# TECHNIQUES OF "SILENCE" AND THEIR APPLICATION IN WELLNESS MASSAGES

# Jana VÁŇOVÁ, Milada KREJČÍ

## Abstract

The main goal of the study was to analyse a three weeks interventional program with techniques of "Inner Silence" from the point of view of health support and quality of life in adults. Partial goal of the study was to verify the interventional program "Inner Silence" from the perspective of utility in wellness services. Partial tasks of the study included an analysis of Czech and international literature sources, then setting diagnostic and interventional methods, probands selection, procedure realisation, results analysis and interpretation, and finally setting up a conclusion for practice in wellness. The following diagnostic methods were used: measuring with EEG biofeedback Brain feedback III Deymed, the Czech version of life quality questionnaire of the World Health Organization WHOQOL and a structured interview. Results of the study show that applications of techniques of "Silence" have a beneficial calming effect and induces the alpha rhythm state of brain waves. We came to a conclusion that a suitable use of "Silence" should be implemented as a part of a wellness procedure in wellness massages.

# **Keywords**

Electroencephalography, philosophy, quality of life, meditation, relaxation, sleep, wellness.

## 1 INTRODUCTION

What comes to human mind hearing the world "Silence"? Is the image similar to a soundproof room? The phenomena "Silence" described in the presented study are expressing through good feelings, to feel well, good. It is our inner "Silence" where we go when we need to be alone with ourselves. To imagine inner "Silence" we can use thoughts that help us calm down. This paper presents only small fragments to the topic of "Silence" in relation to the human civilization.

# Wellness as a lifestyle and part of quality of life

Wellness is commonly perceived as a synonym for a healthy lifestyle (Fialová, 2007). Our modern civilization is justly likened to ancient Greek culture, and we can therefore mention the Greek ideal of kalokagathia, which is a harmony between the physical, mental and spiritual aspects, an undeniable search for balance (Šíp, 2008). Wellness is a constant effort to improve the quality of life along with health promotion. Wellness is currently undergoing dynamic development. Because wellness services are prescribed by a doctor, clients visiting wellness centres often spend a lot of money in order to improve and maintain their health and well-being (Krejčí, Hošek, et al., 2016). In the area of wellness, health is conceived in a wider context. According Krejčí, Hošek, et al. (2016), this fact is illustrated by the WHO definition of wellness: "Wellness is the optimal state of health of individuals and groups. There are two focal concerns: the realisation of the fullest potential of an individual physically, psychologically, socially, spiritually and economically, and the fulfilment of one's role in the family, community, place of worship, workplace and other settings" (WHO 2000).

Every wellness specialist works with a combination of four components of biopsycho-socio-spiritual well-being, which the full enables realization individual's potential. (Krejčí, Hošek, et 2016). The borderline between wellness and intoxicating and magical influences is also fragile. Ethical. existential and adaptation contexts are also interesting. Wellness is a complex conceptual construct and it gives rise to discrepancies in its interpretation. This fact shows us what a sensitive part of humanity it is. It is therefore always necessary to think about what wellness gives to each individually.

First time the term "Quality of life" was introduced in USA by the president Johnson in the post-war time in 1960. Later the term spread to Germany in the 1970. German politician Willy Brandt built his election program just on improving of the quality of life. The term was later also used in sociology, because the term quality of life "... is used to distinguish living conditions such as income, political establishment or the number of cars per household from the people's actual feelings about their life" (Hnilicová, 2003). In the

1970, it was found out that quality of life must include cognitive assessment, emotional experience and biological health. Over the past twenty years the "Quality of life" phenomena and its monitoring have been steeply rising. There is a wide range of definitions based on a set of subjective and objective parameters.

Quality of life is a studied phenomenon. To study of quality of life currently means searching for and identifying factors that contribute to a good and meaningful life and a sense of human happiness. Quality of life includes physical health, experience of life, independence, social relations, environment and spirituality. Physical health includes perception of pain, unpleasant feelings, energy, fatigue, sleep and rest. Experience of life shows positive feelings, memory, concentration. and self-confidence, perception of the body and appearance, and negative feelings. Independence includes mobility, the management of day-to-day tasks, the degree of dependence on treatment and work performance. Social relationships include personal relationships, social support and sexual activity. Environment creates a sense of personal safety, home environment, financial situation, health and social care, acquiring new information and skills, spending leisure time, hobbies, the environment and transportation. Spirituality determines how each individual understands his personal philosophy and seeks answers to meaning of the individual life (Dragomirecká and Bartoňková, 2006).

