Meditation and Workplace Creativity: A Potential Relationship

Mansi Mansi
Doctoral Scholar
School of Management
RMIT University
Email: mansi.mansi@rmit.edu.au

Associate Professor Adela McMurray
Director, Research Support & Performance
Research & Innovation Portfolio
RMIT University
Building 91, Level 2, 110 Victoria St Carlton
Email: adela.mcmurray@rmit.edu.au
Meditation and Workplace Creativity: A Potential Relationship

ABSTRACT

This multidisciplinary literature review across the business, medicine and psychology disciplines explored the possible relationship between meditation and workplace creativity. This review generated four staged frameworks resulting in the Meditation and Workplace Creativity Intervention Framework which yielded the equation ‘NF+M = C → WC’ (Negative Factors + Meditation = Change Facilitating Workplace Creativity). The hypothesized equation may be utilized as a potential diagnostic tool for future studies within organizational settings so as to facilitate workplace creativity. This paper stimulates thinking in the area of meditation, workplace and creativity.

Keywords: Meditation, Creativity,

INTRODUCTION

The concept of ‘Meditation’ and ‘Workplace Creativity’ may appear irreconcilable and unrelated; however, this paper uncovers the potential relationship between these two concepts and the way they complement each other. Thus, the purpose of this exploratory conceptual paper is to systematically analyse and consolidate the existing multidisciplinary meditation literature which is dominated by the health and medical disciplines. Secondly, the paper provides an understanding of how meditation has the holistic capacity to enhance workplace creativity.

We have developed four frameworks identified as the Internal & External Meditation Factors Framework, the General Meditation and Workplace Creativity Framework, the Micro Meditation Workplace Creativity Framework and finally the Meditation and Workplace Creativity Intervention Framework. These frameworks consolidate the meditation literature to show the different layers of positive changes in an individual’s physical, psychological and physiological wellbeing due to meditation practices. The concluding framework ‘Meditation and Workplace Creativity Intervention Framework’ is the contribution of this paper which depicts the potential relationship between
meditation and workplace creativity. However, the developed equation in this framework needs empirical investigation; and multi-disciplinary literature review suggests that meditation has the potential to enhance holistic creativity within the workplace.

Fisher (2006) provides practical reasons that philosophers have argued for centuries that humans, by nature, are meditative beings. For example, Descartes called his writings ‘Meditations’, Similarly, Heidegger drew a clear distinction between ‘calculative’ and ‘meditative thinking’. The literature accentuates that workplace creativity is dependent on various phenomena and requires the utmost balance between mind and body where there is communication between various brain waves which coordinate complex tasks such as control, transmit, information and are the centre for dynamic creativity (Judith, 2008, pp 228).

The literature shows that meditation increases learning ability (Dillbeck 1982), clarity of perception (Saradth 2003), moral imagination (Forge, 2004), focused attention (Ospina et al, 2007) and mindfulness and cognitive flexibility (Moore and Malinowski, 2009). Thus we contend there is a possible relationship between meditation and workplace creativity and pose the following research question which underpins our conceptual theory building paper:

Research question 1: What is the potential relationship between meditation and workplace creativity?

To answer the research question, we conducted an in-depth multidisciplinary literature review and utilized conceptual theory building to develop a four staged meditation and workplace creativity framework accompanied by theoretical propositions.

RESEARCH METHOD

This multi-disciplinary conceptual theory building paper employed a systematic in-depth documentary analysis of the meditation and workplace creativity multi-disciplinary literature. A systematic analysis of the business, medicine and psychology disciplines was followed by
triangulating the findings which uncovered the positive benefits of meditation and its relationship with the different forms of workplace creativity which in turn informed each stage of our four frameworks.

We acknowledge there are different schools of meditation, which promote and practise their own unique Meditation technique such as Zen Meditation, Transcendental Meditation, Vipassana Meditation, Kaon Meditation, Mahayana Meditation, Tibetan Meditation and Mindfulness Meditation. Different religions such as Buddhism, Zen, Hinduism, and Sufi interpret meditation in their own way, this paper does not associate meditation with any particular religion, culture or country. The term meditation is used throughout the paper and is regarded as a physical activity, which has multi-facet physical, psychological and physiological benefits.

