Perceptions of a Yoga Intervention at a Brazilian University: Self-Knowledge, Wellbeing, Mind-Body Balance, Relaxation, Thoughtfulness, and Body Awareness

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Abstract

The incorporation of yoga into the national health systems has been encouraged by the World Health Organization. In Brazil yoga was included in the Unified Health System (SUS) through bill 719 which created the Academy of Health Program in April 2011. The purpose of this paper is to present the results of the Yoga and Health Promotion Program which took place in the second semester of 2012 and of which 16 lecturers, workers and students of the State University of Campinas participated. The subjects received a trigger question to comment on. Thematic analysis was applied and six themes emerged from the participants’ narratives: self-knowledge; wellbeing; mind-body balance; relaxation; thoughtfulness and body awareness. In conclusion, although the results are not generalizable, none of the participants declared to have had a negative perception of the yoga practice.

Keywords: Yoga; Narratives; Mind-body practice; Well-being; CAM

Introduction

Yoga is a Hindu tradition dating back to the first millennium BCE. There are many definitions of yoga: world view [1], contemplative practice [2], and different yogas, academic, Eastern and Western [3]. It was first systematized in the Maitrayaniya Upanishad [4] into six steps. Later, in the second century BCE, Patanjali developed an eightfold structure in the Yoga Sutras, consisting of two ethical steps: 1) yama, universal morality: non-violence, truthfulness, non-stealing, non-perversion of sex, and greedlessness; 2) niyama, the life rules: purity, harmony, serenity, contentment and self-study; three external steps: 3) asanas, postures; 4) pranayama, breath regulation; 5) pratyahara, sensory withdrawal; and three internal steps: 6) dharana, concentration; 7) dhyana, meditation and 8) samadhi, identification with something greater than oneself.

It was popularized in the West by Swami Vivekananda, who arrived in Chicago in 1893. Nowadays, its most well-known modality is hatha-yoga, which focuses mainly on sequences of physical postures, breathing techniques, attitudes and meditation. Interestingly, in his Sutras, Patanjali only mentioned a few comfortable postures for meditation, yet hatha-yoga is more recent and appears during the 11th-15th centuries of the Common Era. It was firstly known in the following texts: Dattatreyyogasasta, Goraksha Samhita, Siva Samhita, Hathayogapradipika and Gheranda Samhita.

Yoga has been practiced by millions of people in the EEUU5 and was introduced into Brazil in the 1940 by Caio Miranda, in Rio de Janeiro. In 2011 it was included into the National Health System (SUS), in the section of the Academy for Health Program.

Although many studies have been performed on the impact of yoga in health [4-6], on behavior [7], stress reduction [8], anxiety [9], psychosomatic disorders [10], and migraine [11], there are still few studies which analyze the perceptions and narratives of the practitioners of this mind-body integrative practice [12,13].

Yoga narratives are important so far as they reveal the practitioners’ perceptions and meanings, which relate to yoga experiences in the greater context of health. The cultural significance of suffering and healing was discussed by Kleinman [14] when he identified a difference between the subjective experience of ill-health according to the patient (illness) and the biomedical notion of a medical specialist, which emphasizes alterations in the physiological structure and functioning of the body (disease). Narratives are practitioner-centred. They are brief and applicable to any kind of problem, and therefore lead to satisfactory response and completion rates. The yoga practitioners’ own words are used, which allow the individuals to elaborate on their experience of illness, disease, pain, well-being and mind-body balance.

According to Schütze [15] the biographic work is basically an internal activity of the mind and the emotional psyche, essentially constituted by the conversation with others and with oneself. Life history is related to a sequence of experiences which involve the development of an inner identity.

Although narratives are not a simple reflection of reality, but a representation of it, the importance of what the author calls autobiographic narrative resides in the fact that it reveals trajectories and processes of metamorphosis.

Germano and Castro [16] maintain that subjectivities are constructed in the daily discursive practice and that narratives can be approached from different perspectives, especially in the field of health/illness. In thematic analysis, the exclusive focus is on the context, the events and cognitions to which language refers, what is said, more than how, to whom or with which intentions. The thematic approach can serve an extensive array of narrative texts as stories that turn into representations of it, the importance of what the author calls autobiography.

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One of the uses of narratives can be considered philosophical and methodological, in which the purpose is focused on what a narrative can contribute to a more profound knowledge of the individual or collective experience [18].

According to Charon [19], medicine is more permeated by narratives than we imagine. The practice of medicine focuses the attention on the life horizon, is compromised with the description of what is singular, has the task of unveiling the patient’s life plot and involves the consciousness of intersubjectivity as well as the ethic nature of the healing process.

