# DEVELOPMENT AND VALIDATION OF A MEASURE FOR ASTEYA AND SAUCHA

## Dissertation

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## Master of Science in Yoga Therapy 2021

By

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## CERTIFICATE

This is to certify that **NAOREM REBITA DEVI** who has got MSc registration with start from August 01, 2019 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 **"DEVELOPMENT AND VALIDATION OF A MEASURE FOR ASTEYA AND SAUCHA"** 

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Date:22-09-2021 Place: Bengaluru

## DECLARATION

I hereby declare that the subjective study was conducted by me at **Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA),** Bengaluru, under the guidance of Dr. Rajesh S.K. and Dr. Judullavarasu.

I also declare that the subject matter of my dissertation entitled **DEVELOPMENT AND VALIDATION OF A MEASURE FOR** *ASTEYA AND SAUCHA* has not previously formed the basis of the award of any degree, diploma, associate-ship, fellowship or similar titles.

Date:22-09-2021 Place: Bengaluru Naorem Rebita Devi

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Naorem Rebita Devi DATE: 22-09-2021 PLACE: Bengaluru

## STANDARD INTERNATIONAL TRANSLATION CODE USED TO TRANSLATE SANSKRIT WORDS

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'n	=	अं	tha	=	थ	ha	=	ह
ķ	=	अः	da	=	द	kșa	=	क्ष
ka	=	क	dha	=	ध	tra	=	র
kha	=	ख	na	=	न	jña	=	হা
ga	=	ग						

gha = घ

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### ABSTRACT

**Background:** 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. *Asteya* which means not taking anythings which doesn't belongs to you, not taking that which is not offered to you, including not just material objects but also time, thought, energy, emotions and ideas. *Saucha* which means by cleanliness, purification of body,speech and mind.

Aim: To develop and validate a tool of *Asteya* and *Saucha*.

**Methodology:** This research is mostly about tool development, and it includes 4 *Asteya* items and 4 *Saucha* items. From the Marlowe-Crowne social desirability scale, there are 13 items on social desirability. The whole sample (N=108) is made up of 60 females, 47 males, and 1 participant did not want to be identified by his/her gender. There includes a reliability test as well as exploratory factor analysis. Both quantitative and qualitative methodologies, as well as a predesign technique were used.

**Result:** The Asteya and Saucha have internal reliability (Cronbach's alpha) of 0.501 and 0.474 respectively. The combined internal reliability (Cronbach's alpha) for both *Asteya* and *Saucha* is 0.567. We could extract only 1 factor; the combination of *Asteya* and *Saucha*.

#### **CHAPTER 1**

### **1.0 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), *Dhyanfka* (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 behavior outwardly in the world and inwardly towards oneself. Incorporating these principals into life, one can have a profound effect on the practice of Yoga and the peace of mind. The *Yamas*focus on the behaviour and thinking towards outside around the world. The *Niyamas* are principles that focus on how one should be have 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 (*Santosa*), austerity (*Tapas*), self-study (*Svadhyaya*) and surrender to God (*Isvarapranidhana*)(Taimni, 2010).

1.3.1 Five Yamas Described in Patanjali Yoga Sutra

- Ahimsa (Non-Violence): Minimizing the amount of harm we are causing to oneself and others in thought, word and deed, by becoming aware of the ways in which we may bring suffering to others.
- Satya (Truthfulness): Satya includes right speech, truthful communication as well as skilful listening. When truly practicing *Satya*, one's words and deeds are all in alignment with one another.
- 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 often described as 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
  - 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 than wishing for things to be different, one should accept and appreciate 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. The term *Tapas* means "heat" and it refers to the discomfort which comes with breaking habitual thought 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. Studying of yoga texts and scriptures is also said to be a form of *Svadhyaya*.
- 5) *Isvara Pranidhana* (Surrender to God): One should surrender himself/herself to something higher than himself/herself. This is the surrender of the small self to the higher self. *Isvara-pranidhana* also means letting go of doubt and making space for faith.

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

The *Hatha Yoga Pradipika* is one of the primary ancient texts on hatha yoga. This text was considered to be composed in the 15th century CE by *Swami Swatamarama*. The primary goal of this text is to facilitate the physical disciplines and practices of *Hatha Yoga* and integrate these with the higher spiritual goals of *Raja Yoga*. *Swami Swatamarama* mentioned that *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) Samtoşa: Contentment
- *3) Astikya:* Belief in the God
- *4) Danam:* Charity
- 5) *Isvarapujanam:* Worship of God
- 6) Siddhanta Vakya Sravanam: Listening to the recitations of sacred scriptures
- 7) *Hri:* modesty
- *8) Mati:* Discerning intellect
- *9) Japa:* Mantra repetation
- *10) Hutam:* Sacrifice

