increasing self-confidence and emotional quality in individuals. These results are consistent across various population groups, including patients with chronic illnesses and healthy populations such as athletes. These findings support the theory that AT, as a form of relaxation therapy, works through the autonomic nervous system by improving the balance between the sympathetic and parasympathetic systems (Breznoscakova et al., 2023; Kohlert et al., 2022). Parasympathetic activation through breathing exercises, self-suggestion, and relaxation focus is believed to reduce psychological symptoms related to stress. However, most studies have only evaluated short-term effects. There have not been many longitudinal studies proving whether the psychological benefits of AT can last long after the intervention has been discontinued. Thus, it is important to continue research focusing on long-term effects and to integrate stress biomarker measures (such as cortisol, continuous HRV, or other physiological responses) to strengthen empirical evidence.

Physical Function and Rehabilitation

In addition to psychological aspects, AT has been proven to aid in the physical rehabilitation process. Research on stroke patients shows an increase in functional independence, while in patients with chronic kidney disease undergoing dialysis and patients with chest pain, AT has been proven to reduce psychosomatic symptoms and improve physical conditions related to pain (Asbury et al., 2009; Kohlert et al., 2022; Minowa & Koitabashi, 2013; Sutrisno & Nursalam, 2022). Moreover, AT can increase Heart Rate Variability (HRV) and influence physiological sexual responses in women. This demonstrates that AT offers multidimensional benefits, not only reducing psychological burden but also affecting physiological conditions. The underlying mechanism is likely related to cardiovascular autonomic regulation and increased pain tolerance through modulation of brain activity, as shown by fMRI studies (Naglatzki et al., 2012). However, the generalization of these results is still limited because many studies focus on specific patient populations with relatively small samples. Future research should involve the general population with larger sample sizes so that the findings are more representative.

Specific Populations

The scope of the research shows that AT is most commonly studied in patients with chronic diseases, such as stroke, diabetes, HIV, kidney failure, and cancer. This indicates that AT is considered a potential complementary approach to help patients with high psychological and physiological burdens (Kohlert et al., 2022). However, this limitation also indicates that the generalization of results to the general population is still inadequate. In the context of female patients, for example, several studies have shown the benefits of AT on chest pain and sexual function, but research on men is relatively limited. Similarly, different age groups (children, healthy elderly) have been largely overlooked. This opens up opportunities for new, more inclusive, and cross-population research.

AT Learning Process

Qualitative studies provide important insights that the success of AT is not only determined by technique, but also by psychosocial processes in learning (Ramirez Garcia et al., 2022). Patients who can internalize AT techniques, take ownership of the process, and feel its benefits are more likely to maintain consistent practice. This emphasizes the need for interdisciplinary research that not only assesses clinical effectiveness but also explores the psychological, social, and cultural factors that influence compliance and therapeutic success.

CONCLUSION

A review of 14 studies shows that Autogenic Therapy (AT) has significant effectiveness in both psychological and physiological aspects. In terms of mental and emotional health, AT has been proven to reduce anxiety, depression, and stress levels, as well as increase self-confidence. These findings are consistent across various groups, ranging from patients with chronic medical conditions to healthy populations such as athletes. In addition, AT also provides tangible benefits in supporting physical rehabilitation. In stroke patients, AT helps improve functional independence, while in patients with kidney failure, chest pain, and cancer, AT can reduce psychosomatic complaints and improve pain perception. In fact, improvements in Heart Rate Variability (HRV) and sexual function in women indicate that AT not only impacts psychological aspects but also influences physiological conditions closely related to quality of life.

REFERENCES

Aliyazdi, M., Agahheris, M., & Nouhi, S. (2022). Effectiveness of autogenic training and affect regulation training on anxiety sensitivity in women with type 2 diabetes. Researcher Bulletin of Medical Sciences, 26(1 SE-Research Articles), e24.

Asbury, E. A., Kanji, N., Ernst, E., Barbir, M., & Collins, P. (2009). Autogenic training to manage symptomology in women with chest pain and normal coronary arteries. Menopause, 16(1), 60–65. https://doi.org/10.1097/gme.0b013e318184762e

Breznoscakova, D., Kovanicova, M., Sedlakova, E., & Pallayova, M. (2023). Autogenic Training in Mental Disorders: What Can We Expect? International Journal of Environmental Research and Public Health, 20(5), 4344. https://doi.org/10.3390/ijerph20054344

Cavallaro, M. F. (2020). The autogenic training on dialysis as a mental place of serenity and well being. Journal of Clinical & Developmental Psychology, 2(2).