In total we reviewed two hundred and ten studies and of those studies, thirty one were relevant in developing the foundational stage identified as the ‘Internal and External Meditation Factors’ framework. This framework provides overwhelming evidence that meditation profoundly influences a person’s mind, health, emotions, feelings and physical state.

Establishing this foundational stage, facilitated in progressing on to the next stage of analysis where eleven of the two hundred and ten studies informed the development of the ‘Meditation and Workplace Creativity Framework’ thereby disclosing the potential relationship between meditation and different forms of workplace creativity. It is noticed in this framework that not all of the studies have a direct relationship between meditation and workplace creativity. We contend that meditation impacts the workplace creativity in a holistic manner which is broad and multi-layered.

Building on stages one and two, the in-depth analysis then progressed to the development of the ‘Micro Meditation Workplace Creativity Framework’ which is the triangulation of three studies from two different era’s (1974 and 2009) drawn from the Business and Psychology disciplines. The findings in stages one, two, and three formed the pillars to the fourth stage ‘Meditation and Workplace Creativity Intervention Model’ which systematically compiles and concludes all the stages
proposed in this paper. This model highlights the antecedents, outcomes, and importance of meditation in enhancing holistic workplace creativity and yields an equation which may be utilized as a diagnostic tool by future studies to test this potential relationship.

Literature review reveal that studies conducted across diverse disciplines in different decades are predominantly US based and have used wide range of methods. Meditation is also extensively studied across health disciplines because of its potential benefits on mind and body. We noted that there is an inconsistency in the meditation and workplace creativity studies. For example, Frew’s (1974) work is the pioneer in recognising the relationship between meditation and creativity. Domino (1977) in an empirical investigation suggested that there is a significant correlation between transcendental meditation and creativity. Similarly, after three years Travis (1979) in longitudinal study found that transcendental meditation technique enhances creativity. Although the number of studies were limited, the Meditation and creativity relationship was identified approximately forty years ago in nineteen seventy. The relationship between transcendental meditation, creativity and pure consciousness was established by Orme-Johnson and Haynes (1981). A further study conducted on Swedish managers uncovered that meditation has multidimensional benefits and one of which is creativity (Schmidt-Wilk et al, 2000). However, the literature indicates that in the management and business disciplines the recognition of the meditation and workplace creativity relationship is inconsistent and patchy. Consequently, it may be seen that there is a gap in the meditation and workplace creativity literature. As the literature suggests, we recommend that meditation and workplace creativity studies especially in the business and management disciplines requires rigorous empirical investigation which would provide equivalence as found in the medical and psychological disciplines.

THEORY

Our literature review reflects that there is a mutual interdependency and connection between the two domains of Internal and External Meditation Factors. Therefore, Spillover Theory (Diener, 1984; Wilensky, 1960) which conceptualizes the vertical and horizontal aspects of meditation shown in the
four frameworks provides the theoretical underpinning for this paper. Spillover theory posits that satisfaction in one’s life domain affects satisfaction in another life domain (Giacalone and Jurkiewicz, 2003, pp 209).

The Spillover effect of meditation is seen in prior studies which have identified that meditation has positive influence on the Internal ((Eppley et al, 1985; Shapiro et al, 2005; Michaels 1976; Wallace et al, 1983) and External Wellbeing (Forge, 2004; Roedler et al, 2009; Nidich et al, 1972) of an employee. Meditation is also studied in conjunction with workplace creativity such as development of personality (Nidich et al, 1972); focused attention (Ospina et al, 2007); cognitive flexibility (Moore & Malinowski, 2009) and problem solving (Kinder, 1979). Work and life are not viewed as a separate compartment and their meaning made in life or at work have spillover effects (De Kalerk, 2004; Liou et al, 1990). Therefore, the spillover effect of meditation on an employee’s vertical and horizontal well being highlights the congruent relationship between meditation and workplace creativity and underpins our four frameworks.

