Maintaining mental sharpness and clarity is important to most everyone, and doing so is valuable for maintaining our professional edge. But we are under assault from many directions with challenges that can interfere with mental sharpness. Some of the challenges are familiar; others hide in the background. What are these challenges and what can we do about them?

Goutam Saha, has put together a very concise summary of everything contributing to mental hygiene, including the challenges and actions to meet them. He expresses this with mind maps, which themselves contribute to mental clarity.

Peter Denning Editor

Mind Hygiene for All - a Concept Map

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This article visually describes the important concepts of mind hygiene and the relationships thereof using a Concept Map (Cmap) toward better human cognition.

Many of us either do not know how to nourish our mental health or often neglect our mind issues. This work aims to help us quick understanding of the complex but important mind hygiene topic. Mind hygiene is the science of keeping the mind, brain and nerves of humans healthy. It is concerned with the prevention of mental illnesses and maintenance of health and psychological issues like perception, cognition etc. Medicine helps biology whereas mind hygiene movement might help us to take care of human psychology. Mind Hygiene is a very important domain to prevent our mental sicknesses in this modern busy life to overcome stress, profound boredom, mental fatigues etc. Cognition is the psychological result of perception, learning and reasoning. Perception refers to the state of becoming aware of something via the senses. Cmap improves visual perception. Psychology focuses on the acts and functions of the mind. Human brain is the most complex device on the planet comprising of 100 billion neurons connected by 1.5 million kilometers of nerve fibers. Brain enables us to share our mental life with my friends.

The concept maps here would be of immense help for faster and easier and effective understanding of the complex Mind-Hygiene domain without reading large texts lines after lines and pages after pages. Professional hazards and stringent product or service delivery schedules make our lives full of stresses resulting in mental defects followed by irreparable damages in our bodies. Readers would clearly understand the ways to avoid mental defects and to prevent allied diseases on going through the concept maps on mind hygiene. IHMC's (Institute of Human and Machine Cognition, Florida University) information technology enabled Cmap tool has been used here to develop the concept maps. Everybody including students, scientists, engineers, information technologists, industrialists and other professionals must understand this knowledge domain in order to keep their thoughts, feelings and reasoning defect less and to have stress tolerant, robust mind and thus to have defect free thought process toward higher productivity and healthy society. Especially who are in Information Technology (IT) service sectors often suffer from mental fatigue and hazards because of monotonous work nature over longer period to meet their clients' pressing demands. This work aims to discuss IT enabled knowledge modeling-Cmap perspectives over a given domain knowledge of mind hygiene toward healthier mind and cognition. Moreover healthy mind would help us to extend our thought process toward better understanding the complex real life problems and to develop better computing model thereof through improved reasoning and analysis.

Concept Maps are graphs that are comprised of concepts on the nodes and the relationships among the concepts on the arcs. Knowledge refers to information combined with experience, context, interpretation, and reflection. Knowledge representation technique eases the tasks of managing large representations for complex domains and sharing knowledge with peers and colleagues and publishing them. Knowledge modeling is an interdisciplinary approach to capturing and modeling knowledge. Knowledge is comprised of individual pieces of information called facts. Knowledge modeling is to package combinations of data or information into reusable format for preserving, improving, sharing, aggregating and processing knowledge to simulate intelligence. Such knowledge modeling approach is useful for teaching, learning, brainstorming and collaborative development of complex software products and knowledge acquisition and knowledge sharing during expert system development. This knowledge modeling work of this article aims to encourage the IT professionals to use Cmaps in their various knowledge management (KM) related tasks including e-Health, e-Governance, e-Learning, education technology, web and multimedia content development etc. for better effectiveness and it is a significant step forward to concept map enabled web-based KM applications development.

Mind Hygiene Concept Maps:

Four concept maps here are self descriptive ones and they represent precise and unambiguous knowledge comprising of important facts and their inter-relationships with linking words or propositions to show how the facts or ideas are connected, in contrast to the conventional long texts as we usually see in books, web content etc. Visual representation has a great impact on our cognition. Mind hygiene is the science of keeping the mind, brain and nerves of human healthy. Human's activeness, will, hope, emotions and intellect play a significant role as causative factors both in mental sicknesses and in health. Our mental activities include all of our thoughts, feelings, memories, dreams and other mental activities. Mind activities are the products of electrical and chemical activity in the brain. Regular exercise, yoga, massaging, deep breathing, sound sleep, relaxation, broaden outlook, socialization, positive thinking, hobby, sports, listening music, ignoring trifles, courage to face problems, gossiping, changing life style, not to worry much about outcomes, forgetting the word "frustration," taking vitamins & minerals, avoiding fast foods & alcohol etc. are helpful to have sound mind.