The purpose of this paper is to analyze the experience of the participants of the Program Yoga and Health Promotion, carried out with a group of students, teachers and workers of the State University of Campinas in the second semester of 2012. Participants received a trigger phrase about which they could write whatever they wished. The aim of collecting the participants’ narratives was to identify their perceptions on the practice of yoga expressed in their own words.

**Methods**

The yoga classes pertaining to the Yoga and Health Promotion Program (YHPP) were scheduled twice a week in the early morning, for 50 minutes, from August to December 2012, and a total of 27 classes were delivered. The person leading the yoga classes was a certified yoga instructor who is a physical educator with a masters’ degree in Education.

The program was disclosed via the internal mailing list of the Faculty of Medicine and Clinics Hospital, specifically to workers, lecturers and students. Enrollment was done by order of arrival until the [20] available vacancies were filled.

The participants constituted a non-probabilistic and intentional sample, and in this pilot project the authors used the subjects’ fictitious names. They were consented before beginning the program and signed the information was coded and classified into thematic categories. The patterns and themes mentioned in those narratives. During this step the participants’ narratives out loud, thereby collecting the initial impressions of those data. The second step consisted of identifying the participants’ narratives by the six authors sitting together and reading all the information. Thematic analysis, used in qualitative methodology, entails basically three steps: 1. pre-analysis; 2. exploration of the material; 3. treatment of results and interpretation. The first step was carried out when the six authors sat together and read all the participants’ narratives out loud, thereby collecting the initial impressions of those data. The second step consisted of identifying patterns and themes mentioned in those narratives. During this step the information was coded and classified into thematic categories. The

<table>
<thead>
<tr>
<th>N°</th>
<th>Fictitious name</th>
<th>Profession</th>
<th>Gender</th>
<th>Age</th>
<th>Data from the application form</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Ana</td>
<td>Psycho-pedagogue</td>
<td>F</td>
<td>36</td>
<td>anxiety, takes medication</td>
</tr>
<tr>
<td>2</td>
<td>Carla</td>
<td>Nurse</td>
<td>F</td>
<td>40</td>
<td>lower back pain</td>
</tr>
<tr>
<td>3</td>
<td>Felix</td>
<td>Administrative technician</td>
<td>M</td>
<td>29</td>
<td>lack of stretching</td>
</tr>
<tr>
<td>4</td>
<td>Bianca</td>
<td>Pharmacist - biochemist</td>
<td>F</td>
<td>59</td>
<td>nothing</td>
</tr>
<tr>
<td>5</td>
<td>Beatriz</td>
<td>Nurse</td>
<td>F</td>
<td>46</td>
<td>back pain near the shoulders</td>
</tr>
<tr>
<td>6</td>
<td>Marta</td>
<td>Nurse</td>
<td>F</td>
<td>52</td>
<td>lower back and neck pain, intermittent use of pain killers</td>
</tr>
<tr>
<td>7</td>
<td>Mérica</td>
<td>Lecturer and lab technician</td>
<td>F</td>
<td>50</td>
<td>neck pain</td>
</tr>
<tr>
<td>8</td>
<td>Mônica</td>
<td>Social assistant</td>
<td>F</td>
<td>62</td>
<td>high blood pressure</td>
</tr>
<tr>
<td>9</td>
<td>Mercedes</td>
<td>Administrative technician</td>
<td>F</td>
<td>45</td>
<td>distress</td>
</tr>
<tr>
<td>10</td>
<td>Pedro</td>
<td>Civil engineer</td>
<td>M</td>
<td>52</td>
<td>Back pain, broken ribs</td>
</tr>
<tr>
<td>11</td>
<td>Robson</td>
<td>Nurse</td>
<td>M</td>
<td>31</td>
<td>overweight</td>
</tr>
<tr>
<td>12</td>
<td>Raquel</td>
<td>Social Service trainee</td>
<td>F</td>
<td>24</td>
<td>Self-doubt</td>
</tr>
<tr>
<td>13</td>
<td>Rebeca</td>
<td>Nurse</td>
<td>F</td>
<td>49</td>
<td>Takes medication for slight cardiac arrhythmia</td>
</tr>
<tr>
<td>14</td>
<td>Taita</td>
<td>Nurse</td>
<td>F</td>
<td>47</td>
<td>neck pain, anxiety</td>
</tr>
<tr>
<td>15</td>
<td>Samanta</td>
<td>Hospital management technician</td>
<td>F</td>
<td>-</td>
<td>pain, discouragement</td>
</tr>
<tr>
<td>16</td>
<td>Wagner</td>
<td>Administrative technician</td>
<td>M</td>
<td>51</td>
<td>Hip pain, takes medication</td>
</tr>
</tbody>
</table>

Table 1: General characteristics of the participants - Yoga and Health Promotion Program.
phrase segments were analyzed and the key concepts were identified. The focus was on the context, the events and cognitions to which the narratives referred. These categories were discussed by all the authors until a consensus was reached. Once the thematic categories have been established, the authors can propose inferences and interpretations linked to the purposes of the study, and this activity encompasses the third step. Six categories emerged from the narratives during phase 1 and 2: self-knowledge, well-being, thoughtfulness, mind-body balance, relaxation, body awareness.

