Dorota Ortenburger
Philosophy, Sociology and Psychology Institut
Pedagogical Academy of J. Długosza, Częstochowa

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HATHA YOGA EFFECT ON SPINE ACHE FOR INDIVIDUALS OF DIFFERENT HEALTH BELIEFS

Introduction

This paper analyses one of the problems of existing relations between the body and the psyche. The problem can be described as an importance of selected health beliefs for individuals starting hatha yoga exercises. Beliefs as a scientific problem are the target of interest for many fields of knowledge.

There are specific health beliefs that are a basis for activities, and increase or decrease the probability of illness. They are rather permanent for an individual, growing with its social development. The beliefs are also one of the important elements engaged in forming particular plans. They make up a strong motive for decisions, and for the activity choices. The starting point for the ideas and proceedings of the presented research is the theory of reasoned action (TRA) of Ajzon andFishbein [1,3].

The purpose of the research was the characterization of relationships between the type of health beliefs and the changes in selected aspects of physical and mental functioning for hatha yoga practicing individuals of different age. One of the investigated effects is the spine aches decrease and the state of mind improvement.

Problem, assumptions, research purpose, methods, investigated sample

The research goal was the analysis of relationships between the relatively permanent health beliefs of hatha yoga practicing individuals and the changes in physical and mental functioning: the state of mind improvement and the chronic spine ache decrease.

The conducted research covered:

- demographic variables (age, sex),
- variables referring to the scope of the practice (since when, how often),
- psychological variables (such as health beliefs),
- psychosomatic variables (state of mind changes, spine ache decrease).

Investigated sample characterization

The research was carried out in 2002-2003 in Czestochowa and Szczyrk. The investigated group comprised of 96 individuals practicing hatha yoga. They can be defined as lower intermediates in hatha yoga practice - to the research date they have done exercises for more than 3 months and less than 1,5 years. The frequency of the exercises scored from 1 to 2-3 times a week. Over 90% of the group were women. The age differed from 14 to 62 years.

The Beliefs about Pain Control Questionnaire (BPCQ), compiled by Skevington [14, 23, 27], was used to measure the type and strength of beliefs on pain and physical complaints control. In order to investigate the subjective changes in state of mind for hatha yoga practicing individuals the inquiry including open and closed questions was concluded.

Results

Two subgroups were separated within the hatha yoga practicing individuals and those subgroups significantly differ. There are slight but noticeable relationships between the health

beliefs (correlated with the pain coping strategies) and the changes in state of mind caused by hatha yoga exercises.

Overall results proves the assumption that the majority of hatha yoga practicing individuals notice positive changes in their state of mind. The positive changes for individuals of different health beliefs are presented in the table below.

Table 1. Average state of mind changes and the type of pain control abilities beliefs for 71 hatha yoga practicing individuals

Dominant type of pain control abilities beliefs	X Average Positive state of mind changes	SD Standard deviation
TypeW	15,15	5,17
TypeL	15,78	4,98
TypeP	16,35	4,77

source: own elaboration

The greatest state of mind improvement was observed by those hatha yoga practicing individuals, who have average strong belief of pain and distress internal control (type W). It can be explained by the fact that most people who attend hatha yoga classes look for a qualified hatha yoga instructor (they are not content with buying hatha yoga instructions tape). During hatha yoga classes many exercises are very difficult at the beginning. Thus the instructor enjoys great confidence of people who practice.

According to the results there is a very weak correlation between the health beliefs and spine aches decrease for hatha yoga practicing individuals ($r = 0,23$, $p < 0,05$).

