The International Journal of Indian Psychology ISSN 2348-5396 (Online) | ISSN: 2349-3429 (Print) Volume 8, Issue 3, July- Sep, 2020 DIP: 18.01.086/20200803, ODI: 10.25215/0803.086 http://www.ijip.in



Research Paper

Long-term meditation practice in Puno, Perú: A five-level

exploratory model of theory and research

Lee Fergusson¹*, Javier Ortiz Cabrejos², Anna Bonshek³

ABSTRACT

Practice of the Transcendental Meditation technique has been well-documented in the published literature since the 1970s. However, the significance of the practice in Latin America generally and Perú specifically has been unrecorded, despite its widespread use in schools, government agencies, and businesses in the last 20 years. This paper examines the theoretical foundations of the practice and compares these propositions to international research findings, all of which have been conducted outside Perú. Using a five-level qualitative approach to explore the practice in Perú, the paper also reports the experiences of six long-term practitioners of Transcendental Meditation in Puno who have practiced the technique for an average of 15 years. These reports have been coded and analysed thematically and organised into the following five levels: consciousness, mental, physical, behavioral, and sociocultural, with Puno data analysed for confirmatory or dissimilar evidence vis-à-vis the international findings. Participants are from the Aymara population, an under-represented group in published literature from South America, making the study distinct. Findings suggest that experiences of long-term meditators in Puno are largely consistent with prior international research outcomes.

Keywords: Perú, Aymara, Transcendental Meditation, frequency and saliency analysis

The purpose of this study is to explore the long-term practice of Transcendental Meditation in Puno, Perú. While Lucchese and Koenig (2013) have discussed the relationship between meditation and cardiovascular health and its implications for Brazilian society, their investigation offers limited insight into the nature or relevance of the phenomenon for the rest of South America. We were therefore required to look further afield for evidentiary insight into meditation and Perú, firstly to foundational theoretical principles and then to international research findings to adequately background the phenomenon.

The fact that little research has been published in South America on this topic makes the study important, but a more significant feature of it is that Puno is home to the Aymara people, a continuous pre-Incan civilization living at 3,800m in the Andean highlands on a plateau

¹Professor of Education, Environment and Vedic Science, Maharishi Vedic Research Institute, Gold Coast, Australia

²Independent Researcher and Director, Instituto Maharishi de Ciencia y Tecnología del Perú, Lima, Perú ³Professor of Art and Vedic Science, Maharishi Vedic Research Institute, Gold Coast, Australia <u>*Corresponding Author</u>

Received: July 26, 2020; Revision Received: August 29, 2020; Accepted: September 08, 2020

^{© 2020,} Fergusson L, Cabrejos J O & Bonshek A; licensee IJIP. This is an Open Access Research distributed under the terms of the Creative Commons Attribution License (www.creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any Medium, provided the original work is properly cited.

known as the Altiplano (Eisenberg, 2013). The Aymara share many cultural practices and language similarities with the Quechea people of the same region, including a belief in Pachamama, an Andean deity associated with Mother Earth. In regional cultures, Pachamama is viewed as a goddess who presides over planting and harvesting and is the embodiment of the high mountains. Composed of about three million people, the Aymara are distributed across eastern Bolivia, southern Perú and northern Chile, with the largest group concentrated in the Lake Titicaca region of Puno, the site for this study.

Our exploratory approach begins with a review of propositions related to the practice of Transcendental Meditation as posited by Maharishi Mahesh Yogi, its founder. These propositions span a period of about 50 years but reach back to their source in Veda and the Vedic Literature of ancient India (Maharishi, 1957, 1964a) and have been fulsomely analysed elsewhere (e.g., Maharishi Foundation International, 2014). One of the distinct features of the practice is the large corpus of empirical and case literature which accompanies it; these data have been summarised by many authors (e.g., Dillbeck, 2011, 2013; Fergusson & Bonshek, 2014).

In order to gain an understanding of the practice of Transcendental Meditation in Perú, we ask the following research question: Do the experiences of long-term practitioners of Transcendental Meditation in Puno confirm or contradict the theoretical propositions about the practice and are they evidenced in international research?

Theoretical Propositions of Transcendental Meditation

Maharishi (1960, 1961, 1964b) began teaching the Transcendental Meditation technique in the late 1950s, and his thoughts about it have been well chronicled. More recently, the practice has been incorporated into what we now know to be Maharishi Vedic Science, the systematic exploration and articulation of Veda and the Vedic Literature and their systematic application to different areas of individual and collective life (Maharishi, 1995, 1997; Nader 1993, 2012; Hagelin, 2015).

Unlike the boundaried disciplines of physics, physiology, sociology, economics and astronomy for example, which focus attention on external, outer 'objects' of knowledge, the knowledge base of ancient Vedic Science as brought to light by Maharishi encompasses both the objects and the 'subject' of knowledge. The objects of knowledge include the molecule, the human body, society, the environment, and the cosmos, as recorded in books and observed in physical objects and phenomena. The subject of knowledge, on the other hand, means the knower, the individual learner, the observer, the one who experiences and thereby knows the object. This aspect of knowledge is often referred to as the individual 'Self', the inner consciousness or awareness of the one who does the knowing. Thus, the basic structure of knowledge is an external (usually physical) object, which can be known through experience/observation, and a knower who knows the object. These dual requisites come together to form 'knowledge'.

However, Maharishi goes further and identifies not only these two fundamentals of knowledge but also a third: the 'processes' of knowing, the innumerable mechanisms and pathways of knowing, which facilitate the coming together of the knower and known. Common pathways of knowledge include reading, observing, reflecting, testing, measuring and so on, and constitute the main methodological processes of gaining knowledge in the sciences, philosophy, and education. In the language of Maharishi Vedic Science, the subjective knower

is called *Rishi* (ऋषि), the processes of knowing are called *Devatā* (देवता), and the known is *Chhandas* (छन्दस) (Maharishi, 1985, p. 67); their coming together into a unified whole is called *Samhita* (संहत). Such a view is not dissimilar to "developments in quantum theory [which aim] to unify all physical processes [and] have opened the door to a profoundly new vision of the cosmos, where observer, observed, and the act of observation are interlocked" (Kafatos, Tanzi, & Chopra, 2010).

While the objects of knowledge and the processes of gaining knowledge are well known to contemporary education and thus form the core of humanity's knowledge base, less emphasis has been placed on the subject, on the knower. Indeed, a comprehensive appreciation and understanding of the knower has been largely ignored in contemporary discourse, although its importance and centrality to knowledge construction is becoming more and more evident, particularly in education and healthcare (e.g., Colás-Bravo, Magnoler, & Conde-Jiménez, 2018). It is the investigation and development of the knower through Transcendental Meditation which is the subject of this research.

In simple parlance, Transcendental Meditation is a process of knowing. And what is known through it? The object of knowing is the unbounded pure consciousness of each individual, the source of thought which resides deep within each individual. In this sense, the object of knowledge is also the subject of knowledge; they are one and the same in a unified state. Thus, Transcendental Meditation is said to be a systematic, repeatable and reliable method of gaining access to one's own inner creative potential located at the source of thought, a process of unifying knowledge at the silent, most fundamental level of the mind, as shown in Figure 1.



Figure 1: Transcendental Meditation and its relation to levels of life.

In Maharishi Vedic Science, pure consciousness is described as "the peaceful, the blissful, the undivided, and the 'fourth state of consciousness', after waking, dreaming and sleeping; that is the Self, the Ātmān, and that is to be known" (शिवं शान्तमद्वैतं चतुर्थं मन्यन्ते स आत्मा स विज्ञेयः, Shivaṃ shāntam advaitaṃ chaturthaṃ manyante sa Ātmā sa vigyeyaḥ, *Nṛisiṃhottaratāpanīya Upanishad*, 1) (Maharishi, 1993, p. 142). Elsewhere, Maharishi (1966, p. 27) has referred to pure consciousness as 'Being', which is the "plane of cosmic law, the basis of all the laws of nature, which lies at the root of all creation and evolution" (p. 33):

Underneath the subtlest layer of all that exists in the relative field is the abstract, absolute field of pure Being, which is unmanifested and transcendental. It is neither matter not energy. It is pure Being, the state of pure existence. This state of pure existence underlies all that exists. Everything is the expression of this pure existence or absolute Being which is the essential constituent of all relative life. The one eternal, unmanifested, absolute Being manifests itself in many forms of lives and existences in creation.

