

### 3. Meditative Experience and Different Paths: Data Based Analyses by K. Engel

#### Summary

The article presents a field-study of meditative practices involving 1550 adherents of Zen, Vipassana Tibetan Meditation, Christian Contemplation, Osho-Meditation, Transcendental Meditation, Yoga Meditation, Qi Gong and „Non-supervised Meditation“. The participants practised intensively - on average for over ten years from 30 to 60 minutes a day with 3 - 4 additional one week or weekend courses per year. The different groups of meditating persons are compared to two other groups: students and psychiatric inpatients.

The data we collected supports the tentative statements:

Despite the wide variety of implicit theories and techniques applied, meditative experience is more likely to be similar than different.

Along the meditative path friends, community and partnership are of great importance.

Meditation as a relaxation technique and having a personal teacher are for experienced and long-time practitioner less important.

With regard to psychosocial health people who meditate are more likely to be similar to healthy persons than to patients requiring psychotherapy.

*Keywords: Meditation, Different Schools, Similar Experience, Psychosocial Health*

#### I. Introduction

The project on meditative path (Engel '97b) attempts to collate samples from different schools. The meditation exercises and the test persons are described briefly. The meditating persons were people who replied to requests for cooperation published in appropriate journals and at meditation centres. For the interpretation of our data we collected information from two other groups: medical students (defined as norm group: capable of working (studying) and not requiring psychiatric treatment) and clinical inpatients whose reason for being admitted to hospital was problems deriving from difficulties in religious or spiritual matters.

#### II. Methods

##### II.1 Test Persons

N = 1550 test persons were examined. The biographical and social details are placed at the beginning of the section on results.

##### II.2 Control Groups

###### II.2.1 Medical students

Medical students approaching their finals (Second State Final Exams), able to work (study); not psychiatric inpatients; no membership of a school of meditation. u = 77

## II.2.2 Inpatients

Inpatients requiring psychotherapy diagnosed as having spiritual and religious problems (DMS IV; category: V; 62, 89 - SASS '96). Patients of Fachklinik Heiligenfeld, Bad Kissingen. n = 32

## II.2.3 Further Control Groups

Two control groups were deployed by the test authors (SCL 90 R - see below) for interpreting the psychosocial symptoms. n = 974 Normal healthy persons; n = 1002 Psychotherapy out-patients.

## II.3 Measurement Instruments (Tests)

### II.3.1 MDQ: Meditation Development Questionnaire - Engel '97b

Personal questions; adherence to a school of meditation, etc. Stage of meditative development: formulation of items on the general stage of meditative development in accordance with Zen Development Theory (Dubs '87): 5 stage questions from 0: not at all to 4: very strongly.

### II.3.2 ASASC: Assessment System for Altered States of Consciousness (ASASC van Quekelberghe et al. '91).

### II.3.3 Questionnaire to the depth of Meditation - from Müller a. Ott (Müller '97).

### II.3.4 SCL 90 R (Derogatis '86)

Factors to physical and mental symptoms - see results.

### II.3.5 Potential Influences on Meditation: Items on the following areas:

- |              |                                      |
|--------------|--------------------------------------|
| 1. Friends   | 4. Meditation Teacher                |
| 2. Health    | 5. Self-Reliance                     |
| 3. Community | 6. Meditation as relaxation response |

## II.4 Exercises

### II.4.1 Zen

Sitting (20 - 40 min./ d) on average twice daily; all-day exercises (3 - 5 days) with up to 16 sessions. Eyes open, back erect; observe breathing only; not influencing; release thinking: concentration on or striving for internal or external phenomena. n = 238

### II.4.2 Vipassana

Traditional Buddhist form of meditation: awareness exercise; breathing only, not influenced. Sensual perceptions and thinking are named, released, not influenced. Eyes closed, sitting, back straight. Sessions vary in duration. n = 106

### II.4.3 Tibetan Buddhist Meditation

Numerous exercises most which begin with expressions of reverence; imaginations; energy control; duration varies with each meditator. Eyes closed, back straight. n = 118

### II.4.4 Christian Contemplation

Form of meditation with eyes closed; breathing linked to short Christian formula; sitting upright; individual duration of meditation. n = 41

#### II.4.5 Osho Meditation

Various forms of meditation (e.g. Dynamic Meditation, Kundalini, Aum) performed standing up, sitting, lying down; eyes partly open, partly closed. Sitting performed with no specific instructions on back posture. Widely differing exercises throughout, mostly not less than one hour in duration. n = 412

#### II.4.6 Yoga Meditation

Sitting upright preceded by preparatory ethical and physical exercises; eyes closed. Mostly concentration on a single point, e.g. between the eyebrows; series of tones (mantras) coupled to breathing. Varying duration of meditation lasting up to several hours without interruption. n = 424

#### II.4.7 Qi Gong

Sitting upright; eyes closed (in the „silent“ exercises); control of energy flow. Varying duration of meditation. Eyes open in the „moving“ exercises performed standing up. n = 37

