# Study of Cognitive Performance Development of graduate students by the intervention of MCSS & Sahaja Yoga Meditation Technique

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#### **INTRODUCTION**

The world has witnessed several viral epidemics in a timeline such as the severe acute respiratory syndrome coronavirus in 2002 to 2003, H1N1 influenza in 2009, Middle East. Individuals working from home, attending meetings and completing their daily target work without even stepping out from home since weeks have created a chaotic environment and hampered a balanced family life. Health is a state of complete physical, mental and social well-being and not merely the absence of disease or enormity. This can be seen that mental well-being is imperative for a healthy life. Pandemic condition in COVID 19 is never imagining by any profession & the unexpected changes happened in complete routine of population. All changes have several permutation & combinations which turns into positive & negative impacts. Some positive effects are: Emissions reduced, Social needs or relations fulfilled, Environment's healing, Responsibilities towards society and Know our self.

Some negative effects are: Threat to mental & physical health, Stress, depression, fear crisis, Migration, Social distancing and Economic slowdown.

Cognition & Meta-Cognition

Cognition is mental processes which include perception, acquisition of knowledge, skills and understanding about particular event or situation. Cognitive processes include thinking, interpreting, knowing, memorizing, mediating, and problem-solving (Kendra Cherry Mar. 2020). These are higher-level functions of the mind, intelligence and involve verbal, nonverbal communication, imagination, perception, and planning (Dhakal A, et al. 2021).

There are some core skill which is used by brain to think and feel, read and write, learn and unlearn, remember and memory decay, reason out, and concentrate and focus on specific aspect. (www.mindmattersjo.com). To implement such skills it is needed to receive information and act on it into the storage of data in mind, it can employ day at college, at profession, and in moreover life. 'Brain training' is a process of training the cognitive skills to the brain and inculcating in behavior to think and learn (www.learningrx.com). Every cognitive skill plays a crucial part in processing new information. That means if any one among these below skills is weak, regardless of what quite data is coming in your way, grasping, recollecting information is impacted. Most education competitions are caused by one or more weak cognitive skills.

Now those are staying in home (Passive agents), Sahaja Yoga Meditation is that technique of thoughtlessness which removes all kinds of tension, stress, anxiety, depression in human psychology.

For both active & passive agents, changes carry by Sahaja Yoga meditation in psychological behavior:

Mentality/Perception (thought process) Example: A farmer who works in farm & used to put sugar in his tea in such a way so that spoon can stand still in cup but there is no problem of Diabetes In modern world or in urban area, people eats very less sugar but they are suffering with such diseases. So removal of unnecessary thoughts can be achieved by Sahaja Yoga Meditation by connecting with real nature divine powers.

**Reactions into responses Example**: While riding bike or driving car, if someone blows horn then people used to react immediately so how to response for keeping ourselves calm can be achieved by Sahaja Yoga Meditation.

**Ethical behavior Example**: While performing professional & social duties what responsibility & principles one should carry is innately taught by Sahaja Yoga Meditation.

Anger or stress management Example: In this pandemic condition, it is obvious to lose patience & become stressed so Sahaja Yoga meditation can make one relaxes.

**Stability in behavior Example**: Usually people used to have mood swings which differs personality traits overall so Sahaja Yoga meditation can give stability in person's behavior.

**Wisdom/decision making power. Example**: What, Why, When, Where & how all these questions used to come in everyone's mind so to make it best Sahaja Yoga Meditation can help innately.

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Love & affection Example: A sign of compassionate & mature person, one should love overall for making secured & safe life which can be achieved by Sahaja Yoga Meditation.

**Pure attention/concentration. Example:** Continuous thoughts can break the immunity & connection between heart & mind which can be stabilize by Sahaja Yoga Meditation.

**Forgiveness Example:** Anger & stress can be reducing by forgiving or forgetting the unnecessary thoughts which can achieve by Sahaja Yoga Meditation.

**Peaceful nature/divine bliss. Example:** Connecting with divine powers is best stage of Human Psychology to achieve complete stat of peace & joy through Sahaja Yoga meditation.

Meditation is the intellectual alertness that we meditate means people will be in thoughtless ness awareness that gives them harmony or contentment. Such practices & methods are for to slow down & ultimately stop the continuous movements & instability of individual's minds & thoughts. Meditation encompasses reaching a state of 'thoughtless awareness' in which the needless pressure & stress creating movement of the mind is deactivated or neutralized without dropping of concentration & efficiency. Meditation enables one to concentrate on the existing moment rather than on the unmoved & unchanged past or undecided future. Meditation is not about concentration, loss of control, exercise or yoga and mental hard work.

