

## Concept of the Yoga Intelligence

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**Abstract:** *In this paper, we analyze sustainability of the new concept: yoga intelligence. Discipline that is old for thousands of years has been analyzed from the new angle. Yoga has been perceived as the form of intelligence, considering that it integrates abilities which establish balance between physiological, emotional, cognitive and motivational processes. Yoga concept is based on existence of the latent processes and ability of their recognition, understanding and application, with the goal to achieve the unity – state of samadhi. The starting point in creation of the concept of yoga intelligence is the search for meaning. In this paper, we analyze the questionnaire constructed for estimation of the yoga intelligence and there was expressed importance that shows the need for the further researches and confirmation of its validity.*

**Key words:** *yoga, intelligence, yoga intelligence, concept of the yoga intelligence, meaning*

### Defining the Yoga Intelligence

In an attempt to define yoga intelligence (YQ), it was not only searched for a definition that includes all its aspects. Primarily we were interested in the angle that position yoga intelligence in perception and understanding of the life, self and environment, which affects our personality and beliefs.

It should be borne in mind that yoga exists for centuries as an independent discipline of self-development and philosophy of living. Due to the effectiveness of this method, we can find it in the practices of many religious schools. Modern approach requires from us the unbiased perception and research of yoga as the discipline of self-improvement, its methods and effects of practice.

Yoga in direct translation means unity. Thus, yoga means fragmentation, disunity offering their methods for connecting into the unit. Absence of the contradictory tendencies is to be realized by focusing (*ekagratachita*). This kind of composure stops abiding of the consciousness in fragments by offering a new comprehensive and immediate perception.

Yoga practice allows reaching the interlocking, i.e. calming down the parts of the turning consciousness (*yogash chitta vrtti nirodha*<sup>1</sup>. I: 2, *Patanjali*) and abiding of the practitioner in his/her essential being, i.e. authentic I.

Yoga practitioner changes the perception on many levels: energy - in the awareness, understanding and managing energy movements; physiologically - increasing the level of vital capacity; emotional - in identifying, understanding and expressing their feelings, in compassion; mind clearness; creative outbursts in the form of need for achievement of ideas in a creative elation, strengthening a sense of security that comes from strengthening the self-reliance, and ability to realize the meaning. These developmental changes occur as a result of approach to the authentic I or the "core". More clearly, there happens extension of perception (perceptual field) as response of the core after application of the yoga practice.

On the path of self-development, the awareness of these abilities strengthens in the yoga practitioners and therefore the ability of understanding, expression and management. Therefore, in this study we perceive yoga as a concept of intelligence.

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<sup>1</sup> Nirodha – suspension

Yoga intelligence can be defined as the ability to use resources as a whole, the ability to realize, understand and manage our deepest meanings and purposes by searching to the meaning, the ability to recognize all of the life's unpredictable events as the signs for development and maturation, relying mostly on the depth of experience, i.e. insight, with the aim of achieving unity - the state of Samadhi.

We can perceive yoga intelligence as a complex adaptive system that encourages the constant transformation of the elements within the system. We perceive it as the ability to recognize the diversity and uniqueness in the perception of the purpose and meaning in the mind, emotions and behavior. Yoga achieves ability of meaningful monitoring of the own and others' thoughts, feelings, emotions and moods, physiological and motivational processes and their usage as guides for thinking and behavior. Yoga practice transforms our perception of reality. Yogi searches for the deeper and deeper meanings. Yoga practice enables individual to integrate all fields of the life activities through the discourse of the purpose and meaning.

Yoga intelligence also involves ability of analytical and logical reasoning only after the evaluation that determines how meaningful would be to analyze that phenomenon. Mind processes are part of a complex adaptive system and they are activated in every contact with the environment, determining its meaning. Yoga intelligence insists on maintaining self-regulation and control as for the yogi thinking and working effectively means that emotions, thoughts and behaviors aimed at the finding of meaning - reaching the "truth" - samadhi. Yoga intelligence integrates important capabilities that make person's life. We should not forget that emotions are experience of our evaluation and subjective relations toward things, events and the one's own actions.

Cognitive and conative dimensions imbued with a sense make a specificity of the yoga intelligence. This is what separates yoga intelligence from the academic, social and emotional intelligence.