**MEDITATION: A REVIEW OF LITERATURE**

To date, no universally accepted definition of meditation appears to exist in the literature. This could be due to the fact that the purpose and meaning of the term meditation is vast, complex and multidimensional. In addition, the term is cumbersome to define due to its multi-meaning and is studied across numerous disciplines. However, the attempt to define meditation by different authors has made this term prosperous and diverse where the literature provides a plethora of definitions, which describe meditation in a unique and diverse way. For example, an early definition proposed by Hewitt (1977) states that meditation is a general term applied to the methods of steadying, quieting or opening the mind for the purpose of altering states of consciousness and entails training the mind, especially one’s attention and will, so that one may set forth from the surface level of consciousness and journey into the very depth of raised consciousness.
Building on Hewitt’s (1977) general definition, Easwaran, (1979) is more specific and states that meditation is a systematic technique for concentrating and taking hold of, the utmost degree of our latent mental power which consists of training the mind, especially our attention and will, so that we may set forth from the surface level of consciousness and journey into the very depths of consciousness.

Extending Easwaran’s (1979) definition, Roth (1987) proposes that meditation is the simplest form of human awareness and pure consciousness open only to itself and its own full potential. Edwards (2000) would agree and suggests that techniques such as meditation increase creativity by enhancing the capacity to visualise, which is a touchstone of creative thinking.

In support of Roth’s explanation, Losyk (2005) states that meditation liberates the mind from distracting thoughts and facilitates a state of calmness where meditation assists in being in the present moment and thereby strengthening the mind-body correlation.

In agreement, Cullen (2006) asserts that with advanced brain scanning technology, studies show that meditation directly affects the function and structure of the brain, changing it in ways to enhance attention span, sharpen focus and improve memory. She found evidence that daily practice of meditation thickens the part of the brain’s cerebral cortex responsible for decision-making, attention and memory. She further states that Deutsche Bank, Google and Hughes Aircraft offer meditation classes to their employs and as a result, meditation prevents stress-related illness, regulates emotions, increases cognitive intelligence and reduces absenteeism. Rampersad (2007) concurs and states that improved concentration is the result of meditation, which is the rediscovery of a natural state of awareness and forms an effective basis for self-knowledge.

The conventional meditation literature states that the utility of meditation was confined to the related dimensions spiritual awakening. Studies addressing the implication of meditation is inexhaustible, such as Druhl et al, (2001) confirms that the positive effects of Transcendental Meditation and TM-Sidhi programs have been verified in over 500 scientific research studies, conducted over the past 40
years at over 200 independent universities and research institutions in 20 countries. He further states that a close coordination between mind and body results in improved functioning of the physiology, allowing better integration of the creative qualities of universal intelligence into the individual mind.

**MEDITATION FRAMEWORK**

**Stage 1 - Internal and External Meditation Factors**

Framework 1 broadly outlines the benefits of meditation in two different categories i.e. internal factors and external factors. Internal factors are the amalgamation of studies conducted within the arch of the health sciences discipline which claim to have positive benefits on the human mind and body. External factors are the combination of meditation studies conducted around family and surroundings which yield positive benefits within similar domain as shown in the framework.

Framework 1, which is comprised of thirty one studies, demonstrates the association of an employee’s internal and external factors, which are the co-joined and interrelated physical and mental states. It is the aim of this paper to review the meditation studies contributing workplace creativity. We propose, this broader association of internal and external factors may impact on an individual’s workplace creativity, as workplace creativity is not an independent phenomenon rather it is a holistic and interdependent occurrence. The general barriers to workplace creativity may be stress, physical and psychological health, depression, inability to manage emotions and deterioration of personal and familial relationship may be minimised by practising meditation as shown in framework 1.

