

**DESIGNING AND VALIDATION OF IS DAYAAND MITAHARASUB  
DOMAINS OF “YAMA AND NIYAMA QUESTIONNAIRE”**

Dissertation

Submitted Towards Partial Fulfillment of

**Master’s degree in Yoga Therapy-MSc in Yoga Therapy August 2020**

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## CERTIFICATE

This is to certify that **Ankit** who has got MSc registration with start from August 01, 2018 by Swami **Vivekananda Yoga Anusandhana Samsthana, deemed to-be University**, has successfully completed the required training in acquiring the relevant background knowledge in Yoga Therapy and has completed the M.Sc. course of 2 years to submit this research project entitled **DESIGNING AND VALIDATION OF *DANA AND MITAHARA* - SUB-DOMAINS OF “*YAMA AND NIYAMA* QUESTIONNAIRE”**

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Date:

Place: Bengaluru

## DECLARATION

I hereby declare that the subjective study was conducted by me under the guidance of Dr. Rajesh S.K. and Dr. JuduIlavarasu. I also declare that the subject matter of my dissertation entitled DESIGNING AND VALIDATION OF **IS DAYA AND MITAHARA** SUB DOMAINS OF “YAMA AND NIYAMA QUESTIONNAIRE” has not previously formed the basis of the award of any degree, diploma, associate-ship, fellowship or similar titles.

A rectangular box containing a handwritten signature in blue ink. The signature appears to be 'Ankit' written in a cursive style.


Place: Bengaluru

Date:

## ACKNOWLEDGEMENT

An Enriching learning experience can be possible only with the complete support of the Institution, teachers, Family and friend. So, I am extremely thankful to Swami Vivekananda Yoga AnusandhanaSamsthana (S-VYASA), MSc course coordinator Padmasri madam and all my teachers of MSc course for the opportunity for an enriching learning experience on Yoga therapy and research.

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## ABSTRACT

**Background:** The personality scale of *Dana and Mitahara* is a cost-effective screening tool to measure those particular personality aspects among a group of people. Further the data can be used to interpret whether there is any difference in yoga practitioners and non-yoga practitioners regarding these attributes.

**Aim:** The aim of this study is to develop and validate the personality scale as a screening tool to analyze and measure the yogic concepts - and to be able to quantify and measure these constructs in the present circumstances.

**Methodology:** The study employed tool development method through which a questionnaire with 14 items was developed. No specific inclusion or exclusion criteria was done. The questionnaire was circulated in Google form with the help of different means of social media. Data was collected through Google Excel sheet which was further analyzed and interpreted. Quantitative and qualitative methods were used. As it was a survey design there was no particular intervention.

**Result:** The data were analyzed using exploratory factor analysis. Two factors were extracted as the theory indicates. Overall reliability of the scale was found to be questionable ( $\alpha = 0.56$ ).

**Conclusion:** This scale is described to measure and analyze *ahisā* in one's personality. *ahisā* leads individual towards more pleasant and happier life. More work on the development of the scale is necessary. Despite the limitations, there is a scope for further research in this field as it opens up interesting opportunities.

**STANDARD INTERNATIONAL TRANSLATION CODE USED TO  
TRANSLATE SANSKRIT WORDS**

a	=	अ	ña	=	ङ	pa	=	प
ā	=	आ	ca	=	च	pha	=	फ
i	=	इ	cha	=	छ	ba	=	ब
ī	=	ई	ja	=	ज	bha	=	भ
u	=	उ	jha	=	झ	ma	=	म
ū	=	ऊ	ñ	=	ञ	ya	=	य
ṛ	=	ऋ	ṭa	=	ट	ra	=	र
ṝ	=	ॠ	ṭha	=	ठ	la	=	ल
e	=	ए	ḍa	=	ड	va	=	व
ai	=	ऐ	ḍha	=	ढ	śa	=	श
o	=	ओ	ṇa	=	ण	ṣa	=	ष
au	=	औ	ta	=	त	sa	=	स
m̐	=	अं	tha	=	थ	ha	=	ह
ḥ	=	अः	da	=	द	kṣa	=	क्ष
ka	=	क	dha	=	ध	tra	=	त्र
kha	=	ख	na	=	न	jña	=	ज्ञ
ga	=	ग						
gha	=	घ						

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# CHAPTER 1

## 1. INTRODUCTION

### 1.1 THE CONCEPT OF YOGA

Yoga is a *Sanskrit* word which means union or to connect (union between Individual soul and supreme soul). Yoga is the spiritual process, developed in the eastern tradition. Yoga is a traditional practice for achieving self-realization, but in recent years, significant value is being given to the effects of yoga practices on physiological and biological health (Varambally & Gangadhar, 2012). However, Yoga is an art of holistic living but not only a combination of *Asana* and *Pranayama*. For the westerns, Yoga is a kind of mind-body technique where meditation reflects stable seated practices and yoga reflects practices that include movement and involvement of the physical body (Chaoul & Cohen, 2010). Yoga, in reality, is a vast combination of psychological, physical, and spiritual science which gives the holistic development of human body, mind and soul (Bhobe, 2000). The science and practices were clearly described by *Patanjali* in ancient text *Patanjali Yoga Sutra*. Yoga, according to sage *Patanjali*, involves eight limbs namely *Yama* (abstinences), *Niyama* (observances), *Asana* (physical postures), *Pranayama* (breath regulation), *Pratyahara* (withdrawal of the senses), *Dharana* (concentration), *Dhyana* (meditation) and *Samadhi* (absorption) (Taneja, 2014).