Therefore, yoga intelligence is the ability to control one's development while searching for purpose in the process of making aware, understanding and management of cognition (knowing), affects and motivation.

### **Yoga – in search for meaning**

Perception is the first function that a new-born child uses to receive information about the environment. Period in which the child names the things we call phase: IT. Another interesting phase is the phase. GIVE, when the child observes the objects by taking them, and the most often by putting them in the mouth. The child sees the relationships between things and phenomena. But the most important phase of development for us is the one when being asks the question: WHY?

Why is a key stage in the development of all beings. Although many, regardless of the physical age, are still in the phase GIVE, "why" is necessity that will surely come. The innate need of a self-conscious person is to comprehend, understand, find meaning, fit the fragment into the whole. That is the process that yoga encourages. Each internalization of the segment brings us closer to the permeation with the unity.

Diversity in relation to the religious schools is reflected in the fact that they indicate the correct behavior in exchange for the favor of the creator, while the yoga methodology focuses on improvement of the physical, emotional and intellectual potential of the individual. Yogi does not expect sense as a reward for good and moral behavior. By reaching the direct experience, he achieves a deep understanding that results in a proper conduct. Yogi himself contributes to the harmonious relation of physical, emotional and intellectual functions. Yoga is the discipline that returns an individual to here and now – to the activities that can bring him fulfillment and fullness now. Yogi assumes that he/she possesses inexhaustible resources by which he/she can reach the ultimate meaning – self-realization – Samadhi. The achievement is not in another time (in the promised future), it is now (.. give your best and be satisfied with what you achieved). Every moment is the path and achievement, the activity and the peace of satisfaction (Ananda).

The orientation of the yogi to his own potentials and ability to achieve to realize them, implies certainty based on direct experience rather than submission to authority which requires a certain opinion or behavior. Self-confidence in yogi comes from knowing oneself and one's own experience of

integration that occurs at every level. Yogi succeeds to see reality as it is, to see it in a variety of unique individual manifestations and at the same time in its unity – oneness.

### The concept of yoga intelligence

**Table 1.** The construct of yoga intelligence

YOGA INTELLIGENCE		
SEARCH FOR MEANING		
AWARENESS OF ONESELF AND ENVIRONMENT	UNDERSTANDING	MANAGEMENT
ENERGY		
PHYSIOLOGICAL		
EMOTIONAL		
THOUGHTS		
CREATIVE		
COMMUNICATION		
MOTIVATIONAL PROCESSES		

We have started from the premise that yoga system can only represent a concept that integrates key elements separated by Patanjali. Managed by that stand point, there was created the concept of the yoga intelligence that is made of the skills that help in successful coping with the challenges of everyday life on the path of self-improvement to self-realization – Samadhi. Yoga practice includes an awareness about the harmonious activity of all physiological systems (nervous, respiratory, cardiovascular, muscular, digestive, urinar, bone), the ability of daily care (control) but also managing some of the processes. The yogi acquires an ability to identify, understand and manage emotional, cognitive, creative, communication and motivational processes.

The concept of yoga intelligence consists of three key components: awareness, which includes: awareness of self and awareness of the environment, ability of understanding and ability of managing internal processes and relations.

Self-awareness is the ability of a yogi to recognize his/her energy, physical, emotional, intellectual, communication and motivational potentials, as well as accurate assessment and evaluation of the same ability. Awareness of the own self enables recognition of the internal signals and the ability to recognize the effect that they have on us and the environment. Awareness helps to the yoga practitioner to identify what he/she believe in, to identify available resources, beliefs, the goals i.e. awareness of their own deepest life goals and responsibilities that they take. Objectivity in the self-assessment provides an accurate insight into one's own capabilities, strengths and limitations and helps in the selection of skills to be developed in order to continue the process of self-improvement.

Awareness of the environment consists of three elements: empathy, attentiveness, and awareness of the unity.

**Table 2.** Ability of understanding as a component of the yoga concept

ABILITY OF UNDERSTANDING		
DIRECT	1	Understanding of the meaning, process, relations and phenomena is the result of the <b>direct experience</b> of the yoga practice
IMPLIED	2	Understanding is the result of analysis, comparisons and synthesis
CONTEXTUAL	3	Understanding is the answer in search for meaning

Understanding comes from the analysis and comparison, but in yogi it happens more often as a result of direct insights that dotted like pearls resulting from yoga practice. It helps in understanding the meaning and purpose, bringing practitioner into the contact with the depths of his being and deep sources of the inner potentials. It allows the understanding of the experience to be started from the depths up to the surface of our being where we think, perceive, speak and work.