#### II.4.8 Transcendental Meditation

Sitting; back straight, two exercises at 20 min./d; eyes closed; perception of non-meaningful series of tones of between one or two syllables. n = 51

#### II.4.9 „Non-guided“ Meditation

The meditators have either learnt to meditate from previous teachers or have put together their own individual meditation programmes. n = 84

#### II.4.10 „Various“ Forms of Meditation

This is a summary of all those forms of meditation that cannot be classified according to traditional schools. n = 39

### II.5 Evaluation and Statistics

We don't know if our sample is representative for the population as a whole. So we would like to stay on the descriptive level and only formulate a number of hypotheses. The use of statistical measures could give the impression that we are testing hypothesis - with a pseudo-objectivity, so we will give figures and graphics, but no statistical measures and remain on the descriptive level.

## III. Essential Questions

Is what is experienced along the meditative path more similar or less similar when the various schools are compared?

How important are potential influences on meditation such as friends, a community, a meditation teacher?

Are the psychosocial problems of meditators more comparable or less comparable to patients requiring psychotherapy or the healthy normal persons?

## IV. Results

### IV.1 Psychosocial data and meditation practice

The figures to the age we have distributed in 10-year frequencies. For all groups the up to 20 years are almost non-existent (only 2 of 1550). The 20-30 year olds test persons figure about 10 %; the 30-40 year olds about 20 %; we find the strongest concentration in the 40-50 year olds; in some groups (Zen, Christian Contemplation, Yoga Meditation, „Various“ forms of Meditation) in the more than 50 year's.

The trend towards meditation being practised intensively in the later years of life has led to a re-evaluation of old-age. In newer publications on meditation age as an “ultimate test of life” gains in weight both in theory (Leder '96; Atchley '97) and in empirical studies (Alexander et al '89).

Gender distribution is balanced in some groups (Zen; Tibetan Meditation), in most groups there is a bias towards higher numbers of female participants (m:f = about 40:60). This particularly noticeable in the Yoga group (m:f = about 20:80).

The level of education of the groups shows a striking trend towards university entrance qualification: at least 50%, up to over 70% in the Christian Contemplation groups.

The trend towards a higher level of education can be estimated more precisely if comparative statistics relating to the general population of a country are used. According to the German Federal Office of Statistics (census year: 1995) 15,9% of the total population of over 15-year-olds (68,5 million) have a university entrance qualification, i.e. the meditative groups have a far higher standard of education when compared to the general population.

Data relating to the social structure of a participant's life was collated using the following summarizing terms: single, divorced, widowed: = living alone - and living together, married: = living in partnership. Thus we did not so much inquire about how meaningful the partnership was - this is a point we will come to later - as about the particular form of the modus vivendi. The meditative groups all display a general trend towards a detached way of life - 60% on average - with the exception of the Yoga group (43.2%). Whether or not the large majority of female participants plays some part in this remains a moot point.

The duration of meditative practice - i.e. how long a participant has been meditating on a regular basis - is about ten years (Zen, TM, Qi Gong); in some groups the duration is slightly shorter - eight years (Vipassana, Tibetan Meditation), in three groups the duration amounts to almost twelve years (Christian Meditation, Osho and Yoga Meditation).

The daily period of time assigned for meditation practice is about half an hour in most groups, most intensively in the TM and Osho Meditation groups with an average of over 50 minutes.

The practice of weekly or weekend meditation courses is a normal practice in all groups - our study showed that for most meditators the number of courses is at least 3, the TM average being 2.5. The Tibetan Meditation and Christian Contemplation course frequencies display the highest, with an average of 4.2 courses, directly followed by the Osho Meditation and Vipassana with an average of 3.9 (see Table 1).

The supplementary exercises - mostly physical - are on average fifteen minutes long with typical variations in the schools. The highest duration in the Yoga schools - on average over thirty minutes per day, followed by Qi Gong (twenty-five minutes daily).

Table 1 Meditation Practice

Meditation \ Scale	n	Practice (Years)	Practice (Min./Day)	Curses / Year	Additional Practice (Min./Day)
Zen	238	10,3	31,3	3,5	12,7
Vipassana	106	8,1	41,0	3,9	10,1
Tibet Med.	118	8,4	39,2	4,2	12,1
Christ. Kont.	41	11,8	29,5	4,2	13,6
Osho Med.	412	11,7	51,1	3,9	16,6
Yoga Med.	424	11,8	26,0	2,9	33,3
TM	51	10,4	54,2	2,5	15,9
Qi Gong	37	10,0	27,5	3,6	25,4
No Teacher	84	6,2	26,0	2,9	10,1
Others	39	9,1	33,5	4,3	11,2
Students	77	0,4	6,4	0,0	0,0
Patients	32	3,7	20,8	1,5	11,3

When we look at the statistics on meditative practice as a whole - with an average daily meditative practice of an hour a day, and additional three to four courses a year devoted exclusively to practising meditation, and an overall meditative practice of over ten years - we can safely say that meditative practice plays an important (even central) part in the lives of the participants.

