

Organizational Learning Based on Transforming Collective Consciousness

Bengt Gustavsson and Harald S. Harung

Introduction: The Challenge of Organizational Learning

The rate at which an organization learns may become the only sustainable source of competitive advantage – (Jorma Ollila, CEO and Group Chairman of NOKIA, Finland[1, p.15]).

Machines are taking over routinized work and human beings are increasingly taking on the role that they have the best capacity for, namely creativity and intelligence. The trend towards “less strain, more brain” is necessary in a world which is changing at an increasing rate, and where the environment is more unpredictable and turbulent than ever. This calls for an enhanced organizational learning, since *learning* implies non-routine change, the ability to deal with new situations, which is an essential attribute that organizations must exhibit in order to survive and succeed.

If learning is the crucial issue for organizational life, then what is the problem? Why don't we educate management and employees – send them to courses, put them in college, teach them everything that can be taught? Everyone who has worked with career development and various training programmes for management and employees knows that there is more to it than that. Surely training has had an effect. As Kenderick[2] argues, the increase in US per capita Gross National Product (GNP) from 1948 to 1973 was caused by improvements in the quality of human resources owing primarily to education and training[3].

But has this training achieved the goal of creating a situation for the person to be capable of continuous learning on the job? In many cases it

seems not. There is, therefore, a growing concern that traditional education and company training has been only partially successful[1,4]. In fact, Torbert[4, p.8] goes as far as to state that:

...very little of the learning that occurs in universities or corporate training programs today leads to performance improvements; the little that *does*, does so almost exclusively on the most primitive level of learning particular *predefined skills*.

A large number of approaches have been tried out to overcome this challenge. Peters and Waterman list quality circles, job enlargement, team building, T-groups, conflict resolution, and managerial grids, and then state: “The bones of these programs are scattered on America's low productivity desert. Very little has changed”[5, p. 241]. Consequently, there seems to be some substance to the claim that the effects of human resource development (HRD) in terms of causing a fundamental organizational development, are rather limited. In fact, Senge[6] emphasizes that focusing on events and facts – isolated parts, not wholes – results in disabilities that hamper organizational progress.

We suggest that learning has only been successful as long as the topic was related to the more surface areas of our awareness: action, senses, concrete mind, and intellect[7]. When it comes to deeper levels of consciousness, such as feeling and intuition, there has been little learning and progress[8,9]. such a development is essential since, according to Dahl[10] change takes place in the affective domain and not in the cognitive domain. Contact with deeper levels of awareness (the “affective domain” of awareness) is consequently necessary if change is to be managed in the learning process. We therefore need to introduce a deeper element, beyond the intellect, in learning to enhance the capacity for continued growth.

The theme of this article is that the level of development of consciousness is primary in determining continuous learning of an individual and the organization. We therefore start with a discussion of consciousness in organizations – the relationship between the individual and the collective consciousness of an organization. We continue to examine the characteristics of higher levels of individual and organizational development. This is followed by our view of a long-term strategy of raising the individual consciousness by transcending the surface levels of the mind, and how this influences the entire organization and thereby sustains a continuous learning process. Also, we are suggesting an experimental strategy for quickly raising the collective consciousness by employing a group of experts in consciousness in order to create coherence – “a group for an organization”.

Perspective: Collective Consciousness – The Prime Mover of an Organization

One of the most interesting developments in the understanding of organizations in recent years is the application of the concept of culture in organizational analysis[11]. The cultural perspective attempts to understand organizations from a subjective viewpoint where the collective perceptions of the members of the organization are formed as an interaction between the purpose of the organization, its members, its symbols, its environment, etc.

However, as several authors have observed (for example [12,13,14]), the research on organizational cultures cannot be said to have led to a unified understanding of the concept. We believe that it is more appropriate to use *collective consciousness* as a conceptual tool than culture, because it connects the phenomenon to its origin, consciousness, in a more meaningful way than culture, which is often taken-for-granted and given an exogenous status, i.e. as existing “out there”.

By collective consciousness we mean the wholeness that is formed by the members of an organization coming together. It is the characteristics of the *Gestalt*, the wholeness, that is more than the collection of its parts – that define the phase, or level, of development of the organization.