**Table 3.** Ability of management as the componens of the yoga concept

ABILITY OF MANAGEMENT OF ONE'S OWN POTENTIALS	
1	Management of one's own: energy, physical and physiological, emotional, reflective, creative and motivational processes (using yoga techniques: <i>kriyas, bandas, mudras, asanas, pranayamas, pratjahara, dharana, dyana</i> )
2	Distinguishing important from unimportant. To think, speak and do only what is aimed at personal development and general welfare.
3	Self-control ( <i>brahmacharya</i> ) - inhibition of any form of pleasure in favor of enabling development.
4	Unobtrusive initiative – not to withdraw from the self-improvement.
5	Adjustability – using all resources to ensure sustainability.
6	The consistency in values, in implementation of yoga practice, emotions and behavior.
7	Orientation towards self-development: an effort to always work better and achieve more. "Give your maximum and be satisfied with the achieved".
8	Positive view of the world, oneself and one's life, present and everyday life.
9	Acceptance of self and reality as it is.
10	The easiness in achieving because all self-developmental steps are carried out within the limits of comfort.

**Table 4.** Ability of relations management as the component of the yoga concept

ABILITY OF RELATIONS MANAGEMENT	
1	Nurturing relationship (support and encouragement derived from the relation master -student)
2	Selflessness in helping seekers (students)

3	It is a catalyst of developmental changes
4	Resonance of the yoga master
5	Management of relations in the group of participants
6	Synchronicity (harmonization on the energy level)
7	Ethics (integrity, responsibility, compassion and forgiveness emerged from <i>yama</i> and <i>niyama</i> )

Ability to manage oneself and relationships is achieved by using a wide range of yoga techniques. Of all the elements, self-motivation should be emphasized with particular care as a key characteristic that follows the practice of yoga and that arises from the insatiable need of the search for meaning - Samadhi. Self-motivation is the ability of persistence in spite of dealing with the complexity required by the yoga practice, with the gradual development or difficulties that accompany developmental path of yoga. Self-motivation includes the ability to motivate oneself to persist despite the difficulties and frustrations, the ability to delay receiving the internal award along with the capacity to manage the one's own potentials, in order that bad mood doesn't effect efficiency in thinking. Yoga intelligence helps in self-understanding, i.e. in identifying motives that really initiate behavior, but also the acceptance and ability to pursue higher motives, enabling person to act on them by the breakdown of old motives and rising to a higher motives. The process of self-improvement of a yogi is accompanied by the absence of resistance, connection of the deep developmental experiences with external interests, genuine concern with the essence in the appearance, engagement without an external stimulus and satisfaction in the learning process.

Ethics is the ability to distinguish correct from incorrect. Ethical behavior is gained by adopting the principles of *Yama*. The moral code to yogi represents the capacity to reflect. Ethics is the nature of yoga because improvement enables us to reach the insights of the unity, which contributes to the adoption of universal human values, choice of human goals and activities. The person with integrity features harmonized behavior in accordance with universal ethical principles. Nurturing relation implicates the teacher – student relation and is based on the principle of support and encouragement. Forgiveness is an important principle that leads to tolerance for mistakes, the one's own mistakes and mistakes of the others. Synchronicity represents the interaction on energy, non-verbal level that allows non-verbal relationship with other people. In yoga practice, this ability is particularly strongly expressed in supporting the students.

### Measuring the Yoga Intelligence

Accepting yoga as a life philosophy and practice leads to changes in motivation and its dynamics in an individual. To detect the change, it must be expressed through a change in behavior or attitudes. More precisely, we can not discern the motives of a person, but we can describe and categorize their behavior. Starting from the behavior patterns that correlate with these yoga intelligence process, it is possible to describe the kind of behavior that shows high yoga intelligence, and hence a higher motive.

