MODELING RITUALS THROUGH COMBINED WELLNESS INFLUENCES

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INTRODUCTION

Professional stress has become a prevalent issue in modern workplaces, leading to adverse physical, mental, and emotional health consequences (Dimitrova, 2023; Addas, 2025). Long working hours, high expectations, and job insecurity contribute to increased stress levels among employees (Avey et al., 2009). Wellness therapies offer a natural and effective alternative to mitigate these effects, promoting relaxation, resilience, and overall well-being (Dimitrova, 2024; Ignatova et al., 2022; Nesheva, 2023). This analysis explores the role of wellness therapies in reducing professional stress and improving workplace productivity (Nesheva et al., 2021; Ignatova, 2023). Stress is defined as a state of the organism that arises due to prolonged and unusual irritation, requiring tension to adapt to the stimulus (Ignatova et al., 2020; Nesheva, 2023a). Distress is a prolonged continuation of stress, associated with the development of pathological changes in the body (Nikolov, 2003; Dimitrova, 2023a; Yang et al., 2025). Anxiety is a psycho-physiological phenomenon, a component of normal self-regulation under extreme conditions, and a part of the general adaptation syndrome. It manifests as a negative, diffuse feeling of emotional tension, anticipation of potential troubles, restlessness, and an undefined fear of something that may occur. Emotional stress is a significant factor that creates a conducive environment for the development of vascular system diseases (Nesheva, 2020). The digestive system is directly connected to neuropsychological conditions (Krämer et al., 2024; Nikolov, 2003). Stress and its emotional manifestations, such as anxiety, insecurity, depression, panic, and alienation, are nowadays indicators that can even lead to health problems. Data from national statistics reveal that **50 to 75%** of all medical visits are related to complaints and illnesses caused by social stress (Batista et al., 2022).

Wellness therapies serve as a viable alternative to managing professional stress, offering holistic and scientifically-backed methods for improving overall well-being (Zhelev et al., 2004). By incorporating these therapies into workplace wellness programs, organizations can enhance employee health, boost productivity, and create a more positive work culture. As stress continues to be a growing concern, investing in wellness initiatives will be crucial for long-term workforce

sustainability and success. Integrating wellness therapies into corporate Wellness programs may support people well-being (Chobanian et al., 2003). Initiatives such as on-site massage therapy, meditation sessions, and relaxation spaces can significantly reduce workplace stress. Encouraging life balance and promoting self-care practices also contribute to a healthier lifestyle. Therapies like massage and aromatherapy help lower cortisol levels, reducing overall stress. Regular participation in wellness activities enhances mood, decreases anxiety, and prevents burnout. Techniques such as yoga and hydrotherapy improve flexibility, circulation, and immune function. Individuals who manage stress effectively are more focused, engaged, and productive in their roles.

METHODS

The **purpose** of this material is to conduct a comparative analysis of the effects of different wellness rituals on regulating the psycho-emotional state of clients, with the aim of providing scientific justification.

Research Focus:

We applied **benchmarking** to assess the impact of three wellness rituals: **"Aromatherapy," "Ayurveda" and " Complex ritual ". They are** based on specific indicators. These indicators include **high pulse rate and blood pressure** triggered by the need to solve a personal problem, **decreased anxiety leading to panic, fear of failure, or job loss,** all of which are classified as **"momentary indicators."**

To achieve the set research objectives, the following **methodological tools** were used:

Assessment of Situational (Momentary) Psycho-Emotional State:

- ✓ **Pulse Rate and Blood Pressure.**
- ✓ **State-Trait Anxiety Inventory (STAI-Y)** – developed by C. Spielberger, Bulgarian adaptation by Shtetinski and Paspalanov (1989). In this study, only the **"SA" scale** was used to assess situational anxiety. The scale consists of **20 questions (items)** and measures anxiety as a temporary state (see Annex 1). The **SA-scale** evaluates situational anxiety (a short-term, transient state of anxiety).