De Rivera, L., Ozamiz-Etxebarria, N., Dosil-Santamaría, M., & de Rivera-Monterrey, L. (2021). Autogenic Training Improves the Subjective Perception of Physical and Psychological Health and of Interpersonal Relational Abilities: An Electronic Field Survey During the COVID-19 Crisis in Spain. Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.616426

Ferrari, R. (2015). Writing narrative style literature reviews. Medical Writing, 24(4), 230–235. https://doi.org/10.1179/2047480615z.000000000329

Gruden Pokupec, J. S., Gavić, L., Klemenčić, M., & Matić, H. (2013). Anxiolytics, Antidepressants and Autogenous training in the therapy of burning mouth syndrome. IOSR Journal of Pharmacy (IOSRPHR), 3(3), 31–43. https://doi.org/10.9790/3013-033103143

Kanji, N., White, A. ., & Ernst, E. (2004). Autogenic training reduces anxiety after coronary angioplasty: A randomized clinical trial. American Heart Journal, 147(3), 508. https://doi.org/10.1016/j.ahj.2003.10.011

Kazemi, M., Agah heris, M., Jalali, M., & kordmirza nikoozade, ezatolah. (2023). Comparison of the Effectiveness of Autogenic Training and Progressive Muscle Relaxation on Anxiety. Iranian Journal of Health Psychology, 6(4), 19–32. https://doi.org/10.30473/ijohp.2024.66417.1285

Kohlert, A., Wick, K., & Rosendahl, J. (2022). Autogenic Training for Reducing Chronic Pain: a Systematic Review and Meta-analysis of Randomized Controlled Trials. International Journal of Behavioral Medicine, 29(5), 531–542. https://doi.org/10.1007/s12529-021-10038-6

Minowa, C., & Koitabashi, K. (2013). Effects of Autogenic Training on Perioperative Anxiety and Pain in Breast Cancer Patients : The Kitakanto Medical Journal, 63(1), 1–11. https://doi.org/10.2974/kmj.63.1

Mohd Nordin, N. A., Thazhakkattu Vasu, D., & Ezzat Ghazali, S. (2025). Effectiveness of Autogenic Relaxation Training as an Adjunct to Usual Physiotherapy in Enhancing Emotional Well-Being and Functional Independence in Stroke Survivors: A Randomized Controlled Study. Topics in Stroke Rehabilitation, 32(6), 573–585. https://doi.org/10.1080/10749357.2024.2444117

Naglatzki, R. P., Schlamann, M., Gasser, T., Ladd, M. E., Sure, U., Forsting, M., & Gizewski, E. R. (2012). Cerebral somatic pain modulation during autogenic training in <scp>fMRI</scp>. European Journal of Pain, 16(9), 1293–1301. https://doi.org/10.1002/j.1532-2149.2012.00138.x

Ramirez Garcia, M. P., Leclerc-Loiselle, J., Côté, J., Brouillette, M.-J., & Thomas, R. (2022). The process of learning the autogenic training relaxation technique and its benefits on the wellness of people living with HIV. BMC Complementary Medicine and Therapies, 22(1), 86. https://doi.org/10.1186/s12906-022-03557-6

Sakhare, N., Sharma, K., & Syal, A. (2018). Effect of progressive muscular relaxation technique and autogenic relaxation technique on pre competitive state anxiety and self-confidence in athletes. International Journal of Advance Research, Ideas and Innovations in Technology, 4(6), 403–410.

Stanton, A., & Meston, C. (2017). A Single Session of Autogenic Training Increases Acute Subjective and Physiological Sexual Arousal in Sexually Functional Women. Journal of Sex & Marital Therapy, 43(7), 601–617. https://doi.org/10.1080/0092623X.2016.1211206

Sutrisno, S., & Nursalam. (2022). The Effect of Benson and Autogenic Relaxation Therapy on Sleep Quality, Blood Pressure and Anxiety of Hypertension Patients. Journal Of Nursing Practice, 6(2), 214–220. https://doi.org/10.30994/jnp.v6i2.379

Vasu, D. T., Mohd Nordin, N. A., & Ghazali, S. E. (2021). Effectiveness of autogenic relaxation training in addition to usual physiotherapy on emotional state and functional independence of stroke survivors. Medicine, 100(33), e26924. https://doi.org/10.1097/MD.0000000000026924

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