### 1.5 POSITIVE EFFECTS OF YAMAS AND NIYAMAS

*Yamas* and *Niyamas* are guideless which helps the Yoga practitioner to be in his/her path. *Yamas* and *Niyamas* are the foundation of yoga. Practice *Asanas* without following *Yamas* and *Niyamas* is considered a simple exercise. *Yamas* and *Niyamas* help to be in a state of balance during the spiritual journey or the Yogic path. Studies have demonstrated several health benefits of the *Yamas* and *Niyamas*. *Yama, Niyama, Asana, Pranayama,* and meditation showed improvements in quality of life and reduction in stress levels in patients with coronary bypass surgery (Amaravathi et al., 2018). *Yamas* and *Niyamas* were beneficial for stress reduction and psychological well-being in college students. The *Yamas* and *Niyamas* intervention could add to complementary medicine to release the burden of insufficient resources of outpatient mental health treatment (Xu, Kumar, & Srinivasan, 2021). The *Yamas* and *Niyamas* also improved spiritual well-being. The *Yamas* and *Niyamas* and *Niyamas* also improved spiritual well-being. The *Yamas* and *Niyamas* and *Niyamas* also improved spiritual well-being. The *Yamas* and *Niyamas* and *Niyamas* also improved spiritual well-being. The *Yamas* and *Niyamas* and *Niyamas* also improved spiritual well-being. The *Yamas* and *Niyamas* and *Niyamas* also improved spiritual well-being. The *Yamas* and *Niyamas* and *Niyamas* also improved spiritual well-being.

#### 1.6 CONCEPT OF ASTEYA

Asteya (non stealing) means not taking anythings which doesn't belongs to you. It also means not taking that which is not offered to you, including not just material objects but also time, thought,

energy, emotions and ideas. Asteya comes under the Yamas.

According to Patanjali Yoga Sutra : *Asteya* means non-stealing, abstention from theft. *Asteya* (non stealing) brings treasures. When *asteya* is established in the yogic virtue of honesty, all jewels, or treasures present themselves, or are available to the Yogi.

According to Hatha Yoga Pradipika : *Asteya* (non-stealing) not taking what does not belong to you, not only for social or moral reasons, but to avoid psychological and karmic outcomes. In yoga, we are trying to release the complexes and *samskaras* from our mind, thought and personality, so we really do not want to create any more. If we need something and it is truly essential, somehow it will come to you.

#### 1.7 CONCEPT OF SAUCHA

*Saucha* is the first of the Niyamas in Patanjala Yoga Sutras. *Sauchat* which means by cleanliness, purification (of body and mind). Through cleanliness and purity of body and mind, one develops an attitude of distancing, or disinterest towards one's own body and the mind naturally begins toward the divine, and away from the external, physical world. When we keep our mind, body and speech tidy, our enivironment also hygienic and clean. *Saucha* brings purification of the subtle mental essence (*sattva*), a pleasantness, goodness and gladness of feeling, a one-pointedness with intentness, the conquest or mastery over the senses, and a fitness, qualification, or capability for self-realization.

## **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*.

### <u> Patanjali Yoga Sutras –</u>

## अहिंसासत्यास्तेयब्रह्मचर्यापरिग्रहा यमाः

### ahimsāsatyāsteyabrahmacaryāparigrahā yamāh |Ch2-30

Non-violence, truth, honesty, sensual abstinence and non-possesiveness are the five self-restraints.

## शौचसंतोषतपःस्वाध्यायेश्वरप्रणिधानानि नियमाः ।

### śaucasantosatapahsvādhyāyeśvarapraņidhānāni niyamāh | Ch2-32

Cleanliness, contentment, austerity, self-study and surrender to Go constitute fixed observances.

## अस्तेयप्रतिष्ठायां सर्वरत्नोपस्थानम् ।

### asteyapratisthāyām sarvaratnopasthānam |Ch2-37

When non-stealing (asteya) is established, all jewels, or treasures present themselves, or are available to the Yogi.

## शौचात् स्वाङ्गजुगुप्सा परेरसंसर्गः

### śaucāt svāngajugupsā parairasamsargah | Ch2-40

Through cleanliness and purity of body and mind (shaucha), one develops an attitude of distancing, or disinterest towards one's own body, and becomes disinclined towards contacting the bodies of others.

### <u>Hatha yoga Pradipika –</u>

अहिंसा सत्यमस्तेयं ब्रह्मचर्यं क्षमा धृतिः ।

## दयार्जवं मिताहारः शोचं चैव यमा दश

ahimsā satyamasteyam brahmacaryam kṣamā dhṛtiḥ \ dayārjavam mitāhāraḥ śaucam caiva yamā daśa \ Ch1-16(ii)

Non-violance, 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 सन्तोष आस्तिक्यं दानमीश्वर-पूजनम्।

सिद्धान्त-वाक्य-श्रवणं हीमती च तपो हुतम्।

नियमा दश सम्प्रोक्का योग-शास्त्र-विशारदैः

tapaḥ santoṣa āstikyaṁ dānamīśvara-pūjanam | siddhānta-vākya-śravaṇaṁ hrīmatī ca tapo hutam | niyamā daśa samprokktā yoga-śāstra-viśāradaiḥ\Ch1,16(iii)

Penance (austerity), contentment, belief (faith) in the supreme (God), charity, worship of God, listening to the recitations of scacrade scriptures, modesty, a discerning intellect, japa (mantra repetition) and sacrifice are the ten observances (niyama).