### 1.2 INTRODUCTION TO YAMA AND NIYAMA

As discussed earlier, Yoga is a comprehensive system for wellbeing which is more than *Asana* (physical postures). *Yamas* (abstinences) & *Niyamas* (observances) are foundational concepts in the science of Yoga. The *Yamas* and *Niyamas* are the first two limbs of the *Astanga Yoga* (described in *Patanjali Yoga Sutra*) and very important aspects in *Hatha Yoga*

*Pradipika*. The *Yamas* & *Niyamas* are the primary steps towards the self-realization. The *Yamas* & *Niyamas* are related to the behaviour outwardly in the world and inwardly towards oneself. When we incorporate all these principles into life, one can have a profound effect on the peace of mind and practice of Yoga. The *Yamas* focus on the behaviour and thinking towards outside around the world. The *Niyamas* are principles that focus on how one should behave within oneself. The both *Yamas* and *Niyamas* give strength necessary to progress along the path towards inner peace, contentment and enlightenment. *Patanjali Yoga Sutra* describes 5 *Yamas* and 5 *Niyamas* (Taimni, 2010). Whereas *Hatha Yoga Pradipika* presents 10 *Yamas* and 10 *Niyamas* (Muktibodhananda, 2012).

### **1.3 YAMA AND NIYAMA ACCORDING TO SAGE PATANJALI**

The *Patanjali Yoga* also known as *Raja Yoga* or *Ashtanga Yoga* focuses on the path of psychological exploration. The eight limbs (*Ashtanga*) of the system show the path towards human liberation (Dylan & Muncaster, 2021). The *Yama* and *Niyama* are the first and second limbs of *Patanjali Yoga Sutra*. As we discussed earlier, *Yamas* are those principles of wrong behaviour, which we should restrict. The 5 components of *Yamas* are non-violence (*Ahimsa*), truthfulness (*Satya*), non-stealing (*Asteya*), continence (*Brahmacharya*) and non-possessiveness (*Aparigraha*). *Niyamas* are those principles of right behaviour, which should be adopted. The *Niyamas* described in the *Yoga Sutra* are purity of body and mind (*Sauca*), contentment in all circumstances (*Santosha*), austerity (*Tapas*), self-study (*Svadhya*) and surrender to God (*Isvarapranidhana*) (Taimni, 2010).

#### **1.3.1 Five Yamas Described in Patanjali Yoga Sutra**

- 1) **Ahimsa (Non-Violence):** When we reduce the amount of harm causing to oneself and others in thought, deed and word by becoming aware of the ways in which we may bring suffering to others.

- 2) **Satya (Truthfulness):** Satya includes right speech, truthful communication as well as skilful listening. When a person truly and completely follows the path of Satya, one's deeds and words are all in aligned to each other.
- 3) **Asteya(Non-stealing):** One should not take anything which doesn't belong to you. One should not take anything which you haven't earned. The *Asteya* applies to material things, as well as respecting others' time, energy and hard work.
- 4) **Brahmacharya (Continence):** The yogic concept discourages overindulgence in many things, including food and sex. Obsession with things may cause someone to lose truly important things in life. The *Brahmacharya* is described as a moderation, specifically sensual.
- 5) **Aparigraha (non- possessiveness):**One should not take so much that others don't have enough. One should not be possessed by his/her possessions. One should not become over attached with anything.

### 1.3.2 Five Niyamas Described in Patanjali Yoga Sutra

- 1) **Saucha (Cleanliness):** Cleanliness can be practiced on a number of different levels. A clean environment and living space can be maintained outside. A clean body through clean diet, good hygiene. A clean mind with the quality of the information.
- 2) **Santosha (Contentment):** One should become satisfied and happy with the life and situations. Rather wishing for the things to be in a different way , people should learn to appreciate and accept the reality of life. *Santosha* also means being at the present moment.
- 3) **Tapas (Austerity):** One should transform himself/herself through the fire (difficulties) of positive actions. Term *tapa* we can understand it as a heat and the discomfort comes when we break the habitual thoughts and behavioural patterns to bring positive transformation in your life.

4) ***Svadhyaya (Self Study)***: One should become aware of himself/herself and his/her actions. Reflect on them later. One should use his/her reflections to make positive changes to your actions in the future. When we Study scriptures and yoga texts is said to be a form of *Svadhyaya*.

***IshvaraPranidhana (Surrender to God)***:Iswara means supreme reality and pranidana means to surrender or devote or dedicate completely, Here Ishwarapranidana refers to the surrendering of the self to the ultimate supreme reality. It is also considered as the ultimate stages of Bakthi yoga, where you surrender your senses ,body, mind and will to the supreme reality.it will ultimately help to loosen up all the bondages and false identifications from body and mind. It will help the mind which is full of afflictions and disconnections with the external world to bring as sense of oneness and harmony to bring as sense of oneness and harmony. It indicates the feeling of contemplation on the supreme self while carrying out all the activities.