The following yoga techniques were applied: asana (psychophysical postures), pranayama’s (breathing exercises), mantras (chants) Om and Om shanti, meditation and relaxing.

The pranayama’s practiced during the classes were: deep breathing alternated breathing (Nādi shodhana) vigorous expiration (kapalabhati, a breathing technique that belongs to the shatkarmas or purification practices). The polarized breathing technique (Nādi shodhana) was only introduced from the 12th class onwards. Before that, deep breathing and breathing with longer expiration was emphasized during concentration exercises, or during asana. The purpose of both deep breathing/longer expiration techniques was to increase the participants’ perception of their own breathing, and the effects of it, as well as prepare them for more elaborate techniques. Kapalabhati was introduced during the 20th class and was practiced only during three classes, for a very short period. Participants were instructed to perform the technique calmly and not speed it up. Those who presented any kind of health hazard were instructed to perform deep breathing.

The Om mantra was practiced at the beginning of the classes and the Om shanti at the end. The meaning of these mantras was explained to the participants according to the yoga tradition and the subjects were free to practice them or not. However, these mantras were not practiced right from the beginning of the program. Om was introduced from the sixth class onwards and om shanti after the 10th class. The instructor, together with the research team of six coauthors, of which five are certified yoga instructors, considered it would be adequate for the subjects to become involved in the yoga practice, and also with their class mates and the philosophical teachings of the yoga tradition before they could feel comfortable practicing the mantras.

According to Liberman [22], yoga students nowadays can hardly identify the ethical-philosophical principles (yamas and niyamas) correctly, and let alone practice them. That was why we made a point of including them in the program. Every week a new principle was introduced and one yama or niyama was presented and discussed for two classes in a row.

The following asanas were practiced: cat (Marjariyasana), downward-facing dog (Adho mukha shvanasana), upward bow (Urdhva Dhanurasana), boat (Navasana), child (Balasana), serpent or cobra (Bhujangasana), locust (Shamlabhasana), bow (Dhanurasana), seated forward bend (Paschimotanasana), head-to-knee forward bend (Janu Sirsasana), staff (Dandasana), simple twist (Vakrasana), tree (Vrksasana), extended side angle pose (Uttitha Parsvakonasana), triangle (Trikonasana), palm tree (Talasana), elephant (Ganeshasana), hand under foot (Padahastasana), wind liberating (Pavanamuktasana), bound angle (Baddha Konasana), fierce attitude (Bhairava Mudra), crocodile (Makarasana), fish ( Matsyasana), lord of the dance (natarajasana), warrior I and II (Virabhadrasana I and II), thunderbolt (Vajrasana), lung pose (Uttitha Ashwa Sanchalanasana) and the shoulder stand (Sarvangasana).

The sequence of the poses was variable and a few variations were offered to adapt to some participants’ difficulties: the half-cobra pose was introduced instead of the cobra, and the warrior pose was performed with the hands resting on the hips. Throughout the program, pose maintenance time was gradually increased.
Results

During the first writing exercise of the narratives (phase 1), at the beginning of the program, six thematic categories emerged from the coded information extracted from the participants' narratives (well-being, self-knowledge, thoughtfulness, body awareness, relaxation and mind-body balance). During phase 2, interestingly, the same thematic categories surfaced again. The six thematic categories with narrative examples are presented below in subsections, according to the trigger phrase: “Feel well, practice yoga”.

Yoga practice and self-knowledge

Among the main narrative categories we identified self-knowledge. According to Rebeca:

Yoga is the encounter with oneself. It connects you to reality inside the life context. To practice yoga is that, knowing your own self, respecting the universal laws and therein living in the best possible way.

(Rebeca)

One of the reference works on the philosophy of yoga is the
Yoga Sutras of Patanjali, which describes the yogic steps towards transcendence. The second step, or anga, is the niyamas, related to the individual's behavior. One of the niyamas is svadhyaya, where sva means "he/she" or "belongs to me" and adhyaya means "questioning" or "analysis", literally, "approaching something". Svadhyaya means to come closer to oneself, study oneself [24].