Quality of life is influenced by many factors. These factors include socio-economic status, health, environment, one's own approach to life and emotionality, which implies that quality of life, is both - objective and subjective. "Therefore, quality of life is not the sum of conditions and health

in the current definition by WHO, but it is rather indicative of the influence of health and conditions on the individual "(Hnilicová, 2003). The ultimate goal is to enable individuals to experience the best versions of human life.

Quality of life is increasingly affecting medicine as it is closely related to health. Good health and therefore also quality of life also enables us to work better, which has positive economic consequences. "Quality of life is a highly subjective measure of happiness that is an important component of many financial decisions". (Source: Quality of life [On line]). The highly beneficial impacts of quality of life on individuals, families, society and the economy stimulate many studies and much research.

# Introducing of the phenomena "Silence" as a philosophical background

We perceive inner "Silence" by perceiving beauty, a walk in nature, another person, a massage, and everything else that calms our mind. The oldest texts on this planet are texts by people who have tried to pass on their insights. We know the oldest system of yoga, which helps people achieve a balance between people and their surroundings. It is a path that leads to a connection between the inner and outer world. (Krejčí, Hošek, et al., 2016). Philosophical and religious texts are used for the topic of "Silence".

The topic touches on a sensitive subject of humanity. According old eastern philosophy "Silence is the language of God". This also touches on religion and types of faith. Each person has his own type of faith. People believe in a certain God, nature, science, human potential, etc. Faith is a private matter of every person.

Hinduism Vedanta is coming out of yoga and represents an ancient old Indian non-religious philosophical direction. The word Vedanta can be broken down into two words: Veda and Anta. The word Veda can be identified with sacred science. The second word, Anta, means an end. It describes the uniqueness of human birth. Man is unique in his own way. The ability to think, communicate and create gives him the opportunity to develop and achieve freedom. Vedanta describes the importance of Karma Yoga (right actions that are not motivated by desire), Upasana Yoga (discipline and unification of personality through the discipline of the body, words, senses, mind and meditation), and Jnana Yoga (the yoga of knowledge). Above all, jnana yoga embodies the logical analysis of exploration, which is very close to the Western man today. It offers the following questions: What should be searched for and found? Who is the one searching? Who are we and why are we here? These are age-old questions, the answer to which each person searches for himself. "The spirit is never born and never dies, and because it is not born, it can never die. It is eternal and unchangeable, and it does not die when the body dies"(Paramárthananda, 2013). This quote fully reflects the everpresent idea that we have a potential that all individuals carry within ourselves, where it remains.

Buddhism is not associated with faith in God. It is based on the idea of no self (anatman). This brings a wider dimension of thinking that the idea of self, anatman, does not exist, and it has a spiritual and philosophical perspective (Leaf, 2014).

The still current ancient Greek philosophy is becoming a link between ancient history and the present age.

Especially Socrates philosophy originated in Athens around the mid-5th century. His disciple Plato is the most famous bearer of this philosophy. In published theses, Plato considered the nature and origin of the world in relation to questions of mankind and human society. His works deal with the difference between true knowledge and mere belief, virtue, the possibility of education, a fair and lasting organization of society, and good as the ultimate goal of mankind and society. In his writings, Plato predominantly includes dialogues of his teacher Socrates, who used this to persuade Athenian scholars of how uncertain their supposed knowledge is. Plato also founded the Academy in Athens, which was a used as a model for European universities and scientific institutions.

Today's age is full of excitement and restlessness. In many households, the television is on in every room from morning to morning, making simultaneous audio and information Pollution. Telephones are constantly with, and most young people feel that they have to be constantly connected to at least one social network. Modern technology has removed what used to be natural distance barriers. People are literally attached to the "magical eye" of television and easily accessible internet, which also affects children who are not even two years of age. Attention of people is distracted by ever-present advertising, a lack of privacy, especially in the "open space", the monotone sound of air conditioning, etc. A11 this causes excessive stress. nervousness and a feeling of being overworked, while the rhythm of life continues to accelerate. People increasingly looking for a way to remove them from the cycle of hurry, excitement and pressure to succeed. Some of them visit massages in wellness centres. The phenomena "Silence" should be applied during the work with clients.

## 2 OBJECTIVES AND HYPOTHESES

The main objective of the study was to analyse an interventional program with techniques of "Silence" from the point of view of health support and life quality in adults. The next objective was to introduce peace of mind as the basic need of every human being. The mentioned philosophical background helps to link from past to present and find a centre of one's own being, and at least partially objectify the reason for searching for "Silence".