We can define the collective consciousness as the sum total of the level of *being* of the members. All the individual consciousnesses contribute to this overall quality, and it is therefore the net result of all the individual levels or personal development. It is this aggregate level of *being* that defines the quality of *doing*, and

consequently all the influences put into the environment by the members of an organization. We therefore suggest that it is the level of collective consciousness of an organization that is the prime mover of its behaviour and development. Gustavsson[15] takes the consequences of this way of looking at culture further and defines an organization simply as consciousness.

With this extended cultural perspective we are proposing two important implications for organizations. First, if organizations are viewed as the sum total of the individual members’ consciousness, it should be possible to identify higher phases of organizational development in a similar manner that it is possible to identify stages in the individual development. Second, following the consciousness perspective of organizations, and from our experiences, we argue that it is possible to cause and study organizational transformations, by employing techniques which develop the consciousness of the individuals in the organization.

Implication 1: Higher Stages of Individual and Organizational Development

From a cultural/collective consciousness perspective, the culture-generating process begins in individuals. However, as we shall see, it is possible to transform organizations to higher stages even when only a small group within the corporation takes part in individual development. With this note, we will start the discussion of organizational development by considering the development of the individual in the organization.

Individual Development

For an individual to function well, both at work and in society, he/she needs professional knowledge plus a developed personality[9,16]. Traditional education has its strength in providing the student with *formal competence*, i.e. theories, factual knowledge, and technical skills. In contrast to this, a holistic perspective on knowledge is needed for progress in the real world. *Real competence*, therefore, consists of formal competence *plus* the direct development of consciousness to levels deeper than the intellect. Real competence is characterized by “learning to learn” or by “changing to change”, i.e. a substantial shift in the capacity for non-routine change or adaptability. We can say that, while traditional education and HRD is centred on “transactional learning” (focusing on factual knowledge), the concept introduced herein is oriented more towards “transformational

learning” (expanding the person’s consciousness to more comprehensive states). The Norwegian parliamentary report no. 43[17, p. 94] defines real competence as follows:

It is an expanded concept of knowledge... In addition to concrete, factual knowledge and skills, it includes insight, attitudes, and values, i.e. that which collectively viewed forms the basis for a person’s ability to master his tasks and be active and creative in professional life and in the life of society.

Parliamentary report no. 40[18, pp. 18,19] continues this line of thought and states that: “the goal of a holistic view of knowledge is to fathom and shape man’s creative power: to realization, to empathy, to experience, and to participation” and “the ultimate goal of educational politics (is) to make great man himself”.

However, it appears that education in general has not been able to develop the personality of the student. In fact, extensive research suggests that the development of personality of the individual normally freezes during adolescence or early adulthood, and further that it is not influenced by later education or work experience[8,9,19,20]. The common lack of effective methods to operationalize personality transformations in adults is evident from Torbert[4, p. 51] who wonders how and why persons transform from one stage to the next and calls it “a significant social mystery”. In the same vein Drucker[21, p. 68] posits that “capable, performing people are the scarcest resource in any organization” and “we know very little about self-development”.

In order to study the effects of personal development, theoretically and empirically, Loevinger[19] and Loevinger and Wessler[22] identified a number of developmental stages based on their concept *ego development*[22]. Ego is considered a fundamental “deep structure” – a holistic frame of reference that gives significance to experience. Ego development therefore represents a holistic construct that incorporates cognitive complexity, moral development, character development, impulse control, and self-concept. Loevinger’s measure of psychological development has achieved widespread applications.

The general development steps described by Loevinger and her collaborators include a shift in emphasis from partial to holistic, from control to collaboration, from cure to prevention, from resistance to innovation, and from short term to long term. Higher stages of development, found normally in less than 1 per cent of the adult population, are characterized by independence, self-actualization (in Abraham Maslow’s context), broadened awareness, high creativity, spontaneity, inspiration, courage, capacity for love and empathy, high moral, good mental and physical

health – what we collectively may call wisdom. As has been argued by Torbert[4] and Harung *et al.*[23], higher phases of development lead to improved performance.

Organizational Development

The above research suggests that the level of development is the primary factor determining an individual’s perception of reality and his or her level of performance. If individuals can exhibit different stages of adult development in terms of independence, self-realization, broadened awareness, etc., we should expect an organization to exhibit similar stages from the cultural/collective consciousness perspective. If the general level of psychological development in the members of the organization is high, we expect that the organization, or the combined total of the individual members’ consciousness, will exhibit a higher level of organizational development.