#### <u>Shandilya Upanishad –</u>

तत्र दश यमाः । तथा नियमाः । तत्राहिंसासत्यास्तेयब्रह्मचर्यदयाजप-

# क्षमाधृतिमिताहारशौचानि चेति यमादश

tatra daśa yamāḥ | tathā niyamāḥ | tatrāhimsāsatyāsteyabrahmacaryadayājapa-

## kṣamādhṛtimitāhāraśaucāni ceti yamādaśa \ Ch1

Yama is of ten kinds; and so is Niyama. Under Yama (forbearance) are ten: Ahimsa, Satya, Asteya, Brahmacharya, Daya, Arjava, Kshama, Dhriti, Mitahara and Saucha.

## तपःसन्तोषास्तिक्यदानेश्वरपूजनसिद्धान्तश्रवणह्रीमतिजपो

### व्रतानि दुश नियमाः

#### tapahsantosāstikyadāneśvarapūjanasiddhāntaśravanahrīmatijapo

#### vratāni daśa niyamāķ|Ch2

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 ॥

ahimsā satyamasteyam brahmacaryam dayārjavam \kṣamā dhṛtirmitāhāraḥ śaucam ceti

#### yamādaśa ||Ch2-32

Non-violence, truth, abstinence from stealing, celibacy, compassion, rectitude, forbearance, fortitude, temperance in food, and cleanliness are the ten Yama-s. (32)

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

tapaḥsantuṣṭirāstikyam dānamārādhanam hareḥ \\vedāntaśravaṇam caiva hrīrmatiśca japo

#### vratam || iti |Ch2-33

Penance, contentment, belief in thesupreme, munificence, worshhhip of vishnu, the study of vedanta, modesty, determination, japa (silent prayer) and austerity are the ten niyamas.

#### Varah Upanishad –

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

तपः सन्तोषमास्तिक्यं दानमीश्वरपूजनम् ॥ सिद्धान्तश्रवणं चैव हीर्मतिश्च जपो व्रतम् ।

एते हि नियमाः प्रोक्का दशधैव महामते ॥

ahimsā satyamasteyam brahmacaryam dayārjavam 11 kṣamā dhṛtirmitāhāraḥ śaucam ceti yamā

daśa |

tapaḥ santoṣamāstikyaṁ dānamīśvarapūjanam \ siddhāntaśravaṇaṁ caiva hrīrmatiśca japo

#### vratam |

### ete hi niyamāh prokktā daśadhaiva mahāmate | (5.13,14)

The ten yamä are ahimsa, satya, asteya, brahmacarya, daya, arjava, kshama, dhriti, mitahara and saucha. The ten niyamä are tapas, santosa, astikya, dana, isvarapujana, siddhanta vakya sravanam, hri, mati, japa and vrata.

#### <u>Yoga Yajnavalkya-</u>

अहिंसा सत्यमस्तेयं ब्रह्मचर्यं दयार्जवम् ॥

क्षमाधृतिर्मिताहारः शौचं त्वेते यमा दश।

कर्मणा मनसा वाचा सर्वभूतेषु सर्वदा ॥

ahimsā satyamasteyam brahmacaryam dayārjavam kṣamādhṛtirmitāhāraḥ śaucam tvete yamā daśa karmaṇā manasā vācā sarvabhūteṣu sarvadā | (Ch 1 verse 50,51)

The ten yamä are ahiàsa, satya, asteya, brahmacarya, daya, arjava, kñamä, dhåti, mitähara and çauca.

# तपः सन्तोष आस्तिक्यं दानमीश्वरपूजनम् ।

सिद्धान्तश्रवणं चैव हीर्मतिश्च जपो व्रतम् ॥

tapah santosa āstikyam dānamīśvarapūjanam |

siddhāntaśravaṇam caiva hrīrmatiśca japo vratam | (Ch 2 verse 1)

The ten niyamä are tapaù, santoña, astikya, däna, içvarapujana, siddhäntaçravaëa, hré, mati, japa and vrata.