Difficulties in measuring the yoga intelligence are in the inconsistency between the need that the tests have good psychometric characteristics and at the same time to satisfy the context of the concept itself. Namely, if traditional tests of general intelligence are applied, which consist mainly of abstract tasks, precisely defined and with valid psychometric characteristics, there appear a problem of context, or the fact that such tasks are rarely encountered in real life situations. The situation is complicated by the fact that yoga intelligence provides finding of a solution in a variety of ways, making it difficult to create an instrument for measuring.

In this study we used an instrument with good measurement characteristics for the assessment of the certain abilities incorporated in the model. There has been developed a questionnaire for the assessment of the yoga intelligence that is designed to require the respondents to make ranking of the given options of behavior in different conditions. The measurement is carried out by using a direct assessment of skills and self-assessment scales. There was constructed multiple factor scale of the yoga intelligence that contains subscales divided into classes.

### The characteristic of measuring instrument YQ (Yoga Intelligence)

There was conducted the survey with the aim to construct a measuring instrument that consists of three basic components of "yoga intelligence", which are awareness, expression and management. All three subscales were operationalized by items which assess the following systems: energy, locomotor, respiratory, cardiovascular, nervous, digestive, genitourinary system, then the mental processes, emotions and moods, and perseverance. All subscales were Likert-type. Since the study included 65 subjects, it was decided to factorize each subscales separately, i.e. to treat each of them as a separate measuring instrument.

### Analysis of the latent space of subscale Awareness measurement

With the aim of checking the validity, Awareness subscales was subjected to principal components analysis. Kaiser's criterion of the characteristic roots indicates that there can be extracted even twenty-one factor in this space, while the *scree* test criterion recommends four factors, which are retained in the further analysis and which together explain about 49% of the total variance. For a clearer insight into interconnection factors were rotated oblique angle Promax rotation.

**Table 5.** Characteristic roots and percentages of the explained variance

	Characteristic root	Percentage of variance	Cumulative percentage
1	24,161	29,465	29,465
2	6,006	7,324	36,789
3	5,080	6,195	42,983
4	4,812	5,869	48,852

In defining factors, all saturation above 0,4 were taken into consideration.

**Table 6.** Extract from the matrix of structure of the first Promax factors

	1
After practicing yoga I feel that I can touch a person although there is no physical contact.	,713
I notice when the interlocutor breaths shallow.	,734
I can distinguish right from incomplete breathing in interlocutor.	,814
I notice greater mental freshness in friends who breathe properly.	,731
According to the muscles tone and the tone of the face muscles, I can recognize overall status of the muscular system.	,737
When I look at friends who breathe properly I understand that proper breathing contributed to a growth in total energy and working capacity.	,762
I recognize the needs of my body for a certain type of food (proteins, vitamins, carbohydrates).	,763
I notice when someone wants to hide their muscles tension.	,864
I notice when someone wants to hide their bodies non-acceptance.	,743
I notice when someone is hiding their true feelings.	,818
I notice when someone feels differently than what was in the mood.	,726

The first factor extracted gathers items that talk about proper breathing, awareness of the condition of the muscular system and emotions. People who achieve high scores on this factor are aware of breathing, so that his and other people, have a strong awareness of the locomotor system and well-observed emotional states. Factor is called: Awareness of proper breathing, a condition of the muscular system and concealing emotions.

**Table 7.** Extract from the matrix structure of the second factor promax

	<b>2</b>
I can differ when a friends is sad, and when he/she is disappointed.	,715
<b>I feel when there is a nervous exhaustion.</b>	<b>,630</b>
I can easily notice changes in mood of my friends.	,735
I can distinguish when someone's muscles are strained, and when they are relaxed.	,778
I easily notice people who have a muscular tension.	,740
It is easy to distinguish between relaxation and nervous tension in other people.	,838
I notice in other people when their mind is at peace.	,715
<b>I can easily notice people who feel helpless.</b>	<b>,647</b>
<b>I can distinguish the presence of muscle elasticity and muscle stiffness in other people.</b>	<b>,630</b>
<b>I notice when someone is trying to hide their bad mood.</b>	<b>,665</b>
<b>I always feel when certain muscles group is activated.</b>	<b>,675</b>
I notice when someone feels depressed.	,754
<b>I notice both muscle and deep relaxation in the students after yoga class.</b>	<b>,698</b>
I distinguish when friends eat when hungry, and when they eat because of the need for pleasure.	,712

Another factor is defined by items that talk about the state of consciousness and muscles system and tension, then about depression and low mood, especially in other people. The factor has a maximum saturation in items: It is easy to distinguish between relaxation and nervous tension in other people; I can distinguish when someone's muscles are strained, and when they are relaxed; I notice when someone feels depressed and similar. Factor is named: Awareness of physical and mental tension and mood changes in others.