Although assessing higher development in individuals has been theoretically developed and empirically studied fairly extensively, the understanding and study of phases of organizational development are far less developed[11,24]. The most common approaches have been to relate factors such as structure, size, and strategy to the performance of the organization, and also to study how organizations typically exhibit patterns of steady growth interrupted by revolutionary periods. Most of these approaches study exogenous factors (factors coming from outside such as changes in the environment) in the developmental phases of the organization. In contrast, we are interested in studying the affect of endogenous factors (factors coming from within, such as change in the perception of the organization members) on the developmental phases of the organization.

The problem of identifying the characteristics of higher stages of development remains. This point needs to be theoretically and empirically clarified. We are doubtful that individual stages of development can be directly translated to the organizational level. This is because a reductionistic or atomistic approach by nature only gives limited knowledge of a system as a whole, and understanding the organization as a wholeness is more than understanding the mere collection of the parts using a reductionistic approach[11]. In reality, the wholeness may give rise to unexpected phenomena. Thus, a holistic approach must be used in order to understand the complex phenomenon of an organization.

Gustavsson[11] lists several factors that are related to the level of collective consciousness. In higher levels of development “the symbols will be transparent and less reifying[25] among the

members of an organization and also encompass more of the wholeness of the environment to which the organization belongs"[11, p. 233]. On the other hand, lower levels of collective consciousness "will generate more reifying symbols which focus on short-term, limited, and materialistic aspects". Torbert suggests further characteristics of the more evolved organization: the co-existence of "freedom and order, empowerment and discipline, inquiry and productivity, transformation and stability" and of the "apparently incompatible qualities of shared purposiveness with self-direction"[4, pp. 6,7]. To these characteristics we can add that an expected attribute of an evolved organization is signs of organizational *coherence*, or congruity, for example found in the simultaneous satisfaction of both individual and organizational needs.

Implication 2: Developing Organizations to Higher Stages

Can Organizations Be Developed?

The second implication of the collective consciousness perspective is that it is possible to transform an organization to higher stages of development. This is in contrast to the widespread belief that significant change in organizations is difficult to achieve. Weick[5, p. 6] suggests that "organizations learn and adapt very slowly". Morgan argues that the changes in the qualities of an organization in higher development stages are difficult to reach and "may call for a 'personality change' that can only be achieved over a considerable period of time"[26, p. 106]. This is also the experience of practitioners trying to change an organization and its culture. An example here is Gummesson and his experiences of the implementation of "the quality program" at Ericsson in Sweden: "Traditional ways of reaching out – using internal PR and magazines, meetings, training courses, and more recently video – and computer techniques – leave a lot to be desired. Changing a culture is more than 'shooting off' a communications programme"[27, p. 24].

In relating this problem to culture and collective consciousness, Gustavsson[11] argues that it is no wonder that cultures, and hence organizations, are both crucial, to change but reluctant to change. Habits, patterns, ways of doing and interpreting things have been established and followed for extended periods of time in the organization and have become more or less fixed in the collective perception [culture] of the organization. Gustavsson also argues that the extent to which the organizational members identify with the collective perceptions determines the ability of change – i.e. the

organization's adaptive propensity and creativity. If the members take the habitual patterns of perception for granted to a great extent, new ways of doing and perceiving things as required by the environment will be difficult to achieve. It is as if the members become trapped by their own creation of images of the organization – a phenomenon Morgan[26] calls "psychic prisons". Gustavsson[11] therefore concludes that it is necessary to develop the collective consciousness in a direction which allows for more flexibility in the change of perceptions in the organization. This point is also recognized by Normann who claims that a change in the collective perception is necessary if change is to be stabilized. "The only way to bring about lasting change and to foster an ability to deal with new situations is by influencing the conditions that determine the interpretation of situations and the regulation of ideas"[28, p. 161].

The advantage of relating the organizational reality to the collective consciousness of its members is that reluctance to change makes sense in the light of the development of the individual personality. As we have seen above, the individual personality normally does not change after adolescence or early adulthood, i.e. personality transformations normally freeze before the time a person enters working life. From this perspective it would be difficult to foresee any development in the collective consciousness and hence learning in the organization.