#### 2.2 REVIEW OF SCIENTIFIC LITERATURE

Author and year Sample	Result	Conclusion
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			The Ashtanga Yoga	
		Overall reliability of the scale	Scale has good	
		was found to be excellent (a	psychometric	
		= 0.88), and the criterion-	properties ( $a = 0.88$ ),	
		related validity was	and the overall scale	
(Raina &	550 students	satisfactory as correlations	shows fair degree of	
Singh, 2018)	(367 males and	were found to be 0.46 and	correlations with the	
5 mgm, 2010)	183 females)	$0.48$ (p\0.01) for Flourishing	validating scales which	
		and SPANE-P, respectively,	indicates acceptable	
		and $-0.22$ (p $(0.01)$ for	criterion-related	
		SPANE-N.	validity of the overall	
		STANE IV.	measure of Yoga.	
			A yoga Self-restraint	
	1,153 students aged 11-18 years		scale is described to	
			measure social health	
			and analyze its relation	
			with five self-	
(Dadhore & Gowda,			restraints; non-injury,	
			truthfulness, abstention	
		The Yoga Self Restraint	from stealing, living	
		Scale got Cronbach's alpha	with awareness of the	
		of 0.74, variance 58.46%.	highest reality, and	
2019)		YSRS results were found to	non-possessiveness.	
		be significant at p<0.001	This yoga instrument	
			can facilitate and	
			provide a social health	
			care and wellbeing:	
			self-esteem,	
			interpersonal skills,	
			healthy behaviors,	
			educational	

	attainment.

## **CHAPTER 3**

### **3.0 AIMS AND OBJECTIVES**

### 3.1 AIMS OF THE STUDY

To develop and validate a tool for Asteya and Saucha.

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

- To develop and validate a tool for *Asteya*.
- To develop and validate a tool for *Saucha*.

### 3.3 RESEARCH QUESTIONS

- 1. Is the current tool valid and reliable to measure *Asteya*?
- 2. Is the current tool valid and reliable to measure *Saucha*?

### **CHAPTER 4**

### 4.0 MATERIALS AND METHODS

#### 4.1 INDEX CONSTRUCTION

4.1.1 Specification of the domain-Construct Definition:

In my study, it consists of two domain Asteya and Saucha.

*Asteya* means not taking anythings which doesn't belongs to you. It also means not taking that which is not offered to you, including not just material objects but also time, thought, energy, emotions and ideas.

*Saucha* means by cleanliness, purification (of body and mind). It also refers to purity of mind, speech and body. *Saucha* is considered essential for health, happiness and general well being. 4.1.2 Item Generation:

Item was generation based on the constrict definition of *asteya* and *saucha* consist of 4 and 4 items respectively. Items consist of Linkert scale of Never, Rarely, Sometimes, Frequently, Very often has the responsed. Social desirable result in the false analysis, to address this issue indirect questioning techniques had been used. To avoid the social desirability bias the survey consists of 13 items that were selected from the *Marlowe–Crowne Social Desirability Scale (MCSDS) with the response of true or false. It has a good internal consistency alpha coefficient of 0.80 for women and 0.70 for men (Beretvas, Meyers and Leite-2002). For 60 samples test and retest, correlation is 0.89 from the one-month interval (crino, Svoboda, Rubenfeld, and White-1983). It consists of some additional questions about their gender, age, yoga practitioner, occupation, graduation.* 

#### 4.1.3 Designing scale:

The survey's instructions were then written at the top of the Google form, and the survey's mode of administration was determined to be online. Five Linkert scales are used to determine the order of the items.

#### 4.1.4 Item Analysis:

Factor analysis is the method of taking measured items responses and examining all the items can be broken into clusters or group considering the content and similar responses (Allen, M. 2017). When no previous information on the data structure is available, exploratory factor analysis (EFA) is performed to gain a better understanding of the data structure. For a better solution that is more interpretable, we need to do the factor rotation. By doing the rotation there will be the most parsimonious and simple structure. The oblique rotation method will help to provide the correlation among the latent constructs.

#### 4.2 FIELD TESTING OF THE INSTRUMENT

Due to the large size of the instrument when all of them were grouped together, the 17 subdomains were divided among the group and each individual was assigned 2 sub-domains for a pilot study. Google forms were used to create the questionnaires. The pattern of the questionnaire was similar for all with a uniform response pattern on a scale of very often to never. Before filling out the form, the participant was asked for their consent, and 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.

#### **4.3 PARTICIPANTS**

#### 4.3.1 Sample Size

In this study, we followed convenience sampling. A total of 108 responses are received, among them,60 were female,47 were male and 1 did not prefer to tell gender.

#### 4.3.2 Source of participant

The link of the Google form was shared amongst friends and relatives via WhatsApp and responses were collected.

#### 4.3.3 Inclusion criteria

- Willing to fill the Google form.
- Both gender -Male and Female.
- Both yoga practitioner and non-yoga practitioner are included
- Any field of peoples who are study or working peoples can participate in this study
- Knowledge of the English language

#### 4.3.4 Exclusion criteria

- People suffering from any chronic physical illness.
- People with mental disorders.
- Mentally challenged people
- People who are not willing to participate in the study.

#### 4.3.5 Ethical consideration:

Before collecting data, participants had given the option to share their informed consent and be assured that the information they submit will be used exclusively for this project, will be kept confidential, and would be used solely for research and academic reasons.