Thus, pure consciousness is not only the source of individual mind, but is at once unified (Bayne, 2010) and the source of all that exists in the expanding, material universe, a view shared by foremost thinkers in quantum physics (e.g., Hagelin, 2015). As Maharishi explains:

Consciousness if fundamental to life. It is the prime mover of life. All speech, action, and behavior are fluctuations of consciousness. The whole universe is the expression of consciousness. Since consciousness is the most basic element of life, knowledge of consciousness is the most basic requirement of everyone for maximum success in all areas of life, both personal and professional. (Maharishi International Institute of Vedic Sciences, 1991, p. 3)

The Transcendental Meditation technique is described as a mental procedure practiced for 15-20 minutes twice a day while sitting comfortably with eyes closed. The technique does not require changes to personal belief, lifestyle, or philosophy (an important feature in a Roman Catholic country like Perú). Moreover, no mental effort is required to intentionally alter physiological or psychological processes or states, making it fundamentally different to mindfulness and other mental techniques which advocate concentration or mind control. However, the ordinary thinking process does become quiet and a distinct state of psychophysiological restful alertness, a wakeful but deeply restful state, is naturally gained.

As shown in Figure 1, Transcendental Meditation allows the conscious mind (what Maharishi calls the "performing mind" [Maharishi Foundation International, 2013, p. 22]) to settle down, to relax and free itself of outer stimulus and thereby experience the field of pure consciousness or Transcendental Consciousness (what he calls the "quiet" or "resting" mind). In so doing, it awakens or enlivens the inherent qualities of pure consciousness-intelligence, creativity, orderliness, happiness, and energy-and thereby infuses these qualities into all levels of outer life. Thus, Figure 1 shows the relationship of pure consciousness to the various levels of mind, body, behavior and personality, and society and the environment. It is these five levels of life which we use as the main organising framework for our discussion of theory and international research. Of interest is Maharishi's identification of four levels of the mind: consciousness (Atmā, आत्मा); intellect (Buddhi, बुद्धि), including the finest level of feeling; thinking mind (Manas, मनस्); and senses (Indrivas, इन्द्रिय); these have been explained in more detail elsewhere (e.g., Maharishi, 1995, p. 32). The relation of the thinking mind to senses and objects of action and knowledge are the subject of earlier analysis (Maharishi, 1966, pp. 127-132). Figure 1 thus presents the relationship of Transcendental Meditation to the various levels of human life, with pure consciousness, Being, or Ātmā at the base to indicate its foundational nature showing how, according to Maharishi, experience of pure consciousness affirmatively impacts all subsequent levels and epiphenomena in life. As he has pointed out:

Each man needs sound physical and mental health, greater ability in action, a greater capacity to think clearly, increased efficiency in work, and more loving and rewarding relation with others. He needs enough vitality and intelligence to satisfy the desires of his mind and bring

contentment to his life. We have seen that all this can be gained through the practice of Transcendental Meditation. (Maharishi Foundation International, 2013, Foreword)

Consciousness. Maharishi Vedic Science specialises in consciousness, and a great many published documents on the subject articulate it. Specifically, through Transcendental Meditation:

the conscious mind transcends the subtlest level of thought, it transcends the subtlest state of relative experience and arrives at the transcendental Being, the state of pure consciousness or self-awareness...when the mind goes in the direction of the absolute bliss of transcendental Being, it finds increasing charm at each step of its march. The mind is charmed and so is lead to experience transcendental Being. The practice is pleasant for the mind. (Maharishi, 1966, p. 55)

As a result, Transcendental Meditation causes the mind to experience a field of happiness, calmness, and peace; a field of restful alertness for the mind and deep rest for the body. Maharishi (1966, p. 60) maintains that with repeated experience of pure consciousness, "with more and more practice, the ability of the mind to maintain its essential nature while experiencing objects through the senses, increases. When this happens", Maharishi explains, "the mind and its essential nature—the state of transcendental Being—become one, and the mind is then capable of retaining its essential nature—Being—while engaged in thought, speech, or action". It can thus be said that as pure consciousness becomes a stable continuum upon which perception, thinking and action take place, the practitioner experiences what Maharishi (1995) calls 'higher states of consciousness'.

Mental. Maharishi has written extensively on the interrelationship between consciousness, mental health and physical health, particularly their interrelation with the nervous system. For example, he has stated: "As a result of strengthening the conscious mind [through Transcendental Meditation] a better co-ordination between mind and nervous system is established, and a smooth and efficient functioning of the body is the natural result" (Maharishi, 1966, p. 194). "When tensions build in the mind", Maharishi (1962, p. 3) explains, they are reflected through the nervous system upon the body:

The anxious mind constantly flitting back and forth amongst its problems in its disconnected state exhausts and irritates the nervous system and the body. As a servant to whom his master constantly gives indecisive and confusing orders becomes tired and irritable and eventually fails to do anything, so are the nervous system and body to the mind.

With increased co-ordination and balance between the mind and nervous system through Transcendental Meditation, conditions like anxiety, depression, sadness, loneliness, and anger decrease, and learning, memory, self-esteem, and confidence strengthen. More recently, this type of co-ordination has been associated with homeostatic mechanisms "because of the putative role of autonomic and neuroendocrine systems in the regulation of homeostatic processes" as identified in recent concepts of mental health (e.g., Berntson, Cacioppo, & Bosch, 2017, p. 401). Similarly, the psychopathology of one mental condition, such as loneliness, can also be the cause of other psychopathologies, such as borderline personality disorder (Liebke et al., 2017). Thus, Maharishi (1962, p. 4) has made it clear that "it is the restful alertness of the nervous system [gained through Transcendental Meditation] that is its most healthy state and is the basis of all energy and action".

Physical. The basic principle for maintaining physical health and well-being, according to Maharishi, is to develop and maintain a balanced, integrated state of mind. As early as 1962, he pointed out "research has shown that a very large proportion of physical disorders arise primarily from mental tension as a result of the anxieties and frustrations of life" (Maharishi, 1962, p. 3). Such a view has subsequently been evidenced in the published medical and mental health literature (e.g., Berntson et al., 2017). Transcendental Meditation has been found to release deep-seated tension in the nervous system as a result of the profound state of rest it produces, and "this is why we find that all suffering that could be described as psychosomatic is relieved at its source by meditation" (Maharishi, 1962, p. 3). Even purely 'organic diseases', which do not have an obvious psychosomatic origin, can be accompanied by mental tension and these 'secondary anxieties' may also affect the course of disease. At the core of this proposition is the important role deep rest plays in disease. "Unless one produces this state [of restful alertness] for a few minutes daily, by means of Transcendental Meditation", Maharishi (1966, p. 196) points out:

One has no chance of providing any rest for the inner machinery of the body, which otherwise functions twenty-four hours a day for the whole of one's life as long as the breath flows. It is obviously to the advantage of health and longevity that the ever-functioning inner machinery of the body be allowed a few moments of rest and silence each day through this regular practice.

The documented effect of giving the 'inner machinery of the body' a few minutes deep rest each day is one of rejuvenation, balance and ease in the body, resulting in improved sleep and a decreased incidence of sickness and need for hospital admissions.

Behavioral. As mind and body become healthier and more integrated through Transcendental Meditation, so too do behavior and personality become more balanced. Specifically, Maharishi (1966, p. 183) maintains that "joyfulness is a quality which cultivates and spreads love; it is the result of the overflowing love of the heart and forms the basis of good social relations", and hence joyfulness is at the heart of proper behavior. If there is no tolerance, ill-feeling and disharmony result". In Maharishi's view, the "root of the art of behaviour lies in a polished state of mind. This refined state of mind depends upon the conscious mind being brought into communion with the bliss of absolute Being" (pp. 183-184). Thus, according to Maharishi, "a strong mind is tolerant; a weak mind is easily overcome by the surroundings" (p. 185); a strong mind, one founded on the basis of joyfulness and tolerance, is naturally "elevating and beneficial" (p. 186) to its surroundings. Among the many features Maharishi has associated with this type of behavior is an ability to contribute more constructively to one's own life, family, and broader community.