The first concept map (Figure-1) visually introduces mind hygiene topic. The second Cmap (Figure-2) visually demonstrates the potential mind threats namely paranoia and monomania and their sub-ideas namely, emotional and intellectual monomania etc. The third Cmap (Figure-3) visually demonstrates issues related to concepts of mental sicknesses, brain, mind, Alzheimer's disease and Dementia and their remedies. The fourth Cmap (Figure-4) visually describes the concepts of anxiety, tension or stress, and the underlying subconcepts namely acute-stress and chronic-stress and how they affect our mental and physical health along with their symptoms and preventive measures. Cmap's downward viewing along the linking arrowed lines would give us better understanding the corresponding concepts.

Conclusion:

Mind Hygiene concepts and their relationships have been described lucidly by the Concept Maps. More specific concepts about Mind Hygiene could be described in details by other concept maps and those could be integrated for navigating between them through hyperlinks. Healthier mind would definitely help advancement of the future trends in computing fields like intelligent computing.

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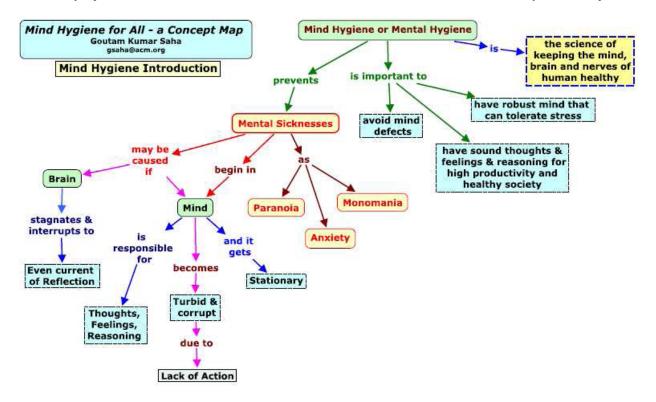


Figure-1. Mind Hygiene Introduction

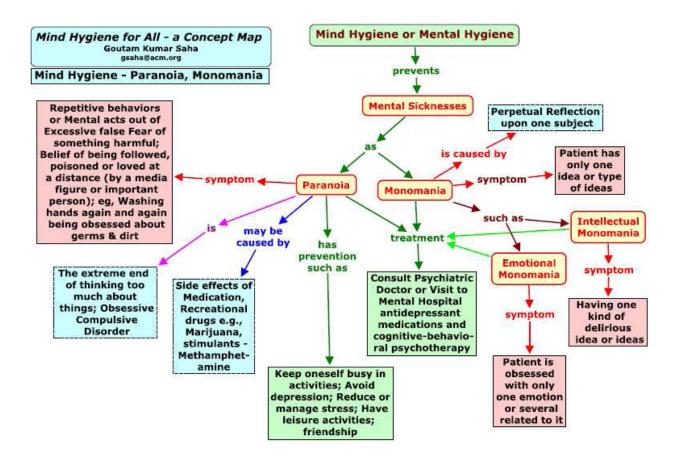


Figure-2. Mind Hygiene Concept Map – Paranoia, Monomania

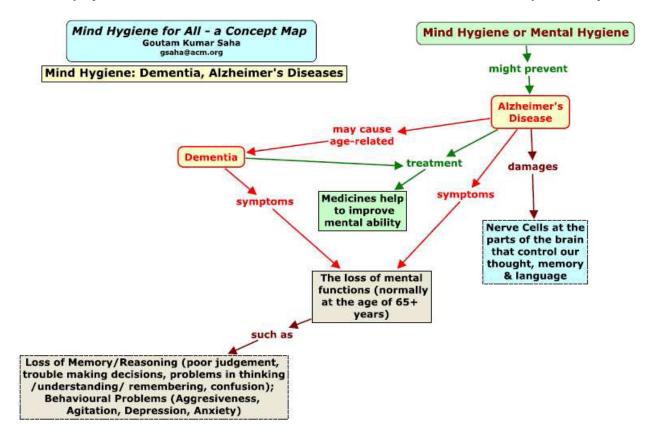


Figure-3. Mind Hygiene Concept Map – Dementia, Alzheimer's Disease

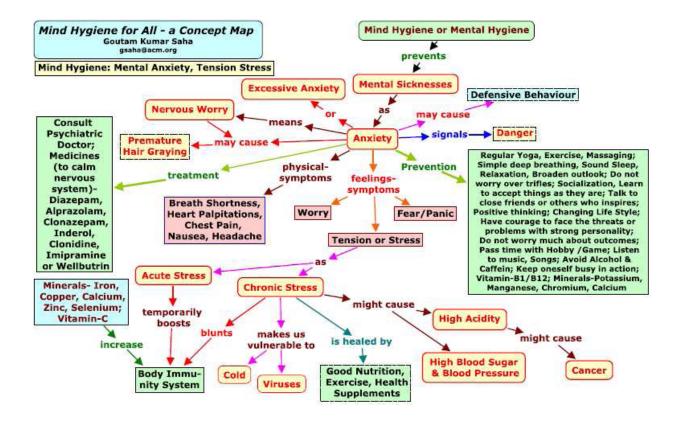


Figure-4. Mind Hygiene Concept Map - Anxiety, Tension