THE INTELLIGENCE MODEL OF ORGANIZATIONAL EFFECTIVENESS:
ITS IMPLICATIONS FOR ENHANCED PRODUCTIVITY

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ABSTRACT

Intelligence or cognitive ability has been researched extensively, but there is a paucity of organizational theories that describe its development in the workplace. This paper synthesizes research from several disciplines to fill this gap. The proposed model has two aspects: 1) the individual level where the employee's intelligence is enhanced through Maharishi's Transcendental Meditation program to improve job knowledge which affects job performance, and 2) the group level in which a relatively small, coherent group through Maharishi's TM-Sidhi program can induce effectiveness throughout the organization. Our thesis is that if we make people more intelligent and improve their capacity for mastering job knowledge, they will be more productive.

INTRODUCTION

There is a worldwide productivity crisis. Many economists feel that the recent upturn "provides no evidence that the disappointing longer-term trend in productivity performance has been reversed." (Baumel & McLennan, 1985). Long-term improvement in the standard of living for the United States and the world must be supported by increased productivity. The question is how to improve productivity?

There is a vast body of literature on productivity. Productivity improvement methods fall into four general categories: 1) product and process improvements, 2) work and job improvements, 3) employee motivational methods, and 4) organizational change (Stoner, 1982). There has been partial success using these methods. Many corporations, however, have reached a plateau where marginal increases in productivity require more money and effort than is feasible. To progress further we propose a practical model based upon a deeper understanding of the fundamental concepts and sources of productivity.

There are many definitions of productivity. We submit that productivity is the holistic development and application of human intelligence, creativity, and organizing ability to achieve goals that have a beneficial impact on society and environment. In Microcosm: The Quantum Revolution in Economics and Technology (Gilder, 1989) points out that productivity and wealth are generated by products of the mind, such as microchip designs and software. Up to now the importance of the mind and its development has been neglected in management. The purpose of this paper is to propose a model of organizational effectiveness based on intelligence and its practical development.

DEFINITION OF ORGANIZATIONAL EFFECTIVENESS

Effectiveness has been defined in many ways. Barnard (1938,p.19) said "When a specific desired end is attained we shall say the action is 'effective'." One, however, might wonder if an action is effective when the desired effect is achieved, but unintended, harmful side-effects result. For example, a manager may be successful in maximizing profit, but if he also exposes his employees to harmful toxins is he really effective? Years later, the company may be sued for medical and punitive damages. In the long-term
both moral responsibility and profitability were damaged. In consideration of these possibilities, we would define organizational effectiveness as: the attainment of specific, desired goals that only have wholesome, life-supporting, and uplifting effects (including profitability) by a group consisting of two or more human beings who consciously coordinate their activities to achieve those ends.

Organizational effectiveness demands more intelligent business people today because there is so much change and technological advancement. Without well-developed mental faculties many workers find it difficult to make new product and process innovations, quality control, participative management, and job redesign. Application of Organizational Development techniques still have utility, but they must be supplemented with a method of increasing intelligence in managers and employees.

REVIEW OF INTELLIGENCE THEORY AND RESEARCH

The focus of this paper is to present a new technology for the development of intelligence in business and industry. During the pioneering stages of modern psychology, the scientific definition of "intelligence" corresponded closely with the common lay understanding. Words such as " quickness of mind," "rationality," and "sensibility" were employed to define intelligence (Fancher, 1985). Later, the trend evolved towards greater precision in definition but, unfortunately, greater fragmentation and specialization. Today, theorists and researchers disagree greatly on how to define intelligence and how to measure it. Some psychologists perceive intelligence as the general capacity for performance on mental tests. Others view it as a set of abilities for processing information in order to make adaptive responses to environmental demands (Sternberg, 1985). The most popular paradigm in intelligence theory and research is the "information processing" model, in which the human mind is perceived as a computer system (Cranson, 1989).

Intelligence includes much more than capacity for academic performance (Sternberg, 1985, 1986). Definitions of intelligence often include reasoning capacity, creativity, intuition, organizing ability, wisdom, adaptability, general cognitive ability, perception, insight, judgment and many other characteristics. Presently, there are over twenty-five major theories of intelligence. Scientists may disagree on precise definitions of intelligence, but most would agree that having it is essential for success, especially for executives and managers in maintaining productivity growth.

Various researchers such as Ceci and Liker (1986) have found evidence that does not support intelligence (as measured by IQ tests) as being the best predictor of occupational performance. Sternberg and Wagner (1986, page ix) state:

Investigators have increasingly recognized the limited predictive value of conventional intelligence tests for everyday performance and, more importantly, have realized the theoretical limitations of academic conceptions of intelligence when the goal is to understand intelligence as it operates in the real world.

Sternberg and Gardner consider the capacity to perform on IQ tests a subset of the intelligence construct, while other researchers such as Hunter consider general cognitive ability an interchangeable term with intelligence. At present general cognitive ability is the best predictor of individual performance on specific tasks (Hunter, 1986). Waldman and Spangler (1989, p.29) say:
A considerable amount of research has been and continues to be conducted concerning the determinants of individual job performance. A number of diverse perspectives have formed the basis of this research, including theories involving general abilities, motivation, feedback, leadership, and group processes. There is clearly a need for an integration of these theoretical perspectives so that researchers can gain a better understanding of the direct and indirect relationships associated with job performance.

Job performance is a complex, multivariate construct. Nevertheless, enhancing intelligence should enhance individual performance; especially if it can be done while simultaneously developing other traits that facilitate effective performance. In the Intelligence Model of Organizational Effectiveness we build upon the aspect of intelligence called general cognitive ability. There is evidence to suggest that this facet of intelligence is an antecedent of job knowledge which is a major determinant of performance.