Rebecca wrote that yoga is the encounter with oneself and then concludes that practicing yoga means getting to know one. All learning and reflecting that helps the individual to learn more about him/herself is svadhyaya [24].

According to the Sutras, to conquer self-knowledge the individual must free him/herself from the incorrect perception caused by the veils of avidhya, ignorance, the automatic and addicted behavior. When Rebecca expresses that yoga connects you to reality in your life context, this means the observing individual avoids being distracted by emotions permeating his/her own history and allows him/her to see the world through multiple perspectives.

The Bhagavad Gita describes knowledge as one of the paths to salvation, where the comprehension of one's own nature is the path that leads away from illusion [25]. In a yoga practice, students are encouraged to observe their body, breathing, emotions, feelings and also the way they interact with the environment and people. A recent study found that the longer yoga practitioners and ashram (retreat) members meditated the broader were the chances of perceiving self-knowledge and changes [26].

After two and a half months of yoga practice, all the participants of the YHPP were invited to write another free narrative related to the same trigger phrase: "Feel well, practice yoga".

In her second narrative Rebecca emphasized the aspect of mind-body balance, which also emerged as a category in other narratives:

Yoga surpasses physical activity, brings emotional and mental balance. Therefore it brings the sensation of comfort, safety and well-being (Rebeca).

The Taittiriya Upanishad describes the five shields of the human constitution: annamaya kosha (physical body); pranamaya kosha (vital body); manomaya kosha (mental body); vijnanamaya kosha (intellectual body) and anandamaya kosha (body of grace) [27,28]. This Upanishad highlights the importance of a comprehensive yoga practice which includes ethical values, body work, as well as breathing and mental exercises to develop self-knowledge and enable the conquest of grace [27]. In Rebecca's second narrative, and according to the kosha concept, one shield interferes in the quality of the other and, possibly, a glimpse of self-knowledge provided her with the emotional and mental balance to deal with the external world, vijnanamaya kosha influencing manomaya kosha, which could have allowed for a more balanced interaction with the environment and the development of well-being.

Yoga practice and well-being

Well-being can be approached from different perspectives of the human and social sciences. Some of its meanings are: wealth, health, joy, an individual preference, quality of life, human development, a subjective state that includes pleasure or happiness, a psychological state of well-being based on the capacity to use reasoning and good sense [29,30].

In the health field, well-being is linked to life style and health promotion. In yogic philosophy, well-being is part of the basic ethics, of the niyamas (life rules) and includes cultivating joy6, as the synonym of contentment.

Among the participants' narratives Mericia's illustrated this state of well-being most clearly: "I'm enjoying the practice, if has left me calmer, free, anyhow it brought me peace of mind."

Interestingly, she notes down her narrative in the first person and starts off with a positive declaration. Furthermore, she mentions a change in her behavior, from which we can infer that she probably was leading a stressful and hasty way of life.

One of the characteristics of yoga is to unwind, to slow down the life rhythm during the sessions, and temporarily remove the practitioner from his/her daily routine. Another characteristic is calming the mental hype, the incessant ebb and flow of thoughts. So when Mericia wrote that she felt free, we can infer that she felt a momentary liberation from some attitude or worry, and we can relate the expression "peace of mind" with serenity, one of the yogic rules of niyama. At the end of the program, Mericia presented the following narrative:

Yoga practice has provided me with well-being. It enhanced my concentration, positive thoughts, and good energy which lasts day in day out in my hasty rat race. I'm satisfied. (Mercia)

She initiates her narrative corroborating the trigger phrase. Concentration is trained in yoga, especially during postures and breathing and/or meditative practices, or a combination of all of them. When she mentions positive thoughts, it is useful to highlight that she managed to observe the quality of her own thoughts and identified a change in them. Lastly, she admits she is satisfied. The YHPP seems to have complied with her yoga expectations.

In this same category of well-being, though, it is important to highlight Samanta's case (subject # 15 in Table 2). She concluded the program but only participated in the writing exercise in phase 1. She wrote the following:

"Physically: I had been feeling pain during the postures. Psychologically: nothing else is bothering me."

