

Psychometric properties of the multidimensional assessment of interoceptive awareness (MAIA) in a Hindi version

Dissertation submitted by

SANDEEP KUMAR

Under the guidance of

RAJESH S.K., Ph. D.

Towards the Partial Fulfilment of Master of Science in Yoga
[M.Sc. Yoga Therapy]



Submitted To



Swami Vivekananda Yoga Anusandhana Samsthana (Deemed to be University)
19, Eknath Bhavan, Gavipuram Circle, Kempgowda Nagar, Bangalore, 560019
Phone: 26612669, 26608645
www.svyasa.edu.in

CERTIFICATE

This is to certify that SANDEEP KUMAR is submitting this Experimental research titled Translation And Psychometric Test Of The Hindi Version The Multidimension Assessment Of Interoceptive Awareness (MAIA)registered with effect from August 1, 2018 by Swami Vivekananda Yoga Anusandhana Samsthana under the division of Yoga and is a record of the work carried out by his in this institute.

Rajesh S. K., Ph. D.

Assistant Prof.

Division of Yoga & Physical science

SVYASA University

Guide

DECLARATION

I, hereby declare that this study was conducted by me under the guidance of Assistant Prof. Rajesh S. K., Ph. D., Division of Yoga & Physical science, SVYASA University, Bengaluru. I also declare that the subject matter of my dissertation entitled “Translation And Psychometric Test Of The Hindi Version The Multidimension Assessment Of Interoceptive Awareness (MAIA” has not previously formed the basis of the award of any degree, diploma, associate-ship, fellowship or similar titles.

Date:

SANDEEP KUMAR

Place: Bengaluru

(Candidate)

ACKNOWLEDGEMENT

First of all, I am thankful to all the people, who directly or indirectly, showed me the right path through their words of wisdom and blessings. I would like to thank my guide, Dr. Rajesh S. K., (Assistant, Prof), Division of Yoga & Physical science, SVYASA University for their guidance and encouragement. He is my mentor and I am grateful for their continuous guidance and encouragement throughout this project. I would like to thank the administration of the University for their Guidance and support. I would like to thank my friends and seniors who gave useful inputs at different stages of this work. Especially, I would like to thank Devas, Meet and Prabhat for their immense help in completing the dissertation. Also, I would like to thank all the participants involved in my research as subjects. I will always be grateful to the university for its support in promoting my career. I am indebted to my parents for their inspiration, love, and support. Finally, I am grateful to the almighty, without whose wish, this work wouldn't have been possible.

Date:

SANDEEP KUMAR

Place: Bengaluru

Name of the candidate

ABSTRACT

Contexts:

The MAIA (Multidimensional Assessment of Interoceptive Awareness) consists of eight scales interrelated to its 8-factor structure. These are labelled Noticing, Not-Distracting, Not-Worrying, Attention Regulation, Emotional Awareness, Self-Regulation, Body Listening, and Trust. Non-Distracting indicates the tendency to ignore oneself from sensations of pain or discomfort. Not-Worrying indicates emotional distress or worry with sensations of pain or discomfort. The MAIA is a self-report measure

Aims:

The aim of the present study is to examine the psychometric qualities of the translated Hindi version of Multidimensional Assessment of Interoceptive Awareness (MAIA). MAIA is a scale that check the awareness to evaluate the correlation between mindfulness, psychological well-being, and depression, happiness in a sample of college students.

Settings and Design:

The data were collected from 223 participants from Himachal Pradesh. All the Participants were recruited from different colleges of Himachal Pradesh.

Methods and Material:

Purpose: This study aimed to translate the MAIA from English to Hindi (MAIA-H) and to examine the psychometric properties of the MAIA-H.

The English version of MAIA is translated by three different persons who were able to understand both Hindi and English, after that we made one consolidated questionnaire in Hindi version, MAIA-H. Participants were given questionnaire packets including demographic details, Hindi version of Mindful Attention Awareness Scale (MAAS), Short Warwick-Edinburg Mental well-Being Scale (SWEMWBS), Short Depression-Happiness Scale (SDHS) and MAIA (Multidimensional Assessment of Interoceptive Awareness).

Data analysis:

The Computation of internal consistency (Cronbach's alpha) was done across the samples. For the construct validity, Pearson correlation coefficients were calculated between the Hindi version of MAIA and other constructs, which were predicted to be moderately or strongly related (convergent validity) and weakly or not related (discriminant validity) to MAIA.

Results:

The reliability coefficient (Cronbach's alpha) of the scale was good (Overall=0.930, Factor 1=0.901, Factor2=0.907, Factor3=0.901, Factor4=0.890, Factor5=0.894, Factor6=0.898, Factor7=0.902, Factor8=0.900), which confirms the reliability of the questionnaire. Construct validity of the MAIA was adequate, as shown by the correlations between Mental wellbeing, depression-happiness scale and mindful attention awareness.

Conclusions:

In summary, the current study found that the Hindi Version of MAIA has good reliability and adequate construct validity.

Key-words: Multidimensional Assessment of Interoceptive Awareness, Mindfulness, Happiness, Depression, Well-being.

STANDARD INTERNATIONAL TRANSLITERATION CODE USED TO

TRANSLITERATE SĀMSKRĪTA WORDS

Vowels (स्वराः)

a = अ	ā = आ	i = इ	ī = ई	u = उ	ū = ऊ
ī = ऀ	ī = ँ	e = ए	ai = ऐ	oo = ओ	au = औ

<i>anusvāra</i>	<i>Visarga</i>	<i>Avagraha</i>
aṁ = अं	aḥ = अः	' = ऽ

Consonants (वर्गीयव्यञ्जनानि)

	अल्पप्राणाः	महाप्राणाः	अल्पप्राणाः	महाप्राणाः	अनुनासिकः
कवर्गः	ka = क	kha = ख	ga = ग	gha = घ	ṅa = ङ
चवर्गः	ca = च	cha = छ	ja = ज	jha = झ	ña = ञ
टवर्गः	ṭa = ट	ṭha = ठ	ḍa = ड	ḍha = ढ	ṇa = ण
तवर्गः	ta = त	tha = थ	da = द	dha = ध	na = न
पवर्गः	pa = प	Pha = फ	ba = ब	bha = भ	ma = म

Consonants (अवर्गीयव्यञ्जनानि)

ya = य	ra = र	la = ल	va = व
śa = श	Ṣa = ष	sa = स	ha = ह

Monogrammatic Letters (संयुक्त अक्षराणि)

Kṣa = क्ष	tra = त्र	jña = ज्ञ
-----------	-----------	-----------

TABLE OF CONTENT

1 INTRODUCTION	1
1.2 NEED OF TRANSLATION	1
1.3 LARGE SCALE USAGE	2
1.4 CORRECT EXPRESSION	2
1.5 LARGE HINDI SPEAKING POPULATION IN INDIA	2
2 ANCIENT LITERATURE REVIEW	7
2.1 AIM OF THE ANCIENT LITERATURE REVIEW	7
2.2 OBJECTIVE OF THE ANCIENT LITERATURE REVIEW	7
2.3 CONCLUSION OF THE ANCIENT LITERATURE REVIEW	10
3. SCIENTIFIC LITERATURE REVIEW.....	11
3.1 SCIENTIFIC REVIEW TABLE	14
4. AIMS AND OBJECTIVES.....	18
4.1 AIM OF STUDY.....	18
4.2. OBJECTIVES OF STUDY	18
4.3 ALTERNATE HYPOTHESIS.....	19
4.4 NULL HYPOTHESIS.....	19
4.5 INCLUSION CRITERIA.....	19
4.6 EXCLUSION CRITERIA.....	19
5. METHODS.....	20
5.1 SOURCE OF SUBJECTS	20
5.2 ETHICAL CONSIDERATION AND INFORMED CONSENT	20
5.3 DESIGN OF STUDY	21
5.4 ASSESSMENT TOOLS	21
5.4.1 <i>Multidimensional Assessment Of Interoceptive Awareness Scale(MAIA)</i>	21
5.4.2 <i>Mindful Attention Awareness Scale</i>	21
5.4.3 <i>The Short Depression-Happiness Scale</i>	22
5.4.4 <i>The Short Warwick-Edinburgh Mental Well-being scale</i>	23
6. DATA EXTRACTION AND ANALYSIS	23
6.1 DATA COLLECTION PROCEDURE	23

6.2 SCORING PROCEDURE.....	24
6.3 DATA EXTRACTION.....	24
7. RESULTS.....	25
7.1 DESCRIPTIVE STATISTICS	25
7.3 RELIABILITY ANALYSIS (CRONBACH’S ALPHA).....	26
7.4 CORRELATION ANALYSIS.....	30
8. DISCUSSION.....	37
8.1 UNIQUENESS OF THE CURRENT STUDY	38
9. APPRAISAL.....	38
9.1 STRENGTH OF THIS STUDY	38
9.2 LIMITATIONS	39
9.3 SUGGESTIONS FOR FUTURE.....	39
9.4 CONCLUSION.....	39
10. REFERENCES.....	41
ALL QUESTIONNAIRES.....	43
RAW DATA	48

Chapter-1

INTRODUCTION

The Multidimensional Assessment of Interoceptive Awareness (MAIA) is a 32-item state-trait questionnaire to measure multiple dimensions of interoception by self-report. Since its publication in November 2012, the MAIA has been translated into 20 other languages and used in numerous studies worldwide. Nine foreign-language validation studies have been completed, which generally confirm the original factor structure but also reveal important shortcomings. The MAIA domains as body awareness, somatic awareness, or interoceptive awareness is used in many ways in medicine, psychology, neuroscience, anthropology, philosophy, and popular discourse, regularly without precision or original definitions, and this is generally with discipline-specific meanings and implications. Definitions of interoception will be different.(Mehling et al., 2012). Most newly, interoceptive accuracy has also been identified as interoceptive sensitivity, should not be confused with sensibility. It has now been shown, in numerous studies, that they are differently measured(Id et al., 2018). The meaning of “interoceptive awareness,” however, varies depending upon the discipline and on the things that are used to evaluate it.(Valenzuela-Moguillansky & Reyes-Reyes, 2015). In this, it is shown that the MAIA “Self-Regulation” scale, which was originally described as assessing the ability to regulate distress by attention(Shoji et al., 2018). MAIA bring the structure to get data to make agents through semi-structured interviews, surveys, field observations or actual datasets and what MAIA does not provide, however, is a set of pretending theories or algorithms for decision-making processes and behavioural patterns(Verhoog et al., 2016).