#### 4.4 DESIGN

#### Survey Design (Online)

One of the study showed that there is not any significant difference between the outcomes of internet and offline survey (Dodou & De Winter, 2014). This research design consists of both quantitative and qualitative methods.

#### 4.4.1 Phase -1: Qualitative Study

A qualitative study design 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 relevant to the present context. After the first draft, we had a thorough discussion with our professor/ guide and experts in the field. Each discussion lasted for about 3 hours, each item was scrutinized, and changes were made wherever necessary. Some of sub-domains were removed due to the irrelevance in current perspective, some merged due to the similarity and overlapping nature of the construct. After the changes were implemented, all the items were once again critically examined and checked for face validity.

#### 4.4.2 Phase – 2: Quantitative study

The research design was a survey method. The sample which was collected was a non-probability sampling (i.e. snowball, conventional sampling). The questionnaire was in the format of Google

from which was circulated through social media (WhatsApp). Participants submitted their Google forms directly and the data was collected through Google forms. Quantitative values were extracted to the Microsoft Excel Sheet before analysis.

### 4.5 ASSESSMENT TOOL:

Questionnaire on the constrict and the social desirability items.

### 5. DATA EXTRACTION AND DATA ANALYSIS

#### 5.1 DATA EXTRACTION:

There were self-constructed questionnaire/self-administrated questionnaire which are having 8 items with five Linkert scales and 13 desirability questions with two option true and false. The responses of Google form were extracted to excel sheet. In the excel sheet, duplicate responses were removed. The CSV format file was inputted in the jasp software to employ self-reliability analysis and exploratory factor analysis.

#### 5.2 DATA ANALYSIS:

Exploratory factor analysis:

In exploratory factor analysis, it consists of two test -

1. Kaiser-Meyer-Olkin which measures adequate sampling, a statistic that indicates the variance proportion in the variable. If the value is greater or equal to 0.60 the results would be useful, then factor analysis may be useful in your data.

2. Bartlett's test of sphericity: This test of the correlation matrix is an identity matrix. When their change in the variables is unrelated so it is unsuitable for structure detection. If its value is less than 0.01 shows that factor analysis may be useful with your data.

Factor analysis is the method of taking measured items responses and examining all the items can be broken into clusters or group considering the content and similar responses. Exploratory factor analysis (EFA) is used when there is no previous information on the data structure is available so for a better understanding of the structure of data EFA is used. For a better solution that is more interpretable, we need to do the factor rotation. By doing the rotation there will be the most parsimonious and simple structure. The oblique rotation method will help to provide the correlation among the latent constructs.

#### Self-reliability analysis:

Self-reliability analysis allows you to study properties to the measurement of scales and the items that compose the scale. It helps to see the relationship between the individual items and also with

the help of Cronbach's alpha u get an idea about the internal consistency, based on the average inter-item correlation.

#### Social desirability scale:

While doing the survey, people's responses are based on social norms rather than true opinion (Meisters et al., 2020). Peoples will answer based on what would others think about them. Wiggins and Rumrill (1959) give three different approaches for desirability problems (Wiggins & Rumrill, 1959). Statistical correction for faking bad and faking good is done in response (Meehl & Hathaway, 1946), Social desirability is assessed using the Marlowe-crown social desirability scale. The items were short forms as 11, 12, 13 items (Reynolds, 1982). Here, 13 items were taken, because it proved that it is the best fit with a mean of 4.61 and the standard deviation is 2.90 and skewness is 0.72 and kurtosis is 0.09, and Cronbach alpha is 0.75 (Sârbescu et al., 2012).

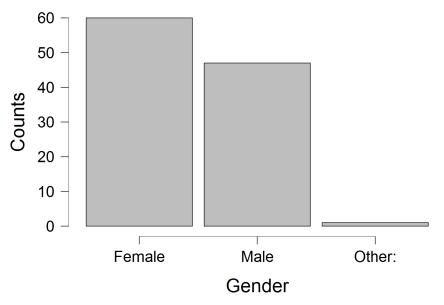
## 6. RESULT

## **Demographic graph:**

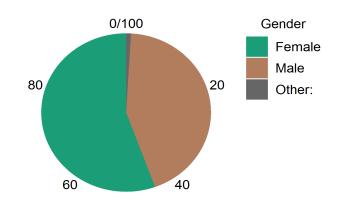
## Gender:

In this study total sample is 108 (N=108). Among 60 were female, 47 were male and 1 prefer not to say.