**Table 8.** Excerpt from the matrix of structure of the third Promax factor

	<b>3</b>
When practicing the <i>asanas</i> (yoga postures), I feel a pleasant warmth in the body (hands and feet).	,700
<b>In meditation, I feel a tingling sensation along the spine and pleasantly warm body.</b>	<b>,635</b>
After yoga class I express my thoughts more clearly and more concise.	,761
I always try to work better than I used to work	,714
<b>I enjoy deep breathing.</b>	<b>,637</b>
<b>In those who practice yoga, I notice that their body is always pleasantly warm and that heat increases while they exercise.</b>	<b>,622</b>

The third factor is defined by the items of heterogeneous content, but the greatest saturation show the following items: After yoga class I express my thoughts more clearly and more concise; When practicing the *asanas* (yoga postures), I feel a pleasant warmth in the body (hands and feet). This factor is named: Awareness of body heat and better mental status after yoga.

**Table 9.** Excerpt from the matrix structure of the fourth Promax factor

	<b>4</b>
I always finish what you started.	,781
If I do something difficult, I most often persist.	,788
I always persist in achieving my goal.	,735
<b>Even if it doesn't go easily, I finish the work.</b>	<b>,661</b>
I always achieve the most of what I predicted.	,766
<b>I feel ready to take responsibility for tasks that I execute.</b>	<b>,576</b>
<b>I know what I want to accomplish in life.</b>	<b>,532</b>

The fourth factor gathers items that generally relate to persistence, so it is called: Awareness, perseverance and persistence in achieving goals and objectives.

Factor analysis showed that this subscale don't have one general factor of measurement, given the high number of factors that have a characteristic roots bigger than one, i.e. there are more subjects of measurement or more aspects of the measured phenomenon. There were extracted four key factors that together explain about half the space of the measurement of this instrument. The mutual correlation of factors has been shown that the subjects of measurement of the first and second factor significantly overlap (mutual correlation 0, 536), while the first and third factors correlates minimally. It is clear that, metrically speaking there could be constructed even more valid scales for the measured phenomenon, but also, this level of validity can be accepted in this sample, while we could work more on the homogeneity of the measuring instrument. Items that have the highest saturation on the extracted factors (greater than 0,5) also show the highest item-total correlations, so they will be retained in the final design of the measuring instrument.

Reliability of the subscale Awareness is expressed by Cronbach's alpha coefficient (Alpha = ,9583) which is very high level of reliability.

Discrimination of the awareness scale items was tested with item-total correlations and insights into the amount of alpha coefficient in the case of omitting items. The results showed that discrimination of the most items is at the satisfactory level (correlation ranging from 0,3 to 0,8) and items that have an item-total correlation lower than 0,3 are items that have been shown to ensure higer reliability of the measuring instrument if excluded, so they will be left out or worded in the next version of the instrument.

### Analysis of latent measuring space of the expression subscale

Keiserov criterion of the characteristic roots indicates that in this space can be extracted nine factors, and *scree* test criterion recommends up to the five factors, which we accepted. They are rotated by oblique angle Promax rotation and together they explain about 64% of variability.

**Table 10.** Characteristic roots and percentage of explained variance

	<b>Characteristic roots</b>	<b>Percentage of variance</b>	<b>Cumulative percentage</b>
<b>1</b>	<b>15,170</b>	<b>35,278</b>	<b>35,278</b>
<b>2</b>	<b>5,243</b>	<b>12,192</b>	<b>47,470</b>
<b>3</b>	<b>3,123</b>	<b>7,264</b>	<b>54,734</b>