1.1 NEED OF TRANSLATION

Multidimensional Assessment of Interoceptive Awareness (MAIA) was developed in different languages but not in Hindi. This is a well-approved questionnaire in the western population to assess awareness. A questionnaire developed in English, and administered to people whose mother tongue is not English always poses a risk to the measurement of that construct. This is not practical,

especially in a place like India, where local languages change after a few miles. Further, there are many ways to express feelings in different words. Therefore, usage of the applicable local versions of the questionnaire should be inspired to measure a construct. Without any language barriers, the current study attempted to develop a Hindi version of MAIA.

1.2 LARGE SCALE USAGE

Language is a major limit for contact among the native people who are unable to understand the foreign language. Therefore, an assessment tool or a questionnaire must be certified in their native language in order for the assessment to be meaningful. So, a translated version of MAIA in Hindi was developed for the people who belong to India and have Hindi as their mother tongue.

1.3 CORRECT EXPRESSION

Error or lack of understanding happens when a person fails to express his/her emotions due to limited understanding of any other foreign language. Therefore, it is suggested to give answers by choosing questions in their native language.

LARGE HINDI SPEAKING POPULATION IN INDIA

The scope of administering the questionnaire to a larger population by translating it to Hindi increases the chance of the questionnaire for the Hindi speaking population.

DEFINITION OF MAIA

The MAIA was based on terms such as body awareness, somatic awareness, or interoceptive awareness are used in many different ways in medicine, psychology, neuroscience, anthropology, philosophy, and popular discourse, often without precision or original definitions, and generally with discipline-specific meanings and implications. Definitions for interoception may differ, for example, between psychophysicists and neuroscientists. We attempt to provide more clarity for these constructs by integrating viewpoints and language from the multiple disciplines, for which mind-

body processes and the interaction of mind and biology have become major research topics. This paper describes the systematic development of a new self-report instrument for this construct. Starting from health science and clinical practice background with a particular interest in integrative pain management, we found that contradictory views exist in Western medicine regarding the value of body awareness. Much of the earlier literature considers a patient's attentional focus on body symptoms as an expression of anxiety, depression, or somatization. For example, the terms body awareness and somatic awareness have been used in studies of anxiety and panic disorders to describe a cognitive attitude characterized by an exaggerated focus on physical symptoms, magnification somatosensory amplification rumination, and catastrophic outcome beliefs. Consequently, the numbers of perceived and presumed potentially distressing body sensations have served as markers for anxiety and somatization and somatic(Mehling et al., 2012).

In MAIA there is 32-items multidimensional instrument composed of eight subscales:

- (1) Noticing: the awareness of uncomfortable, comfortable, and neutral body sensations.
- (2) Not-Distracting: The tendency to ignore or distract oneself from sensations of pain or discomfort.
- (3) Not-Worrying: emotional distress or worry with sensations of pain or discomfort.
- (4) Attention Regulation: the ability to sustain and control attention to body sensation.
- (5) Emotional Awareness: the awareness of the connection between body sensations and emotional states.
- (6) Self-Regulation: the ability to regulate psychological distress by attention to body sensations.
- (7) Body Listening: actively listening to the body for insight.
- (8) Trusting: experiencing one's body as safe and trustworthy.

INTEROCEPTIVE AWARENESS AND MENTAL HEALTH

Interoception refers to the processing of internal bodily stimulation by the nervous system. Parcellation of the nervous system's processing of sensory signals into interoception, proprioception, and exteroception began more than a hundred years ago. Although it was predated my interest in linking body-brain interactions with conscious experience. It will be an important area for future research(Khalsa et al., 2018).

INTEROCEPTIVE AWARENESS AND PHYSICAL WELL-BEING

In this interoceptive awareness showed that the relation between augmented psychophysiological

arousal and interoceptive awareness is not limited to affect stimulation but is also come in situations involving physical stress. We conclude that cardiovascular reactivity to physical stress is associated with interoceptive awareness and trait anxiety(Pollatos et al., 2007).

INTEROCEPTIVE AWARENESS AND PSYCHOLOGICAL WELL-BEING

The growing field of investigators identified “interoceptive awareness” as the scientific thing is good capturing the construct commonly pursued in mind-body investigations. This term will be the potential to integrate views from more disciplines. Finally, hierarchical linear regression demonstrated that the self-report measures of interoceptive awareness and dispositional mindfulness shared considerable variance, but also explained unique portions of the variance in psychological well-being(Hanley et al., 2017).

INTEROCEPTIVE AWARENESS AND EMOTIONAL WELL-BEING

The interoceptive awareness shows that the relevance of the perception of bodily signals interoceptive awareness for emotion regulation. When applying an emotion regulation strategy, interoceptive awareness facilitated the downregulation of affect-related arousal. Reappraisal was accompanied by a significant reduction of P3 and slow wave amplitudes that correlated significantly with interoceptive awareness scores(Füstös et al., 2013).

ADAPTATION OF MULTIDIMENSIONAL ASSESSMENT OF INTEROCEPTIVE AWARENESS BY DIFFERENT LANGUAGES

**TABLE NO. 3: VARIOUS VERSIONS OF MAIA ALONG WITH
RELIABILITY DETAILS**

S.No.	Versions	Cronbach Alpha
1	Japanese	It shows mean values, standard deviation and internal consistencies of the MAIA-J as well as ranges of item-scale correlations. There were significant inter correlations ranging from 0.65 to 0.91. $p < 0.01$) as well as with “Emotional Awareness” ($r = -0.15$, $p < 0.05$)also demonstrated good internal consistency of MAIA-J scales, except of “Not-Distracting” ($\alpha = 0.64$)(Shoji et al., 2018).
2	Chilean	It shows that the spanish version of MAIA proved to be a valid and reliable tool to investigate interoceptive awareness in the Chilean population.The Spanish version showed appropriate indicators of construct validity and reliability, with a Cronbach’s α of 0.90 for the total scale, and values between 0.40 and 0.86 for the different subscales(Valenzuela-Moguillansky & Reyes-Reyes, 2015).
3	Portuguese	MAIA has shown good reliability. In the original MAIA version, both scales Not-Distracting and Not-Worrying showed lower internal consistency 0.66, 0.67, respectively(Machorrinho et al., 2019).
4	Malaysia	It shows that the estimated internal consistency using ω , which–as previously outlined–is likely to provide a more reliable estimate of internal consistency than Cronbach’s α in the case of the MAIA. Values greater than 70 reflect adequate internal reliability(Maia et al., 2020).

5	Chinese	It shows that the reliability and validity of the MAIA-C. The results support the reliability and validity of most of the MAIA-C scales. The MAIA-C showed high content validity; overall internal consistency reliability; and acceptable test retest reliability, composite reliability, and construct validity in individuals with mind body practice(Lin et al., 2017).
---	---------	---

CHAPTER2

2. ANCIENT LITERATURE REVIEW

2.1 AIM OF THE ANCIENT LITERATURE REVIEW

The aim of the review of the ancient literature was done to figure out the concept of perseverative thinking which has been already dealt therein.

2.2 OBJECTIVES OF THE ANCIENT LITERATURE REVIEW

- To bring about harmony between the concepts already mentioned in the ancient Indian literature and connect it with modern scientific thinking.
- To encourage modern thinkers to explore the Nobel thoughts of ancient Indian seers.

Bhagwad Gita

प्रजहाति यदा कामान्सर्वान्पार्थ मनोगतान्
आत्मन्येवात्मना तुष्टः स्थितप्रज्ञस्तदोच्यते ॥ २-५५ ॥
prajahāti yadā kāmānsarvānpārtha manogatān |
ātmanyevātmanā tuṣṭaḥ sthitaprajñastadocyate || 2-55||

The Supreme Lord said: When a man completely casts off, O Arjuna, all the desires of the mind and is satisfied in the Self by the Self, then is he said to be one of steady wisdom! (Sivananda, 1989)

योऽयं योगस्त्वया प्रोक्तः साम्येन मधुसूदना
एतस्याहं न पश्यामि चंचलत्वात्स्थितिं स्थिराम् ॥ ६-३३ ॥
yo'yaṁ yogastvayā proktaḥ sām्यena madhusūdana |
etasyāhaṁ na paśyāmi cañcalatvātsthitim sthirām || 6-33||

Arjuna said: This Yoga of equanimity taught by Thee, O Krishna, I do not see its steady continuance (Sivananda, 1989).

असंशयं महाबाहो मनो दुर्निग्रहं चलम्
अभ्यासेन तु कौन्तेय वैराग्येण च गृह्यते ॥ ६-३५ ॥
*asaṁśayaṁ mahābāho mano durnigrahaṁ calam |
abhyāseṇa tu kaunteya vairāgyeṇa ca grhyate || 6-35 |*

Undoubtedly, O mighty-armed Arjuna, the mind is difficult to control and restless; but, by practice and by dispassion it may be restrained (Sivananda, 1989).

गतिर्भर्ता प्रभुः साक्षी निवासः शरणं सुहृत्
प्रभवः प्रलयः स्थानं निधानं बीजमव्ययम् ॥ ९-१८ ॥
*gatirbhartā prabhuḥ sākṣī nivāsaḥ śaraṇam suhṛt |
prabhavaḥ pralayaḥ sthānaṁ nidhānaṁ bījamavyayam || 9-18 ||*

I am the goal, the support, the Lord, the witness, the abode, the shelter, the friend, the origin, the dissolution, the foundation, the treasure-house and the imperishable seed (Sivananda, 1989).

Śvetāśvatara Upaniṣad

एको देवः सर्वभूतेषु गूढः सर्वव्यापी सर्वभूतान्तरात्मा
कर्माध्यक्षः सर्वभूताधिवासः चेता केवलो निर्गुणश्च ॥ ६-११ ॥
*eko devaḥ sarvabhūteṣu gūḍhaḥ sarvabhūtāntarātmā |
karmādhyakṣaḥ sarvabhūtādhivāsaḥ cetā kevalo nirguṇaśca || 6-11 ||*

One God is hidden in all beings. He is all-pervading, the inner self of all, who presides over all actions, dwells in all beings, the witness, the only one, without any qualities (Tejomayananda, 2018).

Yoga Vashishtha

चित्ते विधुरिते देहः संक्षोभं उपयाति हि

संक्षोभात्साम्यंउत्सृज्यवहन्तिप्राणवायवः॥
citte vidhurite dehaḥ samkṣobham upayāti hi /
samkṣobhāt sāmyam utsrjya vahanti prāṇavāyavaḥ ||

When the mind is agitated, the body indeed goes to the state of agitation. On account of agitation, the vital airs (or currents of bio-energy) flow, giving up evenness (Bharti, 1982).

Patanjali yoga sutra

वितर्कबाधनेप्रतिपक्षभावनम्॥२-३३॥
vitarkabādhane pratipakṣabhāvanam||2-33||

When the mind is disturbed by passions one should practice pondering over the opposites (Satyananda Saraswati, 2002).