#### **1.4 YAMA AND NIYAMA ACCORDING TO HATHA YOGA PRADIPIKA**

The *HYP* is considered as a primary ancient texts of hatha yoga.This text was composed in 15th century CE by *Swami Swatamarama*. *Swami Swatamarama* mentioned that the *Hatha Yoga* is a preliminary practice for Raja Yoga. *Swami Swatamarama* said that obtaining self-control and self-discipline is much easier when we start with the physical and energetic body, versus trying to directly control the mind as in *Raja Yoga*. *Hatha Yoga Pradipika* presents 10 *Yamas* and 10 *Niyamas*(Muktibodhananda, 2012).

##### **1.4.1 Ten Yamas mentioned in *Hatha Yoga Pradipika***

1) ***Ahimsa***: Non-violence

- 2) **Satya:** Truthfulness
- 3) **Asteya:** Non-stealing
- 4) **Brahmacharya:** Continence
- 5) **Kshama:** forgiveness
- 6) **Dhriti:** Endurance
- 7) **Daya:** Compassion
- 8) **Arjava:** Humility
- 9) **Mitahara:** Moderate diet
- 10) **Saucha:** Cleanliness

#### 1.4.2 Ten Niyamas Mentioned in *Hatha Yoga Pradipika*

- 1) **Tapas:** Austerity
- 2) **Samtoṣa:** Contentment
- 3) **Astikya:** Belief in the God
- 4) **Danam:** Charity
- 5) **Isvrapujanam:** Worship of God
- 6) **Siddhanta Vakya Sravanam:** Listening to the recitations of sacred scriptures
- 7) **Hri:** modesty
- 8) **Mati:** Discerning intellect
- 9) **Japa:** Mantra repetition
- 10) **Hutam:** Sacrifice.

#### **DANA**

The term “donation “ is known as *Dana* in Sanskrit word giving away as charity or a gift .In Hinduism and some yoga schools, Niyamas is one of the duties or moral observances.

. Such giving includes donation of food, clothing or money to the needy, also includes offering gifts to friends neighbored family, again, with no expectation that the recipient will

reciprocate as an act of generosity

***Mitāhāra***”

Mita means balanced and controlled and receiving Ahara means receiving from all directions. Yogic Concept of Ahara emphasizes “***Mitāhāra***”. The three main factors that Yoga practitioners and every individual should keep in mind while creating a balanced diet are;

## CHAPTER 2

### 2.0 LITERATURE REVIEW

#### 2.1 REVIEW OF ANCIENT LITERATURE REVIEW

The number of *Yamas* and *Niyamas* Varies in the source. In some scriptures they are five each in numbers whereas in some Yoga Upanishads there are ten Yamas and ten Niyamas.

Patanjali Yoga Sutras –

अहिंसासत्यास्तेयब्रह्मचर्यापरिग्रहा यमाः। प यो सु २-३०

*ahiṃsāsatyāsteyabrahmacaryāparigrahāyamāḥ*

The five self-restraints are nonviolence, truth, honesty, sensual abstinence, and non-possessiveness.

शौचसंतोषतपःस्वाध्यायेश्वरप्रणिधानानि नियमाः। प यो सु २-३२

*śaucasaṃtoṣatapaḥsvādhyāyeśvarapraṇidhānānīyamāḥ*

Fixed observances include cleanliness, contentment, austerity, self-study, and resignation to

Go.

Hatha yoga Pradipika –

अथ यमनियमाः।

*Atha yamanīyamāḥ*

अहिंसा सत्यमस्तेयं ब्रह्मचर्यं क्षमा धृतिः।

दयार्जवं मितहारः शौचं चैव यमा दश॥ ह यो प्र २-१६

*Ahimsa satyamasteyam brahmacharyam kshama dhrtih*

*dayārjavam mitāhārah śaucham chaiva yamā daśa*

Non-violence, truth, non-stealing, continence (being absorbed in a pure state of consciousness), forgiveness, endurance, compassion, humility, moderate diet and cleanliness are the ten rules of conduct (yama).

तपः संतोष आस्तिक्यं दानमीश्वरपूजनम्।

सिद्धान्तवाक्यश्रवणं हीमती च तपो हुतम्।

नियमा दश संप्रोक्ता योगशास्त्रविशारदैः ॥ ह यो प्र २-१६

*Tapah santosha āstikyam dānamīśvarapūjanam*

*siddhāntavākyaśravanam hrīmatī cha tapo hutam*

*niyamā daśa samproktā yogaśāstravisāradaiḥ*

The 10 observances are penance (austerity), contentment, belief (faith) in the highest (God),

charity, adoration of God, listening to sacred texts recitations, modesty, a discerning

intellect, japa (mantra repetition), and sacrifice (niyama).

Shandilya Upanishad –

तत्र दश यमः। तथा नियमाः।

*tatradaśayamāḥtathāniyamāḥ*

तत्राहिंसासत्यास्तेयब्रह्मचर्यदयार्जवक्षमाधृतिमिताहारशौचानि चेति यम दश। - प्रथम खण्डः

*tatrāhiṃsāsatyāsteya brahmacaryadayājavakṣamādhṛtimitāhāraśaucānicetiyamādaśa*

Yama is divided into 10 types, and Niyama is divided into ten types. Ahimsa, Satya, Asteya, Brahmacharya, Daya, Arjava, Kshama, Dhriti, Mitahara, and Saucha are the 10 Yamas (forbearance).