4	2,172	5,052	59,786
5	1,787	4,155	63,941

**Table 11.** Extract from the matrix of structure of the first Promax factor

<b>Factor</b>	<b>1</b>
I can describe my current energy situation.	,804
I can describe in what parts of the body I feel the heat when practicing yoga techniques.	,802
<b>I can name most of my energies.</b>	<b>,743</b>
<b>Persons to whom I express the energy warmth and affection can always feel that.</b>	<b>,735</b>
<b>I can describe the changes in circulation when performing inverted yoga postures (candle, plow).</b>	<b>,792</b>
<b>I can easily describe the state during the nerve balance.</b>	<b>,739</b>
I can express reasons for my nervous tensions.	,861
I can describe the state in the bladder before micturition.	,869
<b>I can describe the change in mental process after the application of breathing techniques.</b>	<b>,790</b>
I can almost always describe the state in muscles that are activated.	,833
<b>I understand the importance of the movement of diaphragm on the organs in the abdominal cavity during the proper yoga breathing.</b>	<b>,722</b>
<b>I understand the need of the seeker for meaning and purpose.</b>	<b>,741</b>
<b>I can describe every phase of complete proper yoga breathing and movement (in the body, chest) that accompany it.</b>	<b>,770</b>
I can describe the condition in muscles, joints and bones.	,812

The first factor gathers items of the heterogeneous content that primarily speak about expressing energy status, locomotor system, neural processes, cardiovascular and digestive system. This named this factor: Good expression of energy and somatic aspects.

**Table 12.** Extract from the matrix of structure of the second Promax factor

	<b>2</b>
I can almost always describe in words my feelings and emotions.	,742
I can easily express emotions in words that I experience at the certain moment.	,791
I am able to express my emotions.	,770
I can describe how I feel.	,820
I can say that I know a lot about my emotional state.	,674
I can easily express my thoughts.	,822
I can easily name most of my feelings.	,697

The second factor is defined by items that speak of expressing emotions, by its content, and good knowledge of one's emotional status, as well as easy expression of their own thoughts. Factor is called: Good expression of emotions and thoughts.

**Table 13.** Extract from the matrix of structure of the third Promax factor

	<b>3</b>
When something does not suit me, I almost always show that.	,620
My mood is always visible.	,691
I usually understand why I feel bad.	,639

The third extracted factor gathers items that speak about good expression of mood, so that's how it is named.

The fourth factor gathers items that, by their content, speak about the problems in expression of physiological needs and emotions. People who achieve high scores on this factor have a problem to show that they are hungry or thirsty, that they need to go to the toilet, when they are in company. It's also hard to them to express their emotions to others, as evidenced by the negative correlation of factors with statements such as: I generally easily express my sympathy to the person who I like; I am able to express my emotions. Factor is called: Difficulties in expressing emotions and needs.

**Table 14.** Extract from the matrix of structure of the fourth Promax factor

	<b>4</b>
In company, I don't show hunger nor thirst, I wait to get home so that I meet these needs.	,714
In company, I can never express the need to urinate and bowel emptying. I prefer to do that at home.	,640
<b>I easily think of the way to approach the person that I like.</b>	<b>-,347</b>
<b>I am able to express my emotions.</b>	<b>-,435</b>
I can easily describe when I feel hunger.	-,564
I generally easily express my sympathy to the person who I like.	-,675
In the company, I feel uncomfortable when I need to urinate.	,618

**Table 15.** Extract from the matrix of structure of the fifth Promax factor

	<b>5</b>
I can almost always describe the movement of energy that occur during my practice of yoga.	,765
I can describe the energy movements.	,341
My behavior reflects my energy status.	,371
I can easily express in word the energy movements that I experience at the certain moment.	,383

The fifth factor is determined by the items which primarily talk about the energy system, i.e. the easiness of expressing the energy movements. Factor is named: Expression of the energy movements.

Factor analysis showed that this subscale includes several aspects of the measured phenomenon. Extracted five factors explain together about 64% of the measurement space of this instrument, while the first factor alone includes 35% of variability, so we could treat it as a general expression. We should also point to the fact that the measurement subject of the first and second factors overlap (the correlation coefficient was of moderate intensity). The amount of explained measuring space of the instrument can be considered satisfactory, so the instrument satisfactory valid. Reliability of the subscale Expression is expressed by the Cronbach alpha coefficient (Alpha = ,9431), which is a high level of reliability. Discrimination of the items of scale awareness

was tested with the item-total correlations and the results show that discrimination is acceptable for all items, except for questions: 9,19,22,100,176, which should be omitted or reformulated.