Half of the items are negatively formulated concerning the measured qualities and are **recoded before summing all responses**. A **higher score** indicates a **higher level of anxiety.**

Subject of study:

The study involved 75 clients, all females, with an average age of 30.46 ± 8.81 years, ranging from 22 to 62 years. The participants were divided into three equal groups of 25 individuals (33.3% each), who underwent different wellness rituals:

- ✓ "Ayurveda" Ritual – Includes Abhyanga-Shirodhara massage and Marma-Panchakarma method.
- ✓ "Aromatherapy" Ritual – A standardized aromatherapy massage method, recommended by The International Federation of Aromatherapists (IFA).
- ✓ "Complex" Ritual – A systematic extraction of best practices, combining techniques from Swedish, Hawaiian, Chinese, and Ayurvedic massage.

RESULTS

The Concept of Modeling Rituals

Modeling rituals involve systematically designing wellness experiences by drawing from multiple established practices. By integrating methodologies such as aromatherapy, Ayurveda, and massage therapy, these rituals provide a synergistic effect that enhances their overall benefits. The goal is to refine existing techniques and create a structured approach that maximizes wellness outcomes.

Key Components of Combined Wellness Rituals

Aromatherapy – Utilizes essential oils to promote relaxation, emotional balance, and mental clarity.

Ayurvedic Practices – Incorporates traditional techniques such as Abhyanga massage and Shirodhara to harmonize the body's energy systems.

Massage Therapy – Draws from Swedish, Hawaiian, and Chinese massage techniques to release tension and improve circulation.

Mindfulness and Meditation – Enhances self-awareness and emotional resilience through guided relaxation and deep breathing exercises.

Thermal and Hydrotherapy – Employs hot and cold treatments to stimulate circulation and alleviate muscular discomfort.

Benefits of Combined Wellness Rituals

Enhanced Relaxation and Stress Reduction – The integration of multiple techniques leads to deeper relaxation and a more profound reduction in stress levels.

Improved Physical Health – By incorporating diverse methods, these rituals support circulation, muscular relief, and immune system function.

Holistic Emotional Balance – The synergy of aromatherapy, massage, and meditation fosters emotional well-being and anxiety reduction.

Personalized and Adaptive Approach – Individuals can experience a tailored ritual that aligns with their unique wellness needs.

Increased Effectiveness Over Single Modalities – A combined approach provides more lasting and impactful results than individual therapies.

Application in Wellness and Spa Industry

Integrating these combined wellness rituals into spa services enhances client experiences and promotes long-term well-being. Businesses can differentiate themselves by offering personalized, research-backed rituals that cater to modern wellness demands. Training programs should focus on creative and adaptive techniques to enrich the wellness menu across various centers.

Table 1 reveals significant changes in the indicators of blood pressure, pulse, and the anxiety level score after the three rituals. The measured values show significantly lower average levels following the procedures. Our findings on the substantial reduction of systolic arterial pressure (SAP), diastolic arterial pressure (DAP), pulse rate, and situational anxiety after the three rituals support the conclusions of other authors:

"... Through massage, blood vessels reflexively dilate, peripheral resistance decreases, and arterial blood pressure drops. Massaging certain areas of the body (abdomen, neck, shoulder girdle, and massage collar) leads to stimulation of the sympathetic ganglia and reduction of elevated blood pressure..."

The reduction in anxiety levels is attributed to the fact that "... massage can regulate excitation and inhibition processes in the cerebral cortex..." and "... has a positive effect on human psychology. After a massage, a person feels refreshed, with a sense of well-being and improved mood..." (Zhelev et al., 2012).

Additionally, this effect is likely due to the stimulation of various pressure points in the three applied methodologies, which contribute to restoring the body's energy balance, thereby regulating pulse, arterial blood pressure, and calming the psyche. It is also known that this impact is influenced by the wellness environment in which the three rituals take place.

The data from Table 1 indicate that the developed "Complex" ritual, as an original methodology, has effects similar to or even superior to the well-established wellness rituals "Aromatherapy" and "Ayurveda" in terms of reducing the examined indicators. We found that all three rituals contributed to a significant decrease in situational anxiety levels, pulse rate, systolic, and diastolic blood pressure. These findings confirm that the applied treatments have led to a reduction in stress manifestations in the studied individuals.