We also acknowledge that the benefits of meditation may be inconsistent from individual to individual which means there may be variance in the positive effects of meditation. But the healing property of meditation cannot be denied and may be seen as a ripple effect on one’s mind and body. We propose in this first stage that there is a fundamental universal rhythm between Internal and
External Meditation Factors, which can contribute to the holistic workplace creativity. For example meditation has been extensively researched in the health sector due to its potential benefits on an employee’s psychological and physiological well being as shown in framework 1. We cited reliable and empirically tested meditation literature to highlight the benefits of meditation. The National Centre for Life Course Research (NCLR) in Dunedin (Hartshorn, 2007) uncovered in their global studies that:

- USA and European countries estimated spending between 5 and 10% of GNP per annum addressing workplace stress which according to them reached epidemic proportions.
- A 2002 survey conducted in the United Kingdom, found that work related stress and poor mental health passed backache as the leading cause of long-term sickness absence in industry, accounting with approximately 40% of the invalidity benefit being paid by the government.
- A Survey was conducted in United Kingdom in 2006, found that managers who felt productive took 2.5 sick days leave whereas managers who felt less productive took 10 days off per year.
- In a 2008 survey conducted in New Zealand, it was estimated that 30% of New Zealand workers are “happy in their work”, and that 41% are unhappy and unsatisfied with their job.
- Women with high psychological job demands were 75% more likely to suffer from depression or anxiety than women with the lowest psychological job demands.

Another study conducted by Econtech (2008) on behalf of Medibank Private in Australia addressed the costs associated with stress, absenteeism and productivity and uncovered:

- Workplace stress costs the Australian economy $14.81 billion annually
- Stress related absenteeism directly cost Australian employers $10.11 billion annually
- Workplace stress sees 3.2 days per worker are lost each year
- Annual productivity loss in Australia is 1.36%
• $10.11 billion direct cost to employers
• Total cost on economy (GDP) is 1.01%

(Source: Medibank, 2008)

The justification to include workplace stress and related data is to compare and contrast it with studies incorporated in Framework 1. We propose that meditation in the workplace fulfils two goals. The first goal being that meditation relaxes the mind and body and assists with treating a wide range of disorders. Secondly, workplace creativity, mind and body are united and interdependent on each other, therefore they share a certain crucial relationship with each other. This framework provides a holistic picture of various cohesive disorders taking place in any human mind and body (physical, psychological, family and surroundings) is improved by meditation. Thus, meditation is a reliable tool for mind-body ailments as Capra (1982 pp 385) states that correct breathing is one of most important aspect of relaxation and reviewed as a deep psychosomatic balance technique for the mind.

Honsberger (1973) a German researcher discovered four types (beta, theta, alpha and delta) of electrical voltages which emanate from the brain. When engaging in deep meditation practices, alpha waves are generated which are highly creative thus it is less likely that one will fall victim to anxiety and stress related disease. Therefore, creativity is a by-product of alpha brain waves and creative people have different brain waves from other non-creative people. Thus, at this point we note that with more alpha brain waves there are higher changes to be exceedingly creative, hence the application of meditation in enhancing workplace creativity is highly sensible. Alpha waves are also helpful in peak performance and creativity which is a desired aptitude in the workplace (Schwartz , 1996). The following stage 2 framework compiles the meditation related workplace creativity studies existing in literature.

**Stage 2 - Meditation Workplace Creativity Framework**

This second stage framework is supported by 11 studies, provides the first comprehensive consolidation of the disparate meditation and workplace creativity literature, which was concentrated between 1973-2009. For example, meditation results in moral imagination (Forge,2004), increased
self-compassion (Shapiro et al., 2005), moral maturity (Nidich et al., 1983) and development of personality (Nidich et al., 1972). Although, all the studies included in this framework does not relate directly to workplace creativity but authors note that the spillover effect of meditation cannot be ignored in harnessing workplace creativity if not directly then indirectly. We also acknowledge that these meditation studies were submerged in the literature and with the changing trends in business and management disciplines, this concept is of great importance to the academe, organizations, workplace and future studies. To our knowledge, this is the first time that more than forty six studies from 3 different disciples and eras have been compiled to inform the potential relationship between mediation and creativity.