Two hypotheses were analysed:

# **Hypotheses H1**

After the intervention unit "Inner Silence", proband group A will exhibit a higher incidence of alpha points by at least 10 alpha points compared to proband group B.

## **Hypotheses H2**

After the "Inner Silence" intervention unit, probands of group A will exhibit at least 10 % higher score of physical health of test WHOQOL 100 than probands of group B.

# **3 PROCEDURE AND METHODS**

#### 3.1 Procedure

To determine the health benefits, preresearch was carried out by the author with the consent of 32 participants – clients in wellness massage program. 32 probands were randomly selected from the fifty applicants, when 16 probands (8males; 8 females) were placed in Group A, which absolved the "Inner Silence" intervention. The other 16 probands were collected in Group B (8males; 8 females) which did not absolve the "Inner Silence" intervention, but traditional massage program.

# Age characteristics:

■ Group A (n = 16, 8males; 8 females): average age of 39.13 years; the average age of the females was 38.5 years, and the average age of the males was 39.75 years. In the Group A the female gender is marked A1 - A8 and the male gender is marked A9 - A16.

■ Group B (n = 16, 8 males; 8 females): with an average age of 38.25 years; the average age of the females was 38.38 years, and the average age of the males was 38.13 years. In the Group B, the female gender is marked B1 - B8 and the male gender is marked B9 - B16.

The timetable for the research and tests application was determined. 1st day was realised the WHOQOL questionnaire application. On the 7th day and on 14th day, the EEG test was performed. Finally, on 21st day the final EEG test was performed and the WHOQOL questionnaire was applied again. The timetable was valid for all probands to precise an objectiveness of the research procedure, see Table 1.

Table 1 Timetable of the research procedure including then "Inner Silence" intervention

Week 1	We	eek 2	Week 3
WHOQOL	EEG 1	EEG 2	EEG 3; WHOQOL
1 <sup>st</sup> day	7 <sup>th</sup> day	14 <sup>th</sup> day	21 <sup>th</sup> day - end of research

The "Inner Silence" intervention was applied and implement into the massage unit, using a wellness massage technique to create a state of inner silence. Intervention "Inner Silence" was realised in Group A, represented a wellness massage in combination with the inner silence state instructions. Initially, a standard welcome interview was conducted, after which the probands were left to relax in their inner silence during the massage. In Group B, where the "Inner Silence" method was not applied, a traditional massage procedure was performed during which different topics of daily life were discussed, such as work, etc.

Describing of steps of the intervention:

- 1. Welcoming of proband, inviting them in the "Inner Silence intervention.
- 2. The proband removed their clothing in cloakroom and could borrow a hair tie, hairbrush and cover sheet to the massage table.
- 3. Position of the proband on the massage table: For measuring purposes, the proband laid on their back during each measure of brain activity before the massage. Then the proband was asked to change

- the position on stomach, and the massage started.
- 4. Massage: The back massage was performed with standard massage techniques first on one half of the back and then on the other half. Then it was applied a short Breuss massage. Finally, the proband was massaged from the head down to the buttocks, followed by massage of the interscapulum muscles. After the massage was finished, the proband was asked to turn onto their back, and the massage continued on neck, scalp and face. The massage was combined with light traction of the cervical spine.
- 5. Rest. The probands were allowed to rest for five minutes after the massage.
- 6. Final measurement of brain activity EEG: After the procedure, it was performed two comparative examinations of the electrical activity of the brain.
- 7. Clothing. On the 21st day, the clothed proband was asked for another structured interview, which examined their quality of life using the WHOQOL 100 questionnaire.

Good bye. Each proband who participated in research received three free treatments.

## 3.2 Methods

## Diagnostic methods

 WHOQOL questionnaire - The WHOQOL-100 quality of life assessment was developed by the WHOQOL Group with fifteen international field centres, simultaneously, in an attempt to develop a quality of life assessment that would be applicable cross-culturally, included four items for each of 24 facets of quality of life, and four items relating to the overall quality of life and general health facets.