#### **How Meditation Work?**

Several forms of meditation ranging from multifaceted to modest one, some are strict & some are casual. But if someone practices it practice it on regular basis; meditation is believed to help develop characteristic, unconscious micro performances which can possibly extensive constructive effects on mental & emotional functioning. Meditation practice for 15 minutes twice in a day on regular basis has shown beneficial results & outcomes.

- maintaining the necessary temperament & attitude to safeguard individual whole the instructions in a timely manner,
- evaluate the progress on daily basis to make it certain about the learning & understanding.

Figure1.1: Chakras/Plexus knowledge of human subtle system devised in Sahaja Yoga Meditation. Here is how Sahaja Yoga Meditation (SYM) addresses various stress related problems: Systematic investigations since decades unravel the modulation of brain structure and neural network associated with Sahaja Yoga Meditation rendering beneficial effects on emotional balance along with improved cognitive performance. Various studies of SYM indicate that not only healthy individuals, even the patients suffering from chronic illnesses for instance & stress, anxiety and depressed mood, hypertension. Sahaja Yoga dhyan helps to develop cognitive changes that reorder outlook on life, which recovers the ability to evaluate more conditions as experiments rather than pressures, and facilitates positive growth. But these changes are more than just managing strategies.



Fig 1.1: Subtle System

Psychosomatic flourishing includes a extensive variety of constructive evaluations, such as better gratitude of life, self-growth, self-assurance and esteem, an intelligence, empowerment, and an ability to efficiently organize resources. It is a state of lower stress stimulation, efficient reactivity, faster regaining, and metabolic functioning after stress.

Let us take some details of it.

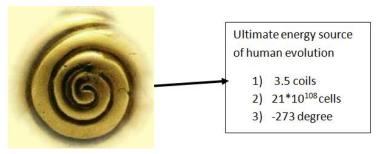


Fig 1.2: Spiral Coil or Kundilini Energy

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Those who attend the guided meditations often express varying degrees of meditation experience, with different understandings of Hindu spiritual practices. The central Hindi terminology used in Sahaja Yoga are 'chakra' and 'kundalini'—etymologically traced back to Vedic Sanskrit hymns that were compiled during the third millennium BCE (Saraswati 1984, 35). During her first time attending, a young woman offered knowledge of the chakras, which are often thought of as "centers of energy located vertically along the spine" (Best 1981, 12), where the kundalini takes its course. In fig 1.2, the energy source which commonly called 3.5 coils kundalini or spiral coils inside human body which placed only for advancement. Human beings used to spend time in different activities like social, physiological, security, esteem needs said by Maslow. But in the last stage of human survival where they get absolute knowledge of themselves i.e. self-realization, motivation or satisfaction, stage where purest form of energy recites unites & gives joy, happiness of life. We not even imagined about it but it is beyond. It penetrates all the functional levels so that all managerial levels get automatically stable or gives best results in it. [Saraswati, Satyananda. 1984]

This meditation brings you all the levels of innate excellence in human being as stated above by rising 3.5 coils. Continuous practice of this meditation gives empowerment in skills, knowledge, and attitude. In this we don't have need to give up anything like eating habits, drinking or living habits.