The second conceptual framework contributes to the literature by integrating 11 meditation studies addressing the significance of meditation in improving workplace creativity which has not been conducted before. Although not a workplace example, a longitudinal study conducted by Orme-Johnson and So (2001) on 362 high school students in three different schools in Taiwan found that the regular practice of TM (Transcendental Meditation) for 15-20 minutes twice a day improved cognitive ability. The study utilized the following variables: Test for Creative Thinking-Drawing Production (TCT-DP); Constructive Thinking Inventory (CTI); Group Embedded Frameworks Test (GEFT); State and Trait Anxiety (STAI); Inspection Time (IT) and Culture Fair Intelligence (CFIT). This figure also reveals that there is an inconsistency in the development of meditation related workplace creativity studies. Therefore the literature shows that there is a gap in studies addressing workplace creativity.

Stage 3 - Micro Meditation Workplace Creativity Framework

Framework 3 depicts the seminal work shows a micro synthesis of the literature from two different research eras: The first being the Rationalist era of 1970s, dominated by approaches such as time motion studies addressing workplace creativity confined to personality characteristics, mental flexibility and creative achievement and the recent literature is dominated by holistic approaches to
creativity, which extends to addressing the organization, team and workplace environments (Andriopoulos, 2001).

In the third stage, we cited Frew’s (1974) seminal study addressing meditation in the workplace, which predominantly focused on performance and productivity with some reference to human factors such as better workplace relations. In contrast, the recent literature by Moore and Malinowiski (2009) and Davis (2008) who addressed feelings-as-information theory and physiological arousal theory are illustrative of the recent humanistic era. Thus, Frew’s (1974) contribution to the literature in the rationalist era was significantly ahead of his time and may explain why other studies did not follow suit and pursue addressing workplace meditation until 30 odd years later. Therefore, we have analysed the three diverse homogeneous studies from different decades and for the first time.

**Stage 4 - Meditation and Workplace Creativity Relationship**

The ‘Meditation and Workplace Creativity Intervention Framework’ as shown in Framework 4 below, illustrates meditation as an intervention, which provides the climate for a balanced approach necessary to cultivate and advance an employee’s workplace creativity. This innovative conceptual framework is depicted in an equation ‘\(NF + M = C \rightarrow WC\)’ where ‘Negative Factors (NF) + Meditation (M) = Change facilitating Workplace Creativity (WC).’ Although this equation requires an empirical investigation, it can be viewed as a possible diagnostic tool by future studies to uncover the potential relationship between meditation and workplace creativity as evolved from the previous three frameworks. The fourth framework illustrates the crux of this paper that the negative characteristics hampering workplace creativity such as stress, anxiety, absenteeism and ego may be reduced and transformed into positive merits when engaging in meditation activity. Thus, this framework discusses the change due to the intervention of meditation and its potential to enhance workplace creativity.
Thus, from the literature, we may deduce that engaging in meditation practice can impact the diverse domain as suggested in framework 1 & 2. It is important to sight the benefits of meditation and its relationship with creativity, which can be direct or holistic in manner.

**CONCLUSION**

This conceptual paper embraced a cross-disciplinary literature review and consolidated the disparate international meditation literature to provoke new thinking about the meditation and workplace creativity relationship. The analysis of this review facilitated in systematically building and developing the four staged frameworks in the pursuit of answering the research question underpinning this exploratory conceptual paper, thereby uncovering the relationship between meditation and workplace creativity.

To our knowledge, this is the first paper that systematically analysed the literature across three disciplines to document the holistic benefits of meditation within the workplace.

We conclude that embracing meditation in the workplace is optimal to foster a climate of workplace creativity. The equation ‘NF + M = C→ WC generated in the final ‘Workplace Creativity Intervention Framework’ provides a valuable conceptual contribution to the academic literature and to practitioners who may utilize the equation in their workplaces as a diagnostic tool to enhance meditation and workplace creativity relationships. This equation could raise a manager’s awareness that the workforce is comprised of several interrelated variables beneficial to personal and organizational creativity and thus shed insights and understanding into the potential advantages of, and relationships between, meditation practices and workplace creativity.