Our Suggested Approach for Developing Organizations

In our view many of the different strategies available to develop organizations have rather marginal effects. To our understanding this is because they usually focus on the intellectual level, seeking to provide improvement through a new mental construction of reality, a construction that usually proves to be a temporary artefact. As we suggested above, the need seems to be to work with deeper aspects of the collective consciousness of the organization in order to understand and promote organizational growth. Therefore, we argue that we have to transcend the intellect and its formal and logical operations and instead, arrive at a deeper reality connected with intuition, emotions and ultimately, a transcendental consciousness (e.g. Abraham Maslow's peak experiences) in order to come out of the "psychic prisons". This is the main theme of Gustavsson's[11] *The Transcendent Organization*, where he claims that the key to organizational development lies in transcending the obstacles to progress in the invisible barriers of the collective taken-for-granted perceptions of the organization.

We have found that it seems possible to develop organization to higher stages by using techniques that develop the consciousness of the individuals. The authors of this article are both familiar with Transcendental Meditation – TM, that is practised twice daily for 20 minutes, and is combined with a regular, active life. In our research we found the TM-technique to improve mental and physical health, transforming the individuals' consciousness towards more holistic thinking, indicating a process of transcending of the binding influence of things taken for granted. These transformations were also evident in aggregate levels of consciousness as improvements among groups of management and employees, e.g. better group spirit, more open climate, and higher demands[11].

Over 100 TM-projects on a greater scale have been carried out in organizations around the world: Japan, Sweden, USA, The Netherlands, England, Russia, and Norway. The majority of these have been implemented without any research. For those few where research has been involved, the focus has by and large been on the individual benefits of the TM programme (for example [29-32]). There are also reports of experiences on variables such as profit, sales, and quality of life, which are claimed to be an effect of TM-activities in companies[33]. Research also suggests that persons practising the TM-technique reached Loewinger's highest stages around 40 times more often than controls[34], which indicates that TM can transform the consciousness of the individuals. From the research and experiences we conclude that TM represents an effective technique[35,36,37] in bringing about a development process at deeper levels of consciousness of the individual, and hence opens the possibility of lifelong development – a process we consider to be necessary and the basis for life-long learning.

For these reasons we are suggesting that the TM-technique can be applied to organizational settings in order to develop organizations to higher stages, or expressed differently, to raise the level of collective consciousnesses in the organization. By a continuous contribution of the organizational members of a level of personal being that reflects more comprehensive levels of consciousness, the aggregate consciousness of all the consciousnesses in the organization will be influenced towards the creation of an organizational being which exhibits more comprehensive quality of action. In a true sense, this is how a learning *organization* can be defined. It is an organization contained with an intrinsic quality of adapting to change, and even better, to *proact* to changes that have not yet occurred. Such a situation cannot be created

merely by intellectual training – it requires a comprehensive, flexible, and creative action of the whole *Gestalt* of the organization, which can be only achieved by transforming the collective consciousness.

Proposal: An Experimental Approach Based on Field Effects of Consciousness

The TM-technique and the advanced TM-Sidhi-programme also suggest an experimental strategy for raising the level of collective consciousness to higher phases of development more quickly. This strategy is based on the ancient notion of Veda, which describes our innermost layer of consciousness as a common ground for all the individuals' consciousnesses:

As the omnipresent, essential constituent of creation, Being lies at the root of everything, beyond all relative existence, beyond all forms and phenomena. Because It has its pure and full statue in the Transcendent, It lies beyond the realm of time, space and causation, the boundaries of the ever-changing, phenomenal field of creation[38, p. 31].

By enlivening this common source, an effect will be created in all consciousness, or stated differently, in the collective consciousness. We call this effect field-effect of consciousness after similar phenomena in physics, which will be further elaborated.

The field-effect of consciousness has been observed at the macro-level in the society. Evidence from more than 35 studies suggests that the practice of transcendental meditation by as little as 1 per cent of the population will have an influence on society as a whole. The corresponding "critical mass" or "ordering nucleus" for the advanced TM-Sidhi programme is as small as the square root of 1 per cent (to illustrate: this gives a number of only 7,000 for the whole world). The studies have found signs of increased affluence and economic productivity – including rising stock market prices, increased strength of national currency on the international market, increased patent applications, and reduction in the misery index (sum of unemployment and inflation)[39,40,41]. Other observed effects are decreased societal disorder as measured by crime, accidents, sickness, and conflicts[42,43]. This influence has been called the *Maharishi Effect* after the founder of the TM-technique, *Maraishi Mahesh Yogi*, who first predicted it.

