# Happiness explained by the ancient Hindu **Scriptures** and the temporal nonlocality in Quantum **Entanglement**

# Jai Paul Dudeia

Professor and Director, Amity University Haryana, Gurugram 122413, India.

### **ABSTRACT**

Who does not wish to be happy? But how many of us really know what happiness is. What is the difference between happiness, pleasure, satisfaction, success, joy and bliss? Happiness is actually a state of mind. Happiness exists within us. It need not be influenced by the external factors. A poor family with very little facilities can be far happier than a rich man having all the luxuries of life. So, in order to be truly happy, one must understand the source of happiness. In this paper we shall attempt to demonstrate how certain principles in quantum theory align with the philosophical concepts in the ancient Hindu scriptures, like Upanishads and the Bhagavad Gita and show how happiness appears to exist in a state of complementarily: simultaneously at the infinite, timeless, non-local level and at the finite, temporally bound and localized realm.

**Keywords:** Happiness, Upanishads, Bhagavad Gita, Temporal nonlocality, Quantum entanglement.

#### 1. Introduction

Who wants to be happy? Everyone! Pursuit of happiness is the goal of all religions and almost all spiritual writings describe the ways how to achieve it.

Brihadaaranyaka Upanishad (1.4.14), an ancient Hindu scripture, says:

Sarve Bhavantu Sukhinah, Sarve Santu Niraamayah, Sarve Bhadraani Pashyantu, Maa Kaschid Dukha Mapnuyat.

Meaning: May all be happy; May all be without disease; May all look for well-being of others; May none have misery of any sort. - Brihadaaranyaka Upanishad 1.4.14

According to Sri Aurobindo, happiness is the natural state of humanity, as he mentions in his book 'The Life Divine', he informs about it as delight of existence. Srimad Bhagavad Gita interprets happiness as derived via good thoughts and good deeds that depend on the state and on the control of the mind. Through evenness of temper and mind, the state of supreme bliss is reached in all aspects of one's life. According to the Vishishtadvaita vedanta school, which was proposed by Ramanujacharya, true happiness can only be through divine grace, which can be achieved by surrender of one's ego to the Divine. According to Ramana Maharshi, happiness is within us and can be known only through discovering our true self. The happiness can be attained by inner enquiry, using the thought "Who am I?

#### 1.1 What is happiness?

Happiness is the meaning and the purpose of life, the whole aim and end of human existence.

- Aristotle

Everyone in this world desires happiness, although few know exactly what is meant by the word. How do you define happiness? According to a large number of spiritual philosophers, happiness is our birthright. It is

ours for the experiencing. Nevertheless, if we don't really know what true happiness is, or how to cultivate its sweet fragrance inside ourselves, then our efforts to find true happiness in outer circumstances alone are likely to be in vain.

Happiness is a state of inner fulfillment, not the gratification of inexhaustible desires for outward things. Genuine happiness may be influenced by the circumstances, but it is not dependent on it. It actually gives us the inner resources to deal better with those circumstances. Happiness is to understand that we are one with others, and this not only leads to obtaining happiness, but also brings peace and harmony into the lives of others. The more we care for the happiness of others, the greater our own sense of happiness becomes. According to the ancient Hindu scriptures, happiness is a fundamental state of existence that aligns the sacred self with the timeless, infinite dimension of the cosmos.

Doing what you like is freedom. Liking what you do is happiness. - Frank Tyger

Men and women are rushing hither and thither in the blind search for happiness, and cannot find it; nor ever will until they recognize that happiness is already within them and round about them, filling the universe, and that they, in their selfish searching, are shutting themselves out from it.

- James Allen

According to Augustine, "Eternity is the now that does not pass away." A happiness anchored in the now is eternal. The Self lives in the now; the 'I' lives in time. Shifting your centre of awareness from the 'I' to the 'Self' means anchoring your consciousness in the now. At first we can do this only for brief moments. But we can learn to take the temporal happiness of the 'I' lightly and enjoy more and more the "now-happiness" of the Self, the condition that accounts for genuine happiness.