### Analysis of latent measuring space of the management subscale

Results of analysis of the main components indicated that Kaiser's characteristic root criterion recommends that in this space there can be extracted fifteen factors, while the *scree* test criterion recommends up to five factors. There will interpreted five factors that were rotated by oblique angle Promax rotation and together they explain about 54% of variability.

**Table 16.** Characteristic roots and percentage of explained variance

	Characteristic root	Percentage of variance	Cumulative percentage
1	17,617	30,907	30,907
2	3,881	6,809	37,717
3	3,177	5,573	43,290
4	3,106	5,450	48,739
5	2,840	4,982	53,722

**Table 17.** Extract from the matrix of structure of the first Promax factor

	1
By practicing breathing techniques, I manage to normalize heart rate and achieve deep relaxation.	,752
During urination, I can consciously stop urinating and start it again by sphincter control.	,745
After yoga class, nervous status is balanced.	,786
From the unpleasant experience I learn how not to behave in the future.	,760
I accomplish a nerve rejuvenation by the yoga techniques.	,862
I tend to soften unpleasant emotions and to enhance pleasant emotions.	,724
By practicing yoga I manage to establish a nervous balance.	,854
By practicing yoga my senses sharpen and my perceptual field extends.	,759
<b>With the proper yoga breathing, I achieve clarity of mind.</b>	<b>,687</b>
<b>As soon as you notice shortness of breath, I begin the process of proper breathing.</b>	<b>,657</b>
<b>I achieve peaceful and calm thought process by proper yoga breathing.</b>	<b>,689</b>
When I want to soothe the mind, I start the cycle of proper yoga breathing.	,749

The first factor explains the largest percentage of variance (about 31%) and gathers the items that talk about management of the nervous system and respiratory processes. The factor has a very high saturation with items like: By practicing yoga I manage to establish a nervous balance; After yoga class, nervous status is balanced; By practicing breathing techniques, I manage to normalize heart rate and achieve deep relaxation and similar. Factor is called: Managing the nervous system and respiratory processes.

**Table 18.** Extract from the matrix of structure of the second Promax factor

	<b>2</b>
<b>I can easily achieve the state of muscle relaxation.</b>	<b>,630</b>
I easily encourage the work of all the energy centers.	,808
I easily encourage energy movement along the <i>Sushumna</i> , <i>Ida</i> and <i>Pingala</i> channels.	,802
I think only what makes sense.	,707
<b>I manage to concentrate easily.</b>	<b>,554</b>
<b>I manage with ease to calm my mind.</b>	<b>,648</b>
<b>I can keep the good mood even if something unpleasant happens to me.</b>	<b>,543</b>
<b>I easily separate the important from the unimportant.</b>	<b>,636</b>
I easily direct thought towards achieving the goal.	,761
I easily manage to maintain clarity of mind.	,790

The second factor defines the issues that express management of thoughts and energy movements. The high saturation have the items like: I easily encourage the work of all the energy centers; I easily encourage energy movement along the *Sushumna*, *Ida* and *Pingala* channels; I easily manage to maintain clarity of mind; I easily direct thought towards achieving the goal. Factor is named: Management of energy and thoughts.

**Table 19.** Extract from the matrix of structure of the third Promax factor

	<b>3</b>
I can easily postpone the need to urinate.	,585
I urinate regularly and easily.	,655
When I notice the anus muscle contraction, I relax it easily	,590
I regularly defecate.	,618
I focus the attention by proper yoga breathing.	,745
By proper yoga breathing, I achieve clarity of mind.	,690
As soon as you notice shortness of breath, I start the process of proper breathing.	,683

The third factor gathers items that, in their content, speak about management of physiological needs and the respiratory system. The high saturation on this factor have the items: I focus the attention by proper yoga breathing; By proper yoga breathing, I achieve clarity of mind; I urinate regularly and easily; When I notice the anus muscle contraction, I relax it easily. Factor is called: Managing physical needs and breathing.

**Table 20.** Extract from the matrix of structure of the fourth promax factor

	<b>4</b>
When I am in a good mood, every problem seems to me easy to solve.	,702
When I feel happy and cheerful, then I learn and remember the best.	,718

The fourth factor concerns the impact of mood, in terms of lack of control and surrender, which affects mood, problem solving and thinking processes. This factor is called: The influence of mood.