Table 1:

Comparative Analysis of Different Groups Based on the Examined Indicators Before and After the Ritual

Indicator	Ritual	Before the Ritual	SD	After the Ritual	SD
SBP (Systolic Blood Pressure)	Ayurveda	126.33a	10.21	121.07a	7.82

Indicator	Ritual	Before the Ritual	SD	After the Ritual	SD
	Aromatherapy	128.98a	9.36	120.54a	6.01
	"Complex"	127.43a	11.03	118.02a	5.08
DBP (Diastolic Blood Pressure)	Ayurveda	84.03a	8.93	80.01bc	9.28
	Aromatherapy	79.13a	6.83	75.03ac	7.25
	"Complex"	77.93a	6.99	71.91a	7.54
Heart Rate	Ayurveda	74.87a	14.96	67.732c	9.92
	Aromatherapy	72.14a	9.62	66.41ac	8.40
	"Complex"	68.88a	10.97	63.04a	7.91
Score	Ayurveda	43.97a	5.98	32.53a	1.44
	Aromatherapy	44.35a	5.05	32.97a	3.66
	"Complex"	44.99a	5.69	32.72a	2.73

***Note**: Identical letters in vertical columns indicate no statistically significant difference, while different letters indicate a statistically significant difference ($p<0.05$).*

This outcome is attributed to the proper assessment of each client's functional state and their assignment to a suitable ritual. It can be stated that stress reduction depends not only on the availability of effective wellness rituals and an appropriate environment but also on the level of knowledge, skills, and competencies of the therapist performing the procedure. In Table 1, it is evident that before the ritual, there was no statistically significant difference between the three groups regarding the examined indicators, making the post-ritual comparison statistically valid.

As shown in the table, prior to the procedure, the SBP (Systolic Blood Pressure) values for all three rituals ranged between 120 and 139 mmHg, which, according to the WHO, is classified as prehypertension. After the rituals, the values changed as follows:

- ✓ "Complex" ritual – 118.02 mmHg, $p = 0.006$ (within the normal range)
- ✓ "Aromatherapy" ritual – 120.54 mmHg, $p = 0.002$ (lower threshold of prehypertension)
- ✓ "Ayurveda" ritual – 121.07 mmHg, $p = 0.003$ (lower threshold of prehypertension)

Although there is no statistically significant difference in SBP values between the three rituals after the procedures, it is important to note that the "Complex" ritual resulted in values that fall within the normal range.

Additionally, Table 1 shows a significant difference between the three groups regarding DBP (Diastolic Blood Pressure) and heart rate after the ritual. Statistically, significantly lower DBP and heart rate values were observed in the group that underwent the "Complex" ritual compared to the "Ayurveda" ritual. This suggests that the "Complex" ritual tends to be more effective in reducing DBP and heart rate than the "Ayurveda" ritual.

DISCUSSION

We discuss the necessity of scientifically validating the effects of various wellness procedures or rituals on the client's health status. Currently, even in high-end Wellness and SPA centers, therapies are offered without proven or standardized duration and intensity based on research. The pricing and service menus in SPA centers are primarily developed by professionals with economic education, who focus solely on profit rather than the content and quality of the services. This happens because they lack the necessary expertise in the field.