तपः सन्तोषास्तिक्यदानेश्वरपूजनसिद्धान्तश्रवणहीमतिजपव्रतानि दश नियमाः। - द्वितीयः खण्डः

*tapahsantoṣāstikyadāneśvarapūjanasiddhāntaśravaṇahrīmatijapovratānidaśaniyamāḥ*

Under Niyama (religious observances), are ten, viz., Tapas, Santosha Astikya, Dana,



Ishvarapujana, Siddhanta-Sravana, Hri, Mati, Japa and Vrata.

Trishikhi Brahman Upanishad -

अहिंसा सत्यमस्तेयं ब्रह्मचर्यं दयार्जवम् ॥ क्षमा धृतिर्मिताहारः शौचं चेति यमादश ।

*ahiṃsāsatyamasteyaṃbrahmacaryaṃdayārjavam*

*kṣamādhṛtirmitāhāraḥśaucaṃcetiyaṃādaśa*

The ten Yama-s are nonviolence, truth, abstinence from stealing, celibacy, compassion, rectitude, patience, fortitude, food temperance, and cleanliness. (32)

तपःसन्तुष्टिरास्तिक्यं दानमाराधनं हरेः ॥ वेदान्तश्रवणं चैव हीर्मतिश्च जपो व्रतम् ॥ इति ।

*tapasantsuṣṭirāstikyamdānamārādhanamhareḥ*

*vedāntaśravaṇaṃcaivahrīrmatiścajapovratam*

The ten niyamas include penance, contentment, belief in the supreme, munificence, worship of Vishnu, vedanta study, modesty, determination, japa (silent prayer), and austerity.

Varah Upanishad –

अहिंसा सत्यमस्तेयं ब्रह्मचर्यं दयार्जवम् । क्षमा धृतिर्मिताहारः शौचं चेति यमा दश ॥

तपः सन्तोषमास्तिक्यं दानमीश्वरपूजनम् । सिद्धान्तश्रवणं चैव हीर्मतिश्च जपो व्रतम् ।

एते हि नियमाः प्रोक्ता दशधैव महामते ॥ (5.13,14)

*ahiṃsāsatyamasteyaṃbrahmacaryaṃdayārjavam*

*siddhāntaśravaṇaṃcaivahrīrmatiścajapovratam*

*ete hi niyamāḥproktādaśadhaivamahāmate*

## 2.1 REVIEW OF SCIENTIFIC LITERATURE

Author and year	Sample	Result	Conclusion
(Raina & Singh, 2018)	550 students (367 males and 183 females)	Overall reliability of the scale was found to be excellent ( $\alpha = 0.88$ ), and the criterion-related validity was satisfactory as correlations were found to be 0.46 and 0.48 ( $p < 0.01$ ) for Flourishing and SPANE-P, respectively, and -0.22 ( $p < 0.01$ ) for SPANE-N.	The Ashtanga Yoga Scale has good psychometric properties ( $\alpha = 0.88$ ), and the overall scale shows fair degree of correlations with the validating scales which indicates acceptable criterion-related validity of the overall measure of Yoga.
Sadhana Dadhore, G. Pawan Gowada (2019)	1,153 students aged 11-18 years	The Yoga Self Restraint Scale got Cronbach's alpha of 0.74, variance 58.46%. YSRS results were found to be significant at $p < 0.001$	A yoga Self-restraint scale is described to measure social health and analyze its relation with five self-restraints; non-injury, truthfulness, abstention from stealing, living

			<p>with awareness of the highest reality, and non-possessiveness.</p> <p>This yoga instrument can facilitate and provide a social health care and wellbeing: self-esteem, interpersonal skills, healthy behaviors, educational attainment.</p>
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## **CHAPTER 3**

### **3.0 AIMS AND OBJECTIVES**

#### **3.1 AIMS OF THE STUDY**

To build a scale to measure and analyze the qualitative concepts of Yama and Niyama.

#### **3.2 OBJECTIVES OF THE STUDY**

To analyze and measure the yogic concepts Yama and Niyama. To be able to qualify and measure these constructs in the present circumstances.

## CHAPTER 4

### 4.0 MATERIALS AND METHODS

#### **Qualitative Study:**

A qualitative study design was used as the constructs are subjective in nature. Through the process of generating items and refining the construct, we had in-depth discussions among our group and included items that fit the operational definitions and those which felt relevant to the present context. After the first draft, we had a thorough discussion with our professor/guide who is also an expert in the field. During this discussion which lasted for about 3 hours, each item was scrutinized and changes were made wherever necessary. The initial draft included more than 20 sub-domains under Yama and Niyama, which was later reduced to 17 sub-domains. Some of them removed due to the irrelevance in current times, some merged due to the similarity and overlapping nature of the construct and one construct added to the list. After the changes were implemented, all the items were once again critically examined and checked for face validity.