Sociocultural. The quality of one's social and environmental life encompasses and encapsulates all that has come before it in Maharishi's hierarchical model of levels. If one's inner consciousness is unknown and hidden, if one experiences mental disquiet, if a person suffers from ill-health and is diseased, and if behavior is not infused with joyfulness and tolerance, then one's social life is unfulfilled and troublesome. Thus, if an individual has a salutary purpose in life, has a path toward fulfilment, is sociable and enjoys good family and work relations, and is sensitive to the feelings of others, then that person is said to enjoy a worthwhile quality of life. Indeed, Maharishi (1966, p. 80) maintains that the very purpose of life is the "expansion of happiness...and evolution is the process by which it is fulfilled". Evolution in this sense means personal growth toward higher states of consciousness. In

Maharishi's view, "social relations improve by developing the qualities of heart and mind in individuals" (p. 217). Moreover, he has written extensively about culture and the importance of its strength and resilience (Maharishi, 1978).

International Research Findings

The international research effort to investigate Transcendental Meditation has been ongoing since 1970. Outcomes from this 50-year program have been collected in a seven-volume series (Chalmers, Clements, Schenkluhn, & Weinless, 1989a, 1989b, 1989c; Dillbeck, 2011, 2013; Orme-Johnson & Farrow, 1977; Wallace, Orme-Johnson, & Dillbeck, 1990) and have been summarised by noted psychiatrist Norman Rosenthal (2016).

Rosenthal identified benefits from Transcendental Meditation associated with improved physical health and more efficient cognitive functioning, including increased creativity, improved psychological personality traits, decreased depression, better interpersonal relationships, improved performance and greater success, happiness, and self-actualisation. For the purposes of this paper, and in keeping with theories on human development through Transcendental Meditation advanced by Maharishi, we have organised our survey of international research findings into the same five levels. These findings, along with methods of investigation (i.e., quantitative, qualitative or clinical case study) and cross-referenced citations, have been presented in Table 1.

Consciousness. Practice of Transcendental Meditation has been associated with increased alertness (Al-Dahadha, 2013), experiences of Transcendental Consciousness or restful alertness (Mason & Orme-Johnson, 2010; Travis & Parim, 2017), and higher states of consciousness (Heaton, 2016; Travis, 2014).

These experience are typically reported to result in feelings of bliss, peacefulness and integrity (Perkins & Aquino-Russell, 2017), and a sense of being "anchored to an unshakeable, transcendental inner spiritual core" (Norlyk Herriott, Schmidt-Wilk, & Heaton, 2009, p. 195), resulting in increased mindfulness (Tanner et al., 2009). Such findings support the propositions advanced by Maharishi in relation to the existence and possible experience of the field of pure consciousness, as shown in Figure 1.

Mental. The research on psychological states and phenomena are extensive and outside the range of this paper. However, the following findings are of relevance. Practice of Transcendental Meditation has been found in some of the more recent examples to: reduce state and trait anxiety (Orme-Johnson & Barnes, 2013; So & Orme-Johnson, 2001) and psychological distress (Nidich et al., 2009); stabilise psychiatric disorders as measured by electroencephalographic (EEG) microstates (Faber et al., 2017); decrease the need for psychotropic medications required for anxiety and post-traumatic stress disorder (PTSD) management (Barnes et al., 2016) and decrease the severity of PTSD symptoms (Nidich et al., 2018); improve general mental health (Hankey & Shetkar, 2016) and well-being (Barnes et al., 2016); and increase field independence and cognitive ability, as measured by increased creativity, reduced inspection time, and increased constructive thinking (So & Orme-Johnson, 2001; Sridevi & Rao, 2003).

Table 1: Summary of in	ternational research finding	gs by level, method, a	and author(s).
------------------------	------------------------------	------------------------	----------------

Level	International Research Finding	Research Method(s)	Author(s)
Consciousness	Increased alertness; experience of Transcendental Consciousness; higher states of consciousness; feelings of bliss, peacefulness and integrity; increased mindfulness; anchored to an unshakeable, transcendental inner spiritual core	Quan; qual	Al-Dahadha (2013); Heaton (2016a, 2016b); Mason & Orme-Johnson (2010); Norlyk-Herriott, Schmidt-Wilk, & Heaton (2009); Perkins & Aquino-Russell (2017); Tanner, et al. (2009); Travis (2014); Travis & Parim (2017)
Mental	Reduced anxiety; reduced psychological distress; changes in electroencephalo- graphic microstates and stabilization effects of psychiatric disorders; improved mental health and PTSD; improved cognitive ability, including increased field independence, increased creativity, reduced inspection time, and increased constructive thinking; reduced symptoms of attention deficit hyperactivity disorder; decreased need for psychotropic medications; increased self-esteem; increased emotional intelligence and affect	Quan	Barnes et al. (2016); Benn (2003); Faber et al. (2017); Grosswald et al. (2008); Hankey & Shetkar (2016); Nidich et al. (2009); Nidich et al. (2018); Orme-Johnson & Barnes (2013); So & Orme-Johnson (2001)
Physical	Reduced blood pressure; reduced diabetes mellitus; reduced obesity; improved hunger recognition and reduced sub-clinical inflammation; improved Crohn's disease; improved Grave's disease; improved cardiovascular function; reduced left ventricular hypertrophy; stress reduction; improved aerobic capacity and performance	Quan; qual; clinical case study	Barnes, Kapuku, & Treiber (2012); Barnes, Treiber, & Davis (2001); Barnes, Treiber, & Johnson (2004); Lovell-Smith (2016); Nidich et al. (2009); Ooi, Giovino, & Pak (2017); Schneider, et al. (2012); Travis et al. (1996); Urushidani & Kuriyama (2016)
Behavioral	Increased emotional intelligence and affect, including self-control, self- reflection, self-awareness, socio- emotional capacity, and flexibility in emotional response; improved coping; reduced post-traumatic stress disorder (PTSD) symptoms and perceived stress; reduced substance abuse; increased self- efficacy and quality of life; increased brain integration and leadership	Quan; qual	Belham (2011); Benn (2003); Goldstein et al. (2018); Hartung, et al. (2009); Nidich et al. (2009); Nidich et al. (2016); Nidich et al. (2017); Haaga et al. (2011); Rees et al (2013); Rosaen & Benn (2006)
Sociocultural	Quality-of-life indicators; social renewal; economic development; reduction in crime; increased engagement in social welfare programs; positive impact on social and cultural indicators	Quan; qual; mixed methods	Fergusson (2016); Fergusson & Bonshek (2017); Fergusson & Cavanaugh (2019); Fergusson, Bonshek, & Pau (2019); Fergusson et al. (2020); Orme-Johnson (2016); Orme-Johnson & Fergusson (2019)

Physical. Similarly, the 50-year research effort to examine the impact of Transcendental Meditation practice on physical health is extensive, and includes findings such as reduced blood pressure (Barnes, Treiber, & Johnson, 2004; Nidich et al., 2009; Ooi, Giovino, & Pak

2017; Urushidani & Kuriyama, 2016), *diabetes mellitus*, obesity, subclinical inflammation, left ventricular hypertrophy, the strongest predictor of cardiovascular morbidity and mortality (Barnes, Kapuku, & Treiber, 2012; Lovell-Smith, 2016), and stress (Schneider et al., 2012) in practitioners. Improvements in Crohn's disease, Grave's disease (Lovell-Smith (2016), and cardiovascular function (Barnes, Treiber, & Davis, 2001), among other diseases, have been observed.

Behavioral. How these psycho-physiological changes impact behaviour and personality have also been explored. For example, Belham (2011), Benn (2003), and Rosaen and Benn (2006) have found evidence of increased emotional intelligence and affect, including self-control, self-reflection, self-awareness, socio-emotional capacity, and flexibility in emotional response, and Nidich et al. (2009) found evidence of an improved ability to cope. Reduced PTSD symptoms and perceived stress (Nidich et al., 2016; Rees et al., 2013) and reduced substance abuse (Haaga et al. 2011) has also been observed.

Improved self-efficacy, perceived stress, and quality of life in African women have been reported (Goldstein et al., 2018) and increased leadership, supporting the model that leadership ability is closely related to psycho-physiological refinement, such as higher integration of the electrical brain activity, more mature moral reasoning, and more frequent peak experiences found in top performers compared to average performers, has been observed (Harung et al., 2009). Travis et al. (1996) had earlier identified improved aerobic capacity and performance traits in practitioners of Transcendental Meditation.

Sociocultural. Large-scale studies have examined the impact of Transcendental Meditation on quality of life, society and culture. These include indications of increased health-related quality-of-life (HRQoL) indicators in Cambodian university faculty and staff (Fergusson et al., 2020), benefits to society and economic development, education and social renewal (Fergusson, 2016; Fergusson & Bonshek, 2017), and reductions in crime and other variables of social imbalance have been documented (Fergusson & Cavanaugh, 2019; Orme-Johnson & Fergusson, 2019).