Due to the verb tenses used, the authors allocated her to the well-being category because her perception in the present tense is

<table>
<thead>
<tr>
<th>#</th>
<th>Participants' fictitious names</th>
<th>Thematic Categories – phase 1</th>
<th>Thematic Categories – phase 2</th>
</tr>
</thead>
<tbody>
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<td>relaxation</td>
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<td>Carla</td>
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<td>relaxation</td>
</tr>
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<td>3</td>
<td>Felix</td>
<td>self-knowledge</td>
<td>well-being</td>
</tr>
<tr>
<td>4</td>
<td>Bianca</td>
<td>thoughtfulness</td>
<td>thoughtfulness</td>
</tr>
<tr>
<td>5</td>
<td>Beatriz</td>
<td>mind-body balance</td>
<td>body awareness</td>
</tr>
<tr>
<td>6</td>
<td>Marta</td>
<td>body awareness</td>
<td>well-being</td>
</tr>
<tr>
<td>7</td>
<td>Mericia</td>
<td>well-being</td>
<td>well-being</td>
</tr>
<tr>
<td>8</td>
<td>Mônica</td>
<td>relaxation</td>
<td>thoughtfulness</td>
</tr>
<tr>
<td>9</td>
<td>Mercedes</td>
<td>body awareness</td>
<td>well-being</td>
</tr>
<tr>
<td>10</td>
<td>Pedro</td>
<td>well-being</td>
<td>mind-body balance</td>
</tr>
<tr>
<td>11</td>
<td>Robson</td>
<td>body awareness</td>
<td>well-being</td>
</tr>
<tr>
<td>12</td>
<td>Raquel</td>
<td>well-being</td>
<td>self-knowledge</td>
</tr>
<tr>
<td>13</td>
<td>Rebecca</td>
<td>self-knowledge</td>
<td>mind-body balance</td>
</tr>
<tr>
<td>14</td>
<td>Taíta</td>
<td>body awareness</td>
<td>mind-body balance</td>
</tr>
<tr>
<td>15</td>
<td>Samanta</td>
<td>well-being</td>
<td>---</td>
</tr>
<tr>
<td>16</td>
<td>Wagner</td>
<td>mind-body balance</td>
<td>self-knowledge</td>
</tr>
</tbody>
</table>

Table 2: Thematic categories that emerged from participants' narratives during phase 1 and 2 of the yoga program, according to the trigger phrase.
that now everything is alright, even though pain did occur but then seemed to fade away. Although this assignment is questionable, in this case, it is difficult to extract more information about this participant’s perceptions, because she only wrote one very concise narrative, limiting her self-expression. She omits in what part of the body she felt pain, how intense it seemed, what might have been the cause, and what she did about it. The fact that she did not participate in the second phase and gave in a blank sheet of paper may mean many different things. In her yoga application form she mentioned feeling discouraged. The authors suggest that she might have felt embarrassed about not being able to do the postures well, or felt afraid of speaking up about her pain in front of her yoga class mates, or might have been depressed. However, as the authors have no written narrative of hers explicitly mentioning these issues, any interpretation would be mere speculation.

**Yoga practice and body awareness**

In several YHPP participants’ narratives the category of body awareness emerged. Mehling31 studied professionals and patients of some practices classified as mind-body therapies, or therapeutic approaches, to identify what the concept of body awareness meant for them. As reported by his interviewees, mind and body were integrated entities and all human beings have the innate capacity to integrate themselves. According to Mehling, body awareness is, therefore, self-consciousness or focusing attention on internal sensations, which are also the result of interactions with the environment and subject to modification by the action of thought, attention and interpretation.

In line with Mehling [31] users of mind-body practices understand that body awareness is the result of a process of becoming more conscious of the body, through the contact with emotions and life experiences. The perception of the limitations -and even pain- occurs in this process of expanding the sensation of the body, allowing the participant to adjust him/herself to the practice within the scope of his/ her conditions.

Robson’s narrative deals with body awareness: I wasn’t familiar with yoga and I'm discovering more benefits for my physical and mental health each time I come here. Sometimes I catch myself relaxing my shoulders, arms, back, etc.; synchronizing my breathing with my movements and these attitudes have significantly reduced the pain in the back I usually felt. As regards the mental benefits, I observe more balance, and the thoughtfulness we apply during activity takes us to observe our daily attitudes which harm us. I feel very well practicing yoga and feel clearly the alterations it will bring into my life (Robson).

Interestingly, Robson’s brief contact with yoga has already shown him a couple of diverse modifications related to the perception of his own body. By recognizing the improvements in his body awareness during the yoga classes, he can transfer this acquired knowledge to other periods of the day.

In his second narrative constructed after two and a half months of practice, body awareness is linked to feeling well:

Relax your body, develop body awareness, and learn how to be a more balanced person, more just with yourself and others, feel less pain and more peace, in other words, feel well, practice yoga.

Robson migrated from the category of body-awareness (phase 1) to well-being (phase 2). In both narratives Robson also mentions his relationship with other people as an aspect that improved with the practice, which shows that emotions are part of the process. He also mentions feeling pain, but less than before.

Robson’s narratives help us to reflect upon yoga as a practice that can generate the perception of caring for oneself, which is not often cited in health narratives and can modify the interpersonal relationships.