**LIMITATION AND FUTURE RESEARCH**

A limitation of this conceptual paper is that the literature review was conducted across three disciplines. Future studies may like to consider analysing the meditation and creativity literature published across other disciplines and disaggregating the various types of meditation to uncover any differences in their relationships to creativity.
REFERENCES


Framework 1: INTERNAL AND EXTERNAL MEDITATION FACTORS

**Internal Factors + Meditation = Change in**
(Physical & Psychological Health)

- Low blood pressure (Wallace et al., 1988)
- Migraines (Buse & Andrasi, 2009)
- Enhance antibodies (Davidson et al., 2003)
- Decreased symptoms of Asthma (Honsberger & Wilson, 1973)
- Reduced Anxiety (Eppley et al., 1985)
- Lower Cholesterol (Cooper & Aygen, 1979)
- Reduced use of Addictive Drugs (Monahan, 1977)
- Reduced Cardiovascular Risk Factors (Wallace et al., 1983)
- Reduced Cortisol (Jevning et al., 1978)
- Lower breath rate (Wallace, 1971)
- Improves Depression, Anxiety and Satisfaction (Shapiro et al., 2005); (Neff, 2004)
- Cancer (Carlson et al., 2003)
- Longevity (Alexender et al., 1989)
- Reduces Stress (Michaels, 1976)
- Psychotherapy (Homes et al., 1983)
- Increase Self-Actualization (Nidich et al., 1972)
- Self Regulation (Shapiro et al., 1985)
- Increase Positive Emotions (Goleman et al., 2003)
- Younger Biological Age (Wallace et al., 1982)

**External Factors + Meditation = Change in**
(Family & Surroundings)

- Ecological Sustainable Behavior (Jacob et al., 2008)
- Pro-Environmental Behavior (Jacob et al., 2008)
- Improved economic trends (Dillbeck & Davies, 1987)
- Reduced Violence (Orme Johnson et al., 1987)
- Decreased crime (Dillbeck et al., 1981)
- Reduced need for medical care (Orme-Johnson, 1987)
- Higher ethical conduct (McNaughton, 2003)
- Moral Maturity (Nidich et al., 1972)
- Moral Imagination (Forge, 2004)
- Improved quality of life (Dillbeck et al., 1981)
- Improved Quality of Life (Wahner et al., 2009)
- Decreased doctor visits (Orme-Johnson, 1987)
- Improved economic trends (Dillbeck & Davies, 1987)

**Source: Authors**
Framework 2: MEDITATION & WORKPLACE CREATIVITY FRAMEWORK

Individual + Meditation > Workplace Creativity = Change

WORKPLACE CREATIVITY

- Development of Personality (Nidich et al, 1972)
- Problem Solving (Kinder, H.S, 1979)
- Increased Learning Ability (Dillbeck, 1982)
- Moral Maturity (Nidich et al, 1983)
- Heightened Clarity of Perception (Saradth, 2003)
- Creativity, Fluidity in problem Solving (Saradth, 2003)
- Increased Intelligence (Tjoa, 1975)
- Moral Imagination (Forge, 2004)
- Increased Self-Compassion (Shapiro et al, 2005)
- Focused Attention (Ospina et al, 2007)
- Increase Mindfulness, Cognitive flexibility (Moore & Malinowski, 2009)

Source: Authors
Framework 3: MICRO MEDITATION WORKPLACE CREATIVITY FRAMEWORK

WORKPLACE + MEDITATION = CHANGE

WORKPLACE

Frew (1974)
- Productivity
- Job Satisfaction
- Improved Performance
- Less Desire to Change Job
- Better Relations at Work

MEDITATION

Moore & Malinowski (2009)
- Improves Mindfulness
- Effects Positively on Cognitive Flexibility
- Ability to Focus and Sustain Attention.

Positive Mood Enhances Creativity

Source: Authors
Framework 4: MEDITATION AND WORKPLACE CREATIVITY INTERVENTION MODEL

NEGATIVE FACTORS
- Stress
- Anxiety
- Absenteeism
- Low Productivity
- Workplace Conflicts
- Resistance to Change
- Ego
- Low Tolerance
- Crisis Situations

MEDITATION + = CHANGE

POSITIVE FACTORS
- Reduced Stress
- Decreased Anxiety
- Improved Interpersonal Relationships
- Increased Tolerance
- Development of Personality
- Increased Self Compassion
- Increased Tolerance

FACILITATES WORKPLACE CREATIVITY

Source: Authors