Similarly, Orme-Johnson (2016) explored the effect of Transcendental Meditation on social and cultural indicators in the Middle East, and Fergusson, Bonshek and Pau (2019) found evidence of increased engagement in social welfare programs by graduates of higher education programs which incorporate Transcendental Meditation into the curriculum.

These considerations of theory and research have resulted in the proto-theoretical research model presented in Figure 2. Having considered the core propositions of Maharishi Vedic Science about Transcendental Meditation and the international research findings which accompany them, we note the practice has been widespread in Puno, Perú for the last 20 years.

We therefore embarked on a research effort to understand the subjective experiences of practitioners in Puno in order to confirm or deny the theoretical propositions and international research findings associated with the long-term practice of Transcendental Meditation.



Do the findings from Puno confirm or deny the **theoretical propositions** and **international research findings** associated with the long-term practice of Transcendental Meditation?

Figure 2: Proto-theoretical research model for investigating the long-term practice of Transcendental Meditation in Puno.

METHODOLOGY

This research project was approved in October 2019 by the Research Ethics Approval Committee of Maharishi Vedic Research Institute (MVRI) in Australia, in accord with both MVRI's *Code of Research Practice and Procedure* and the *Australian Code for the Responsible Conduct of Research*, and was conducted under approval number: MVRI-2019-17. We have adopted the phenomenological interview method advanced by Georgi (2009) and described by others (Høffding & Martiny, 2016) for qualitative research, which in our case consisted of the following five stages: 1) collection of verbal data; 2) analysis of the data, using a comparative method; 3) thematically dividing the data into codes and then into clustered codes or themes using frequency and saliency criteria; 4) organisation of data into five levels for presentation; 5) summary of data for academic dissemination.

Participants

Five adult male participants and one adult female participant living in Puno volunteered to be interviewed for this study (average age 39 years). Each had been practicing Transcendental Meditation for a minimum of ten years (average 15 years), which is what qualified them for participation. *Participant #1:* AC is a 35-year old male, agricultural engineer and graduate of the Silesian School in Puno, where he learned Transcendental Meditation 20 years ago. *Participant #2:* CM is a 29-year old male, anthropologist; he learned Transcendental Meditation 14 years ago when a student at Colegio Nacional San Carlos in Puno, one of the oldest schools in Perú with a 200-year tradition having been founded by liberator, Simón Bolivar. *Participant #3:* FI is a 39-year old male, systems engineer and graduate of Colegio Nacional San Carlos where he learned Transcendental Meditation ten years ago. *Participant #4:* JP is a 67-year old male, secondary education for 20 years. *Participant #5:* PC is a 34-year

old male with a master's degree in water resources and graduate of the Colegio Nacional San Carlos; PC learned Transcendental Meditation 12 years ago. *Participant #6:* WC is a 30-year old female civil engineer living in Puno; she learned Transcendental Meditation 14 years ago while attending Mauritius Institute of Science and Technology in Lima.

Procedure

Data collection occurred in Puno in late November 2019 via semi-structured interviews conducted in Spanish by the second author. Interviews lasted approximately 45-60 minutes and included nine demographic/background questions and 30 high-level, non-leading, open-ended questions and seven sub-questions related to personal experience. High-level questions included: How would you describe your experience during Transcendental Meditation; and How would you describe your experience immediately after Transcendental Meditation?

We recognise that bias management is critical in this type of curiosity-driven research. The need is highlighted by the fact that the second author had prior knowledge of participants and hence should be considered a 'research instrument' in this context. Such a condition can pose threats to dependability and trustworthiness. In order to counter and control these threats, we implemented a series of procedural checks: first, the second author did not analyse any of his own interview data; second, dependability was controlled by asking the same question to each participant following the same research protocol; and third, trustworthiness was maintained by developing line-of-inquiry questions in a way which was consistent with previous research methods and theory on experience of Transcendental Meditation. Such an approach to qualitative research design has been discussed elsewhere by Fergusson et al. (2019).

Data Analysis

Interview data were initially transcribed, translated, and thematically analysed through a process of open coding by the first author using computer-assisted qualitative data analysis software (CAQDAS) (Wreally for transcription, DeepL for translation, and Atlas.ti for analysis). Preliminary codes were clustered conceptually to reflect similar emergent themes, and these were cross-checked using ATLAS.ti. The transcriptions, translations, and thematic grouping of data were verified for accuracy and reliability by the second author and another independent Spanish speaking translator outside of Perú who was unfamiliar with the research question. This process generated 72 codes (CDs) > 16 clustered codes or themes > five theoretical levels.

Subsequent analysis of themes by the authors using criteria for both frequency (i.e., recurring themes as discussed by Nowell, Norris, White and Moules, 2017) and saliency (i.e., important themes as discussed by Buetow, 2010) resulted in their organisation around the central five-level construct for exploring long-term experience of Transcendental Meditation in Puno; themes were then analysed for confirmation or contradiction against international research findings.

RESULTS

The following results are representative examples of coded quotes (with code number and italicized topics of relevance) from each participant, organised into 16 clustered themes and five levels. The results have been summarised in Table 2, including any matched international data which are consistent with the Puno findings. Discussion of themes will be presented in the next section.

Table 2: Summary of Levels and Themes related to Puno research findings and their
relation to international research findings.

Level	Theme	Puno Research Finding	Supporting Quote	International Research Finding
Consciousness	1	Feelings of inner joy and happiness, as if 'returning home'	"I feel a lot of joy; it is an inner joy" (CD70)	Feelings of bliss, peacefulness
	2	Increased awareness; awake with a good mood	"I'm more aware of what I do now" (CD8)	Increased alertness; increased mindfulness; experience of Transcendental Consciousness
	3	Increased calmness, relaxation, tranquillity, harmony	"there is a tranquillity, as if everything were in harmony" (CD9)	Unshakeable, transcendental, inner spiritual core
	4	Heightened sense of Self	"I feel more capable of being a better version of myself" (CD10)	Unshakeable, transcendental, inner spiritual core
	5	Experience lasts throughout the day and night	"Any impression that I have of meditation lasts during the day and lasts through the night" (CD27)	Higher states of consciousness
Mental	6	Increased self-esteem, confidence, security	"I have high self-esteem; you could say I have no depression" (CD1)	Increased self-esteem, increased emotional intelligence and affect
	7	Reduced anxiety, anger, sadness	"I was angry, irritable. After I learned Transcendental Meditation, that diminished considerably" (CD45)	Reduced anxiety; reduced psychological distress
	8	Improved concentration, memory	"Transcendental Meditation has improved my ability to concentrate" (CD66)	Improved mental health
Physical	9	Improved health	"I feel very good; I am in optimal condition" (CD46)	Improved aerobic capacity and performance
	10	Improved sleep and ability to exercise	"My sleep is good, is optimal" (CD30)	Stress reduction
Behavioral	11	Leadership	"Transcendental Meditation has awakened a quality of leadership in me" (CD48)	Increased brain integration and leadership
	12	Improved diet and reduced alcohol consumption	"Progressively it became clearer, and now I'm a very healthy person" (CD17)	Reduced substance abuse
	13	Professional ambition and achievement	"I see myself as a great professional capable of generating great change in society" (CD52)	Increased self-efficacy and quality of life
Sociocultural	14	Purpose of life to expand happiness	"this led us to an understanding about the purpose of life, which is to make that happiness spread to other people" (CD55)	Increased engagement in social welfare programs
	15	Social relations, empathy, humility, and quality of life	"I now definitely think I have a good of quality of life" (CD68)	Quality-of-life indicators
	16	Tradition and culture	"I value the culture of Puno. The sense of the Pachamama interacting with nature; I value that a lot" (CD69)	Positive impact on social and cultural indicators

Level One: Consciousness

Theme 1: Feelings of inner joy and happiness, as if 'returning home'. All participants reported that when meditating they experience moments of joy and happiness. FI: "I feel a lot of joy; it is an inner joy. It is a joy that I carry with me. I have a different way of feeling about the environment [because of Transcendental Meditation]; my perception of my immediate environment is different" (CD70). WC: "Transcendental Meditation gave me the possibility of feeling very happy; I feel deeply blessed and happy" (CD61). CM: "I am experiencing a

lot of joy" (CD25). JP: "My experience is that over time you experience a state of relaxation and stillness of inner joy; you feel that you are returning home as a human being, that is my regular experience" (CD38).