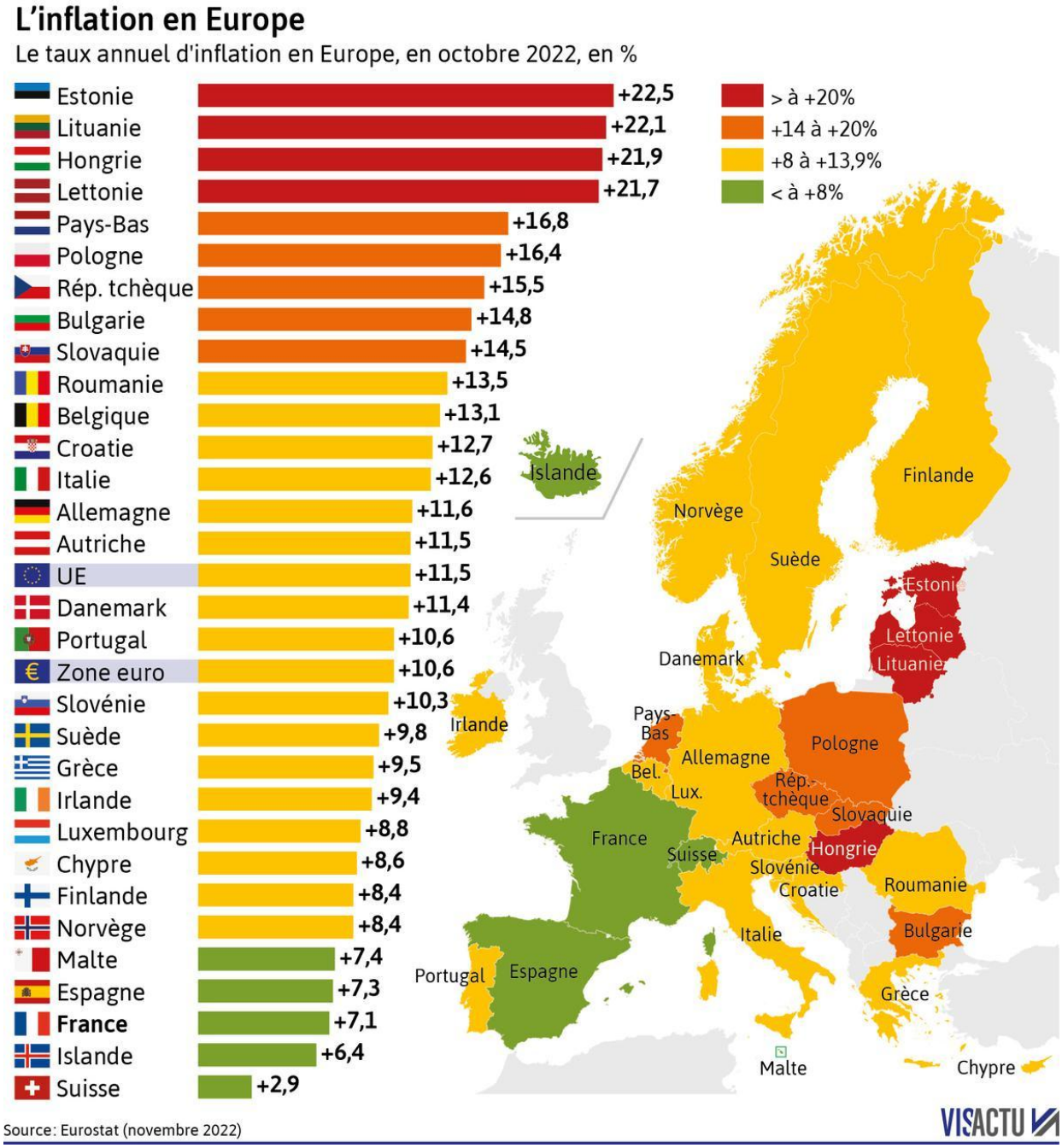

Figure 1. Inflation Rates in Individual European Countries (October 2022).Source: Eurostat

In some cases, low-qualified specialists provide services, sometimes applying incorrect methodological sequences of steps and techniques. Let's discusse the actual statust of founding for Science and R&D in Europe. According to EUROSTAT data for 2024, Bulgaria's expenditure on science and innovation remains low compared to other EU member states. For the country's future, it is crucial to increase the share of Gross Domestic Product (GDP) allocated to science from 0.79% to at least 2%, while the European benchmark is even 3%. However, if we compare the share of budget expenditures, the picture looks quite different. For an objective analysis of the data, it is essential to consider the inflation rate in individual European countries (see Figure 1).

The trend of increasing expenditures on research and development (R&D) continues in Bulgaria, yet they remain far from the European target. In 2023, investments in R&D grew by 15.9%, reaching a total of 1.467 billion BGN. This maintains the annual growth trend since 2019, according to the National Statistical Institute (NSI). However, R&D expenditures as a percentage of GDP stand at 0.79%, which is only a 0.04 percentage point increase from 2022. This is still far from the EU target of 3% of GDP allocated to R&D. Scientific research in Europe plays a key role in the development of the economy, technology, and society. The European Union (EU) allocates significant funds for research and development (R&D) through programs such as "Horizon Europe", which is the main framework program for research and innovation for the period 2021-2027, with a total budget of €95.5 billion.

Funding and Distribution of Subsidies

Although the EU aims to invest 3% of GDP in scientific research, actual figures in most member states remain lower. According to EUROSTAT data for 2024, the average R&D expenditure in Europe is approximately 2.2% of GDP, with the highest investments made by countries such as Sweden, Germany, and Denmark. Meanwhile, Eastern European countries, including Bulgaria and Romania, remain significantly below the average, with expenditures below 1% of GDP.