### 1.2 What is pleasure?

Pleasure is satisfying the need of five senses: A good meal, a good smell, a good sex, a good scene, looking a beautiful face, listening to good music etc. The pleasure is dependent of external objects. If there is no such object, the pleasure will go away. The experience of pleasure is subjective and different individuals experience different kinds and amounts of pleasure in the same situation. Pleasure is short-lived, at times leading to pain, guilt or depression as its after-effects. Pleasure is temporary, and generally is centered on the self, which can make us selfish and sometimes is in conflict with the well-being of others.

# 1.3 What is the difference between happiness and pleasure?

Happiness is often equated with a maximization of pleasure, and some imagine that true happiness would consist of an interrupted succession of pleasurable experience [1]. There is no reason to deprive ourselves of the enjoyment of a magnificent landscape, of swimming in the sea or of the scent of a rose, but we must understand that the experience of pleasure is dependent upon circumstance, on a specific location or moment in time. It is unstable by nature, and the sensation it evokes can soon become neutral or even unpleasant. In other words, pleasure is externally motivated and fleeting, while happiness is internally generated and constant. Happiness is not necessarily dependent on any external or internal pleasurable stimuli.

## 1.4 What is the difference between happiness and success?

"Success is getting what you want; happiness is: wanting what you get."- Ingrid Bergman. Success is meeting the deadlines. Happiness is working toward your goals. Success is focusing on accumulating wealth. Happiness is focusing on improving your life [2]. Success is promotion above your peers. Happiness is being respected by your peers. "When I look back on all these worries, I remember the story of the old man who said on his deathbed that he had had a lot of trouble in his life, most of which had never happened." - Winston Churchill. Success is finding a life partner. Happiness is keeping your partner for life. Success is keeping the knowledge you glean to yourself. Happiness is sharing your expertise freely.

One of my Facebook friends recently wrote on her post, "Success is father, and happiness is mother. Father wants his children to be successful but mother always wishes her children to be happy."

# 1.5 What is the difference between happiness and satisfaction?

'Happiness' is defined as both a state of mind and an emotion. Man can choose to be happy. It is relevant to note that even people who are poor can be happy despite the fact that not all their needs are met, even the most basic ones. 'Satisfaction,' on the other hand, is the state wherein your desires are met. You will find it in the possession and enjoyment of things that you desire. In effect, it, too, is a state of mind wherein you find contentment knowing that your demands and desires are made possible.

Meeting the desires of your heart and the demands of your needs will not necessarily make you happy despite the fact that you will never want for anything when you are satisfied. Everything actually depends on your beliefs. If you see poverty as a blessing rather than a curse and be content with what you have, then your chances of being happy are greater than the person who sees material things as a necessity in life [3].

# 1.6 What is the difference between happiness, joy and bliss?

When you have joy, that joy is in the central being, in the heart itself. When you are really joyful, that joy usually remains inside the heart with utmost confidence. Inner joy means real inner security. But if you are happy, it can be on a much lower plane of consciousness — on the physical plane, the vital plane, or the mental plane. Joy is superior to happiness. Bliss is much higher, much superior to joy. It is infinitely superior to both joy and happiness.

When we are immersed in doing an activity that we truly love, we transform ourselves into a refreshing and tranquil state. When that activity, which we love to engross in, results into the enhancement of human potential and/or welfare of others, we achieve happiness. Happiness is synchronizing with the flow of nature while doing such activity with effortless acceptance and with zero resistance and no expectations [4].

This paper explains the concept of happiness from the point of view of the ancient Hindu scriptures, like Bhagavad Gita and Upanishads, and the quantum physics.

# 2. 'Happiness' according to Ancient Hindu Scriptures

## 2.1 Upanishads

The Upanishads advance a unique and powerful notion that the qualitative distinction between pleasure and happiness resides within a temporal context. To elaborate, the pleasure is short-lived: meaning that it is temporally local; on the other hand happiness is long lasting: meaning that it is temporally nonlocal.

Isa-Vasya-Upanishad gives knowledge of the All-pervading Deity. The dominant thought running through it is that we cannot enjoy life or realize true happiness unless we consciously "cover" all with the Omnipresent Lord. If we are not fully conscious of that which sustains our life, how can we live wisely and perform our duties? Whatever we see, movable or immovable, good or bad, it is all "That." We must not divide our conception of the universe; for in dividing it, we have only fragmentary knowledge and we thus limit ourselves [5].