#### **Field Testing of the Instrument:**

Due to the large size of the instrument when all of them were grouped together, the 17 sub-domains were divided among the group and each individual was assigned 2 sub-domains for a pilot study. Questionnaires were prepared using goggle forms. The pattern of the questionnaire was similar for all with a uniform response pattern on a scale of very often to never. The participant was asked for consent before filling the form, the initial instructions are to answer the questions with what comes naturally and without giving it too much thought on a scale of very often to never. The first section included demographic details after which the 15 items along with the 13 social desirability items were given in the second section.

## **CHAPTER 5**

### **5.0 PARTICIPANTS**

**5.1 SAMPLE SIZE:** Samples were collected from all over the India and the total sample size was 100.

#### **5.1.1 SELECTION AND SOURCE OF PARTICIPANTS**

##### Convenience and Snowball Sampling

Anyone who are willing to fill up the questionnaire and is above age of 18. The form was circulated through social media and other applications to several people (family, friends, relatives, neighbors, groups, classmates, and general population).

#### **5.1.2 INCLUSION CRITERIA**

- Willing to fill the Google form.
- People who own a smartphone and have access to the internet.
- Had the accessibility to fill the Google form.
- People who are above 18 years.
- Both Male and female.
- Able to understand English language

#### **5.1.3 EXCLUSION CRITERIA**

- People who are afflicted with a chronic sickness of any kind.
- People who are mentally challenged.
- People who are not willing to participate in the study.

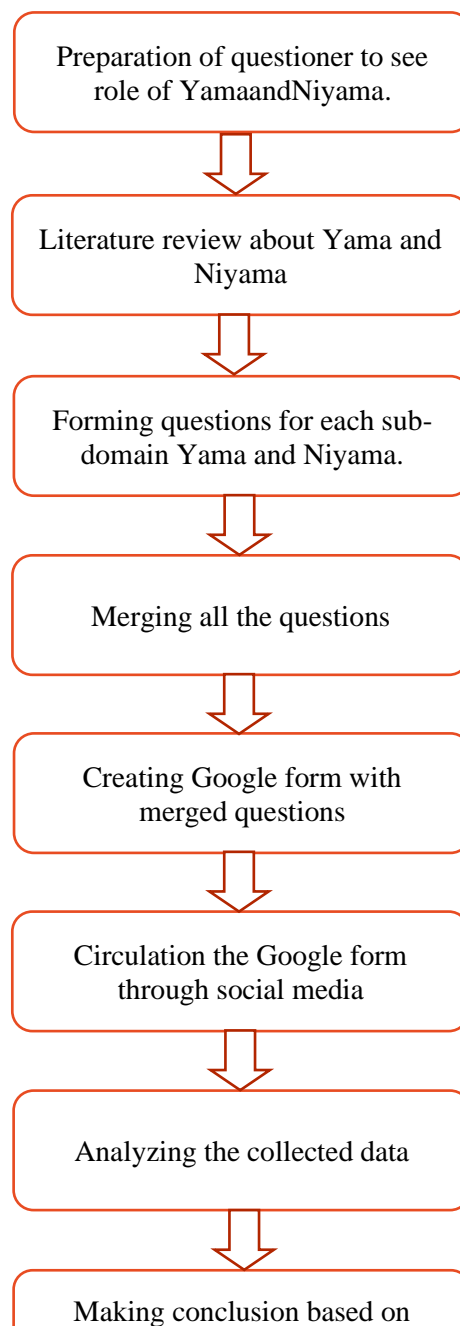
#### 5.1.4 ETHICAL CONSIDERATION

An informed consent was presented to people in the google form detailing about confidentiality of the information, explaining about the details of the study and digital approval was taken from each participant.

#### 5.2 DESIGN OF THE STUDY

Survey design

#### STUDY FLOW CHART



### **5.3 VARIABLES STUDIED**

Variables studied under Yama are- *Ahimsa, Satya, Asteya, Kshma, Drithi, Aparigraha, Daya, Arjava, andMithahara.*

Variables studied under Niyama are- *Saucha, Santosha, Tapas, Swadhyaya, Ishwarapranidhana, Dana, Astikya, Hri, andHutam.*

### **5.4 DATA COLLECTION AND EXTRACTION:**

#### **5.4.1 DATA EXTRACTION:**

All the data received from the respondents in the Google form .Then the excel sheet is converted into Comma separated values (CSV) and then imported into JASP for the analysis. The software used for analysis was JASP, Version 0.13.1.

#### **5.4.2 ITEM GENERATION:**

Items were generated based on operational definitions based on ancient texts, discussion with my research group and guide. The two sub-domains (*ishwarapranidhana and driti*) has eight and seven items. The survey finally consisted of fifteen items related to the two sub-domains. The items were designed in order to express the concept in a practical and relevant manner suitable to the present times. The eleven items had responses based on a five point Likert Scale. Very Often to Never. A higher score indicated a higher percentage of the respective personality trait.



## CHAPTER 6

### RESULTS

There is no duplicate and missing value in data.