Challenges in Scientific Research

Uneven distribution of funds – More developed economies allocate more resources, while less developed countries rely mainly on European subsidies.

Insufficient private sector participation – In some countries, R&D investments come predominantly from the state, whereas in others—such as Germany and France—the business sector plays a leading role.

Bureaucratic obstacles – Complex application procedures for European funding make it difficult for researchers from smaller countries.

Possible Solutions and Perspectives

Greater incentives for the private sector through tax relief for companies investing in science and innovation.

Improving cross-border cooperation between universities and research institutions.
Expanding access to European funding programs and simplifying administrative procedures.
Overall, the EU is making significant efforts to develop science, but better resource distribution and greater engagement from both the public and private sectors are needed.

CONCLUSION

Statistically significantly lower values of DAN and heart rate were observed in the group that underwent the "Complex" ritual compared to the group that underwent the "Ayurveda" ritual. Additionally, after the rituals, the percentage of women experiencing anxiety decreased significantly more in the groups with the "Complex" and "Ayurveda" rituals.
The conclusion is that the "Complex" ritual has not only a similar but even a stronger effect compared to the well-established Wellness rituals "Aromatherapy" and "Ayurveda" in terms of reducing the studied indicators. This provides a solid basis for incorporating creative activity in both training staff and trainees when developing original and effective rituals to enrich the Wellness menu in various centers.
The reduction of emotional stress manifestations in the studied individuals, as a result of applying the three Wellness rituals, supports their scientifically-based implementation in the SPA business. Modeling rituals through combined wellness influences presents a forward-thinking approach to holistic health. By merging multiple therapeutic practices, individuals and wellness professionals can achieve superior outcomes in relaxation, mental clarity, and physical health. The future of wellness lies in these integrated, scientifically-supported rituals that cater to the evolving needs of individuals seeking comprehensive well-being solutions.

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REFERENCES

1. Addas, Abdullah (2025). Impact of neighborhood safety on adolescent physical activity in Saudi Arabia: gender and socio-economic perspectives. Frontiers in Public Health, Open Access, Vol. 13, 2025 Article number 1520851. Doi: 10.3389/fpubh.2025.1520851
2. Avey, JB., F. Luthans, SM Jensen, (2009). Psychological capital: A positive resourse for combating employee stress and turnover, Human Resource Management, Speptember - October, 2009, Vol. 48, No. 5, Pp. 677-693
3. Batista, P., Afonso, A. Et al., (2022). Anxiety and Coping Stress Strategies in Researchers During COVID-19 Pandemic. Journal Frontiers in Public Health. Open Access, Vol. 11, E-ISSN: 2296-2565

