CHAPTER 1.0

1.0 INTRODUCTION

According to the WHO (1946) preamble definition, "health is not merely absence of disease or physical infirmity, but a state of complete physical, mental and social well-being." It is consisting of various factors—the balance of physical, psychological and spiritual. The present world has never been richer in material development. Our lives may be better than ever, yet we may have never faced the increased global challenges including ecological imbalance and holistic health issues. This is the time we are passing through those difficult experiences and disasters. Each human being has yearning for health and happiness at heart; it is common to people of all races, creeds, ages, nationalities. Our behaviour affects the world. It is necessary to have some guidelines, by which we could learn how to behave ourselves in this world, and promote harmonious material, mental, emotional and spiritual well-being.

In recent years there has been a growing interest in understanding happiness, not only on a personal level, but nationally, and even internationally. An increasing number of studies and experiments are conducted in an attempt to find out what makes people happy; and what the various physical, mental, and emotional effects of happiness might be. Numerous researches indicate that health and happiness are highly linked with cultivating positive emotional experiences (Fredrickson, 2000; Salovey et al., 2000); regularly experiencing positive thoughts, emotions, and attitudes, such as contentment, peacefulness, gratitude, creates an upward spiritual movement which in turn counteracts negative emotions and better coping with stressful events (Tugade & Fredrickson, 2006). Pert's research provides scientific evidence that our emotions and feelings are the bridges that link the body and mind (Pert, 1999). This foundation of research revealed a new scientific understanding of the power of mind and feeling that can directly and deeply influence our health and well-being. Further, this happened to coincide with the records of Traditional Chinese Medicine (TCM) which holds the view that "overjoy impairs the heart; anger impairs the liver; overthinking impairs the spleen; over grief impairs the lung and fear impairs the kidney" (Yan, 2018). Thus, emotions affect emotion-related organs.

Notably, over the past few years, the mind-body practice of *yoga* has been widely studied. Science has been used to study aspects of anatomy, physiology, and psychology in the area of *yoga*. Since 2009, there has been a large increase in publications about *yoga*'s therapeutic benefits (Jeter et al., 2015). The authors note that primary *yoga* interventions for mental health, cardiovascular and

respiratory diseases were the largest number of cases investigated. It is evident that substantial number of studies reveal positive effects on psychophysiological health through these practices (Field, 2016). It is known fact that the high rate of emotional pressure, unrest, and confusion are very common in the present era. Especially, members of young adult communities go through many troubles and experiencing medium to high level of emotional pressures (Auerbach et al., 2018). Only a small minority (16.4%) of college students with 12-month mental disorders received adequate treatment due to the high prevalence and insufficient resource services (Auerbach et al., 2016). The common mental problems in this major life transition period is not only associated with lower academic performance (Bruffaerts et al., 2018) but also with college attrition, emotional stress and anxiety, suicidal thoughts, and general health (Auerbach et al., 2016; Auerbach et al., 2018). It is important to resolve mental disorders early and develop feasible, efficient and cost-effective stress interventions to prevent and reduce emotional pressures in college students. However, coping strategies are not taught at their earlier schools or the higher education institutions which result in impaired physical, emotional and spiritual development.

Many reviews show *yoga* interventions demonstrate a reduction in perceived stress, depression and anxiety in youth during education (Stillwell et al., 2017; Chung, 2108; Breedvelt et al., 2019). According to previous findings, *yoga* is one of the interventions increasingly popular with tertiary education students, and positive outcomes reported in most studies. The studies have shown *yoga* programs facilitated multitude aspects of psychological health and well-being which covered academic performance stress (Malathi & Damodaran,1999; Arora et al., 2011), emotion regulation and different aspects of psychological well-being such as quality of life, perceived stress and self-regulation, mindfulness, self-compassion (Gard et al., 2012; Bond et al., 2013; Brems, 2015) as well as cognitive functions and creative ability (Nagendra et al., 2015; Saoji et al., 2016; Bollimbala et al., 2020). Most studies on *yoga* focus on the combination of postures, breathing exercises and meditation components. Most modern *yoga* classes typically focus on postures, breathing and meditation. However, *yoga* ethics is missing in practice.