Analogies from field theory in physics are often used for explaining this startling phenomenon that a small group can influence society without any observed physical contact or

communication. The field theory of quantum physics describes the familiar and tangible world as having its basis in unseen and intangible fields. These underlying fields, such as gravity and electromagnetism, are unlimited and all-pervasive. Matter, forces, time, and space which we observe in our daily life, are different modes of vibrations in these fundamental fields. Two examples can serve as an aid to illustrate this phenomenon.

First, a laser light is an example of how a small group of coherent photons creates order in all the photons of the system. The explanation for this is that in a system governed by wave equations, such as a field, order is stronger than disorder: When the proportion of the coherent elements reach a certain critical value, order will spread throughout and cause the disordered system to undergo a sudden “quantum leap” to a coherent state.

A second field property is “action-at-distance”. Consider for example the electromagnetic field that exists everywhere in the universe. Radio, TV and radar function by transmitting waves through the electromagnetic field. These waves cannot be seen, but they still have their effects. The gravitational field functions in the same invisible way, and is responsible for keeping the moon in its orbit around the earth, and order in the whole universe.

In order to understand the Maharishi Effect, we only need to posit that consciousness functions in the same way as all other fundamental phenomena in nature – i.e. that consciousness is an unbounded, invisible field with waves that propagate through the whole of society like waves on a pond. The group functions as a “critical mass”, influencing the collective consciousness of the whole organization.

“A Group for an Organization”

The Maharishi Effect relates to society at large; the research has been connected to cities, nations or the world. These findings suggest that similar effects can also be found at the organizational level. We therefore propose that as an experiment “a group for an organization”, i.e. a group of experts in Transcendental Meditation and the TM-Sidhi programme, can be employed to raise significantly the level of collective consciousness of the organization. This can be accomplished either by training a group of the organization’s own members, or by employing an external group. In this way, it could be simpler for management quickly to transform the collective consciousness, so that it reflects more of the attributes of a learning organization.

There are several challenges when applying the model of field effect of consciousness to organizations. It is more difficult to define boundaries of an organization than of a city or nation. For multinational or multi-site corporations it is clearly necessary to consider each plant in isolation. But even so, who are to be considered members of the corporation? The employees are obvious, but what about other stakeholders such as shareholders, board of directors, customers, or suppliers. Also, and related to this is the question of the size of the “critical mass”, i.e. what percentage the group must be of the organization’s population in order to create distinguishable effects. It is expected that the percentage will be higher the smaller the organization is. Gustavsson[11] refers to some loosely estimated percentages for TM-meditators ranging from 5 per cent in organizations with more than 1,000 employees to 50-100 per cent with less than ten employees. In terms of the advanced TM-Sidhi programme no such estimates exist. From the studies at the societal level it is suggested that “critical group size” will be substantially smaller. However, more research is needed here. There are several other ontological and methodological challenges in relation to organization and consciousness which space does not permit us to discuss here. Instead, we refer to Gustavsson[11] for a more detailed discussion.

Nevertheless, despite these methodological challenges, we are suggesting the employment of such a “group for an organization” on an experimental basis, as it has never been undertaken before. It can serve as a “short-cut” in achieving the desirable development of the organization towards higher phases, which we have defined as the truly learning organization. There is considerable theoretical basis and empirical experience to justify such an experiment, and the outcome is likely to be successful.

Conclusion

In this article we have proposed a new concept of organizational learning based on transformation to higher stages of organizational development. We are arguing that this will have significant effects on the total quality of the organization and its actions. The end point of organizational learning would be autonomous and empowered individuals with high levels of creativity and ethics, and the intrinsic capability and desire of orienting their individual contributions in the direction of the common whole – their organization and society at large. This, we claim, cannot be solved on a traditional level of training, but must be achieved

by transcending the minds' normal operations, infusing wholeness into the individuals' consciousness, which in turn contributes to the collective consciousness of the organization. We are recommending two complementary strategies for this purpose: by training the organization's members in Transcendental Meditation, the most efficient technique we know for personal and collective development. The second strategy consists of employing a "group for an organization", specialists in TM and the TM-Sidhi programme that generate a field effect of consciousness, thus creating a transformation, in the organization.

What do we see as the practical outcomes of developing higher phases of organizational development? First, we see the essence of administration to maintain higher stages of individual and collective development. With this, we anticipate administration to move from control and problem solving to symbolizing the wholeness and creating shared meaning. Second, we believe that the size of the administration would be dramatically reduced.