Theme 2: Awareness, lucidity, 'awake with a good mood'. Five of the six participants reported a growth of awareness or wakefulness. AC: "I am more aware of what I do now [than before practicing Transcendental Meditation]. The first change I noticed was to become a little more aware, with more confidence" (CD8). FI: "I am awake with a good mood" (CD7). WC: "When I meditate, I feel very good; I feel happy. It is an experience that gives me the opportunity to be able to be with myself and to explore all the limits that exist within me. It's a very beautiful experience...I feel more revitalized with more energy, more lucidity and with a greater capacity to understand things" (CD71). CM: "I meditate with innocence and try not to judge the practice. But if we talk about experience, well it's beautiful. Going through the different levels that one enters when one is meditating, levels of consciousness, and a lot of happiness, a lot of bliss, sometimes a lot of love. Sometimes also it feels like being in nothingness, as if nothing is happening, then a whole lot of experiences that are wonderful [emerge]" (CD26).

Theme 3: Calmness, relaxation, tranquillity, harmony. All six participants reported calmness and relaxation. FI: "I am more relaxed, calmer [since practicing Transcendental Meditation]" (CD72). WC: "I feel very deeply relaxed. I feel as if there is no physical activity [or strain] in my body, and that makes me feel very relaxed" (CD63). PC: "I no longer feel the sensation that I am breathing; I feel very good" (CD13). AC: "The first thing [I noticed], there is a tranquillity, as if everything were in harmony" (CD9). JP: "After having finished the practice I am in a state of peaceful relaxation and I enjoy it. The experience is deep because [it is as if] other areas of the brain have been enlivened and more connected to other areas of the brain hemispheres" (CD39).

Theme 4: Heightened sense of Self. Three participants reported a heightened sense of Self. PC: "I feel more capable of being a better version of myself (CD10). WC: When I meditate, I feel very good, I feel happy. It is an experience that gives me the opportunity to be with myself and to explore all the limits that exist within me. It's a very beautiful experience" (CD64). JP: "With the other benefits I experienced over the years practicing Transcendental Meditation, there is no longer an inner emptiness; it played an important role in filling the emptiness; the existential void was filled" (CD40).

Theme 5: Higher states of consciousness. All participants reported some form of experience associated with higher states of consciousness, and the effect of meditation lasting beyond the meditative period. CM: "Any impression that I have of meditation lasts during the day and lasts through the night. The perception that I had of myself and of my surroundings is very strong [and is associated with] experiences of love, of bliss, of silence, of happiness. An experience of connection with nature, connection with surroundings; it is something that cannot be explained with words but is something wonderful to live" (CD27). JP: "In the first years that I learned [Transcendental Meditation] I obtained all the benefits in all aspects of my life, and that stays with me, to my person" (CD41). WC: "Perhaps [the experience of meditation] is affected by the tiredness we normally accumulate during the day, but I feel good after meditation; I feel more eager. By contributing something to society, this feeling becomes more constant" (CD65).

Level Two: Mental

Theme 6: Self-esteem, confidence, security. The experience of increased self-esteem and confidence were reported by all participants, including with a heightened sense of security within oneself. AC: "I am insecure, I have slumps; but when I practice this [Transcendental Meditation] program, I feel calm; I have no lack of self-esteem or any insecurity. Now I have high self-esteem; you could say I have no depression" (CD1). WC: "I can say that it [my self-esteem] has improved very noticeably. Before I learned to meditate, I felt good about myself and my surroundings, but after I learned I felt much more confident, because I understood many things that were within me" (CD42). CM: "There are times when one is eliminating stress and tension, but I take them as they come. Of course, we are in a process of evolution and that is very understandable, but I try to take it with the greatest innocence; I have much more confidence than I had before and I have learned to trust others much more" (CD13). JP: "When I learned to meditate, there was an inner security and enrichment that allowed me especially to relate well, in a much better way, with my contemporaries and also with students" (CD28).

Theme 7: Anxiety, anger, sadness. Changes in psychological states were reported in some form by all participants. WC: "I was stable, although you could say that I was angry, irritable. After I learned Transcendental Meditation, that diminished considerably; not every time I practiced but from the first times there was a feeling of greater tranquillity or serenity that gave me the possibility of expressing myself in a much more fluid way" (CD45). WC: "As far as anxiety levels, well, I wasn't very anxious before I learned to meditate, but when I learned I realized the stress levels that I normally had as a result of the daily activities I was doing were reducing anxiety so much that I feel much better now. That's pretty remarkable because I couldn't say that about many of my friends because they can be quite anxious" (CD43). PC: "The best thing that has happened to me is an ability to control sadness" (CD11). AC: "Transcendental Meditation helps a lot in overcoming sadness" (CD2). CM: "When I saw the responsibilities that were put on me there were times when I felt a little stressed. But in the same way I approach depression with the innocence, I see anxiety is something normal in the process of evolution. Now what I see most is how that moment when anxiety comes and how I can handle it, to improve it, and to overcome it; as a result, anxiety is much less and is much more manageable now than before" (CD14).

Theme 8: Concentration, memory, understanding. Concentration and memory, typically as associated with learning, were reported by four of six participants. FI: "Transcendental Meditation has improved my ability to concentrate" (CD66). WC: "[My concentration] has improved quite a bit I remember that when I learned meditation. My exams, what well at that time I was still in school and the exams I was taking were between an average of 15 out of 17. After I learned to meditate...it was much easier for me, being able to concentrate and learn faster. And that was the change or benefit because I realized that learning was much easier. My ability to learn improved quite a bit; I was able to assimilate more knowledge and my ability to memorize was recovered because of meditation" (CD44). JP: "It [Transcendental Meditation] has helped me a lot in understanding. Especially in the intellectual aspect and in an aspect of abstract subjects, not like philosophy, but in the experience and explanation of Being and its relationship to higher states of consciousness" (CD29). CM: "I learn things very easily and quickly in terms of memory; I am quick to remember things when I put enough focus on them; but all that is much easier and much faster, I do not need to strive so much to learn something" (CD15).

Level Three: Physical

Theme 9: Health. Three of six participants made clear references to physical health as a result of the practice, including in relation decreased sickness and improvement to sleeping patterns and learning Yoga. WC: "I am also more flexible and agile than the average person my age. I feel very good; I am in optimal condition" (CD46). WC: "I had some small headaches that were a bit disturbing. After learning Transcendental Meditation, they have gradually disappeared; as of this date they are no longer, I have nothing" (CD47). CM: "Prior to learning Transcendental Meditation, I caught a lot of colds or flu-because of the climate of Puno. These colds kept me in bed many times for a week or week and a half with a lot of injectable medicines; that was my biggest problem. Since I learned to meditate my health is much better [to the point] now I practically don't catch any flu, just a very mild cough but not needing medicine. Everything is now normal and within the normal range of health" (CD16).

Theme 10: Sleep and ability to exercise. JP: "My sleep is good, is optimal" (CD30). JP: "I stopped exercising due to a back problem, but over the years this has been overcome; now I don't have that problem" (CD31). WC: "Before meditating I used to go for a run for the cardiovascular activity. Once I learned meditation, I started to do Yoga Asanas, which have affected me in a positive way" (CD51).

Level Four: Behavioural

Theme 11: Leadership. WC reported on the association of meditation with leadership: "Transcendental Meditation has awakened a quality of leadership in me; it became much more natural, harmonious, and efficient to work with other people and with organizations with which I participated. That has been something very good" (CD48).

Theme 12: Diet and reduced alcohol. Two participants reported a tendency a healthier diet, and more so-called 'body consciousness' or 'body management' (Shusterman, 2008). CM: "Meditation has helped give me a perception of what my body needs and what makes it good and what makes it feel bad, and it also gave me the will, the consciousness, to discern between these" (CD18). CM: "As a teenager I was still somewhat unstable and a little affected by family problems. I had some psychological problems, and with friends I had a tendency to drink [in order] to escape from the reality of home. Progressively it became clearer, and now I'm a very healthy person. I always try to find ways to feel healthier, to feel better; I always try to find ways to be good to myself, and also to be good to others as well. A lot has improved with the problems I had at home. Now I'm much more tolerant and more easily accept the problems that might come or do happen" (CD17). WC: "After learning to meditate, naturally the inclination was towards healthier foods. This happened in a natural way since my physiology made my mind look for foods that were healthier. My diet is much healthier. For example, the habit of consuming fats or sugary drinks in excess has decreased. My consumption levels of food are also quite reduced" (CD50).