## IV.2 Meditative Development

Having described the meditative practice of the groups we now come to the main object of our study: a description of meditative experience. We shall begin with the stages of development. A potential formulation of meditative development will describe the stages commencing with the isolation of the inexperienced beginner. This stage is succeeded by a number of indications that there is such a thing as an inner centre of „The Absolute“. Then comes the stage of solving problems - intra- and interpsychic conflicts (with the possibility of becoming a fight), after that a rather quieter stage called the „work stage“ with a subsequent absorption into the soul first experienced as a feeling of being supported, then a sense of total security up to experience of cosmic unity. These stages were formulated in correspondence with the Zen story of the ox and his herdsman retold in Osho '88, Lassalle '94, Engel '97 a.

Table 2 Meditative Development

Development Meditation	n	1 Isolation	2 No Experience	3 Indications	4 Struggle	5 Work	6 Support	7 Security	8 Unity	9 Non-material
Zen	238	0,36	0,43	3,22	1,15	2,35	2,83	2,42	1,58	1,22
Vipassana	106	0,32	0,28	3,15	1,10	2,56	2,65	2,43	1,65	1,25
Tibet Med.	118	0,19	0,40	3,16	1,15	2,51	2,45	2,17	1,55	1,45
Christ. Kont.	41	0,12	0,30	3,71	1,13	2,62	3,05	2,80	1,61	1,42
Osho Med.	412	0,39	0,52	3,41	0,80	2,60	2,84	2,62	1,74	1,80
Yoga Med.	424	0,22	0,38	3,36	1,05	2,51	2,69	2,58	1,75	1,60
TM	51	0,24	0,43	3,39	0,29	1,94	3,02	2,90	1,94	1,76
Qi Gong	37	0,22	0,64	3,03	1,03	2,05	2,16	2,19	1,43	1,33
No Teacher	84	0,49	0,87	3,14	1,35	2,29	2,18	2,13	1,41	1,39
Others	39	0,29	0,39	3,37	1,13	2,31	2,63	2,66	1,57	1,79

Since the study covers persons with over ten years' meditative experience - that is, people who have overcome initial difficulties - who would not have otherwise continued to meditate - the evaluations of almost all the groups (see Table 2) at the first two stages are near zero. The reason for this is that the two initial stages - isolation in the world and the absence of experiences - have been overcome.

The third stage of development - clear indications of an inner centre - are considered to be high throughout the groups: at over 3.