**Yoga practice and mind-body balance**

According to Hermógenes32, a person will only conquer his mind and feel fully integrated when he/she develops Sama Bhava (bhava: psychic attitude; sama: the same). Only then can he/she know satisfaction, contentment, balance, the middle way between existence and maturity.

Wagner expressed consciousness of this unity in the following way: Yoga: integrative practice that brings together the “parts” of the being, union and harmony, in other words, mind, body and spirit, respecting our bodies and nourishing ourselves from the divine inexhaustible source that exists in every being. (Wagner)

It is noteworthy that Wagner describes yoga as an integrative practice and not just a physical activity.

In his second narrative, Wagner emphasizes the internal values he perceived through the yoga practice: “self-knowledge, liberation, relief, surrendering to the divine in us, gratitude for these moments, light and peace.” (Wagner)

**Yoga practice and relaxation**

As stated in Hermógenes33 “to relax is to let go, shut off, abandon oneself. It is to expand passively. It means being absent from anxiety and struggling, for an instant. To relax is to economize efforts, detach oneself from the normal, distressing and efficient self-affirmation. To relax is to enjoy resting, to soften up, to delight in the ineffable pleasure of doing nothing.” (2011:60)

Ana’s narrative enabled the category relaxation to emerge very clearly: No doubt, after practicing yoga I felt a better mood toward my professional activities. I feel my body relaxed and calm. The people beside me are already noticing changes as regards my anxiety. I am calmer. (Ana)

The state of relaxation can be achieved in many ways with breathing techniques, visualization of positive images, meditation, awareness of the body or mind, etc. Through different practices, yoga provides physical, mental and emotional relaxation.

Furthermore, still according to Hermógenes [33] the asanas (postures) are invigorating and also reduce fatigue, because they enhance the blood flow to all parts of the body, pep up organs and glands and restore neuro hormonal functioning by regulating the hypophysis and suprarenal glands.

In line with Elias [34], the physical effects of relaxation can be divided into two moments. The first is immediate changes, like the slowing down of the heart rate, of the breathing rhythm and reduction of the blood pressure; the second moment is related to long term changes: the reduction of anxiety, and depression, and coping better with stressful factors in life. Ana relates the state of relaxation to the reduction of her anxiety, a change that other people begin to notice in her behavior.

After two and a half months Ana wrote down the following: The yoga practice has led me to a very rewarding relaxation of my body and mind. During the practice of routine activities I manage to maintain calmness and control my anxiety a bit more. (Ana)

She now mentions the word mind, illustrating a sense of a mind-
body union. It is known [33] that some mental states alter our body and vice-versa. In her second narrative, Ana mentioned the reduction of anxiety without having to include what the others thought of her. This could be the result of self-consciousness which was worked upon during the yoga practices and reinforced during relaxation, at the end of the classes, during which the practitioners found themselves in a special mental state that easily produces insights and changes of attitudes and ideas.

Yoga practice and thoughtfulness/reflection

Reflection is an extensive concept with many developments in social and human sciences. Touseul [35] maintains that feelings are the motors of reflection and determine the psychic norms of thought and behavior. According to Giddens [36] reflexivity reconstitutes the connections between knowledge and social life. The knowledge we acquire about society can affect the way in which we act.

In the philosophy of yoga reflection is related to mental processes and the correct knowledge (pramana), because the consciousness observes and perceives, and then this perception produces comprehension, judgment and inference. Henriques [37] mentions that there are sensitive perceptions which, in order to constitute a state of comprehension, require judgment or reasoning to lend them credit.

Bianca's narrative is the most representative of the elements which compose the category of thoughtfulness. In the first narrative, based on the trigger phrase, she wrote:

A very special moment, a moment of reflection dedicated to the physical and the mind, brings our body to the present moment and allows our spirit to reflect upon all the daily things. I fell well. (Bianca)

At the end of the program, she formulated the following narrative: To practice yoga makes me feel more concentrated, surer of myself, and allows me to reflect upon my daily attitudes; it makes me feel better about myself and provides me with inner peace (Bianca).

In the first and second narratives she comes up with the reflection upon daily attitudes, the difference is that in the second one she takes the reflection one step further and links it to well-being and inner peace.

The subjects and the thematic categories they were allocated to in phase 1 and 2 are presented in Table 2.

As regards the frequency of the participants, they were told at the beginning of the course that they would only be allowed to join the program if they pledged not to be absent for more than three yoga classes. Authors considered that three absences was an adequate limit, because if they attended 24 classes, from the total of 27, they would remain within the upper range of 20 to 24 classes considered beneficial for chronic diseases [38]. This means that the 16 participants who concluded the program didn't exceed the absence limit of three classes.