**Katha Upanishad** beautifully distinguishes between the 'happiness' and the 'pleasure' in the following two shlokas:

anyacchreyo'nyadutaiva preya-	
ste ubhe nānārthe puruṣa~ sinītaḥ 🗆	]
tayoḥ śreya ādadānasya sādhu	
bhavati hīyate'rthādya u preyo vṛṇīte 🗆 1	.2.1
śreyaśca preyaśca manuṣyametaḥ	
tau samparītya vivinakti dhīraḥ 🗆	
śreyo hi dhīro'bhi preyaso vṛṇīte	
prevo mando vogaksemādvrnīte $\Box$ 1.2.	$2\square$

Meaning: There is the path of happiness, and there is the path of pleasure. Both attract the soul. Who follows the first (means the happiness) comes to good; who follows the path of pleasure fails to reach the end goal. The two paths lie in front of man. Discriminating between them the wise one chooses the path of happiness; the simple-minded choose the path of pleasure." (Katha Upanishad I.2, 1-2).

In this context, some shlokas from the **Chandogya Upanishad** are quoted here below:

vadā vai sukham labhate'tha karoti nāsukham labdhvā karoti sukhameva labdhvā karoti sukham tveva viiiiñāsitavvamiti sukham bhagavo vijijñāsa iti || 7.22.1 ||

|| iti dvāvimšah khandah //

**Meaning:** 'A person works when he gets happiness. He does not care to work if he does not get happiness. By getting happiness one does one's duty. But one must try to understand the true nature of this happiness.' Nārada replied, 'Sir, I want to know well the true nature of happiness'.

yo vai bhūmā tatsukham nālpe sukhamasti bhūmaiva sukham bhūmā tveva vijijñāsitavya iti bhūmānam bhagavo vijijñāsa iti || 7.23.1 ||

|| iti trayovimśah khandah ||

**Meaning:** 'That which is infinite is the source of happiness. There is no happiness in the finite. Happiness is only in the infinite. But one must try to understand what the infinite is.' Nārada replied, 'Sir, I want to clearly understand the infinite'.

vatra nānvatpaśvati nānvacchrnoti nānvadvijānāti sa bhūmātha yatrānyatpaśyatyanyacchrnotyanyadvijānāti tadalpam yo vai bhūmā tadamrtamatha yadalpam tanmartym sa bhagavah kasminpratisthita iti sve mahimni yadi vā na mahimnīti

// 7.24.1 //

Meaning: 'Bhūmā [the infinite] is that in which one sees nothing else, hears nothing else, and knows [i.e., finds] nothing else. But alpa [the finite] is that in which one sees something else, hears something else, and knows something else. That which is infinite is immortal, and that which is finite is mortal.' Nārada asked, 'Sir, what does bhūmā rest on?' Sanatkumāra replied, 'It rests on its own power—or not even on that power [i.e., it depends on nothing else]'.

sa evādhastātsa uparistātsa paścātsa purastātsa daksiņatah sa uttaratah sa evedam sarvamityathāto'hamkārādeśa evāhamevādhastādahamuparistādaham paścādaham purastādaham daksinato'hamuttarato'hamevedam sarvamiti || 7.25.1 ||

Meaning: That bhūmā is below; it is above; it is behind; it is in front; it is to the right; it is to the left. All this is bhūmā. Now, as regards one's own identity: I am below; I am above; I am behind; I am in front; I am to the right; I am to the left. I am all this.

athāta ātmādeśa evātmaivādhastādātmoparistādātmā paścādātmā purastādātmā daksiņata ātmottarata ātmaivedam sarvamiti sa vā eṣa evam paśyannevam manvāna evam vijānannātmaratirātmakrīḍa ātmamithuna ātmānandaḥ sa svarāḍbhavati tasya sarveṣu lokeṣu kāmacāro bhavati atha ye'nyathāto viduranyarājānaste kṣayyalokā bhavanti teṣām sarveṣu lokeṣvakāmacāro bhavati || 7.25.2 ||

Meaning: Next is the instruction on the Self: The Self is below; the Self is above; the Self is behind; the Self is in front; the Self is to the right; the Self is to the left. The Self is all this. He who sees in this way, thinks in this way, and knows in this way, has love for the Self, sports with the Self, enjoys the company of the Self, and has joy in the Self, he is supreme and can go about as he likes in all the worlds. But those who think otherwise are under the control of others. They cannot remain in the worlds they live in, nor can they move about in the worlds as they like [i.e., they are under many limitations].