#### **Review of Literature**

- 1. The effects of exercises on cognition concluded that although the data look promising, information about the type of exercise is as yet unknown and further research needs to be undertaken. There are some encouraging indications that adequate level exercise reduces the risk of developing cognitive impairment in adults [Geda Y. E. 2010]
- 2. The research in the field of mindfulness and meta-cognition has increased in last few decades. The researches in both fields have been conducted independently and there has been substantial increase in the application of meta-cognition and mindfulness. However, mindfulness and meta-cognition share many commonalities. They are related conceptually in many ways. The research paper concludes that specific aspects, such as development of 'meta-awareness' can be integrated with each other in a complementary as well as supplementary manner in psychotherapy. [Hussain, 2015].
- 3. This study focuses on the impact of Sahaja Yoga meditation and Pranadharna on energetic life balance abilities. From Pt. Ravishankar Shukla University, Raipur 90 females were selected (from 17 to 25 years) later divided into 3 groups randomly; 2 groups were experimental and 1 was control one. Each group was consisting 30 subjects. The 1<sup>st</sup> group was practiced Sahaja Yoga and the second group was practiced Pranadharna. They practiced this for 6 weeks. It was measured by Gymnastics balance beam test and was calculated in numbers. Co-variance analysis was engaged to analyze the received data. Significance level was set at 0.05. Result of this study is significant difference was found between the Sahaja Yoga group and Pranadharna group and Sahaja Yog group and control group. This was effect on dynamic balance abilities and on the other hand, there was no significant difference between the Pranadharna group and control group on dynamic balance ability [Dr. Rajat & Dr. Rajiv Choudhari 2016].
- 4. A study was conducted to determine the efficiency of Sahaj Yoga Meditiation on range of psychological events. The results of the study suggested significant improvement in psychological variables like anxiety, depression and stress. The effects of meditation were negatively related to neuroticism. It also leads to increase in the level of happiness, experience of bliss, quality of life, positive affect, mood, change in personal values, emotional stability and less mental activity [Secondary Data, Poster: The Psychological Effects of Sahaja Yoga Meditation: A Systematic Review, University of Amsterdam]
- 5. A study was conducted to assess the effect of meta-cognitive skills and learning style of school students on their academic achievement. The study also aimed to determine the relationship between meta-cognitive skills, learning & thinking style. The result of the study indicated that meta-cognitive skills, learning style are significant predictor of academic achievement of school students. [Dr. Madhu Gupta and Suman, 2017].
- 6. In this study, researcher analyzed the impact of yoga and meditation on academic performance on students. One-way ANOVA statistical measure had been used to know the difference between the experimental and control group. Two groups of students were divided depending on the students who practiced it before and students who have not been given any training before. This meditation intervention study helps students for improving their academic performance. [Dr.Maryada Eswari, 2018]
- 7. The effects of Pranayama, Hatha yoga and Raja yoga meditation on Executive and Metacognitive regulation. 60 students participated in the study. They were randomly allotted to one of three yoga groups (pranayama, hatha yoga, raja yoga meditation) of 20 members. The findings at the end of 20th day revealed that all the three types of yoga, lead to an increase in Executive function and Metacognitive regulation. Duration of training also affected the test scores. [Susmita Patra, Ishita Chatterjee and Debolina Dasgupta, 2020].
- 8. A study was conducted on school girls to evaluate the effect of Sahaj Yoga on academic stress of the students. Participants were students of 8<sup>th</sup> grade. Experimental group received intervention of yoga practice for 6 weeks. The results of the study confirmed that practicing Sahaj Yoga for 6 weeks reduced the academic stress of students by considerable amount. [Jaysingh Hotkar, 2017]
- 9. The study was undertaken to assess the development in cognitive variables in adolescents' rural resident's school children. Selected cognitive development variables were evaluated at the baseline and at the end of 12 weeks of yoga training in experimental and control groups. The study came on conclusion, selective cognitive development variables were improved after 3 months of yoga training in adolescent school children in rural areas. [Anita Verma et. al., 2015]

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#### METHODOLOGY

#### Variables:

- Independent Variable: Technique of SAHAJ YOGA
- Dependent Variable: Meta-Cognition functions planning, Implementation, monitoring and Evaluation

# **Problem:**

- 1. Would it be possible to improve performance of graduate students with the help of SAHAJ YOGA?
- 2. What extent SAHAJ YOGA will act as intervention to improve meta-cognitive skills' of graduate students?

# **Objectives:**

- 1. To measure performance of graduate students.
- 2. To analyse impact of SAHAJ YOGA on meta cognitive skills of graduate students.

#### Hypothesis:

- 1. There is significant impact of SAHAJ YOGA on performance development of graduate students
- 2. There is significant impact of SAHAJ YOGA on 'metacognitive Skills' of graduate students.

# **Research Design:**

This is Pre-Post research design. An intervention is used to observe impact of independent variable on dependent variable on 49 students. 'SAHAJ YOGA' technique is an independent variable and 'Meta-Cognition' is the dependent variable.

**Sample:** Pre-intervention data are collected from all 49 respondents and then explained meaning and use of SAHAJ YOGA to all graduate students. After 3 months of application of intervention, data are collected from same respondents to observe impact on Meta-Cognition.

# Tools:

1) Meta Cognitive Skill Scale (MCSS) by Prof. Dr. Madhu Gupta and Ms Suman, published by National Psychological Corporation, Agra. This is standardized tools hence item analysis is not required.

2) Self-Realization: The process of Kundalini awakening is Self-Realization. We can connect with our own and achieve meditation state when the cherishing, spiritual energy i.e. Kundalini becomes wide-awake and full of life. When this energy is flowing within human beings, it provides a manifestation for the Spirit. The dormant Kundalini energy rises from the sacrum. As a result, the energy chakras become keyed up or encouraged. When this energy passes through the brain we spontaneously achieve thoughtlessness. Program is all about knowledge & skills of meditation which covers awakening of Kundalini Power within & its experience of self-realization. All the seekers used to get different experiences like:

- Cool breeze on hands & on top of head.
- Stress free,
- Relax or peace within,
- Thoughtless state,
- Power within by means of only meditation.

