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Effect of Preksha Meditation on Creative Problem Solving Ability

Samani Sulabh Pragya

Introduction

In the age of technology and post modernization, creative problem solving ability places an important role as it is significant part of applied thinking. If we call problem solving as dealing with situation, overcoming an obstacle, bringing about a desired effect, making something happen then it can be seen that the thinking involved is very much the thinking involved in everyday life, even though the actual problem may appear exotic. The definition provided by Medwick also says that "the formation of associate elements into new combinations which either meet the specified requirements or are in some way useful."

From beginning of civilization human being tried to solve their problems in different creative ways, finding the innovative methods for enhancing the problem solving ability. Yoga and meditation are also the one of the techniques for enhancing the problem solving ability and developing creativity. Acharya Mahapragya had developed an innovative techniques of meditation based on ancient wisdom of Jain canons and named it as Preksha Meditation. It aims to bring about positive attitudinal and behavioural changes through purifying the mental state, awakening reasoning mind and constant vigilance and bringing overall transformation in personality.

Although meditation has been shown to improve a variety of cognitive functions, relatively few studies have directly examined the influences of meditation training on problem solving (Dillbeck, 1982; Kindler, 1979; Raingruber & Robinson, 2007). Kindler (1979) found that group problem solving could be improved with meditation training, specifically, improving speed to solution and promoting effective teamwork. Raingruber and Robinson (2007) found using a qualitative approach that nurses engaged in meditation training reported improvements in their problem solving abilities, attention, and calm. These findings suggest that meditation might be an effective method for improving problem solving, but more study is clearly required. If meditation were to enhance problem solving, we hypothesize here that its influence might be most pronounced on the actual execution of any given problem solving strategy. Whereas expertise is likely to act on the stages of problem solving that require accurate problem framing (i.e., understanding problems and devising solutions), meditation and other types of cognitive training might have positive effects on some of the key cognitive processes utilized while trying to execute a plan of action during problem solving (Lutz et al., 2009; Mayer, 1992; Tang et al., 2007; Zeidan et al., 2010). Ly and Spezio (2009) found via fMRI that meditation could improve decision making by influencing neural circuits in an enduring manner for recruitment during the self-regulation of social cognitive processes. Other studies have demonstrated that meditators appear to display more conscientious decision making (Kirk, Downar, & Read Montague, 2011), or cognitive flexibility, a mental ability important in problem solving (Dillbeck, 1982; So & Orme-Johnson, 2001). These and other studies suggest a link between meditation and other forms of cognitive functions used during problem solving.

Objective

The present Paper demonstrates the effect of independent variable 'Preksha Meditation' on dependent variables 'Creative Problem Solving Ability'.

Methodology

In present study 40 healthy undergraduate female students with similar socio- economic status and having age 18 - 20 years, were randomly selected. They were tested by Standard Psychological test (mentioned below) on onset phase and follow up phase (after two months). In mid of both phases subjects were administered Standardized Preksha Meditation Intervention for 2 months (5 days per week, 20 mins per day).

Preksha Meditation Intervention Module:

The following Preksha Meditation Intervention module was administered (20 mins):-

1. Recitation of *Mahaprāṇa Dhvani*
2. *Kāyotsarga* (Relaxation)
3. *Dirga Śvās Preksha* (Perception of long and deep breathing)
4. *Leshyā Dhyan* (Colour Meditation) of bright yellow colour on *Gyān Kendra* (Centre of Knowledge)
5. Suggestion to firmly determine, feel and experience, "My positive and creative thinking is enhancing. My cognitive conscious is developing".
6. Conclude with Mahapran Dhvani.

Test and Tool:

In regard to conclude the experiment work the following Standard Psychological test was incorporated.

1. Passi- Usha Test of Creative Problem-Solving (B.K. Passi and Usha Kumar)

Statistical Analysis:

The obtained data were statistically analysed with the help of SPSS to evaluate the distinct effect of intervention. A paired sample *t*-test was used for intra-group comparison to evaluate the net effect of Preksha meditation practices.