### Descriptive Statistics

#### Descriptive Statistics

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
Valid	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	1.71	1.64	2.15	2.30	2.39	1.77	1.91	1.97	2.69	2.12	2.26	2.02	2.26	2.03
Std. Deviation	0.72	0.74	0.94	0.95	0.98	0.81	0.81	0.79	1.15	0.94	1.04	0.88	1.03	1.02
n	9	6	7	9	4	5	8	7	2	6	1	7	1	0
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Maximum	3.00	3.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00

### Single-Test Reliability Analysis of both the construct

# together

## Frequentist Scale Reliability Statistics

Estimate	Cronbach's
Point estimate	0.749
95% CI lower bound	
95% CI upper bound	

## Exploratory Factor Analysis

### Kaiser-Meyer-Olkin test

	MSA
Overall MSA	0.705
Q1	0.758
Q2	0.730
Q3	0.815
Q4	0.692
Q5	0.666
Q6	0.680
Q7	0.506
Q8	0.617
Q9	0.671
Q10	0.698

### Kaiser-Meyer-Olkin test

	MSA
Q11	0.692
Q12	0.795
Q13	0.622
Q14	0.639

### Bartlett's test

X <sup>2</sup>	df	p
296.903	91.000	< .001

### Chi-squared Test

Value	df	p
Model 91.218	64	0.014

### Factor Loadings

	Factor 1	Factor 2	Uniqueness
Q1		0.490	0.691
Q2		0.681	0.586
Q3		0.525	0.588
Q4		0.405	0.701
Q5		0.416	0.764
Q6		0.571	0.707
Q7			0.958

### Factor Loadings

	<b>Factor 1</b>	<b>Factor 2</b>	<b>Uniqueness</b>
Q8			0.950
Q9			0.857
Q10	0.747		0.449
Q11	0.773		0.411
Q12	0.481		0.690
Q13			0.856
Q14			0.930

*Note.* Applied rotation method is oblimin.

### Factor Loadings (Structure Matrix)

	<b>Factor 1</b>	<b>Factor 2</b>
Q1	0.542	
Q2	0.633	
Q3	0.422	0.610
Q4	0.499	
Q5	0.469	
Q6		0.534
Q7		
Q8		
Q9		
Q10	0.742	

Q11 0.767

Q12 0.539

Q13

Q14

---

*Note.* Applied rotation method is oblimin.

### **Factor Characteristics**

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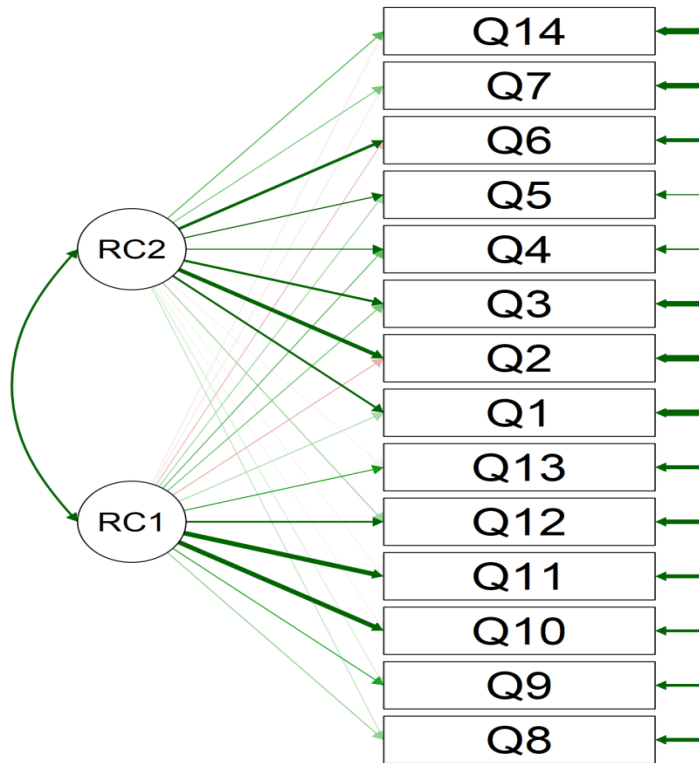
	<b>SumSq.</b>	<b>Loadings</b>	<b>Proportion var.</b>	<b>Cumulative</b>
Factor 1	1.963		0.140	0.140
Factor 2	1.898		0.136	0.276