Figure 1a Meditative Development

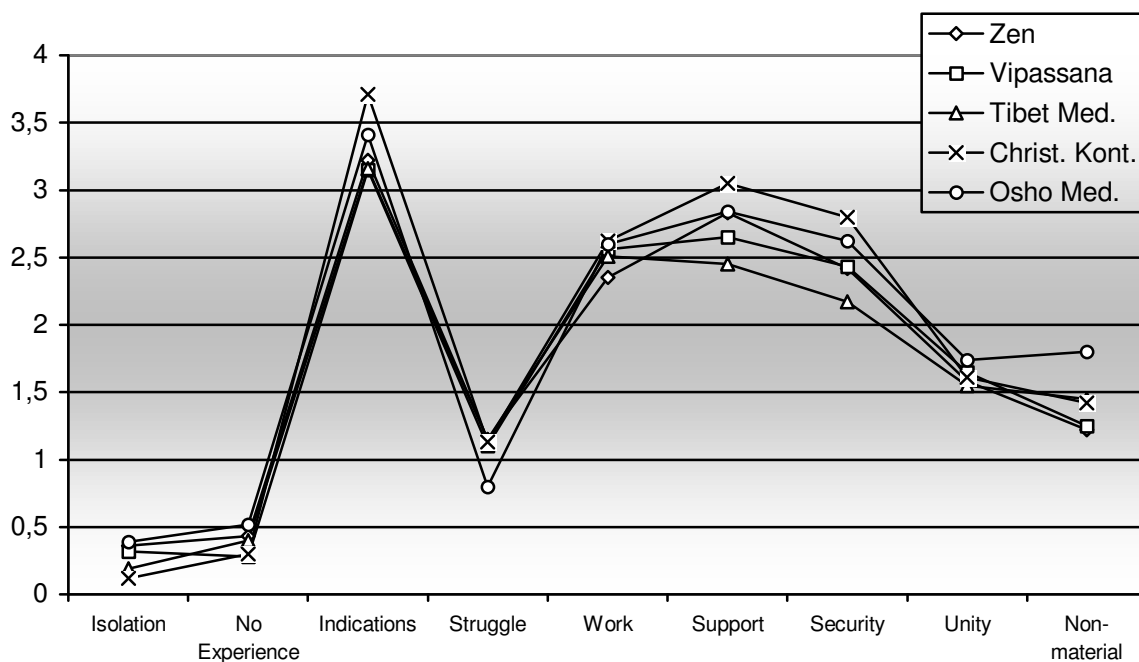


Figure 1b Meditative Development

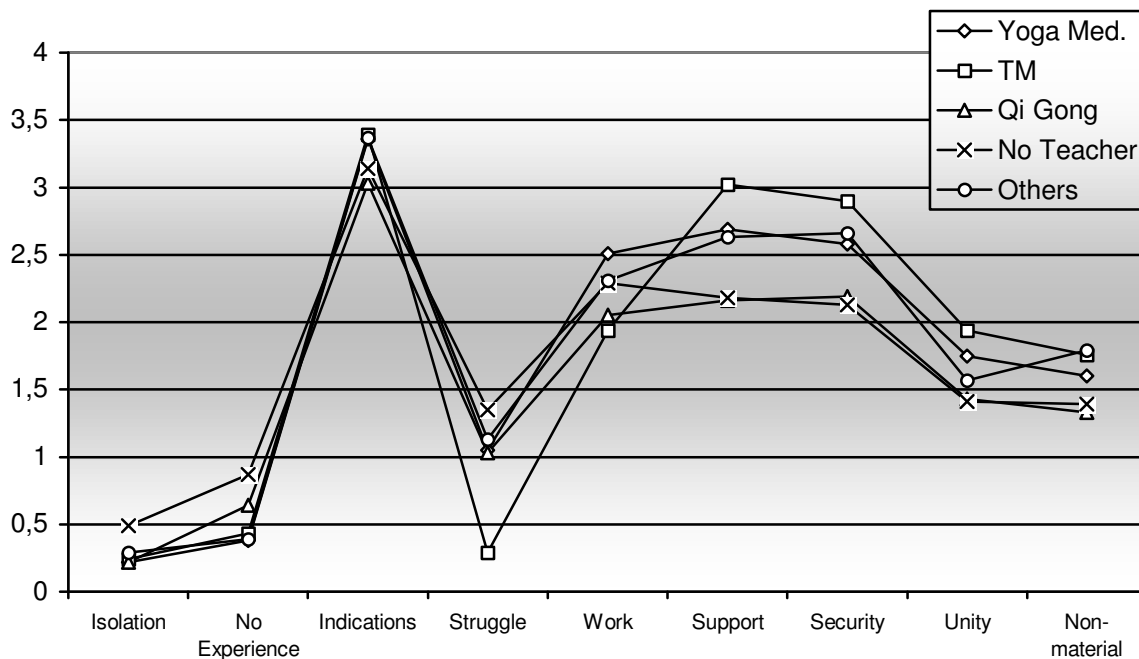


Figure 1 presents a graphic representation of the numbers as summarised in Table 2.

Whether or not further meditative development is described more as a tranquilly flowing river or is marked by intra- and inner psychic struggle - possibly culminating in a real battle - will certainly depend both on the type of meditative path chosen (i. e. the meditative approach) and on the composition of the party of journeymen along the path.

Formulating this correspondence between the meditative path and the participants will be one of the essentially important tasks to be carried out by meditation research in the near future. As a further instrument of a survey we have in our recent studies introduced a personality test to examine the meditative progress of single persons and groups.

The next stage (4): conflicts up to struggle (forceful meditation; formulated f. e. in Lassalle '94: a fight of lice and death) is naturally experienced in the TM group very low. TM is the very opposite of struggling to achieve the final: the way is to stick to the mantram and allow meditation to progress "lightly". The Osho group, too, displays a very low rating at 0.5. This approach (flooding; don't push the river) does not set up performance targets and aims less at conflict and battle, though the final goal will not be achieved entirely without a fight. The highest estimations regarding the stage of development are given by Christian contemplation and by yoga: this too, is fairly easy to understand in terms of the Christian approach. In yoga the basis attitude sometimes is a struggle (for example 'kill your desire, the powerful enemy of the soul' - Bhagavatgita).

In addition to the correspondence that we mentioned above - that between path and participant (psychological analyses), a further very important task of empirical research into meditation will be to formulate the theory implicit in each and every meditative path.

The following stage (Stage 5), which is experienced for the most part as a job of work that is to be carried out as calmly and as much a matter of course as possible, takes up a middle position on all the scales of values, i. e. at around 2.0. At this point the Osho group achieves the highest values: 2.7.

Stage 6, the next stage, presents rather greater differences of estimation: is the meditative process experienced as self-supporting and self-motivating? Christian contemplation group

and Osho meditation state this most strongly at 3.1, the lowest score is given by the Qi Gong group at 1.7.

The empirical data (Table 2) show the same score trend (around 2.5) for all groups as regards the next stage, security (stage 7). All groups do not only view meditation as being 'easy': most of them also experience extraordinarily positive feelings of bliss and happiness.

All the scores given for the next two stages - stage 8 and 9, the stages of achieving the final goal of experienced unity and non-material consciousness - drop to an average of 1.5.

Vipassana drops most clearly (down to 1.0), Tibetan meditation drops least (down to 2.1). In our view this average total drop in score supports the assumption that only a few actually reach the final goal resulting in a drop in total average score.