## **Distribution Plots**



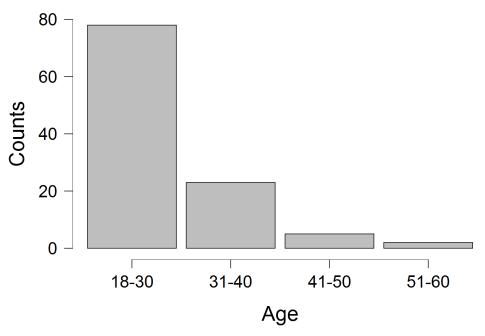
Pie charts



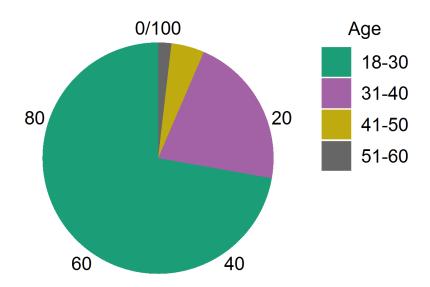
# Age:

In this study, the peoples age in the range of 18-30 is comparable high.

## **Distribution Plots**

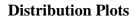


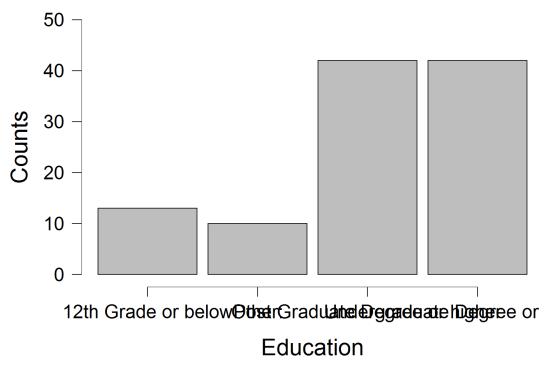
Pie charts



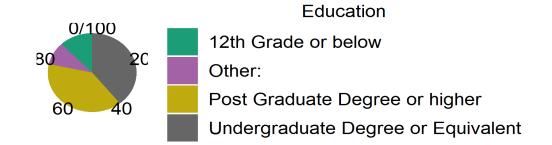
## **Education:**

In the current study, Out of 108 participants, 13- 12<sup>th</sup> grade or below, 42- under graduate degree and 42 -post graduate degree or above 1- missing and 10 - other(not mention).





**Pie charts** 

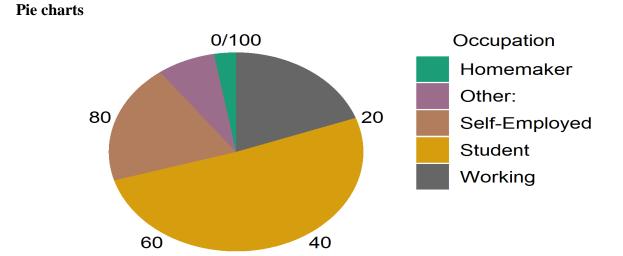


## Occupation

3 were home maker, 21 were self employed, 55 were student, 23 were working, and 8 were other.



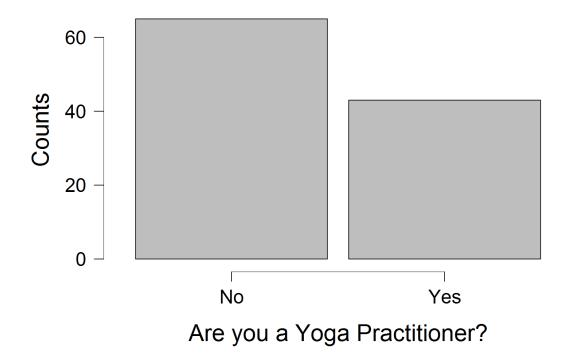


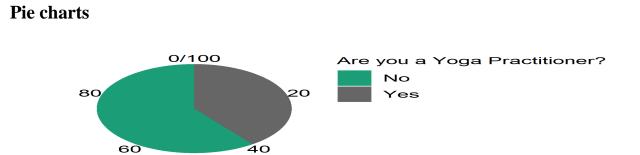


# Yoga practitioner

The percentage of persons who do not practise yoga is higher.

## **Distribution Plots**





## Reliability

Estimate	Cronbach's
Point estimate	0.567

Table 1–Reliability of both the constrict asteya and saucha.

Estimate	Cronbach's
Point estimate	0.501

Table 2-Reliability of asteya.

Estimate	Cronbach's
Point estimate	0.474

Table 3- Reliability of *saucha*.

Overall internal consistency of the two 2 factors is 0.567. The individual yogic constrict of *asteya* has a consistency of 0.501, while saucha has a reliability of 0.474. The alpha value for *asteya* and overall shows that it is a dependable tool for assessing the construct, while the alpha value for *saucha* is low.

### Social desirability

Estimate	Cronbach's
Point estimate	0.673

Table 4: Reliability of Marlowe-crowne social desirability scale.

The reliability of the social desirability question is 0.673 indicate it has a reliable value.

By the two assumption check Kaiser-Meyer-Olkin and Bartlett's test, we conclude that we can perform the factor analysis for this tool development. While doing factor analysis one has to know which rotation we need to perform, which method of estimation. In this study we use olique rotaion with oblimin, Minimum residual method of estimation. The cut off factor loading can be modified if you like, by default it as the 0.4 cut off ,we had maintain the same value only.