2.3 CONCLUSION OF THE ANCIENT LITERATURE REVIEW

So, as we have seen above, the shlokas positively describe the importance of balance. Also, one must have control over the craving of sense objects to be emotionally balanced. However, Lord Krishna says as the mind is very strong, one must do stable practice and detachment to control it. One should witness the thought and slowly clear the mind of all negative thinking to witness the god within. Even God himself likes a devotee who is free from all the dualities. The mind has a direct impact on the body and prana. If the mind is calm, the body and prana are relaxed and vice versa. One should try to divert the mind to opposite thoughts to overcome the disturbances. Patanjali termed this process as *pratipaksha bhavanam*. Overall, one should practice living in present with complete mindfulness because thinking about the future leads to anxiety and living in the past leads to dullness.

CHAPTER -3

3. SCIENTIFIC LITERATURE REVIEW

The study of the Chinese version Multidimensional Assessment of Interoceptive Awareness (MAIA) of the 315 participants recruited, 21 were excluded from data analysis because of more than 12 missing values on the 32-item MAIA-C. Therefore, 29 (93.3%) responses were used in further analysis. Table 1 presents the demographic characteristics for both groups, with 218 (74.1%) in the LE group and 76 (25.9%) in the HE groups. The mean age of participants was 45.2 ± 13.1 years. Most participants were female (69.7%), college - educated (57.5%), married (63.0%), and religious (56.5%) and exercised regularly (74.8%). The two groups were significantly different in terms of age, religious affiliation, health status, life satisfaction the MAIA - C shows the same factor structure as the Chinese version with Cronbach's ($\alpha = .70$). (Lin et al., 2017).

The study shows that the participants of the study were undergraduate and graduate university students of the same university (N = 103, 31% male, 23.34 ± 4.34 yrs), and they belonged to two different subgroups: 44 Hungarians (36.4% male, 21.4 ± 1.67 yrs) and 59 Norwegians (25.4% male, 24.8 ± 5.09 yrs). The language used (questionnaire and instructions) was Hungarian for the Hungarians, and English for the Norwegians Interoceptive accuracy and body awareness did not

correlate at the time of the first measurement (Hypothesis 1; entire sample: $r = 0.06$, $p = 0.587$, see Fig. 1A; Hungarian sample: $r = 0.16$, $p = 0.336$ (Ferentzi et al., 2018).

It shows that there is a gender-specific differences in correlations between BIQ and IS, females showed a significantly stronger relationship than males in the Hungarian sample ($r = -0.42$, $p = 0.003$ vs. $r = 0.2$, $p = 0.390$, respectively; Fisher's $z = 2.33$, p (one-tailed) = 0.01)(Emanuelson et al., 2015).

A Reliability and Validity Study of the Spanish version of the Short Depression-Happiness Scale (SDHS) was conducted on Spanish Elderly People (N=216, 62 % females) with an age range of 65-92 years. Results of the PTQ results showed good sampling adequacy (KMO = 0.90). Short Depression-Happiness Scale (SDHS), Center for Epidemiological Studies Depression Scale (CESD), General Health Questionnaire – 28 (GHQ-28) were used. The Correlations between SDHS, and both GHQ-28 and CESD total scores, were high and significant. SDHS demonstrated adequate psychometric properties about the internal structure, reliability, and criterion-related validity(Lomas Martínez et al., 2018).

Another study conducted for Short Depression-Happiness Scale (SDHS) was validated in the Turkish language for Turkish people. The sample consisted of N = 380 (199 male) with the age range of 16 to 78 years. The validation and reliability of the Short Depression-Happiness Scale (SDHS) were determined with comparison to Oxford Happiness Questionnaire-Short Form (OHQ-SF) and Satisfaction with Life Scale (SWLS). The Internal consistency coefficient of the (SWLS) was determined to be 0.81. SDHS was highly correlated with DHS ($r = .93$, $p < .001$), confirming its convergent validity. Internal consistency of SDHS was ($\alpha = 0.80$)(Sapmaz & Temizel, 2013).

A study was conducted on 350 service subjects with schizophrenia, depression and anxiety spectrum disorders with an age range of (21–65 years) by using different scales of assessments for providing validity and reliability of psychometric properties of the Short Warwick Edinburgh mental well-being scale. The Overall internal consistency for (SWEMWBS) was good ($\alpha=0.90$). SWEMWBS scores showed a significant and positive correlation with the convergent validity measures. Data confirmed that the SWEMWBS can provide a quick means of assessing/monitoring mental well-being in a population prone to mental health(Vaingankar et al., 2017).

Another study on validation of the Short Warwick–Edinburgh Mental Well-Being Scale in Norwegian and Swedish was conducted through self-rated online questionnaires on hotel managers. Responses of the total of 600 managers showed significant moderate negative correlations between well-being and negative affect ($r = -0.38$, in Norway, $r = -0.43$, in Sweden) SWEMWBS demonstrated criterion-related validity(Haver et al., 2015).

A study was conducted with the aim of examining the factor structure and reliability of a Persian version of the Mindfulness Attention Awareness Scale for Adolescents and investigate the relationship between mindfulness and anxiety in adolescents. The sample size was 354 (187 males-52.8%, 167 females-47.2%), in the age range of 12 – 18 years. Revised Children’s Manifest Anxiety Scale (RCMAS) & Mindfulness Attention Awareness Scale for Adolescents were used as assessments. Cronbach’s alpha for the total score, factor 1, and factor 2 was 0.81, 0.78, and 0.70, respectively. This finding indicated the good internal consistency of this scale. The test-retest reliability (four-week interval) for the total score, factor 1, and factor 2 was 0.86, 0.75, and 0.74, respectively; and all were significant at $p < 0.01$. The current study results indicated that the

MAAS-A total and the RCMAS total were significantly related ($r = - 0.43$)(Mohsenabadi et al., 2018).

For the Reliability and Validity of Mindful Attention Awareness Scale (MAAS) of Persian Version, a study was conducted on 383 people (52.7% females) with the following instruments namely, Cognitive emotion regulation Questionnaire (CERQ), Eysenck Personality Questionnaire-Revised short form (EPQR-S), Spielberger Trait Anxiety Inventory (STAI-X), reliability measure of mindfulness was good ($\alpha=0.76$). The convergent validity (positive correlation) between adaptive cognitive - emotional regulation and mindfulness scale was found to be $r=0.25$ ($p < 0.01$)(Abdi et al., 2015).

3.1 SCIENTIFIC REVIEW TABLE

S.No.	Author name & Year	Sample Size	Assessment tools	Results	Conclusion
1	(Lin et al., 2017).	Total N = 294 N ₁ = 205 (69.7% female), N ₂ = 86 (29.3% Male) NOT PROVIDED = 3 (1.0)	MAIA – C	Excellent internal consistencies for one sample ($\alpha = 70$) & significant and substantial correlations with other measures of MAIA -C were found. English version of the MAIA - C shows the same factor structure as the Chinese version with Cronbach's ($\alpha = 70$).	Results showed that the MAIA-C was shown as having acceptable reliability and Validity
2	(Ferentzi et al., 2018).	(N = 103, 31% male, 23.34 ± 4.34 yrs)	MAIA BAQ (Body Awareness	No difference between the two groups of	In a two-month longitudinal study with the

		two different subgroups: 44 Hungarians (36.4% male, 21.4 ± 1.67 yrs) and 59 Norwegians (25.4% male, 24.8 ± 5.09 yrs). Non Clinical	Questionnaire)	Hungarian and Norwegian students for gender ratio was found ($\chi^2 = 1.434$, $p = 0.231$); however, the Norwegian group was significantly older than the Hungarian ($t(101) = -4.323$, $p < 0.001$). Both for interoceptive accuracy and body	participation of healthy young adults, both interoceptive accuracy (IAC, as assessed by heartbeat tracking ability) and body awareness (BA, as assessed by the Body Awareness Questionnaire) showed good temporal stability. The two constructs were independent of each other, both cross-sectionally and longitudinally
3	(Emanuelson et al., 2015).	Two samples 152 29 males and 53 females; mean age: 17.3 1.59 years Second group (21 males and 49 females; mean age: 21.54 2.40 yrs	MAIA BAQ BIQ	As for gender-specific differences in correlations between BIQ and IS, females showed a significantly stronger relationship than males in the Hungarian sample ($r = -0.42$, $p = 0.003$ vs. $r = 0.2$, $p = 0.390$, respectively; Fisher's $z = 2.33$, p	Finally, a weak positive correlation between self-reported body awareness (as assessed by the BAQ) and interoceptive sensitivity was hypothesized (Hypothesis 4) but no relationship was found

				(one-tailed) =0.01). However, the difference was non-significant in the Norwegian sample ($r = -0.43$, $p < 0.001$ vs. $r = -0.17$, $p = 0.374$, respectively; Fisher's $z = 1.2$, p (one-tailed) = 0.11).	
4	(Lomas Martínez et al., 2018).	N=216 (62 % of females) (age range= 65-92 years)	SDHS CESD GHQ-28	The internal consistency score of the SDHS scale was ($\alpha = 0.757$), Correlations between SDHS, and both GHQ-28 and CESD total scores were high and significant	SDHS demonstrated adequate psychometric properties for the internal structure, reliability, and criterion-related validity
5	(Sapmaz & Temizel, 2013).	N = 380 (199 male). age (16 to 78 years)	SDHS, OHQ-SF, WLS	Internal consistency coefficient was ($\alpha =0.80$) SDHS was highly correlated with DHS ($r = .93$, $p < .001$), confirming its convergent validity.	SDHS was found to be providing reliable about depression and happiness. Hence it can be regarded as a practical measurement tool.
6	(Vaingankar et al., 2017).	N = 350 (age 21–65 years)	PMH, GAF, SWLS, GAD	Overall internal consistency was good ($\alpha=0.90$). There was a significant and positive correlation between the SWEMWBS scores and the	Results show that the SWEMWBS can provide a quick means of monitoring and assessing mental well-being in a population

				convergent validity measures.	with poor mental health.
7	Haver et al., 2015	N=600	SWEMWBS, MAAS, WLEIS, PANAS	Significant moderate negative correlations were found between well-being and negative affect ($r = -.38$, in Norway, $r = -.43$, in Sweden). SWEMWBS had demonstrated criterion-related validity.	The Norwegian and Swedish versions of SWEMWBS were found to be appropriate for the evaluation of mental well-being among Norwegian and Swedish people.
8	Mohsenabadi et al., 2018.	N = 354	MAAS-A RCMAS	Cronbach's alpha for the total score was ($\alpha=0.81$) Indicated the good internal consistency of this scale.	MAAS-A and the RCMAS were found to be significantly related ($r = -0.43$).
9	(Abdi et al., 2015).	N = 383 (52.7%) Female	MAAS, CERQ, EPQR-S, STAI-X, BDI-II, GHQ	The reliability measure of mindfulness was good ($\alpha=0.76$). The positive correlation between adaptive cognitive emotion regulation and mindfulness scale was found to be $r=0.25$ ($p < 0.01$).	Psychometric indices of reliability and validity are reliable and have applied and research use in the field of mental health.