4. Chobanian AV, Bakris GL, Black HR, et al.. Seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. // Hypertension 42 (6). December 2003. DOI:10.1161/01.HYP.0000107251.49515.c2. c. 1206–52.
5. Dimitrova, B., 2023. Brain drain's economic impact on the development of Wellness and Spa tourism in Bulgaria.Trakia Journal of Sciences, Vol. 19, Suppl. 1, Series Social Sciences pp.9-14. DOI: 10.15547/tjs.2023.s.01.002.
6. Dimitrova, B. 2023. Educational policy, specialised staff, innovations and recreational industry. Strategies for Policy in Science and Education, Volume 31, Number 5 (p. 532-546), 2023. https://doi.org/ 10.53656/str2023-5-6-imp
7. Dimitrova, B. (2024). Sustainable quality of SPA programs through benchmarking the biomechanical profile of a new aqua spinning methodology. Series on Biomechanics, Vol.38, No.2 (2024), 23-28. DOI:10.7546/SB.03.02.2024.
8. Ignatova, D., Iliev, A., (2020). Motor qualities and their influence on the children's development. International Scientific Journal: Smart Innovations in Recreational, Wellness Industry and Niche Tourism,2, (1-2), 16-44. ISSN: 2603-4921 (online). Available at: https://scjournal. globalwaterhealth.org/.
9. Ignatova, D. & A. Iliev, (2022). Benchmarking for the development of speed and power characteristics. Strategies for Policy in Science and Education, 30 (4), 411-421. https://doi.org/10.53656/str2022-4-6-ben
10. Ignatova, D., (2022). Nadeshdni instrumenti pri otsenka na uchilishten Uelnes (Wellness) v nachalen etap na osnovnata obrasovatelna stepen. Strategies for Policy in Science&Education Strategii na Obrasovatelnata i Nauchnata Politika, 30 (1), 70-81 [In Bulgarian]. https://doi.org/10.53656/ str2022-1-4-rel
11. Ignatova, D., (2023). Affirming wellness culture through innovative methodology related to Blaze-pod trainer system, Strategies for policy in science and education, (Online), Sofia, 31 (2), pp. 212-225. https://doi.org/10.53656/str2023-2-7-aff, ISSN 1310 – 0270 (Print),
12. Krämer, M. D., Bleidorn, W., (2024). The Well-Being Costs of Informal Caregiving. Psychological Science, Open Access, Vol. 35 (12), p.1382 – 1394, doi:10.1177/09567976241279203
13. Nesheva, I., (2020). Information system for inclusion of women with normal pregnancy in gymnastics program. "Smart Innovations on the Recreative & Wellness Industries and Niche tourism", Sofia, No 2 (1), 33-39. eISSN: 2603-4921. Available at: https://scjournal. globalwaterhealth. org/
14. Nesheva, I. & Dimitrova B., (2021). Trakia Journal of Sciences, Vol. 19, Suppl. 1, Series Social Sciences pp.684-690.
15. Nesheva, I. (2023). Pregnancy and wellbeing. Trakia Journal of Sciences, Sofia. Volume 21, Supplement 1, Series Social Sciences, p.231-235, doi:10.15547/ tjs.2023.s.01.039 ISSN 1313-7069 (print), ISSN 1313- 3551 (online)
16. Nesheva, I. (2023a). A wellness tool to perform healthy lifestyle practices In the Bulgarian school system. Natsionalno izdatelstvo Az Buki MON Sp. Strategii na obrazovatelnata i nauchnata politika S. tom 31, nomer 5, s.560-572, ISSN 1314–8575 https://doi.org/10.53656/str2023-5-7-wel
17. Spielberger, C. D. (1972). Anxiety: Current trends in theory and research: I. New York, N.Y.: Academic Press, p.46-67.
18. Trendafilov, D., B. Dimitrova, (2013). Aqua spinning as anti-stress health prevention. Sport Mont, XI (37-38-39), 467 - 473. Available from: http:/www.sportmont.ucg.ac.me
19. Yang, Yichun et al., (2025). Appearance-related distress impacts psychological symptoms in Chinese patients with cleft lip. Frontiers in Public Health, Open Access, Vol. 13, 2025, Article number 1484025. Doi:10.3389/fpubh.2025.1484025
20. Zhelev, V., Kraĭdzhikova, L., Voĭnikov, M., (2006). Masazh, Vtoro preraboteno izdanie, Isdatelstvo Avangard Prima, str 36, 58, S., 2006, ISBN-10: 954-323-192-8, ISBN- 13: 978-954-323-192-8

Annex 1:

STATE TRAIT ANXIETY INVENTORY

Read each statement and select the appropriate response to indicate how you feel

right now, that is, at this very moment. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

Here's the 20 questions (items) and measures anxiety test in a table:

Statement	Not at all (1)	A little (2)	Somewhat (3)	Very Much So (4)
1. I feel calm	1	2	3	4
2. I feel secure	1	2	3	4
3. I feel tense	1	2	3	4
4. I feel strained	1	2	3	4
5. I feel at ease	1	2	3	4
6. I feel upset	1	2	3	4
7. I am presently worrying over possible misfortunes	1	2	3	4
8. I feel satisfied	1	2	3	4
9. I feel frightened	1	2	3	4
10. I feel uncomfortable	1	2	3	4
11. I feel self-confident	1	2	3	4
12. I feel nervous	1	2	3	4
13. I feel jittery	1	2	3	4
14. I feel indecisive	1	2	3	4
15. I am relaxed	1	2	3	4
16. I feel content	1	2	3	4
17. I am worried	1	2	3	4
18. I feel confused	1	2	3	4
19. I feel steady	1	2	3	4
20. I feel pleasant	1	2	3	4

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