## 2.1.1 Stages of Happiness according to Taittiriya Upanishad

Different levels of happiness among various species of life are explained in the Ananda Valli from the Taittiriya Upanishad as follows:

```
saisa 'nandasya mimamgumsa bhavati |
yuva syatsadhu yuva 'dhyayakah | asistho dridhistho balisthah |
tasyeyam prithivi sarva vittasya purna syat | sa eko manusa anandah |
```

**Meaning:** Now this is an assessment of Bliss. Let it be supposed that there is a youth, a noble youth, in the prime of age, most swift and alert, perfectly whole and resolute, most vigorous and of good learning, and that to him belongs the entire earth laden with all riches. Then we have in him one measure of human joy.

It goes on further:

```
te ye satam manusa anandah | sa eko manusyagandharvanamanandah | srotriyasya cakamahatasya |
```

**Meaning:** One hundred such units of human joy make up a single unit of joy which the manushya gandharva (musician) possesses. A sage full of revelation and free from all cravings also possesses the same joy.

Further:

```
te ye satam manusya-gandharvanamanandah | sa eko devagandharva-namanandah | srotriyasya cakamahatasya |
```

**Meaning:** One hundred such units of joy which the manushya gandharva possesses make the joy of the deva gandharva (heavenly musician). A sage full of revelation and free from all cravings also possesses the same joy.

Still further:

```
te ye satam de<mark>vagand</mark>arvanamanandah |
sa ekah pitrinam ciraloka<mark>lokanaman</mark>andah | srotriyasya cakamahatasya |
```

**Meaning:** One hundred such units of joy which the deva gandharva possess make the joy of the Pitrus (a resident of special abode in heaven) who inhabit the long enduring would. A sage full of revelation and free from all cravings also possesses the same joy.

It goes further:

```
te ye satam pitrinam satam ciralokaloka-namanandah |
sa eka ajanajanam devanamanandah | srotriyasya cakamahatasya |
```

**Meaning:** One hundred such units of joy which the Pitrus inhabiting the long enduring world possess make the joy of those demigods who are so by birth in the Ajana heaven (ajana devas). A sage full of revelation and free from all cravings also possesses the same joy.

```
te ye satamajanajanam devanamanandah | sa ekah karmadevanam deva namanadnah | ye karmana devanapiyanti | srotriyasya cakamahatasya |
```

**Meaning:** One hundred such units of joy which the Ajana-born demigods (ajana devas) possess make the joy of those who have become demigods (karma devas) by the force of their deeds. A sage full of revelation and free from all cravings also possesses the same joy.

```
te ye satam karmadevanam devanamanandah | sa eko devanamanandah | srotriyasya cakamahatasya devanamanandah |
```

**Meaning:** One hundred such units of joy which those demigods who have become such by their deeds (karma devas) make the joy of the controlling demigods (devas). A sage full of revelation and free from all cravings also possesses the same joy.

te ye satam devanamananadah | sa eka indrasyanandah | srotiyasya cakamahatasya |

**Meaning:** One hundred such units of joy of the highest gods make the joy of Indra. A sage full of revelation and free from all cravings also possesses the same joy.

te ye satamindrasyanandah | sa eko brihaspateranandah | srotriyasya cakamahatasya |

Meaning: One hundred such units of Indra's joy make the joy of Brihaspati. A sage full of revelation and free from all cravings also possesses the same joy.

satam brihaspaterananda sa ekah prajapateranandah / srotriyasya cakamahatasya /

Meaning: One hundred such units of Brihaspati's joy make the joy of Prajapati. A sage full of revelation and free from all cravings also possesses the same joy.

te ye satam prajapateranandah | sa eko brahmana anandah | srotriyasya cakamahatasya |

Meaning: One hundred such units of Prajapati's joy make the bliss of Brahman. A sage who is full of revelation and free from all cravings possesses all these various measures of joy.