Increasing evidence found yoga facilitated subtle changes in positive personality traits (Deshpande et al., 2008). For the subject of yoga ethics, there is a lack of literature for researchers to reference. According to Indian traditional philosophy such as Bhagavad $G\bar{\imath}t\bar{a}$, a person's actions and behaviour are influenced by the three $gun\bar{a}s$ of nature. The three $gun\bar{a}s$ are: (1) sattva is the attribute influenced by truth, purity and spirituality; (2) rajas is the attribute endowed with constant activity and motion; (3) tamas is the attribute of lack of confidence, inertia, and ignorance

(Yogananda, 2013). The three *guṇās* constitute physical, mental and spiritual aspects of an individual's personality (Khanna et al., 2013). All people display an admixture of all *guṇās* thus accounting for the variety of human mind and behaviour. Furthermore, *yogic* texts introduce the concept of *cakra*. There are seven major *cakrās*, associated with spiritual well-being that affect physical, mental, emotional and spiritual realm (Beshara, 2013). Thus, any activity performed under the influence of these three *guṇās* impacts the balance of *cakra* along the spinal cord.

Interestingly, yoga practices have also indicated improved regulation of the entire organism by balancing acupuncture meridian energy, which links yoga and Traditional Chinese Medicine (TCM) (Nagilla et al., 2013; Sharma et al., 2014). In yoga, $pr\bar{a}na$ is described as subtle energy (life force) flowing through $n\bar{a}d\bar{i}s$ (energy channels) which is the equivalent of qi (vital energy) in TCM meridians (Srinivasan, 2014). The meridian theory is one of the basic principles of TCM and states that qi flows through the channel system (meridians) connected to internal organs and functions (Longhurst, 2010). The imbalance or blockage of qi in various meridians is attributed to illness (Nestler, 2002). $Pr\bar{a}na$ cannot be measured yet, but Electro Photonic Image (EPI) measures are generally recognized to reflect the biological field and assess the subtle energy changes in meridians in the human body, which is consistent with TCM approaches (Korotkov, 2014; Narayanan et al., 2018).

Energy is the resource of life that allows humans to engage in physical and emotional activity. Modern science and the ancient teachings of Chinese medicine states matter is only a vibration of energy. In ancient India, the illumined seers declared that energy is a vibration of thoughts (Yogananda & Kriyananda, 2013). In *yoga* philosophy, the mind is the source of energy, mind being the brain, feelings, and perceptions of all living cells in the body, keeping the human body alert or depressed. The mind is the chief governor of the body; hence we should consider the nutritive potency of the psychological menus that we daily serve the mind. There are seven emotions associate with five major organs (heart, lung, liver, spleen, kidney), according to TCM (Li et al., 2017). *Huangdi Neijing* further states that mind-body health is associated with the balanced movement of *qi* (Li et al., 2017). Thus *yoga* practices such as *āsana*, *prāṇāyāma* and meditation are said to remove blockages, enliven *prāṇa* and promote its smooth flow through the subtle channels, which ameliorates physical, mental or emotional discomfort (Hanky, 2006). Yet, the effect of ethical discipline of *yoga* on the regulation of emotions to account for body-mind health at subtle level has not been experimentally studied.

The ethical principles of yama and niyama are enumerated in Patañjali's Yoga Sūtrās; they are universal rules of ethical life style. These ethical insights are not only simple in theory, but they also aid in the growth of the mind and body (Bhatta, 2009). Although yoga ethics embodied tremendous value for balancing the body, mind, and spirit, it has been neglected in and out of the yoga mat (Brems et al., 2017), and its effect on the energy field of an individual practicing has remained unknown. Unsurprisingly, recent scientific findings about ethical behaviour often correlate with the ancient teachings of the masters (Zhang & Veenhoven, 2007; Krause et al., 2017). Great masters Swāmī Vivekānanda and Paramahamsa Yogānanda pointed out a similar view that emphasis ethical and spiritual development of yoga education; these points to the concept of yama and niyama. Young adults constitute a large part of the country's population and their positive personality, psychophysical health, and ethics quotient not only can turn them into a symbol in the society but also bring lasting well-being and happiness to individuals and to the society. In the current study, we have used the Vedic Personality Inventory (VPI) questionnaire and Bio-Well instrument for assessment of the outcomes of yama and niyama intervention on physical, psychological and spiritual factors.

There are two parts to this thesis. The first part presents ancient scriptures (Chapter 2.0) that are relevant to the universal ethical disciplines in *yoga* and also in all great world religions. The second part is relevant to the scientific study as mentioned above.