Hunter (1986) presented the results of a meta-analysis of hundreds of research studies showing that general cognitive ability predicts job knowledge which in turn predicts job performance ratings in all types of jobs. In summarizing his research, he said that:

Since learning the job is the key to job performance, and general cognitive ability predicts learning, it is to be expected that general cognitive ability will be the key predictor of job performance. (p.360)

Further empirical research (Schmidt, Hunter and Outerbridge, 1986; Schmidt et al., 1988) suggests that intelligence is an antecedent of job knowledge and that job knowledge is a major determinant of job performance.

INTELLIGENCE AND ORGANIZATIONAL EFFECTIVENESS

We theorize that the enhancement of intelligence (or general cognitive ability) must have an effect on job performance, and thereby productivity. By extending Hunter's model to include a human resource intervention, the Transcendental Meditation (TM) and TM-Sidhis program of Maharishi Mahesh Yogi, we expand Hunter's model to include the effects of an individual's intelligence upon the entire organization, nation and world.

This model is a synthesis of several streams of research:
There are two parts to the Intelligence Model of Organizational Effectiveness: individual and group. We propose that effectiveness can be enhanced beyond previous levels by increasing the intelligence or general cognitive ability of the individual employee. We feel that goal-setting and other motivational techniques, health and opportunity are intervening variables that help or hinder the individual performance. But general mental ability circumscribes the level of performance. Until recently, no one has found a method of increasing intelligence reliably. Maharishi Mahesh Yogi (1966) has suggested that each person has unlimited mental potential, but that potential is restricted by various types of stress in the physiology and psychology. He revived ancient Vedic methodologies, the TM and TM-Sidhi program, to develop the individual's latent mental abilities.

On the individual level, past research has suggested that this intervention affects all levels of the intelligence construct (for more information, please see Scientific Research on the Transcendental Meditation and TM-Sidhi Program: Collected Papers Vols.1-5). Extensive research in other areas suggests the utility of the TM technique in boosting performance. Over 450 studies have shown a wide range of benefits to people who practice this technique regularly. These studies support the inference that the T.M. technique increases intelligence and general cognitive ability.

In the business setting three studies were conducted on the effects of the TM technique. Frew (1974) found that job performance, job satisfaction, job stability, and interpersonal relationships with co-workers and supervisors improved in employees participating in the Transcendental Meditation program. Friend (1975) expanded the research of Frew and found similar results. Alexander et al. (1987) completed a three month prospective study conducted in two firms that compared employees who learned the TM technique with control subjects with similar job position, demographic and pretest characteristics. He found that regular TM practitioners decreased their physiological, psychological, and behavioral stress indicators and experienced greater job satisfaction and productivity. In addition Gustavsson (1988) conducted two pilot studies which found that individual top managers who practiced the TM technique experienced more energy, more intuitive decision making styles, reduced stress levels, and that management teams experienced improved group spirit and increased holistic thinking.

In addition to intelligence, the TM and TM-Sidhi program automatically develop many other characteristics that are needed for short-term and long-term achievement and productivity (Muehlman et al., 1989). When considering these general effects of the TM technique and the business-specific benefits, an extremely cogent case can be made for the company-wide utilization of this technology to enhance performance as suggested by the Intelligence Model of Organizational Effectiveness.

In the second part of this model, each organization has what could be called a collective consciousness which is more fundamental than the corporate culture. The whole of anything is more than the sum of its parts; it includes all the relationships between the parts and between the parts and the whole. Each individual has some amount of mental alertness, intelligence, awareness, or consciousness. Individual consciousness upholds and supports thinking, which subsequently affects activity, achievement and fulfillment. The consciousness of employees in a company form a collective consciousness which upholds and supports the collective thinking, activity and fulfillment of the entire firm. This idea might be rather startling in the organizational effectiveness tradition, but some of the research on corporate culture (Schwartz and Davis, 1981) shows that relatively abstract constructs such as collectively shared values can effect the performance of a company.
There is ample empirical research to suggest that the orderly enlivenment (coherence) of collective consciousness can be positively affected by relatively small groups utilizing the TM & TM Sidhi program (Dillbeck et al., 1987). Approximately forty research studies have measured the effects of a small group of people practicing this coherence creating technology together on larger aggregates of people such as a city, state or province, nation, and entire world. These beneficial effects feature environmental changes such as reduced conflict (Orme-Johnson et al., 1987), improved quality of life (Dillbeck et al., 1987), decreased crime rate (Dillbeck et al., 1981), and improved economic trends (Cavanaugh, 1987). In the Journal of Mind and Behavior (1987) Dillbeck et al. give an exhaustive theoretical explanation and presentation of research findings on this phenomena called the Maharishi Effect through which one percent of the population of a city or state practicing the TM technique is found to cause beneficial changes; and the Extended Maharishi Effect (or Super Radiance Effect) where one percent of the square root of the population of a city, state, nation, or world practicing the TM and TM-Sidhi program in a group caused the positive changes mentioned above.

In conclusion, the studies cited above suggest that intelligence, however it may be defined or measured, can be increased in a reliable and systematic manner through the regular practice of the Transcendental Meditation and TM-Sidhi program (Cranson, 1989). One can infer that firms would enhance their organizational effectiveness and productivity by increasing the intelligence of their employees. We suggest extensive research on both small and large companies in several industries to test the validity of our model.

REFERENCES UPON REQUEST