

## Perceived Stress Among Indian Women: Challenge to Sustainable Development and Role of Spirituality and Personality Factors

**Prasanth Puliullathil and Satheesh Varma M**

Chinmaya Vishwa Vidya Peeth University, Ernakulam, Kerala

In prevailing social scenario, Perceived Stress (PS) which is the psychological response to stimuli, is a challenge to Sustainable Development Goals (SDG-3, Good Health and Wellbeing) formulated by United Nations. As PS depends upon the perception of that individual, the personality has a key role in coping of stress. Literature reviews and target group study indicated that Indian Women are exposed to various stressors. Spirituality is a belief of people that something divine beyond humane sensory experience, exists. In present study, convergent parallel design was adopted and purposive sampling done from 159 Indian Women as per power analysis across various religions. Result indicated that lion share samples are exposed to PS and they believe that spiritual practices relieve PS. Multiple Linear Regression model was formulated with PS as the dependent variable and Spirituality Scale Score, Agreeableness, Neuroticism and Conscientiousness personality factors as predictors and result indicated high significance of the model. Further, as per qualitative study through sentiment analysis, word cloud analysis and hierarchy analysis, spiritual practices are reducing stress among Indian Women. Thus it can be conclude that spiritual practices across various religions acts as a coping technique for Indian Women.

**Keywords:** perceived stress, Indian women, spirituality, personality factors, sentiment analysis

“वसुधैव कुटुम्बकम् (*Vasudhaiva Kudumbakam*)  
– a famous *Vedic Verse*

This is a famous thought from Indian Knowledge System, which means “let the whole world to live and cherish like a single family” (Swargiary,2025). In India, this verse is endorsed at the entrance of the Parliament of India, duly reflecting the essence of Indian Knowledge System (IKS) to consider the whole world as a single family and to endeavor for the prosperity of humanity. Akin to Indian values, the UN General Assembly has formulated 17 Sustainable Development Goals (SDG) in Sep 2015 duly envisaging prosperous societies in the whole world by 2030. Target Number 3.4 of SDG-3 (Good Health and Wellbeing) envisages

reduction of mortality rate and promotion of mental health. Target Number 3.4 of SDG-3, which appeals to “reduce mortality from non-communicable diseases and to promote mental health and well-being”.

### Perceived Stress

In prevailing socio-economic, political and cultural scenario, perceived stress of personnel is a crucial term which has many physical and psychological effects on an individual. Latin word ‘Stranger’ (to draw tight), was evolved to the word ‘stress’. With respect to individual to individual and based on their perception, an event can cause a positive stress (Eustress) or negative stress (Distress).

## **Psychological Reactions to Stress - General Adaptation Syndrome**

Selye (1974) has examined the effect of human body in response to stressors and he has developed a theory of General Adaptation Syndrome (GAS). According to him, the stress is the psychological response to stimuli which adversely affects an individual via sympathetic adrenal-medullary activity or by pituitary-adrenal-cortical activity, which he called as General Adaptation Syndrome. This theory involves three stages:

### **Alarm Stage**

In this stage the body is mobilized to respond to stress and there is an increase in adrenal activity and cardiovascular, respiratory functioning.

### **Resistance Stage**

In this stage, the individual makes efforts to take action to overcome the stress or learns to adjust to it and the continuous resistance to stress results in decreased resistance to other stimuli.

### **Exhaustion Stage**

In this stage, the individual experiences a depletion of physical resources in the process of trying to overcome or adjust the threat.