## Kaiser-Meyer-Olkin test

	MSA
Overall MSA	0.573
V1. I feel uncomfortable in an untidy environment.	0.604
V2. If I am wearing unclean clothes, I feel uncomfortable.	0.570
V3. I don't mind skipping my bath occasionally.	0.546
V4. I motivate myself to keep a positive state of mind in general	0.417
V5. I have taken somebody's developmental idea and assumed it as my own.	0.569
V6. I think taking money from my parent's wallet without consent is fine.	0.520
V7. If I find a wallet with an ID in it, I will make efforts to return it to the owner	0.703
V8. If I do not qualify for a position or job, I may use other easy means to get it	0.520

Here the MSA value is >0.50 shows that there an adequacy of sample. But Q4 is <0.05, shows that there is less adequacy of sample.

## **Bartlett's test**

X <sup>2</sup>	Df	Р
102.615	28.000	< 0.001

Test for sphericity

Here, The p<0.05 showing that it is significant.

The two assumption check are significant concluding that we can perform exploratory factor analysis.

## **Chi-squared test:**

	Value	df	Р
Model	45.354	20	< 0.001

# **Factor Loadings**

## Factor 1 Uniqueness

V1. I feel uncomfortable in an untidy environment.	0.563	0.683
V2. If I am wearing unclean clothes, I feel uncomfortable.		0.850
V3. I don't mind skipping my bath occasionally.	0.461	0.788
V4. I motivate myself to keep a positive state of mind in general		0.980
V5. I have taken somebody's developmental idea and assumed it as my own.		0.908
V6. I think taking money from my parent's wallet without consent is fine.	0.424	0.820
V7. If I find a wallet with an ID in it, I will make efforts to return it to the owner	0.615	0.622
V8. If I do not qualify for a position or job, I may use other easy means to get it		0.957

*Note.* Applied rotation method is oblimin.

# **Factor Loadings (Structure Matrix)**

	Factor 1
V1. I feel uncomfortable in an untidy environment.	0.563
V2. If I am wearing unclean clothes, I feel uncomfortable.	
V3. I don't mind skipping my bath occasionally.	0.461
V4. I motivate myself to keep a positive state of mind in general	
V5. I have taken somebody's developmental idea and assumed it as my own.	
V6. I think taking money from my parent's wallet without consent is fine.	0.424
V7. If I find a wallet with an ID in it, I will make efforts to return it to the owner	r 0.615
V8. If I do not qualify for a position or job, I may use other easy means to get it	

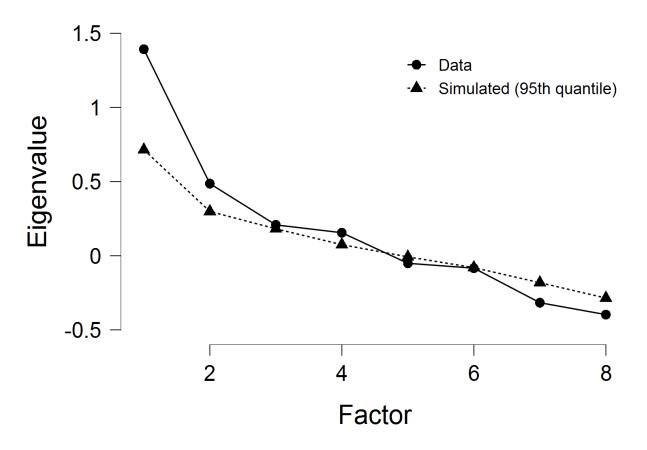
*Note.* Applied rotation method is oblimin.

## **Factor Characteristics**

	SumSq. Loadings	Proportion var.	Cumulative
Factor 1	1.393	0.174	0.174
	Table 10		

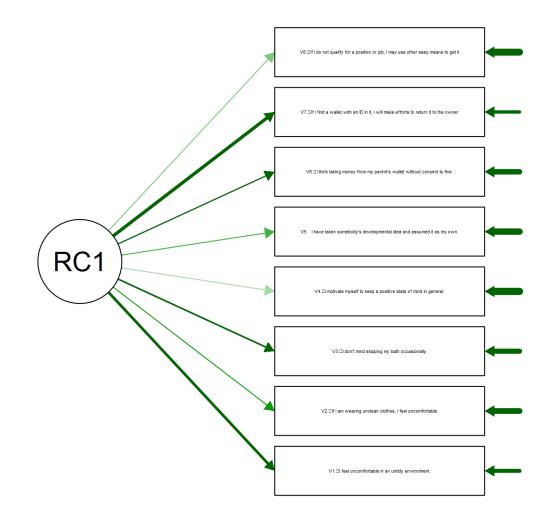
Cumulative summarize the whole factor, ranging from 0 to 1. SS loading which is used to determine the value of particular factor. We can keep the factor if its value is greater than 1.