A self realized soul is situated in Brahman, which is described by Lord Krishna as follows:

brahmano hi pratisthaham, amritasyavyayasya ca sasvatasya ca dharmasya, sukhasyaikanthikasya ca

Meaning: I am the basis of the Brahman, which is immortal, imperishable and eternal and is the constitutional position of ultimate happiness.

One who has attained the spiritual happiness of Brahman possesses and surpasses all other levels of happiness.

#### **Srimad Bhagavad Gita** 2.2

According to Srimad Bhagavad Gita, there are three kinds of happiness: Satvik, Rajasik, and Tamasik.

In Chapter 18, Verse 36, Sri Krishna says to Arjun,

sukham tv idanim tri-vidham shrinu me bharatarshabha abhyasad ramate yatra duhkhantam cha nigachchhati

Meaning: And now hear from me, O Arjun, of the three kinds of happiness in which the embodied soul rejoices, and can even reach the end of all suffering.

tat sukham sattvikam proktam atma-buddhi-prasada-jam

**Meaning:** That which seems like poison at first, but tastes like nectar in the end, is said to be happiness in the mode of goodness. It is generated by the pure intellect that is situated in self-knowledge.

Next, Lord Krishna says through Bhagavad Gita, Chapter 18, Verse 37:

vishayendriya-sanyogad yat tad agre mritopamam pariname visham iva tat sukham rajasam smritam

Meaning: Happiness is said to be in the mode of passion (or pleasure) when it is derived from the contact of the senses with their objects. Such happiness is like nectar at first but poison at the end.

According to Chapter 18, Verse 39 of Bhagavad Gita:

yad agre chanubandhe cha sukham mohanam atmanah nidralasya-pramadottha tat tamasam udahritam

**Meaning:** That happiness which covers the nature of the self from beginning to end, and which is derived from sleep, indolence, and negligence, is said to be in the mode of ignorance.

# 3. Happiness according to Quantum Entanglement

# 3.1 What is Quantum Entanglement?

Quantum entanglement is a physical phenomenon that occurs when pairs or groups of particles are generated such that the quantum state of each particle cannot be described independently of the state of the others, even when the particles are separated by a large distance. Measurements of physical properties such as position, momentum, spin, and polarization, performed on entangled particles are found to be correlated. For example, if a pair of particles is generated in such a way that their total spin is known to be zero, and one particle is found to have clockwise spin on a certain axis, the spin of the other particle, measured on the same axis, will be found to be counterclockwise, as is to be expected due to their entanglement.

Such phenomena were the subject of a 1935 paper by Albert Einstein, Boris Podolsky, and Nathan Rosen, and several papers by Erwin Schrödinger shortly thereafter, describing what came to be known as the EPR paradox [6]. Einstein and others considered such behavior to be impossible, as it violated the local realism view of causality (Einstein referring to it as "spooky action at a distance"). EPR asserted that if such an instant entanglement phenomenon is accepted between the two particles separated by a very large distance; this will violate the maximum limit of the speed of light. Therefore they argued that the accepted formulation of quantum mechanics must therefore be incomplete. Only after the realization of an experiment suggested by Bell [4, 5], was the nonlocal nature of quantum mechanics widely accepted.

# 3.2 What is Nonlocality in Quantum Entanglement?

A non-local connection links up one location with another without crossing space, without decay, and without delay. These connections have three identifying characteristics: (i) They are unmediated (no connecting signal is involved), (ii) unmitigated (the strength of the correlations do not fade with increasing distance), and (iii) immediate(they are instantaneous). Basically the general "principle of locality" requires that "for an action at one point to have an influence at another point, something in the space between the points, such as a field, must mediate the action". In view of the theory of relativity, the speed at which such an action, interaction, or influence can be transmitted between distant points in space cannot exceed the speed of light. This formulation is also known as "Einstein locality" or "local relativistic causality". It is often stated as "nothing can propagate faster than light, be it energy or merely information" or simply "no spooky action-at-a-distance", as Einstein himself put it.