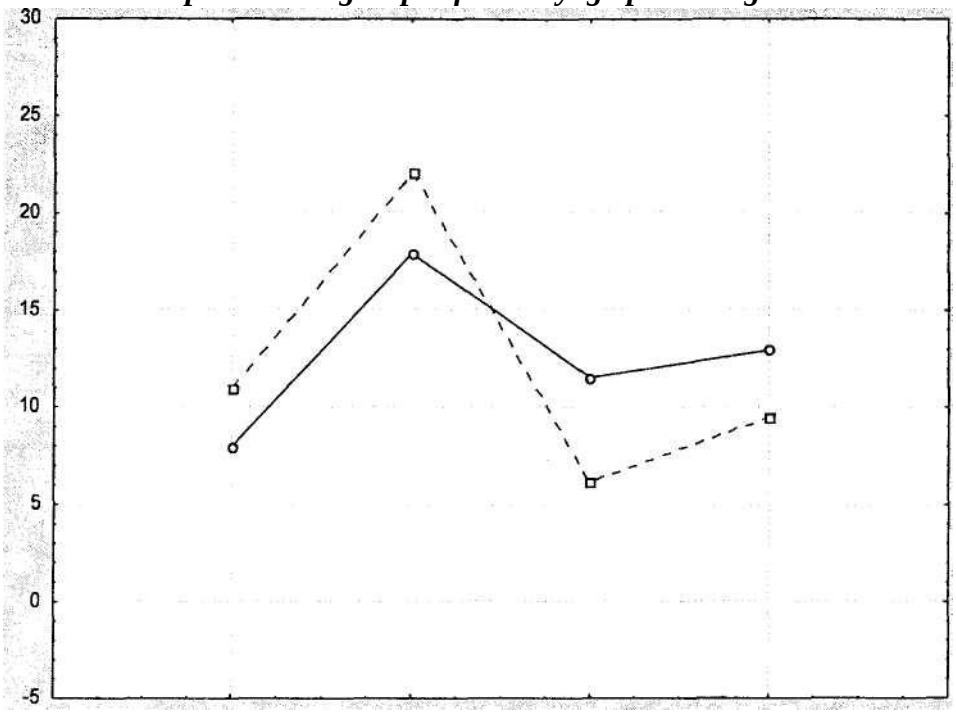
At first there were no direct strong dependencies noticed between the type of pain control beliefs and the state of mind and functioning improvement brought about by hatha yoga exercises. However, further statistical analysis produced fascinating results. There happen to be an interesting differentiation within the hatha yoga practicing group regarding the results of the exercises. The following figure shows data on this matter.

Table 2. Analysis of results in separated subgroups of hatha yoga practicing individuals

Psychological variable	SS BEETWEEN	df	SS INSIDE	df	F	THE PROBABILITY LEVEL
Overall state of mind improvement	160,51	1,00	1086,86	68,00	10,04	0,002293
Internal control	300,36	1,00	1038,63	68,00	19,66	0,000035
External control through medical help	510,30	1,00	532,29	68,00	65,19	0,000000
Coincidence, pure chance	209,16	1,00	1048,63	68,00	13,56	0,000458

source: own elaboration

Figure I. Average state of mind changes and three investigated types of health beliefs for two separated subgroups of hatha yoga practicing individuals



source: own elaboration.

– - The subgroup 1 comprises of those hatha yoga practicing individuals who experienced lower positive state of mind changes than the rest of the sample - individuals that create the subgroup 2. Subgroup 1 members do not seem to strive for the improvement of their health and state of mind. In this group the overall state of mind improvement, better sleep, efficiency perception, noticeable spine ache decrease are seldom.

– - The subgroup 2 hatha yoga practicing individuals tend to care a lot about their health and to take care of it by themselves. The spine ache decrease is observed much often here.

Individuals practicing hatha yoga differed by following health beliefs:

- type W (high W) - means that the dominant health beliefs of the individual assume that the individual controls the pain by himself,
- type L (high L) - health beliefs consider a medical doctor intervention as a main method of changing the state of mind and reducing spine aches,
- type P (high P) - assumes that neither a medical doctor help nor self-control is important for the state of mind, such health beliefs leave this area for accidental effects.

Some of the individuals, who started exercises in the hope that they cope the spine aches, are content they have increased their resistance to problems. The complaints caused by mental distress were diminished.

Fortunately for people who do not have time for regular exercises, the research proved there is no significant difference between positive state of mind changes for individuals who practice hatha yoga rarely and less than others. It is more important to do anything in order to enhance efficiency, namely to start and continue exercises, and try to keep the rhythm.

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