In general it is noticeable in stages 8 and 9, too, that the scores for all groups follow the same trend - the drop in scores we have just described. In order to give a clearer picture of this trend followed by all meditative groups we present a graph (Fig. 1) comparing these scores. This similarity of the overall development is shown in the parallel development of the trends; if this were not the case the lines would criss-cross each other.

As for the two control groups we can say that generally speaking we did not expect the students to have any experience of meditation. 10 % of the investigated 77 students stated that they had experience of meditation and evaluated the intermediate stages of the meditation at between 2 and 3. On the one hand, if about 10 % of our students engage in meditation then this is a welcome result even if it does, on the other hand, tend to flaw the curve of our empirical results.

The Patients:

People suffering from spiritual emergencies (one of the reasons why they have become psychiatric in-patients) will of course have considerable experience - even if this experience has caused them some distress. The question of when a meditative development can be regarded as balanced and when it is leading to a state requiring psychiatric treatment will be discussed later in the section on symptoms. A detailed discussion of questions arising from meditative development and spiritual emergencies is presented in Engel '97 and '99.

### IV.3 Potential Influences on the Meditative Process

Table 3 gives the results of questions on various areas that are potentially important for meditation. These areas will also be prognostic indicators of success or failure along a given meditative path.

In accordance with the words of Buddha - 'having friends is not half the journey, it is the whole journey - we will start with this area where we generally find high scores of around 3.0, the Qi Gong group giving the lowest scores (2.4) and the Vipassana and Osho - Meditation group the highest at 3.1.

The significance of health - the second area - also produces high scores of around 3.0 - the highest in Yoga-Meditation at 3.3. Christian Contemplation and traditional Buddhist meditation (Vipassana) achieve lower values relative to the other groups. In this estimation of the role of health the question arises as to whether or not the strong emphasis on suffering in Christianity and Buddhism has an effect.

The estimation of the importance of attachment to a community with more or less the same basic convictions varies most widely from group to group. Osho meditators place this attachment highest on the scale at 2.6, while the Qi Gong meditators rate this attachment lowest at 1.5; similarly the "Non-Guided" group (1.5) and the 'Various Types' group at 1.7. The participants of these three groups seem to put their faith in their own strength as individuals so attachment to a community is not so important for them. All groups regard personal independence as important (scores between 2 and 3), the highest score coming from the yoga group at 3.1.



The evaluation of the role of the teacher surprised us most since it flies in the face of popular opinion. The three schools - Zen, Vipassana and Tibetan Meditation - regard the meditation teachers as one of the three most highly valued things, the three jewels: the teacher, the teachings and the community. Other schools of meditation place similar emphasis on the significance of the teacher and frequently hang a picture of the teacher on the wall of the assembly hall and in all the meditation rooms. Thus after expecting high scores of between 3 and 4 for the importance of the teacher we find that the average group score is around 1 (i.e. low significance). The highest relative score being in Tibetan Meditation at 2.3.

This generally low estimation of the value of the teacher is something that we might be able to explain when we consider that such veneration is basically reverence for the founder of a given school of meditation rather than for a personal teacher. In any case the date relatives popular belief in the significance of a 'personal guru'. Since the members of a whole group - the Non-Guided group - reject categorically the notion that a personal teacher is important, we would conclude that their attitude further consolidates the trend described above. The correspondingly high evaluation in the estimation of personal independence (values between 2 and 3) further corroborate the results on the assessment result that having a personal teacher is less important for progress along the meditative path.

When interpreting our results we must not forget that they represent statements made by meditators with an average meditative experience of over ten years. These are people who, while journeying along the path to their own soul, have now set great store by self-reliance rather than by belief in the need for a personal teacher.

The balance between self-reliance and connectedness is something which everybody engaged in meditation must work out for himself. Occasionally self-reliance seems to be the be-all and end-all of meditation, sometimes connectedness is the basic principle. Both basic attitudes have been formulated in the Buddha and Bodhisattva paradigms.

The consequence is that the theoretical concept of interpreting meditation as a relaxation response (a notion that is particularly widespread in the Anglo-American literature on meditation - for an overview see Murphy a. Donovan'88) is losing ground.

A misunderstanding such as this could only happen to a science still in its infancy, as research into meditation bears out, and misguided in particular by empirical work based on initial evidence gained during a research period lasting no more than a few months. In tradition, for example, in Buddhist Meditation (Zen, Vipassana, Tibetan Meditation) or the group of Yoga Paths an approach as narrow as the Anglo-American one has never been advocated. Instead, there were always sections of the Path devoted to tensioning and sections on relaxation. Once again this shows how wrong it is to regard 'meditation' as a unified phenomenon that can be interpreted using a single theory. To the stages see Wilber '99. 'See also Ott (2000) for more information on this change in paradigms in the interpretation of meditation - relativisation of the term 'relaxation response'-and stronger emphasis on attention and concentration.