### **Screen Plot**



Qualitative checks how many factors we can extract. Scree plots help to check how many factors one can be extracted. Since 1 points are above the one value of eigenvalue, so we can extract the 1 factors. In jasp, if we perform the parallel analysis or manual analysis we can extract one factors. According to our construct which we developed it's consists of 2 factors itself, so we can extract 1 factors.

# Path Diagram



Saucha measures the construct from Q1 to Q4. Asteya measures the constrict from Q5 to Q8.

### 7. Discussion

The results of the survey of *Asteya* and *Saucha* seems to be promising. The *Asteya* and Saucha have internal reliability (Cronbach's alpha) of 0.501 and 0.474 respectively. The combined internal reliability (Cronbach's alpha) for both *Asteya* and *Saucha* is 0.567. The preliminary results indicated that the items related to the *Asteya* are more reliable than items related to *Saucha*. The overall MSA range from 0.417 to 0.703 and with the assumption checks having statistically significant values of less than 0.01. The factor loadings range from 0.424 to 0.615. The applied rotation method is oblimin for both factors. In screen plot, only one point is above the one value of eigenvalue, so we can extract only 1 factor. According to our construct developed, even it consists of 2 factors, we could extract only 1 factor; the combination of *Asteya* and *Saucha*. It indicates that the items related to *Asteya* and *Saucha* are strongly connected, they have been considered as one factor.

Since this is a qualitative concept .there is a possibility of social desirability bias. Therefore we also included a shorter version of Marlowe's and Crowne social desirability scale. The reliability of the social desirability question is 0.673 indicate it has a reliable value. These scores suggest that the scale is socially sensitive, however this might vary based on the sample population.

These concepts are not just philosophical, they are practical. They are mentioned in many of the scripture and texts because they were meant to be followed. Regardless of place, time, age, gender, and so on. Especially if one is pursuing the path of **yoga sadhana**. These fundamental concepts of honesty, truthfulness, surrender, etc. remain unchanged while the world we live s constantly changing. We wanted to be able to understand what they would mean in the current context of changing circumstances in the world. Most of the finding from our review of literature has similar overlapping constructs as mentioned in various **Upanishads** and **hatha yoga** texts. Since there has not been much work already existing in this dimension of research, we aim to consolidate and create a tool that will help in the further exploration into the roots of yoga, **Yama and Niyama**.

#### 8. CONCLUSION

The overall internal reliability of the questionnaire is good. The internal reliability is higher in the items representing *Asteya* than the items of *Saucha*. Results of current study also indicated that there were only extract only 1 factor in the questionnaire: *Asteya* and *Saucha* are strongly connected. They have been considered as one factor statistically.

## 9. APPRAISAL

## STRENGTH OF THE STUDY

It was a good initiative in novel area. It consists of a good sample N=108.

## LIMITATION OF THE STUDY

- language difficulty in local peoples.
- the study focused on reliability, not content validity.
- methodology is a limitation (no correlation).
- the Brevity of the scale.
- difficulties in controlling the variables.
- items that were difficult to understand.

## SCOPE OF FUTURE RESEARCH

Although these questionnaires can be improved and refined to increase the reliability and validity of the tool, they can be of good use for further studies and research as these concepts form the foundation of yoga.

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## APPENDICES

### **APPENDIX 1: ITEMS OF THE QUESTIONNAIRE**

### **Personality Questionnaire**

#### Saucha

1. I feel uncomfortable in an untidy environment.

Very Often

Frequently

Sometimes

Rarely

Never

2. If I am wearing unclean clothes, I feel uncomfortable.

Very Often Frequently Sometimes Rarely Never

3. I don't mind skipping my bath occasionally.

Very Often Frequently Sometimes Rarely Never

4. I motivate myself to keep a positive state of mind in general.

Very Often Frequently Sometimes Rarely Never

Asteya

5. I have taken somebody's developmental idea and assumed it as my own.

Very Often Frequently Sometimes Rarely Never

6. I think taking money from my parent's wallet without consent is fine.

Very Often Frequently Sometimes Rarely Never

7. If I find a wallet with an ID in it, I will make efforts to return it to the owner.

Very Often Frequently Sometimes Rarely Never

8. If I do not qualify for a position or job, I may use other easy means to get it.

Very Often Frequently Sometimes Rarely Never

### Social Desirability

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

True

False

10. I sometimes feel resentful when I don't get my own way.

True

False

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

True False 12. There have been times when I felt like rebelling against people in authority even though I knew they were right.

True

False

13. No matter who I'm talking to, I'm always a good listener.

True

False

14. There have been occasions when I took advantage of someone.

True

False

15. I'm always willing to admit it when I make a mistake.

True

False

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

True

False

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

True

False

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

True

False

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

True

False

20. I am sometimes irritated by people who ask favours of me.

True

False

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

True

False