Third, we expect productivity, quality, and profitability to be enhanced. "Human resources – not capital, nor income, nor material resources – constitute the ultimate basis for wealth of nations"[44]. The most underdeveloped human resource is consciousness – in organizational terms, the collective consciousness. Develop that, and the rest will follow.

□

Notes and References

1. Olaisen, J., *The Challenge of Innovation and Productivity. Shaping the Future in Permanent White Water*, The Performance Group, Bjelland, Dahl & Partners, Oslo, 1992.
2. Kenderick, J.W., "The Decisions in Productivity Growth", *Conference Series*, No.2, 1980.
3. Denison, E., *Accounting for United States Economics Growth 1948-1969*, The Brookings Institution, Washington, DC, 1974.
4. Torbert, W.R., *The Power of Balance: Transforming Self, Society, and Scientific Inquiry*, Sage, Newbury Park, CA, 1991.
5. Peters, T.J. and Waterman, R.H., *In Search of Excellence*, Harper & Row, New York, NY, 1982.
6. Senge, P.M., *The Fifth Discipline: The Art and Practice of the Learning Organization*, Doubleday, New York, NY, 1990.
7. Harung, H.S., "More Effective Decisions through Synergy of Objective and Subjective Approaches", *Management Decision*, Vol. 31 No. 7, 1993.
8. Alexander, C.N. and Langer, E., *Higher Stages of Human Development*, Oxford University Press, Oxford, 1990.
9. Harung, H.S., "The Significance of Personality Development for Education", *Norsk Pedagogisk Tidsskrift*, No. 4, Universitetsforlaget, Oslo, 1993.
10. Dahl, T., "Peak Performance – The Role of Satisfaction, Stress, and Control", *Presidential Address, Eighth World Productivity Congress*, Stockholm, 23 May 1993.
11. Gustavsson, B., "The Transcendent Organization. A Treatise on Consciousness in Organizations: Theoretical Discussion, Conceptual Development, and Empirical Studies", dissertation, Akademitryck, Edsbruk.
12. Smircich, L., "Concepts of Culture and Organizational Analysis", *Administrative Science Quarterly*, Vol. 28 No. 3, pp. 339-58.
13. Sackman, S.A., *Cultural Knowledge in Organizations. Exploring the Collective Mind*, Sage, Newbury Park, CA, 1991.
14. Alvesson, M. and Berg, P.O., *Corporate Culture and Organizational Symbolism*, de Gruyter, New York, NY, 1992.
15. Gustavsson, B., "Consciousness and Experience: Implications for Organization and Management", *Management Development Workshop on Values System and Managerial Effectiveness: Indian Insights*, Indian Institute of Management, Calcutta, 24-29 January 1993.
16. Harung, H.S., "Personlighetsutviklingens Betydning for Ledelse" (Significance of Adult Development for Leadership), *Praktisk Økonomi og Ledelse, Bedriftsøkonomers Forlag/Norske Siviløkonomers Forening*, No. 3, Oslo, Norway, September 1992.
17. KU-Kirke-og Undervisningsdepartementet, "Mer Kunnskap til Flere", *Stortings Melding*, Nr 43, Oslo, Norway, 1988-1989.
18. KUF-Kirke-, Undervisnings-og Forskningsdepartementet, "Fra Visjon til Virke", *Stortings Melding*, Nr 40, Oslo, Norway, 1990-1991.
19. Loevinger, J., *Ego Development: Conceptions and Theories*, Jossey-Bass, San Francisco, CA, 1976.
20. Kitchener, K.S., King, P.M., Davison, M.L., Parker, C.A. and Wood, P.K., "A Longitudinal Study of Moral and Ego Development in Young Adults", *Journal of Youth and Adolescence*, Vol. 13 No. 13, 1984, pp. 197-211.
21. Drucker, P.F., *The Effective Executive*, Harper & Row, New York, NY, 1967.