CHAPTER – 4

4. AIMS AND OBJECTIVES

4.1 AIM OF STUDY

The purpose of the present study is to prepare a Hindi translated version of multidimensional assessment of interoceptive awareness questionnaire and assess the psychometric properties of it.

4.2. OBJECTIVES OF THE STUDY

- To assess the internal consistency of the Hindi version of multidimensional assessment of interoceptive awareness.
- To replicate the finding of the English version of MAIA(multidimensional assessment of interoceptive awareness) for the Hindi version.

4.3 ALTERNATE HYPOTHESIS

- Hindi version of the multidimensional assessment of interoceptive awareness confirms adequate internal consistency as well as constructs validity as the same in the original scale.

4.4 NULL HYPOTHESIS

- Hindi version of the multidimensional assessment of interoceptive awareness doesn't confirm adequate internal consistency as well as construct validity as the same in the original scale

4.5 INCLUSION CRITERIA

- The age range of 18-50 years.
- Both males and females.
- Ability to understand and read the Hindi language.
- Those who were willing to give consent to participate in the study.

4.6 EXCLUSION CRITERIA

- Students below 18 years.
- Students who were not willing to participate in the study.
- Students who couldn't read and understand Hindi.

CHAPTER – 5

5. METHODS

5.1 SOURCE OF SUBJECTS

Participants were recruited from different colleges of Himachal Pradesh, India.

5.2 ETHICAL CONSIDERATION AND INFORMED CONSENT

All data collecting procedures were reviewed and to be accepted by the Institutional Ethical Committee (IEC) appointed by SVYASA University.

Signed informed consent was obtained from the participants before the beginning of the study period, which required them to read the proposal that involves non-invasive data collection methods and risks free intervention. Participants were explained in detail about the nature of the study and the voluntary nature of participation. Participants were not provided with any incentives for their participation.

5.3 DESIGN OF STUDY

The study was a survey study design.

5.4 ASSESSMENT TOOLS

5.4.1 Multidimensional Assessment of Interoceptive Awareness SCALE(*MAIA*) – The subjective estimate to qualitative form related to the general interoceptive abilities and way are possible by

recently proposed Multidimensional Assessment of Interoceptive Awareness (MAIA). The number of research studies using the MAIA questionnaire is fast - growing, supporting its validity and acceptable reliability for most of the MAIA scales. The broad range of the assessed aspects makes MAIA a valuable tool that could be used to link physiological responses to subjective experiences however both measures – HEPs and MAIA – have never been assessed in the same sample and related one to the other before. Thus, we aimed to elucidate the relationship between the CNS is a copy of interoceptive processing – the late part of the heartbeat is recall potential – and self-reported interoceptive abilities and tendencies as assessed with the scales of Multidimensional Assessment of Interoceptive Awareness questionnaire. Based on the known company of the late HEP amplitudes to the number of the body(Baranauskas et al., 2017).

Internal Consistency: Here the internal consistency there is no significant correlation between the original MAIA

• 5.4.2 Mindful Attention Awareness Scale-

The MAAS is a 15-item single-dimension measure of trait mindfulness. The MAAS measures the frequency of open and receptive attention to and awareness of ongoing events and experience. Response options ranged from 1 (almost never) to 6 (almost always). Example items include “I find it difficult to stay focused on what’s happening in the present,” “I could be experiencing some emotion and not be conscious of it until sometime later,” and “I rush through activities without being really attentive to them.” Item scores were reverse-coded. Higher scores indicate a greater degree of mindfulness(Brown & Ryan, 2003).

Internal Consistency

Good internal consistency was found for the original MAAS in a student sample $\alpha=0.76$.

Reliability

The test-retest reliability of the MAAS was also good ($r=0.81$).

5.4.3 The Short Depression-Happiness Scale - The SDHS was developed by (Joseph et al., 2004). The SDHS is a six-item scale shortened from the original 25 item scale. Three items are negatively scored.

Internal Consistency

Factor coefficients of scale items ranged between 0.70 and 0.85. The reliability coefficient was reported as 0.62.

Reliability

The SDHS was found to correlate with the Oxford Happiness Inventory $r = 0.59$ and the Beck Depression Inventory $r = -0.68$. The SDHS scores were significantly and positively associated with extraversion $r = 0.58$ and agreeableness $r = 0.42$ and negatively associated with neuroticism $r = -0.79$.

5.4.4 The Short Warwick-Edinburgh Mental Well-being scale –

The 7 items in the SWEMWBS were originally drawn from the full version of the WEMWBS. Each item was scored on a 5-point Likert-type scale ranging from ‘None of the time’ to ‘all of the time’. The items in the SWEMWBS contain more indicators of eudemonic well-being than hedonic well-being (Tennant et al., 2007). showed that the SWEMWBS was robust in Rasch model analysis, and produced less item bias. The metric score for SWEMWBS ranges between 7 and 35. The higher the score, the greater the mental well-being.

Internal Consistency

The reliability coefficient was reported as 0.65.

CHAPTER-6

6. DATA EXTRACTION AND ANALYSIS

6.1 DATA COLLECTION PROCEDURE

Data collection carried out with the help of fellow students. The students first listened to the instructions to fill the questionnaires, and if they did not understand any question, the researcher clarified. Respondents were asked about their gender, age, educational qualification, marital status, the importance of spirituality and health status for **demographic information**. For data collection, the MAAS, SWEMWBS, SDHS and MAIA questionnaires were distributed and specific instructions were provided for each of the questionnaires. The students were asked to input their scores on the questionnaires through paper and pencil. After completion, questionnaires were collected.

6.2 SCORING PROCEDURE

- **Multidimensional Assessment of Interoceptive Awareness (MAIA):** An overall MAIA score ranged is (R) reverse – score (5-x) items 5,6,7,8,9 and 10 on not – distracting, and items 11, 12 and 15 on not-worrying.
- **Mindful Attention Awareness Scale (MAAS):** Mindfulness Attention Awareness Scale, a summation of all the questions.

- **Short Depression-Happiness Scale (SDHS):** The SDHS is a six-item scale that attempts to measure depression and happiness at the same time. Higher scores indicate more happiness, and lower scores show not only the absence of it but also greater levels of depression. Items 1, 3, and 6 were reverse scored.
- **SWEMWBS:** Short Warwick-Edinburg Mental Well-Being Scale total score was obtained by adding up all the questions.

6.3 DATA EXTRACTION

The collected data were entered in an excel sheet. From there it is transferred to JASP for further analysis. Computation of internal consistency (Cronbach's alpha) was done in JASP. Also, for the computation of correlation Pearson's correlation coefficient is done.

CHAPTER – 7

RESULTS

Descriptive Statistics of MAAS, SWEMWBS, SDHS and domains of SDHS

	MAAS TOTAL	SWEMWBS TOTAL	SDHS TOTAL	SDHS Positive feeling TOTAL	SDHS Negative feeling TOTAL
Valid	224	224	224	224	224
Missing	0	0	0	0	0
Mean	62.429	19.344	14.862	8.237	6.625
Std. Deviation	12.997	2.994	3.144	2.520	1.145
Minimum	15.000	12.000	6.000	3.000	3.000
Maximum	84.000	26.000	21.000	12.000	10.000

Descriptive Statistics of MAIA and domains of MAIA

	MAIA TOTAL	Noticing TOTAL (MAIA)	Not Distracting TOTAL (MAIA)	Not Worrying TOTAL (MAIA)	Attention Regulation TOTAL (MAIA)	Emotional Awareness TOTAL (MAIA)	Self Regulation TOTAL (MAIA)	Body Listening TOTAL (MAIA)	Trusting TOTAL (MAIA)
Valid	224	224	224	224	224	224	224	224	224
Missing	0	0	0	0	0	0	0	0	0

Mean	3.415	3.470	2.827	3.147	3.502	3.663	3.751	3.686	3.628
Std. Deviation	0.576	0.819	0.633	0.735	0.801	0.780	0.785	0.867	0.825
Minimum	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maximum	4.351	5.000	3.833	4.400	5.000	5.000	5.000	5.000	5.000

Reliability Analysis for MAAS

Scale Reliability Statistics

	mean	sd	Cronbach's α	Average interitem correlation
scale	4.162	0.305	0.890	0.352

Note. Of the observations, 224 were used, 0 were excluded listwise, and 224 were provided.

Reliability Analysis for SDHS

Scale Reliability Statistics

	mean	sd	Cronbach's α	Average interitem correlation
scale	2.477	0.334	0.644	0.228

Note. Of the observations, 224 were used, 0 were excluded listwise, and 224 were provided.

Item Reliability Statistics

	mean	sd	item-rest correlation	If item dropped Cronbach's α
Q2_1r SDHS	1.969	0.547	0.485	0.587
Q2_2SDHS	2.906	0.949	0.184	0.674
Q2_3RSDHS	2.313	0.569	0.216	0.647
Q2_4SDHS	2.665	1.167	0.629	0.473

Scale Reliability Statistics

	mean	sd	Cronbach's α	Average interitem correlation
Q2_5SDHS	2.665	1.167	0.629	0.473
Q2_6RSDHS	2.344	0.578	0.201	0.650

Reliability Analysis for SWEMWBS

Scale Reliability Statistics

	mean	sd	Cronbach's α	Average interitem correlation
scale	2.763	0.097	0.145	0.015

Note. Of the observations, 224 were used, 0 were excluded listwise, and 224 were provided.

Item Reliability Statistics

	mean	sd	item-rest correlation	If item dropped Cronbach's α
Q3_1 SWEMWBS	2.719	1.162	0.387	-0.218
Q3_2 SWEMWBS	2.696	1.023	0.003	0.166
Q3_3 SWEMWBS	2.692	1.019	-0.170	0.288
Q3_4 SWEMWBS	2.915	1.027	-0.080	0.227
Q3_5 SWEMWBS	2.893	0.987	-0.015	0.178
Q3_6 SWEMWBS	2.710	1.016	-0.071	0.220
Q3_7 SWEMWBS	2.719	1.162	0.387	-0.218

Reliability Analysis for MAIA

Scale Reliability Statistics

	mean	sd	Cronbach's α	Average interitem correlation
scale	3.415	0.386	0.921	0.238

Note. Of the observations, 224 were used, 0 were excluded listwise, and 224 were provided.