The phenomenon of entanglement between quantum systems raised the nonlocality problem first noted in the EPR paper: A projective measurement on a quantum system at one space location instantly collapses the state of an entangled counterpart at a distant location. Quantum mechanical nonlocality refers to this apparent entanglement-mediated violation of Einstein locality. Although entanglement correlations are affected instantaneously, they cannot be harnessed for faster-than-light communications. The reason is that the outcome of the local projective measurement is itself statistic and cannot be predicted beforehand.

Nonlocality is subdivided by some physicists into three types. Type I is spatial nonlocality; type II is temporal nonlocality; and type III nonlocality is both spatial and temporal.

## 3.3 What is 'Spatial Nonlocality' in Quantum Entanglement?

Until recently, the two (or more) quantumly entangled objects, satisfying the criterion of non-locality, could be located at any distance apart. This is called the 'Spatial Nonlocality' in Quantum Entanglement. It is to this type of large separation to which Einstein referred to as 'spooky action' because it violated the maximum limit of speed of light.

# 3.4 What is 'Temporal Nonlocality' in Quantum Entanglement?

The non-locality of quantum mechanics, as manifested by entanglement, does not apply only to particles with space-like separation, but also to particles with time-like separation. If the two objects are located at two different times (instead of different points in space) and are entangled, this is called 'temporal nonlocality'. It means that the second object (which was generated at a subsequent time) was entangled with the first object which existed in the past, and vice versa. The future, past, present, and consciousness are entangled within the quantum continuum [6].

## 3.5 Happiness is both 'local' and 'nonlocal' temporally

Whether it is a simple shift of committing to treating people with more kindness, and liberating through realization, you are responsible for your own happiness, trying to better make sense of the world. We are called to do it numerous times in a life. There is a beautiful word for this, it's called 'metanoia', and it originates from the Greek word for "changing one's mind or purpose. Metanoia, in other words, is a nonlocal awareness. Happiness is also nonlocal: it is found externally as well as internally. One can thus transcend to the state of happiness through metanoia [7].

Whereas the nature at its deepest level is quantum mechanical and nonlocal, it appears to our minds in everyday experience as local and classical [8]. Some modern scientists have gone to the extent of asserting that nature is actual nonlocal and it is real. It is our 'spooky mind' that perceives it to be classical and local. The reason behind this spooky mind is that it conceals the ability to perceive the universe in its fundamental, quantum, non-local state by the convenient application of a cognitive filter to perceive it as classical and local [9].

# 3.6 Perception of Time and Nonlocality

Time is a concept that spans the human condition. Psychological research shows that just about all of human experience is dependent upon and influenced by how individuals perceive time, localize themselves consciously within space and time and process their temporally-based perceptions and experiences. Classical physics has successfully allowed us to calculate and measure time at the macroscale while relativistic physics demonstrates how time and space are conjugate pairs that manifest in a unified continuum. With the establishment of quantum mechanics, concepts such as entanglement and nonlocality allow us to construct a new cosmological model of time that connects with cognitive perception—one that asserts that time is perceived in a complementary timeful and timeless state. In the timeful state, the mind perceives time in its localized, linear, and causal aspects; while in its timeless state as non-local, symmetrical, and entangled. Many of the spiritual traditions throughout history maintain a similar position of human consciousness as having the capacity to abide within these complementary modes of existence. How time, and conceptions about the past, present or future are therefore illusions, as there is no 'future' or 'past' [6, 10]. However, when considered from the perspective of quantum mechanics, timespace is a continuum, a unity, and time does not exist independent of this continuum, except as an act of perceptual registration by consciousness or mechanical means.

The recognition of the mind's ability to experience both the localized and non-localized complementary aspects of time was the impetus for the ancient Indian mystics to develop advanced mental techniques to master time within the domain of human consciousness. The goal of these disciplines was to liberate from the inherent cognitive filters that limit one's consciousness into the distorted and fragmented perception of time.

The mechanism that reduces human consciousness into experiencing time in its temporally localized state is what is referred to as veiled non-locality. The term implies how consciousness disguises its wholeness and nonlocality in order to produce local processes. This filtering process allows for specific observations and thoughts in a classical world of everyday experience, while keeping quantum and general relativistic processes out of sight [8].