### **Spirituality**

Spirituality is a sense of belief by one individual where he/she feels that something higher than them exist (sometimes linked to God/ Almighty) and they can rely upon in it while in distress or helpless situations. Spiritual practices can eliminate all miseries of life which are rooted in greed and erosion of values (Murthy, 2012). While we say about spiritual practices, it has got nothing to do with any particular religion, but aim to understand the practices of various religions which leads variation of perceived stress among personnel following that practice. According to Spencer, M. (2012), spirituality

which comprises of an individual's belief of something divine beyond humane sensory experience, exist to relieve his/her stress. Spirituality explores certain facts such as love, compassion, altruism, life after death, wisdom of truth. The workplace spirituality improves organizational potential for better performance (Aravamudhan & Krishnaveni, 2014). According to Trishala and Fatima (2021), feeling of interconnectedness, self-esteem, sense of completeness, worthiness, and love etc are associated with spirituality. The workplace spirituality is associated with spiritual awareness among workforce and it has direct implications on the organisational outcome which benefits of the organisation (Prabhu et al, 2016).

### **Spiritual Personality**

Personality is a dynamic psychological entity of an individual where he/she exhibits emotional, behavioural, thought process and cognitive analytical patterns which are exclusive from others. According to Gordon Allport (1937), personality is the dynamic organization within an individual where he/she adjusts themselves with the environment in unique manner. Ryckman (2004) viewed that personality is a set of dynamic characteristics possessed by an individual which influences him/her to enact in any situation in a unique manner on cognition, motivation and behavior. Spirituality has close positive affect on the medical and health conditions towards patient's health care (Awastii, 2011). While we talk about the spiritual personality, that individual by virtue of his/her thought processes where spirituality is imbibed, views life with high quality, well-organized, and possesses positive emotions, desires and ideas (Husain, A et al, 2012). Furthermore, Mahamid and Bdier (2021) have observed that negative correlation exist between religious spiritual practices and depression symptoms among Palestine people during Covid-19 pandemic era.

## Personality Factors

As the perceived stress depends upon the perception of an individual, personality has an active role in forming his/her perception and there by the perceived stress of that individual. Pollak et al. (2020), ascertained during their study that openness and conscientiousness personality factors have negative as well as positive predictor roles for primary stress appraisal.

## Literature Review

Isa et al.(2019) defined stress as the outcome non-matching of job requirements with employee's capabilities, abilities and resources. Perceived Stress occur when an individual unable to cope-up with the demands, he/she encounters in various stages of life duly causing pressure in life. Rengamani et al.(2017), have observed the perceived stress as the physiological and psychological imbalance to demands in life. It is the reactions to any situation / environment which causes serious effects on individual's life.

Furthermore, Himcinschi et al.(2022) observed that during Covid pandemic era, those who have practiced spiritual activities and communicated with priests, felt less stress.

According to the study of Inez Tuck *et al.* (2006) on relationship between stress and spirituality, observed that there was a significant negative correlations between perceived stress and spiritual well-being during their three time interval study. They have concluded that spiritual practices can effectively be used as a tool for coping stress.

According to Gonçalves et al (2015), the spirituality serves as a psychological and social resource for coping with stress. Further, religious and spiritual interventions showed additional benefits including reduction of clinical symptoms.

Bahadorani et al.(2021), found that spiritual practice such as Tamarkoz (a Sufi meditation technique) can reduce perceived stress.

Detailed systematic literature reviews (SLR) were undertaken under PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework from various databases such as Scopus, Science Direct, PubMed, Google Scholar, Shodhganga by INFLIBNET etc and understood fact that meager studies were existing about perceived stress among Indian Women with respect the role of their spiritual practices.

## The Rationale of the Study

Detailed literature analysis revealed that spirituality and perceived stress are having association. Literatures have also revealed that stress has adverse effect on the worker's productivity in service sector and quality of work is also influenced by fatigue breaks provided (Parihar et al. 2014).

Trishala and Fatima (2021) opined that spiritual practices such as meditation, mindfulness, shrine visit, prayer, practicing gratitude etc will ease stress. Further, Labbe' and Fobes (2010) opined during their study that stress is associated with personality factors such as extraversion, introversion, neuroticism, agreeableness, conscientiousness and at the same time spirituality depends upon the individual's personality. Thus spirituality and perceived stress are associated and need to study their association in deeper. Further, Bonin & Prasad (2012) pin pointed that spirituality can cherish interconnectedness, vision and compassion among individual and their organisation thereby to boost righteousness and altruism towards organisational well-being.