Item Reliability Statistics

	mean	sd	item-rest correlation	If item dropped Cronbach's α
Q4_1	3.138	1.282	0.450	0.919

Scale Reliability Statistics

	mean	sd	Cronbach's α	Average interitem correlation
Q4_2	3.420	1.172	0.505	0.918
Q4_3	3.741	1.035	0.433	0.919
Q4_4	3.580	1.250	0.415	0.919
Q4_5r	1.991	1.050	0.227	0.921
Q4_6r	3.018	1.063	0.461	0.919
Q4_7r	2.848	1.031	0.338	0.920
Q4_8r	3.129	1.009	0.479	0.919
Q4_9r	2.951	1.034	0.264	0.921
Q4_10r	3.027	1.024	0.363	0.920
Q4_11r	2.929	0.977	0.442	0.919
Q4_12r	2.866	1.116	0.331	0.920
Q4_13	3.571	1.261	0.484	0.918
Q4_14	3.420	1.340	0.469	0.919
Q4_15r	2.951	1.003	0.384	0.920
Q4_16	3.554	1.259	0.419	0.919
Q4_17	3.558	1.185	0.591	0.917
Q4_18	3.487	1.140	0.579	0.917
Q4_19	3.558	1.219	0.544	0.918
Q4_20	3.464	1.212	0.545	0.918
Q4_21	3.527	1.201	0.570	0.917
Q4_22	3.366	1.168	0.535	0.918
Q4_23	3.567	1.200	0.579	0.917
Q4_24	3.598	1.160	0.452	0.919
Q4_25	3.629	1.089	0.523	0.918
Q4_26	3.763	1.129	0.561	0.918
Q4_27	3.759	1.142	0.414	0.919
Q4_28	3.647	1.127	0.449	0.919
Q4_29	3.723	1.118	0.508	0.918
Q4_30	3.741	0.995	0.532	0.918
Q4_31	3.893	1.058	0.527	0.918
Q4_32	3.826	1.059	0.499	0.918
Q4_33	3.647	1.103	0.489	0.918
Q4_34	3.585	1.093	0.560	0.918
Q4_35	3.362	1.270	0.509	0.918
Q4_36	3.665	1.063	0.420	0.919
Q4_37	3.857	1.087	0.474	0.919

Correlation

			Pearson's r	p
MAAS_TOTAL	-	SWEMWBS_TOTAL	0.151*	0.024
MAAS_TOTAL	-	SDHS_Positive feeling_TOTAL	0.183**	0.006
MAAS_TOTAL	-	SDHS_Negativefeeling_TOTAL	0.086	0.200
MAAS_TOTAL	-	SDHS_TOTAL	0.116	0.084
MAAS_TOTAL	-	MAIA_NOTICING_TOTAL	0.547** *	< .001
MAAS_TOTAL	-	MAIA_NOT DISTRACTING_TOTAL	0.460** *	< .001
MAAS_TOTAL	-	MAIA_NOT WORRYING_TOTAL	0.523** *	< .001
MAAS_TOTAL	-	MAIA_ATTENTION REGULATION_TOTAL	0.534** *	< .001
MAAS_TOTAL	-	MAIA_EMOTIONAL AWARENESS_TOTAL	0.417** *	< .001
MAAS_TOTAL	-	MAIA_SELF REGULATION_TOTAL	0.388** *	< .001
MAAS_TOTAL	-	MAIA_BODY LISTENING_TOTAL	0.350** *	< .001
MAAS_TOTAL	-	MAIA_TRUSTING_TOTAL	0.395** *	< .001
MAAS_TOTAL	-	MAIA_TOTAL	0.618** *	< .001
SWEMWBS_TOTAL	-	SDHS_Positive feeling_TOTAL	0.336** *	< .001

			Pearson's r	p
SWEMWBS_TOTAL	-	SDHS_Negativefeeling_TOTAL	0.231 ^{**} *	< .001
SWEMWBS_TOTAL	-	SDHS_TOTAL	0.354 ^{**} *	< .001
SWEMWBS_TOTAL	-	MAIA_NOTICING_TOTAL	0.033	0.628
SWEMWBS_TOTAL	-	MAIA_NOT DISTRACTING_TOTAL	0.017	0.802
SWEMWBS_TOTAL	-	MAIA_NOT WORRYING_TOTAL	0.097	0.147
SWEMWBS_TOTAL	-	MAIA_ATTENTION REGULATION_TOTAL	0.140*	0.036
SWEMWBS_TOTAL	-	MAIA_EMOTIONAL AWARENESS_TOTAL	0.093	0.165
SWEMWBS_TOTAL	-	MAIA_SELF REGULATION_TOTAL	0.144*	0.031
SWEMWBS_TOTAL	-	MAIA_BODY LISTENING_TOTAL	0.106	0.113
SWEMWBS_TOTAL	-	MAIA_TRUSTING_TOTAL	0.102	0.127
SWEMWBS_TOTAL	-	MAIA_TOTAL	0.125	0.063
SDHS_Positive feeling_TOTAL	-	SDHS_Negativefeeling_TOTAL	0.385 ^{**} *	< .001
SDHS_Positive feeling_TOTAL	-	SDHS_TOTAL	0.942 ^{**} *	< .001
SDHS_Positive feeling_TOTAL	-	MAIA_NOTICING_TOTAL	0.047	0.485
SDHS_Positive feeling_TOTAL	-	MAIA_NOT DISTRACTING_TOTAL	0.192 ^{**}	0.004

		Pearson's r	p
SDHS_Positive feeling_TOTAL	- MAIA_NOT WORRYING_TOTAL	0.150*	0.025
SDHS_Positive feeling_TOTAL	- MAIA_ATTENTION REGULATION_TOTAL	0.159*	0.017
SDHS_Positive feeling_TOTAL	- MAIA_EMOTIONAL AWARENESS_TOTAL	0.189**	0.005
SDHS_Positive feeling_TOTAL	- MAIA_SELF REGULATION_TOTAL	0.121	0.072
SDHS_Positive feeling_TOTAL	- MAIA_BODY LISTENING_TOTAL	0.206**	0.002
SDHS_Positive feeling_TOTAL	- MAIA_TRUSTING_TOTAL	0.107	0.110
SDHS_Positive feeling_TOTAL	- MAIA_TOTAL	0.199**	0.003
SDHS_Negativefeeling_TOTAL	- SDHS_TOTAL	0.673 ^{**} _*	< .001
SDHS_Negativefeeling_TOTAL	- MAIA_NOTICING_TOTAL	- 0.112	0.093
SDHS_Negativefeeling_TOTAL	- MAIA_NOT DISTRACTING_TOTAL	- 0.084	0.213
SDHS_Negativefeeling_TOTAL	- MAIA_NOT WORRYING_TOTAL	- 0.003	0.960
SDHS_Negativefeeling_TOTAL	- MAIA_ATTENTION REGULATION_TOTAL	- 0.091	0.176
SDHS_Negativefeeling_TOTAL	- MAIA_EMOTIONAL AWARENESS_TOTAL	0.060	0.373
SDHS_Negativefeeling_TOTAL	- MAIA_SELF REGULATION_TOTAL	- 0.017	0.800

		Pearson's r	p
SDHS_Negativefeeling_TOTAL	- MAIA_BODY LISTENING_TOTAL	0.081	0.227
SDHS_Negativefeeling_TOTAL	- MAIA_TRUSTING_TOTAL	0.001	0.986
SDHS_Negativefeeling_TOTAL	- MAIA_TOTAL	0.038	0.568
SDHS_TOTAL	- MAIA_NOTICING_TOTAL	0.003	0.960
SDHS_TOTAL	- MAIA_NOT DISTRACTING_TOTAL	0.124	0.065
SDHS_TOTAL	- MAIA_NOT WORRYING_TOTAL	0.119	0.075
SDHS_TOTAL	- MAIA_ATTENTION REGULATION_TOTAL	0.095	0.158
SDHS_TOTAL	- MAIA_EMOTIONAL AWARENESS_TOTAL	0.173**	0.009
SDHS_TOTAL	- MAIA_SELF REGULATION_TOTAL	0.090	0.177
SDHS_TOTAL	- MAIA_BODY LISTENING_TOTAL	0.194**	0.003
SDHS_TOTAL	- MAIA_TRUSTING_TOTAL	0.085	0.202
SDHS_TOTAL	- MAIA_TOTAL	0.146*	0.029
MAIA_NOTICING_TOTAL	- MAIA_NOT DISTRACTING_TOTAL	0.386** *	< .001
MAIA_NOTICING_TOTAL	- MAIA_NOT WORRYING_TOTAL	0.400** *	< .001

			Pearson's r	p
MAIA_NOTICING_TOTAL	-	MAIA_ATTENTION REGULATION_TOTAL	0.524 ^{**} _*	< .001
MAIA_NOTICING_TOTAL	-	MAIA_EMOTIONAL AWARENESS_TOTAL	0.554 ^{**} _*	< .001
MAIA_NOTICING_TOTAL	-	MAIA_SELF REGULATION_TOTAL	0.545 ^{**} _*	< .001
MAIA_NOTICING_TOTAL	-	MAIA_BODY LISTENING_TOTAL	0.425 ^{**} _*	< .001
MAIA_NOTICING_TOTAL	-	MAIA_TRUSTING_TOTAL	0.452 ^{**} _*	< .001
MAIA_NOTICING_TOTAL	-	MAIA_TOTAL	0.715 ^{**} _*	< .001
MAIA_NOT DISTRACTING_TOTAL	-	MAIA_NOT WORRYING_TOTAL	0.512 ^{**} _*	< .001
MAIA_NOT DISTRACTING_TOTAL	-	MAIA_ATTENTION REGULATION_TOTAL	0.455 ^{**} _*	< .001
MAIA_NOT DISTRACTING_TOTAL	-	MAIA_EMOTIONAL AWARENESS_TOTAL	0.365 ^{**} _*	< .001
MAIA_NOT DISTRACTING_TOTAL	-	MAIA_SELF REGULATION_TOTAL	0.348 ^{**} _*	< .001
MAIA_NOT DISTRACTING_TOTAL	-	MAIA_BODY LISTENING_TOTAL	0.340 ^{**} _*	< .001
MAIA_NOT DISTRACTING_TOTAL	-	MAIA_TRUSTING_TOTAL	0.381 ^{**} _*	< .001
MAIA_NOT DISTRACTING_TOTAL	-	MAIA_TOTAL	0.649 ^{**} _*	< .001