Table 3 Influences on meditation

Influence meditation	n	Friends	Health	Com-munity	Teacher	Con-fidence	Relaxation Response
Zen	238	2,9	2,9	2,0	1,5	2,9	0,2
Vipassana	106	3,1	2,8	1,6	1,7	2,9	0,2
Tibet Med.	118	2,9	2,7	2,2	2,3	2,9	0,2
Christ. Kont.	41	3,0	2,7	2,1	1,7	2,4	0,3
Osho Med.	412	3,1	3,1	2,6	1,9	3,0	0,3
Yoga Med.	424	2,7	3,3	1,8	1,6	3,1	0,2
TM	51	2,9	3,1	2,3	0,8	2,7	0,2
Qi Gong	37	2,4	3,1	1,5	1,6	2,9	0,2
No Teacher	84	2,4	2,8	1,5	0,5	2,6	0,4
Others	39	2,8	2,9	1,7	1,1	2,8	0,3

#### IV.4 Problems and Personal Difficulties along the Meditative Path

In this section we will concern ourselves with problems and difficulties of the sort that most people have to a certain extent but which, beyond a certain tolerance level, require treatment. The definition of who is a normal person and who is a patient is not a matter of theory: it is part of the empirical examination of large groups. A group of people not receiving treatment demonstrates phenomena to a certain defined extent; patients on the other hand show characteristic symptoms.

We would like to know where the meditators stand along this continuum of normal persons and patients: closer to patients, closer to normal persons - or beyond, i.e. do they have more intense symptoms than patients or fewer difficulties (on average) than normal persons?

Our study cannot find out whether the symptoms are inherent in a given person (i.e. inherent before that person embarks on meditation) or the result of meditation; this would only be possible in studies with repeated measurements. Since the persons have practised meditation for over ten years we would not like to see the aspect of psychosocial health isolated from meditative practice.

The survey conducted was based on a widely used standardised and factorised questionnaire - the SCL 90 R (Derogatis '86) - the factors are repeated briefly in Table 4 and Figure 2. The test authors' control groups (normal test persons and out-patients approx. 1,000 per group) are used as reference groups.

In reviewing the meditation groups we would first like to take a look at Figure 2, which provides an easier overview of the data than does Table 4, which we will discuss presently. In general it is striking that in most areas the scores achieved by the meditative groups show that they gravitate more to the normal persons than to the patients. In some meditative groups the test persons achieve even better, i.e. 'healthier' scores than the normal persons.

Table 4 Psychopathology

SCL	n	1 Somatisation	2 Compulsions	3 Social insecurity	4 Anxietes	5 Fear	6 Aggressivity	7 Phobias	8 Paranoid thoughts	9 Psychoticism
Meditation										
Zen	238	0,49	0,26	0,39	0,48	0,44	0,17	0,09	0,47	0,10
Vipassana	106	0,47	0,30	0,36	0,45	0,40	0,10	0,04	0,44	0,12
Tibet Med.	118	0,51	0,32	0,35	0,42	0,33	0,14	0,03	0,43	0,09
Christ. Kont.	41	0,44	0,24	0,56	0,45	0,37	0,10	0,00	0,39	0,07
Osho Med.	412	0,79	0,48	0,67	0,65	0,58	0,37	0,12	0,67	0,34
Yoga Med.	424	0,57	0,34	0,42	0,46	0,39	0,21	0,06	0,50	0,17
TM	51	0,53	0,42	0,47	0,46	0,51	0,24	0,08	0,34	0,17
Qi Gong	37	0,90	0,58	0,67	0,63	0,70	0,17	0,06	0,52	0,14
No Teacher	84	0,78	0,52	0,60	0,88	0,55	0,35	0,11	0,79	0,16
Others	39	0,60	0,46	0,37	0,47	0,35	0,11	0,07	0,53	0,09
Students	974	0,42	0,25	0,31	0,27	0,40	0,12	0,04	0,38	0,11
Patients	1002	1,07	0,95	1,16	1,64	1,66	0,65	0,69	1,05	0,54

Step-by-step analysis of the figures in Table 4 and the graphic curves in Figure 2 shows that the Qi Gong group present the relatively highest scores in the area of somatisation by contrast with the normal persons; the Christian Contemplation, Vipassana and Zen Meditation groups achieve low-level scores in this area.

In the area of ‘social insecurity’ the Tibetan Meditation and Vipassana group lies close to the normal persons; the scores in the other groups are slightly raised and rather higher in the Osho group. This is strange, since the Osho approach places great emphasis on social relationship, or does this data field provide us with further evidence of the correspondence between meditative approach and personality structures of those who are on a particular meditative path? Once again the Qi Gong group achieves high scores, as is the case in subsequent areas, though we will not emphasise this aspect repeatedly.