#### 3.7 Time is entangled

Time cannot be separate from the continuum except when perceived as such by an observing consciousness or measuring device, thereby inducing a collapse of the wave function of time; experienced as the present, past, or future. Time, be it considered a dimension known as timespace, or as a perceived aspect of the quantum continuum, is also subject to entanglement, as all aspects of time are interconnected and indistinguishable until perceived thereby inducing a collapse of the wave function. "A" future can therefore effect "a" past and change it through entanglement and by influencing the wave function [10].

The quantum continuum is without dimensions and encompasses space and time in its basic unity of oneness. Everything within the quantum continuum can be influenced by the local effect and distant effects simultaneously at and beyond light speeds. Therefore, the future, and the "present" being part of this continuum can influence the past by effecting the wave function of the past, present, future, and thus, the space-time continuum, as all are entangled. Time-space is interactional, and can contract to near nothingness and then continue to contract in a negative direction such that the time traveler can journey into the past.

### 4. Summary of Learning from the Scriptures and Quantum **Entanglement on the Perception of Happiness**

Thus the learning of the ancient Hindu scriptures and Quantum Entanglement can be summarized into the following three key points [9]:

- There exists a transcendental, infinite, non-local, dimensionless, unchanging reality that is obscured (i) from the limited cognitive perception of the human senses;
- This foundational reality is veiled by means of a cognitive illusion that limits the consciousness into (ii) a localized, linear, and dimensionally finite perception of time.
- Advanced mental training needs to be developed and practiced in order to liberate one's (iii) consciousness from the illusory cognitive limitations of the mind via a perceptual reframing of time into its fundamental non-local, entangled state.

#### 5. Conclusion

In this paper we have defined the happiness and described how it is different from the pleasure, satisfaction, success, joy, bliss etc. Further, various stages of happiness have been explained here according to Upanishads. Happiness can be triggered both from internal as well as external factors. Happiness is both local as well as nonlocal, confined and spread spatially and temporally. Here, we have aligned the concept of true happiness as recorded in the ancient Hindu scriptures, viz., Upanishads and Srimad Bhagavad Gita, with the temporal nonlocality in Quantum entanglement: thus contributing a synchronicity between the ancient wisdom and the modern science.

# References

- 1. Friedlander, David, "The difference between pleasure and happiness", Life Edited, March 15, 2013.
- Wilson, Dianne J. "The Difference Between Being Successful and Being Happy", Lifehack, 2. https://www.lifehack.org/articles/communication/the-difference-between-being-successful-andbeing-happy.html
- Rampton, John, "Knowing The Difference Between Happy And Satisfied... And Being Both", Thrive 3. Global, March 4, 2019.
- Hari Ravikumar, "Upanishads: Understanding happiness and flow", Daily-O. May 29, 2015. 4.
- Isa Upanishad, Translated and Commentated by Swami Paramanansa, http://www.yoga-5. age.com/upanishads/isha.html
- Dudeja, Jai Paul, "Can we influence certain events that occurred in the past? 6.

- Interpreting 'delayed choice quantum eraser' experiment", International Journal of Research and Analytical Reviews (IJRAR), (ISSN: 2348-1269), Vol. 6, Issue 2, Apr-June 2019, pp.217-226. http://doi.one/10.1729/Journal.20381
- 7. Szalay, Mátyás, "Metanoia: A Phenomenological Analysis of Philosophical Conversion", Radical Orthodoxy: Theology, Philosophy, Politics, Vol. 1, Number 3 (September 2013): 484-503.
- 8. Kak, S., Chopra, D., and Kafatos, M. (2014) Perceived Reality, Quantum Mechanics, and Consciousness. Cosmology, vol. 18. 231-245.
- 9. Jay Kumar, "Temporal Non-Locality and the Cognitive Perception of Happiness: From the Upanishads to Quantum Theory", Cosmology, 2014, Vol. 18. 422-442, Cosmology.com, 2014.
- 10. R. Gabriel Joseph, "Paradoxes of Time Travel: The Uncertainty Principle, Wave Function, Probability, Entanglement, and Multiple Worlds", Cosmology, 2014, Vol. 18. 283-302. Cosmology.com, 2014 BrainMind.com