		Pearson's r	p
MAIA_NOT WORRYING_TOTAL	-	MAIA_ATTENTION REGULATION_TOTAL 0.631 ^{**} *	< .001
MAIA_NOT WORRYING_TOTAL	-	MAIA_EMOTIONAL AWARENESS_TOTAL 0.406 ^{**} *	< .001
MAIA_NOT WORRYING_TOTAL	-	MAIA_SELF REGULATION_TOTAL 0.370 ^{**} *	< .001
MAIA_NOT WORRYING_TOTAL	-	MAIA_BODY LISTENING_TOTAL 0.408 ^{**} *	< .001
MAIA_NOT WORRYING_TOTAL	-	MAIA_TRUSTING_TOTAL 0.498 ^{**} *	< .001
MAIA_NOT WORRYING_TOTAL	-	MAIA_TOTAL 0.727 ^{**} *	< .001
MAIA_ATTENTION REGULATION_TOTAL	-	MAIA_EMOTIONAL AWARENESS_TOTAL 0.654 ^{**} *	< .001
MAIA_ATTENTION REGULATION_TOTAL	-	MAIA_SELF REGULATION_TOTAL 0.530 ^{**} *	< .001
MAIA_ATTENTION REGULATION_TOTAL	-	MAIA_BODY LISTENING_TOTAL 0.549 ^{**} *	< .001
MAIA_ATTENTION REGULATION_TOTAL	-	MAIA_TRUSTING_TOTAL 0.575 ^{**} *	< .001
MAIA_ATTENTION REGULATION_TOTAL	-	MAIA_TOTAL 0.865 ^{**} *	< .001
MAIA_EMOTIONAL AWARENESS_TOTAL	-	MAIA_SELF REGULATION_TOTAL 0.712 ^{**} *	< .001
MAIA_EMOTIONAL AWARENESS_TOTAL	-	MAIA_BODY LISTENING_TOTAL 0.528 ^{**} *	< .001

		Pearson's r	p
MAIA_EMOTIONAL AWARENESS_TOTAL	- MAIA_TRUSTING_TOTAL	0.471 ^{**} *	< .001
MAIA_EMOTIONAL AWARENESS_TOTAL	- MAIA_TOTAL	0.799 ^{**} *	< .001
MAIA_SELF REGULATION_TOTAL	- MAIA_BODY LISTENING_TOTAL	0.493 ^{**} *	< .001
MAIA_SELF REGULATION_TOTAL	- MAIA_TRUSTING_TOTAL	0.453 ^{**} *	< .001
MAIA_SELF REGULATION_TOTAL	- MAIA_TOTAL	0.739 ^{**} *	< .001
MAIA_BODY LISTENING_TOTAL	- MAIA_TRUSTING_TOTAL	0.515 ^{**} *	< .001
MAIA_BODY LISTENING_TOTAL	- MAIA_TOTAL	0.691 ^{**} *	< .001
MAIA_TRUSTING_TOTAL	- MAIA_TOTAL	0.70 ^{***} 7	< .00 1

The internal consistency between the items of MAIA was very good. MAIA, showed a high correlation was found between MAIA and MAAS. There was a high significant correlation between MAIA and its sub domain. MAIA showed the mild correlation between SWEMWBS, SDHS. The correlation between MAAS and MAIA($r=0.618$) and SDHS and MAIA $r= (0.146)$. However, the correlation between SWEMWBS and MAIA ($r=0.125$) was not significant ($P=0.063$).

CHAPTER – 8

Discussion

The present study examined the psychometric qualities of the MAIA Questionnaire in Hindi samples, and the results were very encouraging. To test the psychometric qualities of the Hindi version of the MAIA, the internal consistency and convergent validity of the questionnaire were analysed. The internal consistency between the items of MAIA was very good. MAIA, showed high correlation was found between MAIA and MAAS. There was a high significant correlation between MAIA and its sub domain. MAIA showed a mild correlation between SWEMWBS, SDHS. The correlation between MAAS and MAIA($r=0.618$) and SDHS and MAIA $r= (0.146)$. However, the correlation between SWEMWBS and MAIA ($r=0.125$) was not significant ($P=0.063$). This study focused exclusively on student samples i.e. Non-clinical samples, This in turn may have influenced the size of the correlations found. Further studies should focus on the psychometric qualities of the scale in a clinical population.

In previous study aimed to translate the MAIA from English into traditional. Chinese and to assess the reliability and validity of the MAIA-C. The results support the reliability and validity of most of the MAIA-C scales. The MAIA-C showed a high content validity overall internal consistency reliability and acceptable test - retest reliability composite reliability and construct validity in individuals with mind - body practice. The MAIA-C satisfied content validation with these items representing the content domains and concepts.(Lin et al., 2017).

This study focused exclusively on student samples i.e. Non-clinical samples, This in turn may have influenced the size of the correlations found. Further studies should focus on the psychometric qualities of the scale in a clinical population.

8.1 UNIQUENESS OF THE CURRENT STUDY

In India, this study is conducted for the first time in the Hindi language for examine the psychometric qualities of MAIA.

CHAPTER-9

9. APPRAISAL

9.1 STRENGTH OF THIS STUDY

Multiple Variables: In our study, we included multiple variables like Mental wellbeing, depression and happiness, mind attention awareness scale.

Multi Centric: This study was conducted in different colleges in Himachal Pradesh.

Good Sample Size: This study was conducted on 223 participants on both the genders.

9.2 LIMITATIONS

Non-Clinical Sample: The study focused exclusively on student samples i.e. non-clinical samples. This, in turn, may have influenced the size of the correlations found.

No follow up: We could not do follow up with participants, and find test-retest reliability.

One Time Assessment: Since it was a one-time assessment, test-retest reliability could not be found.

9.3 SUGGESTIONS FOR FUTURE

- Further studies should focus on the psychometric qualities of the scale in a clinical population.
- As we have found different psychological characteristics of students through this study, further studies can be done using this data to work on these psychological characteristics for their betterment.
- Further studies can focus on researching different states.

9.4 CONCLUSION

Despite of the constraints point by point over, the present examination gives proof to the Hindi version MAIA as a valuable and psycho-metrically stable measure of interoceptive awareness that may help to facilitate easy assessment in Hindi language regions.

CHAPTER – 10

10. REFERENCES

- Baranauskas, M., Grabauskaitė, A., & Griškova-Bulanova, I. (2017). Brain responses and self-reported indices of interoception: Heartbeat evoked potentials are inversely associated with worrying about body sensations. *Physiology and Behavior*.
<https://doi.org/10.1016/j.physbeh.2017.07.032>
- Brown, K. W., & Ryan, R. M. (2003). The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being. *Journal of Personality and Social Psychology*, 84(4), 822–848. <https://doi.org/10.1037/0022-3514.84.4.822>
- Emanuelson, L., Drew, R., & Oteles, F. K. (2015). *Health and Disability Interoceptive sensitivity, body image dissatisfaction, and body awareness in healthy individuals*. 167–174.
<https://doi.org/10.1111/sjop.12183>
- Ferentzi, E., Drew, R., Tihanyi, B. T., & Köteles, F. (2018). Interoceptive accuracy and body awareness – Temporal and longitudinal associations in a non-clinical sample. *Physiology & Behavior*, 184, 100–107. <https://doi.org/10.1016/j.physbeh.2017.11.015>
- Füstös, J., Gramann, K., Herbert, B. M., & Pollatos, O. (2013). On the embodiment of emotion regulation: Interoceptive awareness facilitates reappraisal. *Social Cognitive and Affective Neuroscience*, 8(8), 911–917. <https://doi.org/10.1093/scan/nss089>
- Hanley, A. W., Mehling, W. E., & Garland, E. L. (2017). CR. *Journal of Psychosomatic Research*. <https://doi.org/10.1016/j.jpsychores.2017.05.014>
- Haver, A., Akerjordet, K., Caputi, P., Magee, C., & Furunes, T. (2015). Measuring mental well-being: A validation of the Short Warwick–Edinburgh Mental Well-Being Scale in Norwegian and Swedish. *Scandinavian Journal of Public Health*.
<https://doi.org/10.1177/1403494815588862>
- Id, W. E. M., Acree, M., Stewart, A., Silas, J., & Jones, A. (2018). *The Multidimensional Assessment of Interoceptive Awareness, Version 2 (MAIA-2)*. 2(November 2012), 1–12.
- Joseph, S., Linley, P. A., Harwood, J., Lewis, C. A., & McCollam, P. (2004). Rapid assessment of well-being: The Short Depression-Happiness Scale (SDHS). *Psychology and Psychotherapy: Theory, Research and Practice*. <https://doi.org/10.1348/1476083042555406>
- Khalsa, S. S., Adolphs, R., Cameron, O. G., Critchley, H. D., Davenport, P. W., Feinstein, J. S., Feusner, J. D., Garfinkel, S. N., Lane, R. D., Mehling, W. E., Meuret, A. E., Nemeroff, C. B., Oppenheimer, S., Petzschner, F. H., Pollatos, O., Rhudy, J. L., Schramm, L. P., Simmons, W. K., Stein, M. B., ... Zucker, N. (2018). Interoception and Mental Health: A Roadmap. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 3(6), 501–513. <https://doi.org/10.1016/j.bpsc.2017.12.004>
- Lin, F.-L., Hsu, C.-C., Mehling, W., & Yeh, M.-L. (2017). Translation and Psychometric Testing of the Chinese Version of the Multidimensional Assessment of Interoceptive Awareness. *Journal of Nursing Research*, 25(1), 76–84. <https://doi.org/10.1097/jnr.000000000000182>
- Lomas Martínez, D., Fernández Muñoz, J. J., & Navarro-Pardo, E. (2018). Spanish versión of the Short Depression-Happiness Scale (SDHS): A Reliability and Validity study in a sample of Spanish Elderly People. *Acción Psicológica*, 15(1), 17.
<https://doi.org/10.5944/ap.15.1.21196>
- Machorrinho, J., Veiga, G., Fernandes, J., Mehling, W., & Marmeleira, J. (2019).