Figure 2a Psychopathology

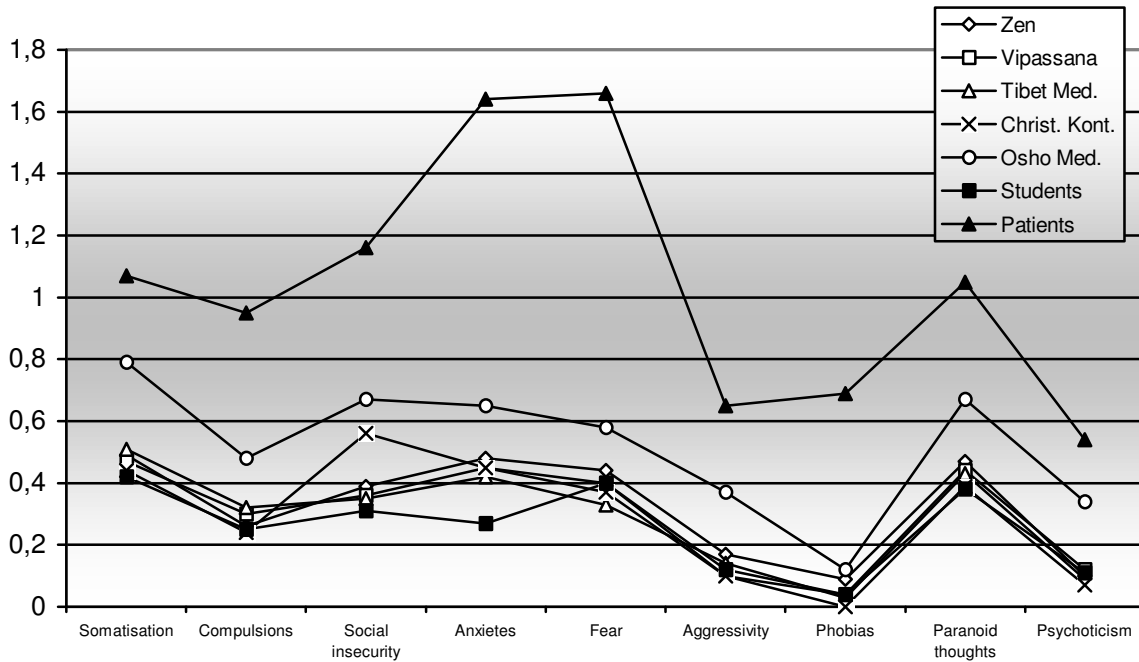


Figure 2b Psychopathology

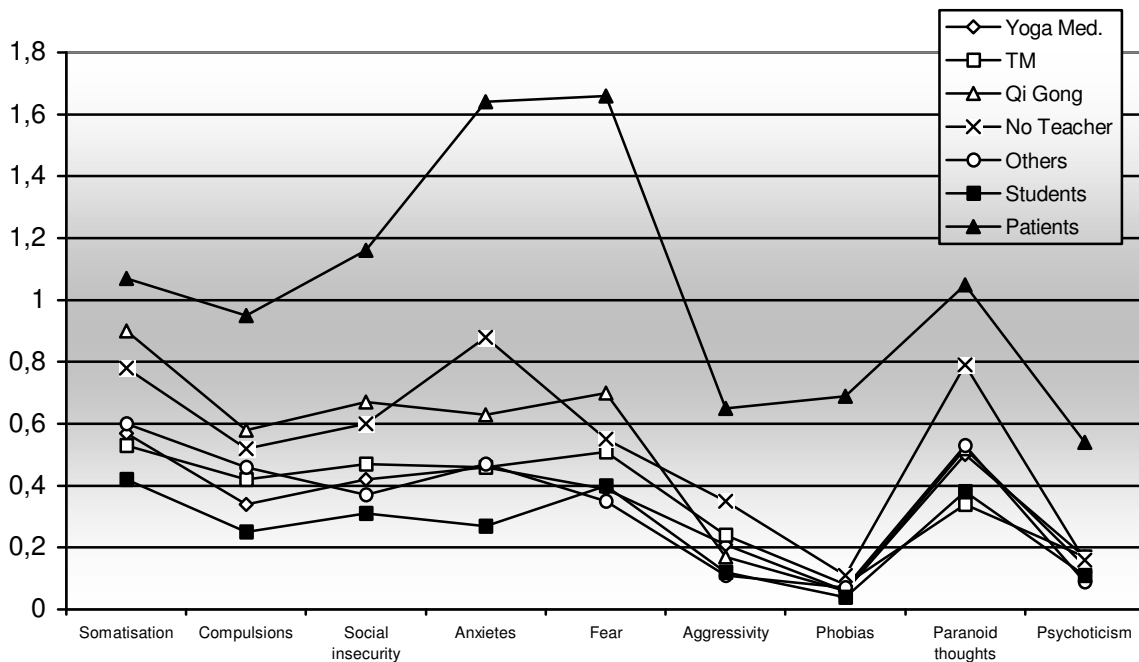


Figure 2 presents a graphic representation of the numbers as summarised in Table 4. All the values for depressivity are raised in contrast to values for the normal persons. The figures on depressivity seem to put an end to the notion that people who have been meditating for over ten years will feel the same or even better than non-meditators. The values for anxieties revolve around the scores for the normal persons. The Tibetan Meditation, 'Various Types', Christian Contemplation and Yoga Meditation achieve important scores here.

The Vipassana and Christian Contemplation groups achieve improved scores for aggressivity in comparison to the normal persons. The Osho group has strikingly raised values.