22. Loevinger, J. and Wessler, R., *Measuring Ego Development 1. Construction and Use of a Sentence Completion Test*, Jossey-Bass, San Francisco, CA, 1970.
23. Harung, H.S., Heaton, D.P. and Philipson, J., "Significance of Higher Stages of Adult Development for Improving the Effectiveness of Knowledge Workers and Reducing the Unemployment in Society", Eighth World Productivity Congress, Stockholm, 23-27 May 1993.
24. Torbert, W.R., *Managing the Corporate Dream – Restructuring for Long-term Success*, Dow Jones-Irwin, Homewood, IL, 1988.
25. The word "reification" is here used in terms of giving a concept concrete status, as if it had existence on its own, i.e. it is made separate from its human origin. For example, an "organization" is animated and given properties like thought, action, and needs that can be found only in living creatures.
26. Morgan, G., *Images of Organization*, 8th ed., Sage Publications, Newbury Park, Beverly Hills, CA, 1989.
27. Gummeson, E., "Using Internal Marketing to Develop a New Culture – the Case of Ericsson Quality", *The Journal of Business and Industrial Marketing*, Vol. 2 No. 3, 1987, pp. 23-8.
28. Normann, R., *Management for Growth*, Wiley, London, 1977.
29. Frew, D.R., "Transcendental Meditation and Productivity", *Academy of Management Journal*, Vol. 12 No. 2, 1974, pp. 362-8.
30. Friend, K.E., *Effects of the Transcendental Meditation Programs on Work Attitudes and Behavior*, Graduate School of Business, University of Chicago, IL, 1975.
31. Haratani, T. and Henmi, T., "Effects of Transcendental Meditation on Mental Health of Industrial Workers", *Japanese Journal of Industrial Health*, Vol. 32 No. 7, 1990, p. 656.
32. Haratani, T. and Henmi, T., "Effects of Transcendental Meditation on Health Behavior of Industrial Workers", *Journal of Public Health*, Vol. 37 No. 10, 1990, p. 729.
33. Swanson, G.C. and Oates, R.M., *Enlightened Management: Building High-performance People*, MIU-Press, Fairfield, IA, 1989.
34. Chandler, H.M., "Transcendental Meditation and Awakening Wisdom: A Ten-year Longitudinal Study of Self-development", *Dissertation Abstract International*, 1990.
35. Comparative meta-analysis of available research shows that Transcendental Meditation is approximately three times as effective as other meditation and relaxation techniques in developing self-actualization[36], and around twice as effective in producing relaxation[37].
36. Alexander, C.N., Rainforth, M.V. and Gelderloos, P., "Transcendental Meditation, Self-actualization and Psychological Health: A Conceptual Overview and Statistical Meta-analysis", *Journal of Social Behaviour and Personality*, Vol. 6 No. 5, 1991, pp. 189-247.
37. Epply, K., Abrams, A. and Shear, J., "The Differential Effects of Relaxation Techniques on Trait Anxiety: A Meta-analysis", *Journal of Clinical Psychology*, Vol. 45 No. 6, 1989, pp. 957-74.
38. Maharishi Mahesh Yogi, *The Science of Being and Art of Living*, International SRM, Los Angeles, CA, 1966.
39. Cavanaugh, K.L. and King, K.D., "Simultaneous Transfer Function Analysis of Okun's Misery Index: Improvements in the Economic Quality of Life through Maharishi's Vedic Science and Technology", *Proceedings of the American Statistical Association, Business and Economics Statistics Section*, 1988, pp. 491-6.
40. Cavanaugh, K.L., King, K.D. and Ertuna, C., "A Multiple-input Transfer Function Model of Okun's Misery Index: An Empirical Test of the Maharishi Effect", *Proceedings of the American Statistical Association, Business and Economics Statistics Section*, 1989, pp. 565-70.
41. Cavanaugh, K.L., King, K.D. and Titus, B.D., "Improving the National Economy through Alliance with Nature's Government: Effects of the Group Practice of Maharishi's Transcendental Meditation and TM-Sidhi Program", *Modern Science and Vedic Science*, Vol. 4 No. 1, 1990, pp. 2-41.
42. Dillbeck, M.C., Landrith, G. III. and Orme-Johnson, D.W., "The Transcendental Meditation Programs and Crime Rate Change in a Sample of Forty-eight Cities", *Journal of Crime and Justice*, Vol. 4 No. 1, 1981, pp. 24-45.
43. Orme-Johnson, D.W., Alexander, C.N., Davies, J.L., Chandler, H.M. and Larimore, W.E., "International Peace Project in the Middle East", *Journal of Conflict Resolution*, Vol. 4, 1988, pp. 776-812.
44. Harbison, F.H., *Human Resources as the Wealth of Nations*, Oxford University Press, New York, NY, 1973.

Bengt Gustavsson is based in the Department of Business Administration, University of Stockholm, Sweden, and Harald S. Harung is based in Oslo, Norway.