---

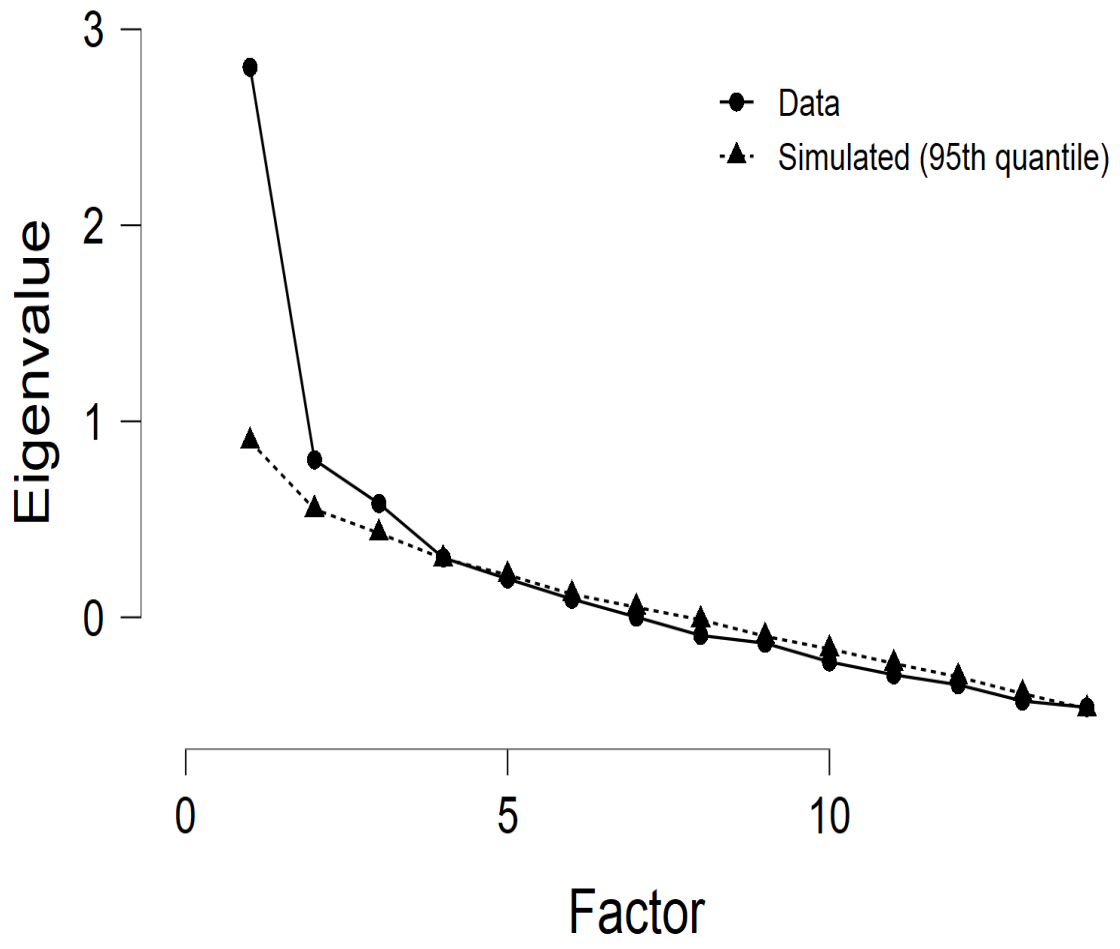
Path Diagram

Scree plot

Scree plot



Scree plot



## Chapter7

### Discussion

The aim was to develop a tool to measure the yogic constructs - *Yama* and *Niyama* and how it makes a difference when adopted and followed in an individual's life. These concepts, although ancient, are very relevant to the present just as morals and ethics or Do's and Don'ts to live in harmony in any society. We developed a 98-item questionnaire having 17 sub-domains. These sub-domains were divided among us, analyzed, and interpreted separately. These constructs will be analyzed, refined and consolidated into shorter versions and then put together as one tool to measure *Yama* and *Niyama*.

A qualitative study design was used as the constructs were subjective in nature. Through the process of generating items and refining the construct, we had in-depth discussions among our group and included items that fit the operational definitions and those which felt relevant to the present context. After the first draft, we had a thorough discussion with our professor/guide who is also an expert in the field. During this discussion, each item was scrutinized and changes were made wherever necessary. The initial draft included more than 20 sub-domains under *Yama* and *Niyama*, which was later reduced to 17 sub-domains. Some of them were removed due to the irrelevance in current times, some merged due to the similarity and overlapping nature of the construct, and one construct was added to the list. After the changes were implemented, all the items were once again critically examined and checked for face validity.

Most items have to be reviewed and/or modified due to low factor loadings ( $<0.05$ ). The applied rotation method is oblimin for both factors. Both factors have fairly low communality values of less than 0.5. However, since this is a qualitative scale, some of the items with low



communality may also contribute to a well-defined factor. The reasons for low factor loadings and communality are to be evaluated to improve the tool in the future. This pilot study helps in deciding what items and factors should be kept, removed or modified for the *Yama Niyama* tool. It helps us revisit and revise the process of item generation and tool development to improve the validity and reliability of the scale. The existing literature in this domain of research is inadequate. We found two tools similar to that of the *Yama Niyama* scale. The Aṣṭānaga Yoga Hindi Scale is a self-report measure of the *Yama* and *Niyama* according to Patañjali Yogasūtras. It includes five *Yama* (Ahimsā, Satya, Asteya, Brahmacharya and Aparigraha) and five *Niyama* (Śauca, Saṁtoṣa, Tapaḥ, Svādhyāya and Ishwara Pranidhana). The questionnaire consisted of 87 items in the first phase and 43 items in the final try-out phase. The internal reliability of the scale (Cronbach's alpha) measured 0.88. The study has devised many sub-scales for each part of Aṣṭānaga Yoga, some of which have low reliability (Raina & Singh, 2018). A Measure of Yoga Self-restraint Scale using Confirmatory Factor Analysis is a 27-item scale with five sub-domains (non-violence, truthfulness, non-stealing, celibacy and nonpossessiveness) and with Cronbach's alpha of 0.74 (Dadhore & Paran Gowda, 2019). These tools measure an aspect of the *Yama* or the *Niyama*. The Hindi Aṣṭānaga Yoga scale is concentrated to a population who know the Hindi language and it also has specific focus on the *Yama* and *Niyama* solely from the Patañjali Yogasūtras. The Yoga Self-restraint scale aims to measure the management of health and wellbeing through self-restrain yoga measures in students aged between 11-18. Our scale aims to combine both these foundational concepts (*Niyama*) and correlate it with the present circumstances. The sub-domains included are taken from different sources of literature making it an extensive and rigorous tool.