Theme 13: Professional ambition and achievement. All participants reported a sense of increased professional ambition, in some cases linked to motivation, success and 'doing good'. WC: "I see myself as a great professional, capable of generating great changes in society through engineering. Vedic knowledge can generate great changes in the place where I live" (CD52). WC: "After I learned to meditate, I realized there is a much more important reality which is why we should work to improve our environment, improve our society through what we do. And that is precisely what has motivated me to constantly support meditation practice" (CD54). CM: "I can learn many more things; I still have more plans to

develop and the ambition is emerging. Not the vision of being able to know more things but to be more successful and do good. That also gives an enthusiasm to be able to do new things. Transcendental Meditation has helped me to not surrender, to have enthusiasm; I am always with the impulse of wanting to do something more" (CD19). AC: "I am very satisfied with what I have achieved in my professional life" (CD4).

Level Five: Sociocultural

Theme 14: Purpose of life to expand happiness. Four participants spoke about their enhanced purpose or 'path' in creating and contributing to a better life. WC: "That feeling [of happiness through Transcendental Meditation] also expanded to my family. They also learned [to meditate] and this led us to an understanding about the purpose of life, which is to make that happiness spread to other people" (CD55). JP: "Something interesting and good happened to me when I started Transcendental Meditation. What I can call the inner aspect of life, the spiritual aspect, is satisfied and my mental life is balanced with the enriching knowledge of the Being" (CD32). CM: "Learning to meditate has changed my whole life. I would be in a bad situation if I hadn't learned because of the things I did; but now I have a path, I have a direction. My lifestyle is progressive. And it is thanks to this practice" (CD21).

Theme 15: Social relations, empathy, humility, quality of life. All participants reported an improved ability to relate to others. WC: "When I learned Transcendental Meditation, my family told me that they had noticed a positive change in me; I was less angry, less reluctant, and so they were also encouraged to learn some months later" (CD57). JP: "When I learned to meditate, there was an inner security and enrichment that allowed me to relate to others in a much better way" (CD33). FI: "I now definitely think I have a good of quality of life" (CD68). CM: "There is a fire that is growing more and more inside me. My experience with Transcendental Meditation has been indescribable" (CD23). WC: "It has helped me generate a greater empathy with all the different work groups that exist in an organization; it has helped me a lot in being able to improve my organizational capacity in the institutions where I work. I can also support them from that level of humility, of empathy, generating in this way a much more efficient and effective environment" (CD59).

Theme 16: Tradition and culture. Each participant spoke about the value they place on traditional Aymara culture, including the value of Pachamama. FI: "I value the culture of Puno, [particularly] the sense of the Pachamama interacting with nature; I value that a lot" (CD69). WC: "I identify with the culture into which I was born; the Andean culture. That culture is deeply rooted in all my relatives and ancestors and has grown quite a bit. I feel proud of my culture and belonging to it has been very important for the evolution of humanity. Every time I practiced Transcendental Meditation, it made me understand more where I was coming from" (CD60). JP: "I am proud to be from the Altiplano of southern Peru, and I thank the life that has allowed me to be born in the city of Puno" (CD35). JP: "[The few minutes spent meditating] make you notice a strengthening of the cultural values in your life. Andean culture is extremely valuable, but very abstract too. Having the internal experience of pure consciousness makes understanding its abstractness a little bit easier. The experience of my culture is better with the contribution that one has of the inner experience of practicing meditation" (CD36). PC: "I am grateful for the Earth, for the Pachamama" (CD12).

DISCUSSION

This study records the life experiences of six people in Puno, and thus represents important case material from an under-researched region of the world. However, we are not trying to

generalise these results to other long-term practitioners in Perú or elsewhere in the world; we are only interested in experiences from Puno in order to see how these accord with theory and prior international research. It is reasonable to conclude from this data that the Puno findings are largely consistent with foundational propositions about Transcendental Meditation and prior international outcomes, although some differences can be observed. As shown in Table 2, most Puno themes are consistent with previous findings, with themes 2, 3, 5, 7, 8, 9, 10, 11, 12, and 15 being particularly so. However, within themes 1, 4, 6, 13, 14 and 16 unique data can be identified.

Theme 1. Maharishi said from the beginning of his teaching that the experience of pure consciousness is one of happiness, but of interest in Puno is the expression that it is also like "returning home", in that the experience is one of happiness but also one of familiarity and security. Indeed, Maharishi uses a similar expression to describe the relationship between a child (the 'performing mind') and his/her mother (the 'resting mind' in pure consciousness). When the child realises that "mother is at home" (cited in Fergusson & Bonshek, 2014, pp, 81-87), when the child realises that pure consciousness is "underneath his conscious, sensory level of thinking and action, he has the awareness that 'mother is at home'. Once that deeper level of awareness...is safe and secure in his mind, as long as it is on the conscious level of his awareness, the child will run here and there in great freedom". It is of interest that JP should speak of both a sense of 'returning home' in Theme 1 as well as feeling 'secure' in Theme 5.

Theme 4. Comments such as PC saying he felt "more capable of being a better version of myself" and JP saying "there is no longer an inner emptiness; [Transcendental Meditation] played an important role in filling the emptiness; the existential void was filled" are certainly rare in the literature on Transcendental Meditation. Both speak to a heightened sense of Self or development of consciousness rarely seen in experiences on this topic.

Theme 6. Similarly, increases in self-esteem and confidence are not uncommon in the literature on Transcendental Meditation, however, statements like AC's "I have no lack of self-esteem or any insecurity. Now I have high self-esteem; you could say I have no depression" and JPs "When I learned to meditate, there was an inner security and enrichment" are of interest for their reference to the concept of a growing sense of security and its correspondence to self-esteem and reduced depression.

Theme 13. A sense of being more ambitious and developing a greater sense of achievement have been reported before, particularly in the context of self-efficacy, but the link here to contributing constructively to society is unexpected, particularly as reported by WC and CM. Ambition is more typically linked to personal goals in one's profession, not to the goal of improving society. The link to not only enthusiasm but also to not giving up on one's goals to change society are noteworthy.

Theme 14. The 'purpose in life' construct is eudemonically associated with well-being and quality of life (Medvedev & Landhuis, 2018), and given experiences of happiness and well-being are a central finding of this research (and at least one such finding relates to quality of life), it is perhaps unsurprising that increased purpose in life has been reported by several participants. The construct of purpose in life and humanity's striving for it as they relate to happiness are also a cross-cultural phenomenon. And while both purpose in life and happiness are something of a tautology, most theoreticians believe happiness is central because while

other human goals are valued, they are so valued because they give rise to happiness. Thus, Transcendental Meditation, which is at its core a technique for developing happiness and wellbeing within oneself, appears to also enhance, at least in Puno, a more developed sense of purpose. This conclusion is reinforced by CM's use of the words "changed my whole life".

Theme 16. This paper cannot fully do justice to the topics of tradition and culture, particularly given the richness, depth and uniqueness of Aymara culture and the Altiplano environment. We note, however, the spontaneous use of the enhanced connection to Pachamama by FI and PC, and the pervasive reference to the strengthening participants felt to their culture as a result of practicing Transcendental Meditation. Comments like JPs "The experience of my culture is better with the contribution that one has of the inner experience of practicing meditation" is particularly telling.

CONCLUSION

This study has shown that the reported lived experiences of individuals who are long-term practitioners of Transcendental Meditation in Puno are similar to those found in international research studies, of which a summary of recent findings has been presented in Table 1. These international findings are a test of the predictions and propositions made by Maharishi beginning in the late 1950s. Comments such as those of AC who said: "lo primero que hay es una tranquilidad como si estuviera todo en harmonia" ("The first thing [I noticed], there is a tranquillity, as if everything were in harmony") are representative of this view. In this sense, after several decades since these propositions were made by Maharishi and since the 50-year research program began, it is reasonable to conclude that the experiences of long-term practitioners in Puno are consistent with, and in some way nuance and extend, earlier research findings (including findings from quan, qual, case study, and mixed methods research) as they have been explained by Vedic theory.