Discussion

It is noteworthy to mention that the narrative patterns were similar in both phases 1 and 2, so no new thematic category emerged in the second phase.

Subject #1 remained in the same category (relaxation) in phase 1 and 2. As was the former case, participant (#7) remained in the same category (well-being) throughout the program. Subjects #6 and #9 followed the same trajectory: they migrated from body-awareness to well-being.

Of the sixteen participants who concluded the program only one (#15, Samanta) didn't write the second narrative, as mentioned in the Results section. The authors have no clear explanations as to why she would have continued the practice and concluded the program if she had been feeling pain at any point. Moreover, she was the only participant who did not inform her age (Table 1) when she applied for the yoga program.

Since we're dealing with the issue of feeling pain, another participant (# 11, Robson) mentioned in phase 1 feeling pain. His narratives are presented in the section on body-awareness. He reported that synchronizing his breathing with his movements significantly reduced the back pain he usually felt. But he didn't elaborate further to exemplify where the pain was located, if it was lower back-pain, how intense it was or how long he had suffered from it. In phase 2 he writes: "feel less pain and more peace", so pain is still mentioned a second time. Nevertheless, he migrates from body-awareness to well-being, indicating that despite feeling some pain he was emphasizing well-being, when he finishes his phrase with "in other words, feel well, practice yoga".

A third participant who mentioned pain in her narratives was Beatriz, # [5]. In phase 1 she wrote the following narrative:

For me practicing yoga is the way to achieve mind-body balance. I believe in medium- to long-term benefits. It's more than just exercising the muscles and the mind.

Then, in phase 2, she reports to have interrupted the use of pain killers:

After 2 months attending the yoga classes I feel great, with an improvement in concentration and a great improvement in the pain in my shoulder. There has been a significant improvement in the pain and I'm not using pain killers any more.

Beatriz was described as having migrated from the mind-body balance category in phase 1 to body awareness in phase 2 (Table 2).

As regards participants' other medical conditions, subject #1, Ana, mentioned in the initial form she filled out, when she applied for the yoga program, that she had been going to a psychiatrist, that she was very anxious and had been taking prescribed Fluoxetine-10mg. She is mentioned in the Results section and was allocated to the Relaxation category in both phases 1 and 2. Authors suggest that, in her case, a combination of yoga and meditation may have resulted in the calmer and relaxed attitudes she mentioned in her narratives.

In the case of subject # 2, Carla, she had mentioned in the application form that she suffered from lower back-pain. However, in both her narratives of phases 1 and 2 she doesn't explicitly mention this discomfort, and was allocated to categories well-being and relaxation. She reports the following in phase 1:

Yoga brought me tranquility, unwinding from daily activities, providing a light day without stress, even as regards the muscles.

In phase 2 she wrote:

The yoga practice brought me more calmness and reduced my anxiety. I feel relaxed on the days there are yoga classes; it seems it is easier to face problems and this provides for less tension and stress. Yoga is good for the body, with a lot of stretching, allowing for better mobility and flexibility.

As was the case with Carla, Marta, subject #6, also reported...
suffering from lower back-pain in her application form, and didn't explicitly mention this in her narratives. She was allocated to category body awareness and then migrated to well-being. Here is what she wrote in phase 1:

It's a moment during which you let go, and perceive your body. This makes one feel very well, because we occupy our time with a lot of things and forget to take of ourselves, to perceive ourselves, to feel what the body is showing us, sometimes [it is], asking to be cared for. Feel well through relaxation, breathing energizes you or "reloads" you for the day.

In phase 2 she wrote:

I have been practicing yoga for a short time, but I feel better, especially in the activities that require concentration. It already is part of my routine and if I cannot attend the class I really miss it.

The difference between the former subject and Marta is that the latter mentioned she was taking painkillers but not on a daily basis. In her case, the authors suggest that the combination of yoga and painkillers may have led her to an outcome of well-being.

The most delicate case was subject # 10, Pedro. In his application form he wrote that he had been feeling back pain due to a former accident and eight broken ribs. Besides that, he also mentioned feeling pain in his right arm and elbow. Yet he didn't mention this in either narrative and was very concise in the writing exercises. In phase 1 he wrote briefly the following:

To practice yoga is to be content with your life. The search for your state of mind-body balance is provided by learning the yoga practice.

And in phase 2 he wrote:

This is an excellent practice. Your body and mind get involved and ascend in harmony with the cosmos.

Strangely enough, there was no mention of pain during the yoga program and he was allocated to the well-being category and then migrated to mind-body balance.