- Multidimensional Assessment of Interoceptive Awareness: Psychometric Properties of the Portuguese Version. *Perceptual and Motor Skills*.
<https://doi.org/10.1177/0031512518813231>
- Maia, I. A., Id, J. T., Barron, D., Aspell, J. E., Kheng, E., Toh, L., Zahari, S., Azzatunnisak, N., Khatib, M., & Swami, V. (2020). *Translation and validation of a Bahasa Malaysia (Malay) version of the Multidimensional Assessment of*. 1–19.
<https://doi.org/10.1371/journal.pone.0231048>
- Mehling, W. E., Price, C., Daubenmier, J. J., Acree, M., Bartmess, E., & Stewart, A. (2012). The Multidimensional Assessment of Interoceptive Awareness (MAIA). *PLoS ONE*.
<https://doi.org/10.1371/journal.pone.0048230>
- Mohsenabadi, H., Shabani, M. J., & Zanjani, Z. (2018). Factor Structure and Reliability of the Mindfulness Attention Awareness Scale for Adolescents and the Relationship Between Mindfulness and Anxiety in Adolescents. *Iranian Journal of Psychiatry and Behavioral Sciences, In Press*. <https://doi.org/10.5812/ijpbs.64097>
- Pollatos, O., Herbert, B. M., Kaufmann, C., Auer, D. P., & Schandry, R. (2007). *Interoceptive awareness , anxiety and cardiovascular reactivity to isometric exercise*. 65, 167–173.
<https://doi.org/10.1016/j.ijpsycho.2007.03.005>
- Sapmaz, F., & Temizel, S. (2013). Turkish version of the Short Depression-Happiness Scale (SDHS): A validity and reliability study. *The Journal of Happiness & Well-Being The Journal of Happiness & Well-Being (JHW) The Journal of Happiness & Well-Being*, 1(11), 32–38. <http://www.journalofhappiness.net/frontend/articles/pdf/v01i01/3.pdf>
- Shoji, M., Mehling, W. E., Hautzinger, M., & Herbert, B. M. (2018). Investigating multidimensional interoceptive awareness in a Japanese population: Validation of the Japanese MAIA-J. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2018.01855>
- Vaingankar, J. A., Abdin, E., Chong, S. A., Sambasivam, R., Seow, E., Jeyagurunathan, A., Picco, L., Stewart-Brown, S., & Subramaniam, M. (2017). Psychometric properties of the short Warwick Edinburgh mental well-being scale (SWEMWBS) in service users with schizophrenia, depression and anxiety spectrum disorders. *Health and Quality of Life Outcomes*.
<https://doi.org/10.1186/s12955-017-0728-3>
- Valenzuela-Moguillansky, C., & Reyes-Reyes, A. (2015). Psychometric properties of the multidimensional assessment of interoceptive awareness (MAIA) in a Chilean population. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2015.00120>
- Verhoog, R., Ghorbani, A., & Dijkema, G. P. J. (2016). Environmental Modelling & Software Modelling socio-ecological systems with MAIA : A biogas infrastructure simulation. *Environmental Modelling and Software*, 81, 72–85.
<https://doi.org/10.1016/j.envsoft.2016.03.011>

ALL QUESTIONNAIRES

Day to Day Experience

निर्देश—नीचे आपके दैनिक जीवन के अनुभवों से जुड़े कुछ वाक्य दिये गये हैं। निम्नलिखित 1-6 मापन के अनुसार कृपया यह इंगित कीजिए कि आप कितनी बार/बारता उन्हें अनुभव करते हैं। कृपया यह बतायें कि आप कैसा अनुभव करते हैं न कि आप क्या सोचते हो कि आपका अनुभव कैसा होना चाहिये। कृपया हर एक वाक्य को दूसरे वाक्यों से अलग मान के उत्तर दीजिए।

1	2	3	4	5	6
लगभग हमेशा	बहुत ज्यादाबार	कभी कभार	कम बार	बहुत कम बार	लगभग कभी नहीं

- 1 मैं किसी भावना को महसूस कर रहा होता/रही होती हूँ और कुछ देर बाद ही मुझे उसके बारे में एहसास होता है। 1 2 3 4 5 6
- 2 मैं अपनी लापरवाही, उचित ध्यान ना देने या किसी और विषय पर सोचने के कारण कार्य/चीजों को बिगाड़/तोड़ लेता/लेती हूँ। 1 2 3 4 5 6
- 3 जो कुछ वर्तमान में होता है उस पर मैं ध्यान केंद्रित नहीं कर पाता/पाती हूँ। 1 2 3 4 5 6
- 4 जब मैं कहीं जा रहा होता/होती हूँ तो मैं तेज रफतार से चलता/चलती हूँ और रास्ते के अनुभवों पर ध्यान नहीं देता/देती हूँ। 1 2 3 4 5 6
- 5 मैं शारीरिक तनाव और कष्ट को तब तक महसूस नहीं करता/करती हूँ जब तक वह मेरा ध्यान ना खींचे। 1 2 3 4 5 6
- 6 जैसे ही मुझे पहली बार किसी व्यक्ति का नाम बताया जाता है, मैं कुछ क्षण बाद ही उस व्यक्ति का नाम भूल जाता/जाती हूँ। 1 2 3 4 5 6
- 7 ऐसा प्रतीत होता है कि बिना चेतनापूर्वक यह जाने कि मैं क्या कर रहा/रही हूँ, मैं 'स्वचालित' रूप से कार्य करता रहता/रहती हूँ। 1 2 3 4 5 6
- 8 मैं कार्यों को जल्दबाजी में बिना अधिक ध्यान दिए हुए करता/करती हूँ। 1 2 3 4 5 6

- 9 मैं अपने लक्ष्य की प्राप्ति के लिए इतना मग्न हो जाता/जाती हूँ कि यह भूल जाता/जाती हूँ कि मैं अपने लक्ष्य तक पहुँचने के लिये इस समय (वर्तमान में) क्या कर रहा/रही हूँ । 1 2 3 4 5 6
- 10 मैं कार्य या नियुक्त कर्म को स्वचालित ढंग से करता/करती हूँ बिना यह ध्यान दिये कि मैं क्या कर रहा/रही हूँ। 1 2 3 4 5 6
- 11 मैं किसी की बात को एक कान से सुनते हुए दुसरी ओर अपना कार्य भी करता/करती रहता/रहती हूँ । 1 2 3 4 5 6
- 12 मैं स्वतः ही विभिन्न स्थानों पर पहुँच जाता/जाती हूँ और फिर आश्चर्यचकित होता/होती हूँ कि मैं वहाँ क्यों पहुँचा/पहुँची । 1 2 3 4 5 6
- 13 मैं अपने आप को भविष्य या भूत की बातों में पूर्वाधिकृत पाता/पाती हूँ । 1 2 3 4 5 6
- 14 मैं अपने आपको बिना ध्यान दिए कार्य करते हुए पाता/पाती हूँ। 1 2 3 4 5 6
- 15 मैं नाश्ता (स्नेक्स) खाता/खाती हूँ ये ध्यान दिये बिना कि मैं खा रहा/रही हूँ। 1 2 3 4 5 6

एस0डब्लू0ई0एम0डब्लू0बी0एस0

नीचे कुछ वाक्य दिए गये हैं जो भावनाओं और विचारों के बारे में हैं। कृपया दिए गये सारी में चिन्ह लगाए जो पिछले दो सप्ताह में आपके अनुभव का सबसे अच्छी तरह वर्णन करता है।

1.	मैं भविष्य के बारे में आशावादी रहा हूँ।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम	हमेशा
2.	मैं खुद को उपयोगी समझता रहा हूँ।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम	हमेशा
3.	मैं आरामदेह महसूस करता रहा हूँ।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम	हमेशा
4.	मैं समस्याओं का अच्छे ढंग से सामना करता रहा हूँ।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम	हमेशा
5.	मैं स्पष्ट सोचता रहा हूँ।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम	हमेशा
6.	मैं दूसरे लोगों के साथ नजदीकी महसूस करता रहा हूँ।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम	हमेशा
7.	मैं वस्तुओं के बारे में अपने मन को निश्चित करने में समर्थ रहा हूँ।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम	हमेशा

एस0डी0एच0एस0

नीचे दिए कुछ वाक्यों में लोग कैसा अनुभव करते हैं दिया गया है। कृपया हर एक को पढ़ें और जो आप का अनुभव आज को शामिल कर के पिछले सात दिनों में रहा उस वर्ग में चिन्ह अंकित कीजिए। कुछ वाक्य सकारात्मक भावनाओं को दर्शाते हैं, कुछ नकारात्मक भावनाओं को। आपने पिछले सात दिनों में अलग-अलग समय पर सकारात्मक एवं नकारात्मक समय पर सकारात्मक एवं नकारात्मक भावनाओं का अनुभव किया होगा।

1.	मैं ऐसा महसूस करता हूँ कि मैं अपने जीवन में असंतुष्ट रहा हूँ।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम
2.	मैं स्वयं को सुखी महसूस करता रहा हूँ।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम
3.	मुझे उदासी का अनुभव रहा है।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम
4.	मुझे लगा है कि मैं जैसा हूँ उसी में, मैं बहुत प्रफुल्लित था।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम
5.	मुझे लगा कि जीवन आनन्दमय रहा।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम
6.	मुझे लगा कि जीवन अर्थहीन था।	कभी नहीं	कभी-कभार	कभी-कभी	अधिकतम

बहुआयामी जागरूकता का बहुआयामी मूल्यांकन

संस्करण 2

(MAIA-2)

(2018)

अनुदेश

नीचे आपको कथनों की एक सूची मिलेगी। कृपया सूचित करें कि प्रत्येक कथन आम तौर पर दैनिक जीवन में आपके लिए कितना लागू होता है।

आम तौर पर दैनिक जीवन में प्रत्येक कथन आपके लिए कितनी बार लागू होता है?

प्रत्येक पंक्ति पर एक संख्या को चुनें :

	प्रत्येक पंक्ति पर लिखित एक संख्या को गोलंकित करें					
	कभी नहीं					हमेशा
1. जब मैं तनावग्रस्त होता हूँ तो मैं देखता हूँ कि मेरे शरीर में तनाव कहाँ है।	0	1	2	3	4	5
2. मैं महसूस करता हूँ जब शरीर में असहजता होती है।	0	1	2	3	4	5
3. मुझे पता है कि मेरे शरीर में मैं कहाँ आराम से हूँ।	0	1	2	3	4	5
4. मुझे अपनी श्वास में परिवर्तन दिखाई देता है, जैसे कि यह धीमा हो जाता है या गति बढ़ जाती है।	0	1	2	3	4	5
5. मैं शारीरिक तनाव या बेचैनी को तब तक नज़रअंदाज़ करता हूँ जब तक कि वे अधिक गंभीर नहीं हो जाते।	0	1	2	3	4	5
6. मैं बेचैनी की संवेदनाओं से खुद को विचलित करता हूँ।	0	1	2	3	4	5
7. जब मुझे दर्द या असुविधा महसूस होती है, तो मैं इसके माध्यम से शक्ति प्राप्त करने की कोशिश	0	1	2	3	4	5