Domain Facets are incorporated within domains:

- Physical health Activities of daily living; Dependence on medicinal substances and medical aids; Energy and fatigue; Mobility; Pain and discomfort; Sleep and rest; Work Capacity.
- 2. Psychological health Bodily image and appearance; Negative feelings; Positive feelings; Selfesteem; Thinking, learning, memory and concentration.
- 3. Independence Freedom, physical safety and security; Health and social care: accessibility and quality; Home environment; Opportunities for acquiring new information and skills.
- 4. Social relationships Personal relationships; Social support; Sexual activity.
- 5. Environment Financial resources; Participation in and opportunities for recreation / leisure activities; Physical environment (pollution / noise / traffic / climate) Transport.
- 6. Spirituality Religion, Personal beliefs.
- EEG biofeedback Brain feedback III DEYMED ® The biofeedback with this all-in-one portable system.

Neuromap system featuring high sample rates, continuous on-line impedance monitoring and an intuitive user-friendly interface.

"Inner Silence" Intervention - three interventional weeks program with techniques of "Inner Silence" from the point of view of health support and quality of life in adults, based on mindfulness relaxation and breath concentration. Mindfulness involves paying attention each moment to things as they are, with an open-hearted and non-judgmental attitude. It is the process of observing thoughts, emotions and sensations as they come and go, with an attitude of curiosity and acceptance. Mindfulness relaxation help to be less caught up in stress, worry, low mood, by allowing us to develop a greater capacity to engage in our lives by being more fully present (Krejčí, 2016).

Statistics - descriptive statistics methods as frequencies, measures of central tendency (averages) and percentage were used in program Excel.

#### 4 RESULTS AND DISCUSSION

Hypotheses H1 declared that: "After the intervention unit "Inner Silence", probands of Group A will exhibit a higher incidence of alpha points by at least 10 alpha points compared to the probands of Group B" was verified. The electrical brain activity in all three measurements increased significantly more in probands of Group A in comparison with the probands of the Group B, see Figure 1.

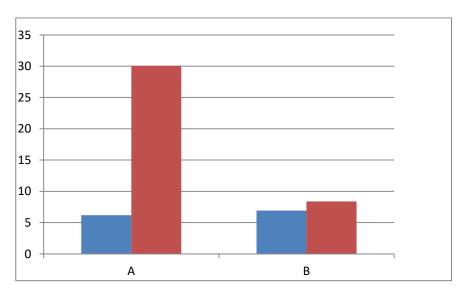


Figure 1 The comparison in the third measure of electrical activity between the groups A and B (blue colour = before the massage unit, orange colour = after the massage unit), (n=32; Group A = 16, 8males; 8 females; Group B = 16, 8males; 8 females)

In the Table 2 are presented results of the probands in the comparison of different domains of the "WHOQOL" in score reached on 1st day comparing to 21st day after the intervention period. From the Table2 overview we can declare that between Group A and Group B are significant differences in positive increasing of scores in different domains, especially in the domain "Physical Health".

The results presented in the Table 2 show a summarization of the quality of life,

summarizing individual domains of the probands in the Group A and in the Group B.

Table 2 The comparison of positive increasing in score of WHOQOL domains in the probands of Group A (A1-16) and in the probands of Group B (B1-16), (n=32; Group A = 16, 8 males; 8 females; Group B = 16, 8 males; 8 females)

Individual domains	Day	Group A Score of A1-16	Group B Score of B1-16
	1	271.3	275.6
Domain I.: Physical health	21	326.9	309.4
Domain II : Evnerience of life	1	527.5	538.1
Domain II.: Experience of life	21	577.5	558.8
Domain III : Indonandanaa	1	416.9	421.9
Domain III.: Independence	21	446.9	445
Domain IV . Casial relationships	1	335	338.8
Domain IV.: Social relationships	21	344.4	340.6
Domain V.: Environment	1	890	896.9
Domain V., Environment	21	898.1	903.8
Domain VII - Cninituality	1	109.4	113.8
Domain VI.: Spirituality	21	113.1	118.8

Hypotheses H2 that: "After the "Inner Silence" intervention unit, probands of the Group A will exhibit at least 10 % higher score of Physical health of test WHOQOL 100 than the probands of the Group B", was verified. Analyses of the results and their comparison show that after the intervention unit the probands of the Group A realised a positive improvement in 55.6%; in comparison of the probands of the Group B, which improvement was realised in 33.4% only, see the Table 2.

The research confirmed Hypotheses H1 and the Hypotheses H2, confirming the improved effect of the wellness massage with the simultaneous application of the "Inner Silence" intervention unit. Given that the research took place over 21 days and positive results could be seen over 14 days, the "Inner Silence" program can be included in a 2-week wellness program.