On the whole, due to the patterns in their narratives, most participants were allocated to the well-being category in both phases of the study. The authors suggest that that may have happened due to the fact that participants don't always have the ability to pinpoint exactly what they are feeling, so well-being is a comprehensive expression that encompasses many different perceptions. The categories thoughtfulness and body awareness had fewer subjects in phase 1 and 2, respectively. The other subjects were unevenly distributed among the remaining categories (self-knowledge, mind-body balance and relaxation).

Although the trigger phrase could induce the participants to a positive result, it was consensually chosen by the coordinators of the program/authors of the article with the objective of allowing subjects to construct their narratives of the practice. The participants had total freedom to question, reject or partially/fully accept the trigger phrase, according to each one's experience. Evidently, it is not possible to evaluate if there was or not any kind of embarrassment at the time when they noted down their narratives.

We would like to underscore that the unanimity of the results could insinuate that the participants were seduced by a positive trigger phrase and that, as Giddens would stress, 36 bodies are affected by the group values to which they belong, revealing the complexity of the interconnections between social life and body practices.

Final Considerations

The narratives enabled the emergence of perceptions related to the themes of self-knowledge, well-being, body awareness, mind-body balance, relaxation and thoughtfulness. The most representative narratives of each category were described, emphasizing how feeling well varied according to each participant's necessity, moment and perception.

The findings of this study are conditioned to the short period of the program, lack of regular frequency of the participants and a non-personalized practice; therefore they cannot pin down a consistent physical change, or a change of behavior capable of completely reducing the original tensions. Nevertheless, there were no negative expressions about the yoga practice, although this result should be taken cautiously due to the characteristics of the trigger phrase.

The narratives and identified themes of relaxation (“I feel my body relaxed and calm”,”The yoga practice has led me to a very rewarding relaxation of my body and mind”), body awareness ("Sometimes I catch myself relaxing my shoulders, arms, back, etc.; synchronizing my breathing with my movements and these attitudes have significantly reduced the pain...") and mind-body balance, ("brings together the ‘parts’ of the being, union and harmony; in other words, mind, body and spirit") are related to established benefits of yoga and can be corroborated by recent qualitative studies showing that yoga promotes body awareness, enhances the consciousness of the body usage in daily activities and that this seems to be the condition for alleviating pain and promoting psychophysical relaxation [39]. The fact some subjects mentioned that their pain had been reduced or gone away is also related to established benefits of yoga, because it is known that asanas and relaxation alleviate muscular tension and stimulate the profound circulation in muscles and viscera. A study performed with healthy adults showed that guided yogic relaxation can also reduce the sympathetic activity measured by autonomic parameters, oxygen consumption and volume of breath, alleviating muscular tension and also pain [40,41].

The narratives allocated to the thematic category of well-being (“Yoga practice has provided me with well-being”) were the most numerous and illustrate the effect of this ‘umbrella term’, often used in stress reduction programs, in which the biochemical and physiological mechanisms, like the reduction of the serum homocysteine levels in women, added to the enhanced self-esteem and social situation, may be involved in the positive effects of yoga [42-45]. According to the literature, the improvement of well-being seems to happen due to the interaction between the autonomous nervous and endocrine systems, which exerts an influence on the melatonin secreted by the pineal gland, activated during the yoga practice [46].

As regards the themes of thoughtfulness (“a moment of reflection dedicated to the physical and the mind, brings our body to the present moment and allows our spirit to reflect upon all the daily things”) and self-knowledge (“To practice yoga is that: knowing your own self”) they are important in the wider context of holistic and self-empowerment trends of Complementary and Alternative Medicine (CAM), to which yoga belongs as a mind-body practice. According to Tovey for some people, exposure to, and engagement with, CAM has the effect of stimulating intense periods of self-reflection and self-development [47].

Thematic analysis of the narratives presented an opportunity of viewing the results and benefits of yoga in a new light. It enabled the authors to accompany the awakening of the participants’ different
perceptions and to follow how they occur in each person. The narratives emphasized the benefits of yoga applied to physical, social and emotional conditions and the themes are consistent with the established benefits of yoga.

Although the results were positive for the subjects of this study they are not generalizable to the population at large, because the sample was small and in qualitative methodology the results are not generalizable in the mathematical/statistical sense. However, in the conceptual sense they can be applied to similar or different communities and lay the groundwork for future and larger scale studies of yoga/wellness programs in the workplace, especially in places where health professionals attend hundreds of patients every day.

Yoga is emerging as a multidimensional therapeutic practice, yet it is necessary to expand qualitative and quantitative research on its applications, exploring the different types of yoga and its potential for usage in the national health systems.

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