करता हूँ।						
8. मैं दर्द को नजरअंदाज करने की कोशिश करता हूँ।	0	1	2	3	4	5
9. मैं किसी चीज पर ध्यान केंद्रित करके असुविधा की भावनाओं को दूर करता हूँ।	0	1	2	3	4	5
10. जब मैं अप्रिय शरीर संवेदनाओं को महसूस करता हूँ, तो मैं खुद को किसी और चीज के साथ रखता हूँ इसलिए मुझे उन्हें महसूस नहीं करना पड़ता।	0	1	2	3	4	5
11. जब मुझे शारीरिक दर्द महसूस होता है, तो मैं परेशान हो जाता हूँ।	0	1	2	3	4	5
12. मुझे यह धिंता होने लगती है कि अगर मुझे कोई असुविधा महसूस होती है तो कुछ गलत है।	0	1	2	3	4	5
13. मैं इसके बारे में धिंता किए बिना एक अप्रिय सनसनी को शरीर में महसूस कर सकता हूँ।	0	1	2	3	4	5
14. जब मुझे असुविधा या दर्द होता है तो मैं शांत रह सकता हूँ और धिंता नहीं कर सकता।	0	1	2	3	4	5
15. जब मैं असुविधा या पीड़ा में होता हूँ, तो मैं इसे अपने दिमाग से नहीं निकाल सकता।	0	1	2	3	4	5
16. मैं अपने आस-पास हो रही चीजों से विचलित हुए बिना अपनी सांस पर ध्यान दे सकता हूँ।	0	1	2	3	4	5
17. जब मेरे आसपास बहुत कुछ हो रहा है, मैं अपनी आंतरिक शारीरिक संवेदनाओं के बारे में जागरूकता बनाए रख सकता हूँ।	0	1	2	3	4	5
18. जब मैं किसी के साथ बातचीत कर रहा होता हूँ, तो मैं अपने आसन पर ध्यान दे सकता हूँ।	0	1	2	3	4	5
19. अगर मैं विचलित होता हूँ, तो मैं अपने शरीर को जागरूकता लौटा सकता हूँ।	0	1	2	3	4	5
20. मैं अपने शरीर को संवेदन करने के लिए सोच से अपना ध्यान हटा सकता हूँ।	0	1	2	3	4	5
21. मैं अपने पूरे शरीर के बारे में जागरूकता तब भी बनाये रख सकता हूँ, जब मेरा कोई अंग दर्द या तकलीफ में हो।	0	1	2	3	4	5
22. मैं सचेत रूप से अपने शरीर पर ध्यान केंद्रित	0	1	2	3	4	5

करने में सक्षम हूँ।						
23. मैं महसूस करता हूँ कि जब मैं गुस्से में होता हूँ तो मेरा शरीर कैसे बदलता है।	0	1	2	3	4	5
24. जब मेरे जीवन में कुछ गलत है तो मैं इसे अपने शरीर में महसूस कर सकता हूँ।	0	1	2	3	4	5
25. मुझे लगता है कि एक शांतिपूर्ण अनुभव के बाद मेरा शरीर अलग महसूस करता है।	0	1	2	3	4	5
26. मैं ध्यान देता हूँ कि जब मैं सहज महसूस करता हूँ तो मेरी सांस मुक्त और आसान हो जाती है।	0	1	2	3	4	5
27. मैं महसूस करता हूँ कि जब मैं खुश / आनंदित होता हूँ तो मेरा शरीर कैसे बदलता है।	0	1	2	3	4	5
28. जब मैं अभिभूत महसूस करता हूँ तो मुझे मेरे अंदर एक शांत जगह मिल सकती है।	0	1	2	3	4	5
29. जब मैं अपने शरीर में जागरूकता लाता हूँ तो मैं शांत महसूस करता हूँ।	0	1	2	3	4	5
30. मैं तनाव कम करने के लिए अपनी सांस का उपयोग कर सकता हूँ।	0	1	2	3	4	5
31. जब मैं विचारों में फंस जाता हूँ, तो मैं अपने शरीर / श्वास पर ध्यान केंद्रित करके अपने मन को शांत कर सकता हूँ।	0	1	2	3	4	5
32. मैं अपनी भावनात्मक स्थिति के बारे में अपने शरीर से जानकारी के लिए सुनता हूँ।	0	1	2	3	4	5
33. जब मैं परेशान होता हूँ, तो मुझे यह पता लगाने में समय लगता है कि मेरा शरीर कैसा महसूस करता है।	0	1	2	3	4	5
34. मैं अपने शरीर को सुनता हूँ कि मुझे क्या करना है, इसके बारे में सूचित करें।	0	1	2	3	4	5
35. मेरा शरीर ही मेरा घर है।	0	1	2	3	4	5
36. मुझे लगता है कि मेरा शरीर एक सुरक्षित जगह है।	0	1	2	3	4	5
37. मुझे अपने शरीर की संवेदनाओं पर भरोसा है।	0	1	2	3	4	5

SAMPLE RAW DATA

Email Address	AGE	GENDER	QUALIFICATION	NAME	Q1_1	Q1_2	Q1_3	Q1_4	Q1_5	Q1_6	Q1_7	Q1_8	Q1_9	Q1_10	Q1_11	Q1_12	Q1_13	Q1_14	Q1_15	Q2_1r SDHS	Q2_2SDHS	Q2_3RSDHS	Q2_4SDHS	Q2_5SDHS	Q2_6RSDHS	Q3_1 SWEEMWBS	Q3_2 SWEEMWBS	Q3_3 SWEEMWBS	Q3_4 SWEEMWBS	Q3_5 SWEEMWBS	Q3_6 SWEEMWBS	Q3_7 SWEEMWBS	Q4_1	Q4_2	
randeepthakur@gmail.com	23	Male	BS C	Randeep	3	3	6	6	3	6	3	2	3	4	3	6	2	5	6	2	3	3	2	2	3	4	1	4	4	4	4	3	4	4	2
sakshijuly15@gmail.com	23	female	BCOM	Sakshi	4	5	5	3	3	3	4	2	2	2	3	6	3	2	6	2	2	2	2	2	2	4	1	1	4	4	2	4	4	4	4
rakshathakur@gmail.com	23	female	BA	Raksha	2	3	4	2	2	2	2	2	2	2	2	2	2	2	1	2	3	3	2	2	2	4	2	4	4	4	3	4	4	4	4
dabasharsha@gmail.com	24	Male	MSC	Dilbar	1	5	5	6	4	6	5	5	5	5	4	6	4	5	6	2	4	3	2	2	2	2	2	2	4	2	2	2	2	2	4
snehasigh@gmail.com	24	female	BTECH	Sneha Rana	1	1	3	3	3	4	4	2	3	4	2	5	2	3	2	1	3	3	1	1	3	3	2	1	3	3	3	3	3	3	3

yuvanthakur@gmail.com	26	Male	M SC	Yuvan	1	4	5	3	3	5	3	4	3	3	3	4	5	5	5	2	3	3	2	2	2	2	1	4	2	2	4	2	2	4
priyadwvi33@gmail.com	22	female	B A	Priya Singh	4	1	2	4	1	3	2	6	5	4	6	4	5	6	3	1	3	3	1	1	2	2	2	1	2	2	3	2	2	3
rana345dine sh@gmail.com	25	Male	BE D	Degu Singh	2	5	6	5	6	6	3	1	4	5	3	4	3	6	6	2	4	2	2	2	2	2	2	2	2	2	3	2	2	4
rana345dine sh@gmail.com	24	Male	B A	Rocky Thakur	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	3	1	1	2	2	2	4	2	2	4	2	2	3
rockysigh@gmail.com	24	Male	M SC	Dinesh Rana	1	2	6	2	6	3	5	1	6	6	2	6	5	5	6	2	4	2	2	2	2	2	1	3	2	2	2	2	2	4
rana345dine sh@gmail.com	24	Male	B A	Dinesh Rana	1	2	1	2	2	2	2	5	2	2	5	3	2	2	2	4	4	3	4	4	2	2	2	3	2	2	3	2	2	4
prabhat.rjl@gmail.com	24	Male	M SC	prabhat ranjan	1	2	1	2	5	6	6	6	6	3	6	5	5	5	5	2	3	3	2	2	3	4	2	4	4	4	4	4	4	3
y9gasandeep020@gmail.com	24	Male	BS C	Sandeep rana	1	1	2	2	1	1	1	5	3	4	4	3	3	2	2	2	3	3	2	2	2	4	1	3	4	4	4	4	4	4

meetchitalia7@gmail.com	24	Male	M SC	Meet Chitalia	4	4	4	3	3	3	4	4	4	3	3	5	3	5	5	2	4	2	2	2	2	2	2	3	2	2	4	2	2	4
prahladparam02@gmail.com	24	Male	BS C	Prahlad Parmar	2	5	4	3	3	4	2	1	3	1	5	5	4	2	4	2	3	3	2	2	3	2	2	3	3	2	3	2	2	4
m003129@gmail.com	23	Male	M SC	Sandeep	1	2	2	4	4	1	1	2	3	4	6	4	4	4	4	2	3	3	2	2	3	2	2	3	3	2	2	2	0	5
ravitsinghyogeshwar@gmail.com	24	Male	B A	Ravi kumar	1	1	4	5	5	5	6	2	4	1	3	5	1	3	6	2	3	3	2	2	3	2	2	4	3	2	3	2	3	2
anjli8274@gmail.com	23	Female	B A	Anjli	6	2	3	3	2	1	1	1	4	4	3	3	6	6	6	2	3	3	2	2	3	2	2	3	3	2	4	2	0	1
anjli8274@gmail.com	25	Female	BE D	Anjli	6	2	3	3	2	1	1	1	4	4	3	3	6	6	6	2	4	2	2	2	2	2	2	2	4	3	4	2	4	3
bhatia1995sumit@gmail.com	24	Male	M SC	Sumit Bhatia	3	3	6	6	3	6	3	2	3	4	3	6	2	5	6	2	3	3	2	2	3	2	2	3	3	3	4	2	3	4

2	1	1	2	3	1	3	3	4	3	3	5	2	2	5	4	3	2	3	4	5	5	4	3	2	3	4	5	5	4	3	3	3	4	4	
4	5	3	2	3	3	3	3	3	3	5	4	2	5	3	4	4	5	5	4	4	5	4	3	4	3	3	4	3	4	5	4	4	4	4	
5	0	0	3	0	1	0	1	4	3	3	4	3	5	3	2	3	4	4	5	3	4	5	4	5	4	3	2	3	4	5	4	3	2	3	
3	5	0	2	4	3	2	3	4	2	3	5	2	5	3	4	3	4	3	2	3	4	3	2	4	2	3	4	3	4	4	3	4	4	3	
2	4	0	2	3	3	2	3	4	3	4	2	4	5	3	4	4	5	4	3	2	3	4	5	4	3	5	3	5	4	5	4	2	3	3	
4	2	0	3	3	4	3	2	2	1	3	2	0	3	4	2	2	3	3	3	5	4	3	4	5	5	5	5	4	1	4	2	2	4	3	
5	3	1	2	3	4	4	4	4	1	3	0	4	1	3	4	5	3	2	2	4	5	5	3	5	5	5	4	5	5	5	5	3	0	5	5