REFERENCES

- Al-Dahadha, B. (2013). The effects of Muslim praying meditation and Transcendental Meditation programs on mindfulness among the university of Nizwa students. *College Student Journal*, 47(4), 668-676.
- Barnes, V. A., Kapuku, G. K., & Treiber, F.A. (2012). Impact of Transcendental Meditation on left ventricular mass in African American adolescents. *Evidence-Based Complementary and Alternative Medicine*, Article 923153.
- Barnes, V. A., Monto, A., Williams, J. J., & Rigg, J. L. (2016). Impact of Transcendental Meditation on psychotropic medication use among active duty military service members with anxiety and PTSD. *Military Medicine*, 181, 56-63.
- Barnes, V. A., Treiber, F. A., & Davis, H. (2001). Impact of Transcendental Meditation on cardiovascular function at rest and during acute stress in adolescents with high normal blood pressure. *Journal of Psychosomatic Research*, *51*(4), 597-605.
- Bayne, T. (2010). The unity of consciousness. Oxford University Press.
- Belham, M. de F. C. (2011). Introducing in a military academy the Transcendental Meditation program for prevention of stress. In M. C. Dillbeck (Ed.), *Scientific research on Maharishi's Transcendental Meditation and TM-Sidhi programme: Collected papers* (Vol. 6) (pp. 4068-4072). Fairfield, Iowa: Maharishi University of Management Press.
- Benn, R. (2003). Transcendental Meditation and emotional functioning in fifth grade students. *Focus on Alternative and Complementary Therapies*, 8(4), 480-481.
- Berntson, G. G., Cacioppo, J. T., & Bosch, J. A. (2017). From homeostasis to allodynamic regulation. In J. T. Cacioppo, L. G. Tassinary, & G. G. Berntson (Eds.), *Cambridge*

© The International Journal of Indian Psychology, ISSN 2348-5396 (e) | ISSN: 2349-3429 (p) | 772

handbooks in psychology: Handbook of psychophysiology (pp. 401-426). Cambridge, UK: Cambridge University Press.

- Buetow, S. (2010). Thematic analysis and its reconceptualization as 'saliency analysis'. Journal of Health Services Research & Policy, 15(2), 123-125.
- Chalmers, R., Clements, G., Schenkluhn, H., & Weinless, M. (Eds.) (1989a). Scientific research on Maharishi's Transcendental Meditation and TM-Sidhi programme: Collected papers, volume 2. The Netherlands: Maharishi Vedic University Press.
- Chalmers, R., Clements, G., Schenkluhn, H., & Weinless, M. (Eds.) (1989b). Scientific research on Maharishi's Transcendental Meditation and TM-Sidhi programme: Collected papers, volume 3. The Netherlands: Maharishi Vedic University Press.
- Chalmers, R., Clements, G., Schenkluhn, H., & Weinless, M. (Eds.) (1989c). Scientific research on Maharishi's Transcendental Meditation and TM-Sidhi programme: Collected papers, volume 4. The Netherlands: Maharishi Vedic University Press.
- Colás-Bravo, P., Magnoler, P., & Conde-Jiménez, J. (2018). Identification of levels of sustainable consciousness of teachers in training through an e-portfolio. *Sustainability*, *10*(10), 3700
- Dillbeck, M. C. (Ed.) (2011). Scientific research on Maharishi's Transcendental Meditation and TM-Sidhi program: Collected papers, volume 6. Fairfield, Iowa: Maharishi University of Management Press.
- Dillbeck, M. C. (Ed.) (2013). Scientific research on Maharishi's Transcendental Meditation and TM-Sidhi program: Collected papers, volume 7. The Netherlands: Maharishi Vedic University Press.
- Eisenberg, A. (2013). *Aymara Indian perspectives on development in the Andes*. Tuscaloosa: The University of Alabama Press.
- Faber, P. L., Travis, F., Milz, P., & Parim, N. (2017). EEG microstates during different phases of Transcendental Meditation practice. *Cognitive Processing*, *18*(3), 307-314.
- Fergusson, L. (2016). Vedic Science-based education, poverty removal and social well-being: A case history of Cambodia from 1980 to 2015. *Journal of Indian Education* (Journal of the National Council of Educational Research and Training), 41(4), 16-45.
- Fergusson, L., & Bonshek, A. (Eds.) (2014). The unmanifest canvas: Maharishi Mahesh Yogi on the arts, creativity and perception. Fairfield, Iowa: Maharishi University of Management Press.
- Fergusson, L., & Bonshek, A. (Eds.) (2017). Maharishi Vedic University in Cambodia: Educational reconstruction and social renewal (2nd edition). Gold Coast, Australia: Maharishi Vedic Research Institute Press.
- Fergusson, L. Bonshek, A., & Pau, M. (2019). Maharishi Vedic University in Cambodia: A study of three mature-age graduates. *ASEAN Journal of Education*, 5(1), 9-23.
- Fergusson, L., & Cavanaugh, K. L. (2019). Socio-political violence in Cambodia between 1990 and 2008: An explanatory mixed methods study of social coherence. *Studies in Asian Social Science*, 6(2), 1-45.
- Fergusson, L., Bonshek, A., Vernon, S., Phon, P., Mok, S., & Srey, V. (2020). A preliminary mixed methods study of health-related quality-of-life at three regional Cambodian universities, ASEAN Journal of Education, 5(2), 1-24.
- Fergusson, L., Harmes, M., Hayes, F., & Rahmann, C. (2019). Lines-of-inquiry and sources of evidence in work-based research. Work-Based Learning e-Journal International, 8(2), 85-104.
- Giorgi, A. (2009). *The descriptive phenomenological method in psychology: A modified Husserlian approach*. Pittsburgh, Pennsylvania: Duquesne University Press.

- Goldstein, L., Nidich, S. I., Goodman, R., & Goodman, D. (2018). The effect of Transcendental Meditation on self-efficacy, perceived stress, and quality of life in mothers in Uganda. *Health Care for Women International*, *39*(7), 734-754.
- Haaga, D. A. F., Grosswald, S., Gaylord-King, C., Rainforth, M., Tanner, M., Travis, F., ... Schneider, R. H. (2011). Effects of the Transcendental Meditation program on substance use among university students. *Cardiology Research and Practice*, Article 537101. doi: 10.4061/2011/537101
- Hagelin, J. (2015). Veda and physics: The science and technology of the unified field. In *Proceedings of international conference to re-establish ideal Vedic India* (pp. 34-47). Fairfield, IA: Maharishi University of Management Press.
- Hankey, A., & Shetkar, R. (2016). Self-transcending meditation is good for mental health: Why this should be the case. *International Review of Psychiatry*, 28(3), 236-240.
- Harung, H., Travis, F., Blank, W., & Heaton, D. (2009). Higher development, brain integration, and excellence in leadership. *Management Decision*, 47(6), 872-894.
- Heaton, D. (2016). Higher consciousness for sustainability-as-flourishing. In S. Dhiman & J. Marques (Eds.), Spirituality and sustainability: New horizons and exemplary approaches (pp. 121-137). Cham, Switzerland: Springer.
- Høffding, S., & Martiny, K. (2016). Framing a phenomenological interview: What, why and how. *Phenomenology and the Cognitive Sciences*, *15*(4), 539-564.
- Kafatos, M., Tanzi, R. E., & Chopra, D. (2011). How consciousness becomes the physical universe. *Journal of Cosmology*, 14, 3-14.
- Liebke, L., Bungert, M., Thome, J., Hauschild, S., Gescher, D. M., Schmahl, C., ... Lis, S. (2017). Loneliness, social networks, and social functioning in borderline personality disorder. *Personality Disorders: Theory, Research, and Treatment*, 8(4), 349-356. doi: 10.1037/per0000208
- Lovell-Smith, D. (2016). Transcendental Meditation, diabetes mellitus and other disorders. *Journal of Maharishi Vedic Research Institute*, *2*, 39-75.
- Lucchese, F. A., & Koenig, H. G. (2013). Religion, spirituality and cardiovascular disease: Research, clinical implications, and opportunities in Brazil. *Brazilian Journal of Cardiovascular Surgery*, 28(1), 103-128.
- Maharishi Foundation International. (2013). *The Transcendental Meditation program: Fundamentally unique* (2nd edition). The Netherlands: Maharishi Vedic University Press.
- Maharishi Foundation International. (2014). *The Transcendental Meditation pocket book: Steps of knowledge and experience* (3rd edition). The Netherlands: Maharishi Vedic University Press.
- Maharishi International Institute of Vedic Sciences. (1991). *Maharishi International Institute* of Vedic Sciences: Graduate school master's catalogue—1991-1992. Cambridge, MA: Maharishi International Institute of Vedic Sciences.
- Maharishi Mahesh Yogi. (1957). *Beacon light of the Himalayas. Kerala*. India: International Meditation Society.
- Maharishi Mahesh Yogi. (1960). *Deep meditation*. London, England: Spiritual Regeneration Movement Foundation of Great Britain.
- Maharishi Mahesh Yogi. (1961). Deep meditation: A very simple system from the ancient Vedic culture of India ideally suited to the tempo of modern times. Los Angeles, California: The S.R.M. Foundation.
- Maharishi Mahesh Yogi. (1962). *Health and the deep meditation of Maharishi Mahesh Yogi*. London, UK: Spiritual Regeneration Movement.