Based on the results of the Deymed diagnostic of EEG, the results analyses show that the "Inner Silence" intervention significantly promoted a higher incidence of alpha rhythm see Figure 1. The alpha rhythm is a direct indicator of relaxation and it is a direct indicator of human health. occurrence promotes the proper functioning of the body and regeneration. If we learn to apply the "Inner Silence" intervention on a regular basis, we will see very fast positive effects on all aspects of human activity. The advantage of many "Silence" techniques is their easy application and accessibility in everyday life. Some "Silence" techniques do not have to be specially trained, and every person can pursue them on a daily basis. The positive effect of "Silence" techniques deepens with repetition. Clients who underwent the "Inner Silence" method for the first time were very pleasantly surprised by their immediate positive mood. Many people described a feeling of "goose bumps". Even those who only had a traditional type of massage were very satisfied with the procedure, but they didn't describe a change in their experience.

The questionnaire survey showed that the use of the "Inner Silence" intervention improved the quality of life in the Domain "Physical Health" much more than a traditional massage procedure. This may be a reflection of the beneficial effect of the "Inner Silence" intervention in higher alpha activity on the quality of life and therefore on health.

We recommend investigating the "Inner Silence" intervention in future research again in standard condition in more probands of the different age periods. On the base of the results of the presented study we can recommend in the practice work of wellness specialists to implement he techniques of "Inner silence", especially before and during the wellness massage procedure.

## **5 CONCLUSIONS**

The comparison between women and men has shown that the "Silence" technique positively affects both women and men. Men exhibited somewhat greater improvements, which may have a direct connection to the greater improvement in men during a massage.

The conclusions show broad a application of the "Silence" technique, as well as the fact that the Silence technique can accompany any procedure or it can be provided separately. In practice, this offers a wide range of uses for the application of the "Inner Silence" method. Moreover, some individuals can apply some "Silence" techniques on themselves without any training, or they can be applied by the "Inner Silence" method. The "Inner Silence" method does not need to be painstakingly practiced, and its effect increases with repetition as evidenced by the EEG measurement, which is its indisputable advantage over other techniques and methods. If the "Inner Silence" method is practiced more often, we will achieve better relaxation, greater relaxation effects and health benefits. We must realize that "Silence" techniques include sleep, relaxation and meditation.

#### **6 REFERENCES**

- Fialová, Ludmila, ed. (2007) *Wellness*, zdraví a životní styl. Praha: Karolinum.
- Dragomirecká, Eva a Jitka Bartoňová. (2006) WHOQOL BREF, WHOQOL 100: World Health Organization Quality of Life Assessment: příručka pro uživatele české verze dotazníků kvality života Světové zdravotnické organizace. Praha: Psychiatrické centrum.
- Hnilicová, Helena. *Kvalita života a její význam pro medicínu a zdravotnictví* http://zdravi.euro.cz/clanek/prilohale karskelisty/kvalitazivotaajejivyznam promedicinuazdravotnictvi151408 [On line] 2003. [cit. 2017 03 09]
- Krejčí, Milada. (2017) Člověk a zdraví. In: Krejčí, M., Šulová, L., Rozum., F., Havlíková, D. *Výchova ke zdravému životnímu stylu*. 2. aktualiz. vyd. Plzeň: FRAUS.
- Krejčí, Milada a Václav Hošek. (2016) *Wellness*. Praha: Grada Publishing.
- Leaf, Murray, J. (2014). *The anthropology of eastern religions: ideas, organizations, and constituencies*. Lexington Books Hardcover on Amazon.com.
- Paramárthananda, Swámí. (2013). *Védanta,* posvátná nauka indické filozofie. Praha: ONYX.
- Šíp, Radim, ed. (2008) Kalokagathia: ideál nebo flatus vocis? Brno: MU.

Váňová, Jana. (2017). *Uplatňování technik* "Ticha" v masáži wellness. Praha, VŠTVS PALESTRA.

WHOQOL (2017) *Measuring quality of life*. [On line] Available on: <a href="http://www.who.int/mental\_health/m">http://www.who.int/mental\_health/m</a> <a href="edia/68.pdf">edia/68.pdf</a> [cit. 2017 05 03]

# 7 CONTACTS

Mgr. Jana Váňová College of PE and Sport PALESTRA Prague, Czech Republic E-mail: javanova@centrum.cz

Prof. PaedDr. Milada Krejčí, PhD. College of PE and Sport PALESTRA Prague, Czech Republic E-mail: krejci@palestra.cz