As regards the Osho approach we shall have to discuss the question of whether the approach that externalises emotions does the same for aggressions. Process studies may be able to find out when these aggressions are calmed and succeeded by positive feelings.

Phobias, that is, concrete fears, are given scores near zero by Christian Contemplation, Tibetan Meditation and Vipassana; the other groups have values that in relation to the normal persons are slightly raised.

The last two categories refer to types of severe mental disturbances: paranoid thoughts and psychoticism.

At this point the description of these areas using the SCL 90 R instrument of survey ought to be enlarged upon, otherwise it might be difficult to understand why normal persons also achieve determinable values - though they are, of course, not 'paranoid' or 'psychotic'. We will not be able to debate this aspect here; suffice it to say that those items on a scale ranging from 'slight irregularities' to 'morbid phenomena' represent the whole spectrum of assessable phenomena.

In the area of paranoid thoughts most groups have scores close to those of the normal test persons. 'Non-Guided' and Osho Meditation values are quite high - TM has improved values here. In psychoticism one group shows slightly raised values; Christian Contemplation, Tibetan Meditation, Zen and 'Various Types' have improved values.

Having examined the areas of psychological dysfunction in detail we would now like to review the table of meditative groups as a whole. What we notice is higher scores for the Osho, Qi Gong and "Non-Guided" groups by comparison with the normal persons. The other groups revolve around the normal values.

On the other hand there is a clear gap between the scores for all the groups (including the Qi Gong group) and the values for the psychotherapy out-patients. We will return to these two aspects in our general discussion.

## IV.5 General Discussion

At the beginning of our study we pointed out that we were presenting a field study that does not attempt to be representative or test hypotheses. However the great "meditation potential" of 1.550 test persons with over ten year's practice in meditation would seem to justify formulating a number of typical questions.

1. Do the obvious differences in social and cognitive structures of the individual schools of meditation frequently using widely differing instructions on how to meditate mean that meditative experiences along the path are more likely to be similar or different? Our study supports the hypothesis that experiences are more likely to be similar.

There are not only differences in meditation techniques - e.g. eyes closed or eyes open - fundamental differences are also to be found in essential cognitive attitudes, e.g. whether or not a meditator has taken Bodhisattva vow. If meditation is not only an accessible but also a potentially successful activity - despite such fundamental differences in the basic attributes of the path of meditation and the participants - this raises questions that we will not be able to answer here. We would very much like to point out that it is possible to achieve the same goal along widely different paths and this seems to back up empirically what numerous meditation teachers - for example Ramakrishna - have always asserted. The task of meditation research will be to determine which personality factors correspond to what type of meditation, i.e. to find out correlations between personality factors, implicit theory and explicit meditation technique.

2. Are there areas, which a) promote, b) hamper or are c) insignificant for the meditative process? Do the various schools of meditation also see these matters in the same way?

Our study discovered a similar attitude to the assessment of things that promote meditation: having friends, belonging to a community, and partnership. What did surprise us was the fact that having a meditation teacher was less important.

3. How can the meditators state of health be assessed?

We did discover a clear difference between meditators and psychotherapy patients. This supports empirically the hypothesis that one should distinguish clearly between meditative phenomena / meditators and psychopathological phenomena / patients as being separate things.

We did not discover any appreciable difference between meditators and normal persons. This statement means among other things that

a) the state of health of meditators is comparable to that of normal persons and

b) their state of health is not generally improves as a result.

This is also our concluding hypothesis: meditation is not primarily a means of health care of health improvement. Meditation sets its own goals - attainment the centre of our soul. Good health is an asset, but not the primary goal.

## V. The Future

Having attempted to show what our field study has examined, we would now like to discuss what was not examined. We were able to collate data from 1.550 meditators with an average of 10 years of meditative practice but we do not know anything about percentage these are of those who started meditation ten years ago, i.e. we know nothing about the drop-out rate. We only know from the literature (Delmonte '86; Rivers a. Spanos '81) that the drop-out rate is very high and that it ranges from 50 % to over 80 %. The task of future empirical studies will be to achieve a gradual refinement of the following five figures:

1. How many people start to meditate in a year?
2. How many drop out after (say) one year or five years?
3. How many can stay the course for over ten years?
4. How many reach the 'turning point' (nothing can stop attainment of the goal)?
5. How many achieve the final goal - the centre of their soul?

These figures will probably turn out to be a pyramid whose upper section tapers very slimly towards the apex. Refining these statistics should be possible in the course of formulating the prognostic factors, the processing of personality factors, implicit theory and meditative technique.

If there is such a thing as the 'centre of the soul' - 'atman', the 'true self', the 'Buddha nature' - and it looks very much as if there is - then mapping out the different paths that lead to it will be one of the foremost tasks of humanist science in the near future. The cardinal questions will be - how much of what will be right and for whom?

As a result of the efforts of transpersonal psychology - in particular those of Ken Wilber - meditation has become an accepted subject for scientific investigation. It will be the task of empirical research to consolidate this status and to find answers to the questions that theory formulates.

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