- Maharishi Mahesh Yogi. (1964a). *The Vedas: Source of the subtle science*. Los Angeles, USA: Spiritual Regeneration Movement.
- Maharishi Mahesh Yogi. (1964b). An introduction to the meditation of Maharishi Mahesh Yogi. London, England: Spiritual Regeneration Movement Foundation of Great Britain.
- Maharishi Mahesh Yogi. (1966). *The science of Being and art of living*. Washington, D.C.: Age of Enlightenment Press.
- Maharishi Mahesh Yogi. (1978). *Enlightenment to every individual, invincibility to every nation*. West Germany: Maharishi European Research University.
- Maharishi Mahesh Yogi. (1985). *Maharishi Vedic University: Inauguration*. Washington, D.C.: Maharishi Vedic University Press.
- Maharishi Mahesh Yogi. (1993). *Maharishi Vedic University: Exhibition*. The Netherlands: Maharishi Vedic University Press.
- Maharishi Mahesh Yogi. (1995). *Maharishi's absolute theory of government*. Holland: Maharishi Vedic University Press.
- Maharishi Mahesh Yogi. (1997). Maharishi Vedic University celebrating perfection in education: Dawn of total knowledge. India: Maharishi Vedic University Press.
- Mason, L., & Orme-Johnson, D. W. (2010). Transcendental consciousness wakes up in dreaming and deep sleep. *International Journal of Dream Research*, *3*(1), 28-32.
- Medvedev, O. N., & Landhuis, C. E. (2018). Exploring constructs of well-being, happiness and quality of life. *PeerJ*, *6*, e4903, 1-16.
- Nader, T. (1993). *Human physiology: Expression of Veda and the Vedic literature—modern science and ancient Vedic science discover the fabrics of immortality in the human physiology*. Vlodrop, Holland: Maharishi Vedic University Press.
- Nader, T. (2012). *Rāmāyan in human physiology: Discovery of the eternal reality of the Rāmāyan in the structure and function of human physiology*. Fairfield, Iowa: Maharishi University of Management Press.
- Nidich, S., Mills, P. J., Rainforth, M., Heppner, P., Schneider, R. H., Rosenthal, N. E., ... & Rutledge, T. (2018). Non-trauma-focused meditation versus exposure therapy in veterans with post-traumatic stress disorder: A randomised controlled trial. *The Lancet Psychiatry*, 5(12), 975-986.
- Nidich, S., O'Connor, T., Rutledge, T., Duncan, J., Compton, B., Seng, A., & Nidich, R. (2016). Reduced trauma symptoms and perceived stress in male prison inmates through the Transcendental Meditation program: A randomized controlled trial. *The Permanente Journal*, 20(4) 43-47.
- Nidich, S. I., Rainforth, M. V, Haaga, D. A., Hagelin, J., Salerno, J. W., Travis, F., . . . Schneider, R. H. (2009). A randomized controlled trial on effects of the Transcendental Meditation program on blood pressure, psychological distress, and coping in young adults. *American Journal of Hypertension*, 22(12), 1326-1331.
- Norlyk-Herriott, E., Schmidt-Wilk, J., & Heaton, D. P. (2009). Spiritual dimensions of entrepreneurship in Transcendental Meditation and TM-Sidhi program practitioners. *Journal of Management, Spirituality and Religion*, 6(3), 195-208.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1), 1-13.
- Ooi, S. L., Giovino, M., & Pak, S. C. (2017). Transcendental Meditation for lowering blood pressure: An overview of systematic reviews and meta-analyses. *Complementary Therapies in Medicine*, 34, 26-34.

- Orme-Johnson, D. W. (2016). Factor analysis of social indicators in the Middle East: Effects of cultural, military, political, and climatic events and group practice of the Transcendental Meditation and TM-Sidhi program. *Journal of Maharishi Vedic Research Institute*, *1*, 5-39.
- Orme-Johnson, D. W., & Barnes, V. A. (2013). Effects of the Transcendental Meditation technique on trait anxiety: A meta-analysis of randomized controlled trials. *Journal of Alternative and Complementary Medicine*, 19(0), 1-12.
- Orme-Johnson, D. W., & Farrow J. T. (Eds.) (1977). *Scientific research on the Transcendental Meditation program: Collected papers, volume 1.* Rheinweiler, West Germany: Maharishi European Research University Press.
- Orme-Johnson, D. W., & Fergusson, L. (2018). Global impact of the Maharishi Effect from 1974 to 2017: Theory and research. *Journal of Maharishi Vedic Research Institute*, 8, 13-79.
- Perkins, J. B., & Aquino-Russell, C. (2017). Graduate nurses experience the sacred during Transcendental Meditation. *International Journal of Human Caring*, 21(4), 163-171.
- Rees, B., Travis, F., Shapiro, D., & Chant, R. (2013). Reduction in posttraumatic stress symptoms in Congolese refugees practicing Transcendental Meditation. *Journal of Traumatic Stress*, 26(2), 295-298.
- Rosaen, C., & Benn, R. (2006). The experience of Transcendental Meditation in middle school students: A qualitative report. *Explore*, *2*, 422-425.
- Rosenthal, N. E. (2016). Super mind: How to boost performance and live a richer and happier life through Transcendental Meditation. London: Penguin.
- Schneider, R. H., Grim, C. E., Rainforth, M. V., Kotchen, T., Nidich, S. I., Gaylord-King, C., ... Alexander, C. N. (2012). Stress reduction in the secondary prevention of cardiovascular disease: randomized, controlled trial of Transcendental Meditation and health education in Blacks. *Circulation: Cardiovascular Quality and Outcomes*, 5(6), 750-758.
- Shusterman, R. (2008). *Body consciousness: A philosophy of mindfulness and somaesthetics*. Cambridge, UK: Cambridge University Press.
- So, K-T., & Orme-Johnson, D. W. (2001). Three randomized experiments on the longitudinal effects of the Transcendental Meditation technique on cognition. *Intelligence*, *29*, 419-440.
- Sridevi, K., & Rao, P. V. (2003). Temporal effects of meditation on cognitive style. *Journal* of Indian Psychology, 21(1), 38–51.
- Tanner, M. A., Travis, F., Gaylord-King, C., Haaga, D. A. F., Grosswald, S., & Schneider, R.
 H. (2009). The effects of the Transcendental Meditation program on mindfulness. *Journal of Clinical Psychology*, 65(6), 574-589.
- Travis, F. (2014). Transcendental experiences during meditation practice. *Annals of the New York Academy of Sciences*, *1307*(1), 1-8.
- Travis, F. T., Blasdell, K., Liptak, R., Zisman, S., Daley, K., & Douillard, J. (1996). Invincible athletics program: Aerobic exercise and performance without strain. *International Journal of Neuroscience*, 85(3/4), 301-308.
- Travis, F., & Parim, N. (2017). Default mode network activation and Transcendental Meditation practice: Focused attention or automatic self-transcending? *Brain and Cognition*, 111, 86-94.
- Urushidani, S., & Kuriyama, A. (2016). Transcendental Meditation and blood pressure. *Journal of Human Hypertension*, *30*(5), 354-354.

Wallace, R. K., Orme-Johnson, D. W., & Dillbeck, M. C. (Eds.) (1990). Scientific research on Maharishi's Transcendental Meditation and TM-Sidhi program: Collected papers, volume 5. Fairfield, Iowa: Maharishi International University Press.

Acknowledgements

The authors appreciate all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The authors declared no conflicts of interest.

How to cite this article: Fergusson, L., Cabrejos, J. O. & Bonshek, A. (2020). Long-term meditation practice in Puno, Perú: A five-level exploratory model of theory and research. *International Journal of Indian Psychology*, 8(3), 755-777. DIP:18.01.086/20200803, DOI:10.25215/0803.086