Following chart & graph will show the comparative behavior of students before & after doing Sahaja Yoga.

Inclusion Criteria: Sample includes BBA students from Nagpur city.

#### **Discussion:**

**Measurement of Metacognition:** Metacognition is a complex phenomenon. It is very important to management graduate students. The standardized scale deployed in this study measures for important factors of Meta-cognition.

To understand its complexity it is necessary to check normal distribution of obtained score hence histogram is drawn. In addition, descriptive statistics is also obtained.

# Table 1 Pre-Intervention Study of 49 respondents.

BIN		
25	25	Frequency
30	30	1
35	35	3
40	40	13
45	45	18
50	50	12
55	55	2
	More	0

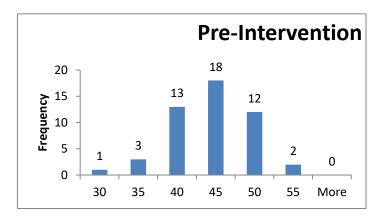
<b>Pre-Intervention</b>			
Mean	42.61		
Standard Error	0.75		
Median	42.00		
Mode	45.00		
Standard Deviation	5.28		
Sample Variance	27.91		
Kurtosis	0.17		
Skewness	-0.09		
Range	26.00		
Minimum	29.00		
Maximum	55.00		

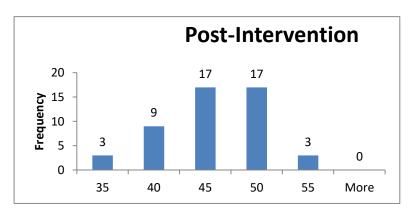
# Table 2 Post-Intervention Study of 49 respondents,

BIN		
30	30	Frequency
35	35	3
40	40	9
45	45	17
50	50	17
55	55	3
	More	0

Post-Intervention		
Mean	44.3	
Standard Error	0.7	
Median	45.0	
Mode	45.0	
Standard Deviation	4.8	
Sample Variance	23.5	
Kurtosis	-0.4	
Skewness	-0.3	
Range	22.0	
Minimum	33.0	
Maximum	55.0	

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Vol. 7 (Special Issue 5, April 2022) International Journal of Mechanical Engineering There are total (n = 49) observations. Graph shows that data is normally distributed, it is skewed. Skewness is important to judge normal distribution of data. Ideally, anyone of psychological parameter for selected sample may occur as normally distributed with skewness of Zero hence, this is called as negatively skewed data. It means more frequencies are following on the right side of mean than frequencies on left side. However with the permissible limit of skewness (-0.5 to +0.5), the data is considered as normally distributed (Skewness=-0.34).

Researcher's objectives are to measure overall metacognition of management graduates and further to take measurement of management skills before application of intervention of SAHAJ YOGA.

#### Technique of Sahaja Yoga:

The researcher has used selected technique of Sahaja Yoga to observed change in functions of Meta-Cognition. The assumption of researcher is that techniques are so effective which can change mentality of management graduates to the extent of observing permanent change in their behavior with respect to function of Meta-Cognition.

As a result of execution of 3 months of Sahaja Yoga exercises, it is observed that students have shown certain positive behavior in terms of their Meta Cognition skills. The change in their behavior has been captured by same scale and it is recorded in data table.

#### CONCLUSION

As a researcher, I always try to understand meditation better. Sahaja Yoga meditation technique is a unique that describes many different types of interventions. This needs to be a way of thoughtful, applying, and unique findings in research on Sahaja Yoga Dhyan technique. This article addresses a need and starts a discussion for more strictness in labeling and succeeding Sahaja Yoga meditation technique. If researchers regularly apply this Sahaja Yoga meditation technique for the target group to define all performs, individuals reading this research and future analysis will be able to consider the potential encouragement of all of the mechanisms that illustrate the intervention.

We hope this discussion about and application of the Sahaja Yoga meditation intervention from different perspectives and practices will lead to improvements. The impact of Sahaja Yoga technique on Meta-cgnition has marked its practice as much more important, continuing the learned practice will give consistency on general life performance. Our result conveys the importance of meditation practice among people and also recommends teaching Sahaja Yoga meditation technique to all people to maximize productivity & reduces stress, anxieties. Practicing Sahaja Yoga meditation technique also reduces stress among practitioners so it helps people to regulate them towards their goal. Further research on this concept with larger sample will help us to generalize the meditation practice to all. Applicability of this meditation practice in various segments will also unveil many beneficial things.

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