Result:

After the statistical analysis, the following results were obtained. The mean value of Originality Test was 5.80 at 0-day which increased up to 7.46 after 2 months of Preksha Meditation intervention in the group. This improvement in problem solving ability (originality) is statistically significant at 0.01 levels.

Table -1 : **Originality**

Duration	Mean	SD	t	p
0-day	5.80	1.706	-5.225	0.01
2 months	7.46	0.809		

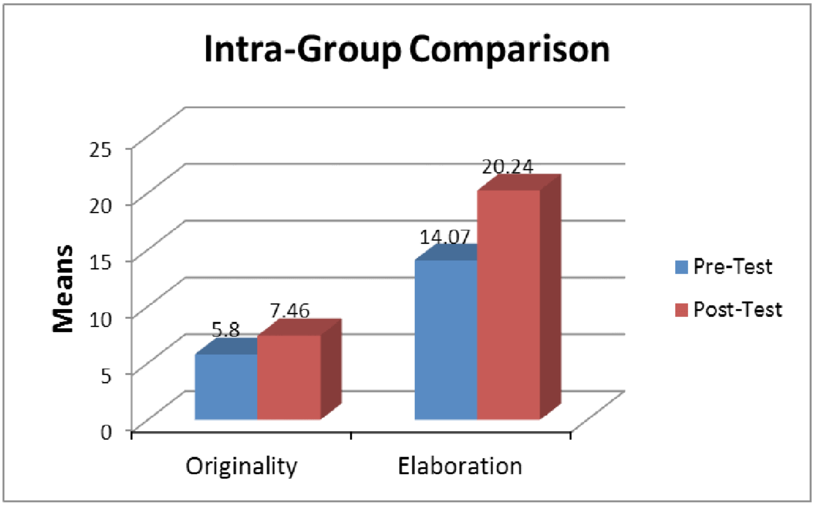
df = 39

The mean value of Elaboration Test was 14.07 at 0-day which rose up to 20.24 after 2 months of Preksha Meditation practice in the group. This improvement in Elaboration Test is statistically significant at 0.01 levels.

Table-2 : **Elaboration**

Duration	Mean	SD	t	p
0-day	14.07	3.830	-5.204	0.01
2 months	20.24	5.907		

df = 39



Discussion

The result obtained showed that meditation training was helpful in enhancing the creative problem solving ability. Dubey (1995) is of the opinion that Problem Solving is framework or pattern within which creative thinking and reasoning take place. It is the ability to think and reason on given levels of complexity. Meditation shows its effect through which people have learned effective Problem Solving at higher level of complexity. Creativity is the capacity or ability of an individual to create, discover a novel idea or object including the rearrangement or reshaping of what is already known to him which proves to be unique personal experience. Meditation may help in rearrangement or reshaping of what is already known. This is due to the relaxation of brain and relaxation in level of stress, anxiety and unusual thoughts.

This technique is also very useful in development of concentration which results in the deep engagement of mind to that specific problem.

Our results are also supported by the study of Kapoor et al (2012) who assessed the significant effects of Preksha Meditation on academic stress of adolescents. Mohan (2011) concluded in his study that the regular practice of Meditation has influenced the stress producing mechanism thereby causing the reversal of stress states. Mallipragya (2007) studied the therapeutic impact of Preksha Meditation over the problem of anxiety of under graduate female students. Bhardwaj (2009) found significant reduction in social and financial stress of adolescents' boys after a six month practice of Preksha Meditation technique.

Conclusion

It may be concluded that practice of Preksha Meditation improves the level of creativity and problem solving ability. So it may be useful to those people who are engaged in different creative fields like architecture, craftsmen, interior designer, engineer and those involved in complex Problem Solving situations like negotiations and conflict resolution.

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