**Table 21.** Extract from the matrix structure of the fifth factor promax

	<b>5</b>
By practicing yoga, my demands for food are normalized.	,567
I take the food in only when I feel hunger and thirst.	,672
I take the food in, in small amounts, a few times a day.	,792

The fifth factor is defined by the items that express meeting the needs for food, i.e. about the good management of food intake.

Factor analysis showed that the subject of measurement of this scale is multiple. Five extracted factors explain about 54% of the measuring space and they inter-correlate, which means that their subject of measurement often overlaps, so the validity and homogeneity of this subscale could be improved. Reliability of the subscale Expression is expressed by Cronbach's alpha coefficient ( $\text{Alpha} = ,9460$ ), which is a high level of reliability.

Discrimination of most items is satisfactory, except the questions: 2, 55, 85, 86, 97, 139, 145, 169, which exclusion would increase reliability of the measuring instrument.

### **Criticism of the concept of yoga intelligence**

Wide range of the concept that yoga intelligence covers makes it difficult to put a single definition and possibility of a successful measuring and confirmation of the validity of the concept.

Despite the general preoccupation with self-improvement, yoga practitioners are characterized by the direction towards all that transcends a personal level.

Yoga attempts to reconcile the view that ... the existence implies change, that the existence is a constant gestation ... (Hegel and Heraclitus) and the view of the Eastern philosophers that existence is a timeless and immutable substance. Yoga means eternal unchangeableness of the non-manifested essence but also its manifested reflection in the constant changes.

The yoga intelligence has a conceptual, correlation and developmental characteristics so it can be treated as ability. Conceptual condition is satisfied because yoga intelligence is a reflection of the mental performances that are not the primary mode of behavior or a non-intellectual achievement. Thus, cognitive processes are the measure of the spectrum of abilities related to emotions and behavior. The correlation condition requires the existence of the moderate correlation between abilities within the indicators of the yoga of intelligence, as well as correlation between yoga intelligence and other forms of intelligence.

Developmental characteristics are reflected in the necessity that the yoga intelligence changes in the function of time, age and experience. The conducted researches suggest that yoga intelligence can be operationally expressed as a set of skills, i.e. that there are individual differences in the level of the yoga intelligence, which meets the conceptual requirement.

The yoga intelligence capabilities inter-correlate between each other, so it meets the correlation condition. Developmental opportunities of the construct are also confirmed in this research, since it is shown that yoga intelligence improves in the function of age. The adult respondents have achieved better results than adolescents. Persistence of theoretical concept of the yoga intelligence is reflected in its measurability as direct measurements of the capacity and not only as a description, as in the fact that it can be used in prediction of success of some major criteria.

### **Conclusion**

Measuring instrument, which originally has three subscales can be considered metrically satisfactory, especially when it comes to reliability of subscales, because it is very high. Results of the factor analysis showed that subscales don't have a single subject of measurement, but it is possible to extract a sufficient number

of items that highly correlate with factors that explain the highest percentage of variance and, thus, obtain more valid and homogeneous measuring instrument. In the following researches there could be examined convergent validity of the scale through correlation with the similar measuring instruments. The length of the instrument can be considered as its biggest limitation, i.e. too many questions, and therefore, its reduction is necessary. It will also be necessary to test it on a larger sample, which will allow one more review of its reliability.

Yoga intelligence is a concept in its infancy, both theoretically and empirically. Bearing in mind that yoga intelligence works as a conscious, complex and adaptive system of the mind, the qualities of this system seem to us as doubtlessly the right place to search for identifying qualities of the yoga intelligence itself. This model is a cognitive and conative, a young concept that is yet to pass all the necessary stages of confirmation.

The concept of yoga intelligence can be interesting to scientific, but also the wider social circles because it can help in solving the discrepancy between what the individual thinks and what he/she feels, between what he/she wishes and what he/she needs, in solving the Fromm's dilemma to be or the have, between what he/she is doing and the need for meaning. Psychometric characteristics of the developed instrument that have predicting value for some aspects of the human successfulness are in the process of verification. The concept of the yoga intelligence appears for the first time in this paper as the concept that should be viewed as a starting point for further scientific researches.

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