## Chapter 8

### Conclusion

The concept of *Yama and niyama* is found in various Indian scriptures like *Patanjali yoga sutra, hatha yoga*, etc. It is an essential part of our day-to-day lives and everyone should inculcate *Yama* and *Niyama* for a better living. Ahimsa which means non-violence is talked about in different religions like *Hinduism, Jainism, Buddhism*, etc. It is the ethical principle of not causing harm to others. In today's world, adhering to ahimsa may seem unrealistic. Therefore this 17-item questionnaire can be a great help to know whether you are following the path of *ahimsa* or not. Through this tool, we found that ahimsa can be quantified and measured through the yogic context and, that they are connected to the present times. The results of the preliminary study show promising results to pursue further research and development of the *Yama - Niyama Scale*.

## Chapter 9

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## Personality Questionnaire

Namaste! I am Ankit Panghal, currently pursuing my master's degree in Yoga Therapy from SVYASA Deemed to be University, Bangalore. I have undertaken a research study (MSc dissertation) under the guidance of Prof. Judu Ilavarasu. This survey study attempts to understand the association between age, Yoga practice and certain personality aspects. Your participation in this study is voluntary. If, at any point in time, you feel uncomfortable, you may withdraw from the study. The whole survey may take around 5 minutes to complete. All the information that is provided by you for the purpose of this study, will be kept strictly confidential and will be utilized only for research and academic purposes. The following questions assess a certain aspect of your personality. Please respond to the question in the best way that represents your natural response. There is no right or wrong answer, so please respond based on what spontaneously appears to your mind, on a five-point Likert scale of Never, Rarely, Sometimes, Frequently, Very often. In case of any queries feel free to contact at panghalankit088@gmail.com.

By filling up the questionnaire, I voluntarily agree to participate in the study. ( Note: you may exit the survey if you do not wish to participate) for more details about the survey, you can refer to the link given below. \*

Agree

Disagree

Name

Email id

Age

- 18-30
- 31-40
- 41-50
- 51-60
- 60 above

Gender

- Male
- Female

Others

Occupation

You are a yoga practitioner ?

- Yes
- No

If yes since how long you are practicing ?

- Less than 6 months
- 6 months- 1 year
- 1-3 year
- More than 3 year

I generally tend to help others in need.

- Very often
- Frequently
- Sometimes
- Rarely
- Never

I feel good when I give or share

- Very often
- Frequently
- Sometimes
- Rarely
- Never

I often engage in charity acts

- Very often
- Frequently
- Sometimes
- Rarely
- Never

I tend to give in spite of my inconvenience

- Very often
- Frequently
- Sometimes
- Rarely
- Never

I volunteer for social activities such as flood relief, etc

- Very often
- Frequently
- Sometimes
- Rarely
- Never

When in need I tend to be emotionally supportive to others. \*

- Very often
- Frequently
- Sometimes
- Rarely
- Never

I tend to eat little more of those food that I like or enjoy.

- Very often
- Frequently
- Sometimes
- Rarely
- Never

My food intake is moderate

- Very often
- Frequently



- Sometimes
- Rarely
- Never

I sometimes prefer to visit a luxury restaurant then have food at home.

- Very often
- Frequently
- Sometimes
- Rarely
- Never

I regularly engage in exercise

- Very often
- Frequently
- Sometimes
- Rarely
- Never

I regularly engage in meditation, and other similar mindful activities.

- Very often
- Frequently
- Sometimes
- Rarely
- Never

I am more aware and mindful during my daily activities

- Very often

- Frequently
- Sometimes
- Rarely
- Never

I often miss having food on time

- Very often
- Frequently
- Sometimes
- Rarely
- Never

I get adequate sleep

- Very often
- Frequently
- Sometimes
- Rarely
- Never

It is sometimes hard for me to go on with my work if I am not encouraged.

- True
- False

I sometimes feel resentful when I don't get my own way \*

- True
- False

On a few occasions, I have given up doing something because I thought too little of my ability.

- True
- False

There have been times when I felt like rebelling against people in authority even though I knew they were right.

- True
- False

No matter who I am talking to, you I am always a good listener.

- True
- False

There have been occasions when I took advantage of someone

- True
- False

I am always willing to admit it when I make a mistake

- True
- False

I sometimes try to get even, rather than forgive and forget

- True

- False

I am always courteous, even to people who are disagreeable.

- True
- False

I have never been irked when people expressed ideas very different from my own

- True
- False

There have been times when I was quite jealous of the good fortune of others

- True
- False

I am sometimes irritated by people who ask favors of me

- True
- False

I have never deliberately said something that hurt someone's feelings

- True
- False