## Research Gap

Even though separate studies regarding perceived stress and association between

personality factors and spirituality exist, a dedicated study among Indian Women for association of these constructs with PS, was not available. Further, multiple linear regression model of PS among Indian Women and effect of personality factors and spirituality, was formulated through this study.

### **Objectives**

After analysis of elaborated literature reviews and research gap identified, following research objectives were proposed:

- 1 To assess the prevalence of perceived stress among Indian Women from various religions.
- 2 To evaluate the score of spiritual personality scale.
- 3 To evaluate the personality factors of the sample.
- 4 To investigate the relationship between perceived stress with personality factors and spiritual personality scale score.
- 5 To develop a multiple linear regression model to predict PS based on the correlated factors.

Thus, on completion of this research, a scientific insight obtained regarding PS and correlated personality factors and spiritual personality factors, were obtained,

### **Research Hypothesis**

Based on the research objectives formulated after elaborated literature reviews, the research hypotheses are as follows:

#### **Hypothesis**

- H1 The Indian women are not suffering from Perceived Stress (PS).
- H2 There is no relationship exist between PS among Indian Women and their personality factors.

H3 There is no relationship exist between PS among Indian Women and spiritual personality scale score.

H4 There is no significant effect of personality factors and spiritual personality scale score on PS among Indian Women.

### **Method**

Convergent parallel design was adopted during the study where quantitative data and qualitative data were collected and analysed in parallel to evolve the results were matched to evolve conclusions. Quantitative data were collected using various psychometric scales viz. scores of Perceived Stress Scale, scores of Ten Item Personality Inventory scale for various personality factors and scores of Spiritual Personality Scale. In parallel with the quantitative analysis, qualitative data were also collected using open ended questionnaire. Both the quantitative and qualitative data were analysed together to evolve the conclusion of the study.

### **Inclusion and Exclusion Criteria**

Volunteered women across various religions such as Hindu, Islam, Christian and Jain were included for the study. The age group of the sample were 18 – 62 years. The women who were able to read, write and comprehend English language, were only included for the study as the scales used for the study was in English. Those women who are under administration of various psychotic/ neurotic medicines or suffering from various mental ailments, were excluded from the study.

### **Sampling**

Convenience sampling was adopted for this study where number of samples was decided through power analysis. The result of the power analysis indicated a sample size of 159 for four predictors, viz. Spiritual Personality Scale Score, personality factor

scores of Agreeableness, Conscientiousness and Neuroticism.

### Tools used

Perceived Stress Scale (PSS-10) by Cohen et al. (1983) for assessment of perceived stress level score of the sample. This scale is a 10-item scale with 5-point Likert Scale scoring, which is very common for assessment of perceived stress and having credible reliability and validity factors. Ten Item Personality Inventory (TIPI) was used for assessment of OCEAN personality factors of the sample. Pollak et al (2020) observed that various personality factors of TIPI are having credible reliability coefficients (á) viz. 0.75, 0.44, 0.69, 0.53 and 0.32 for extraversion, neuroticism, openness, agreeableness and conscientiousness respectively. Further, Spiritual Personality Inventory (SPI) by Husain et al (2012) was utilized, for assessment of spiritual personality score of the sample. This is a 32-items scale having 5-point Likert scale responses. Further, the Cronbach's coefficient alpha of SPI was found to be 0.86 and content validity and factorial validity of two factors of Spiritual Personality viz. Noble Attitude, Moral Rectitude, were found satisfactory (Hussain et al, 2012).

### Data Analysis

Data analysis was undertaken by using SPSS Software (trial version) by IBM,

Microsoft Excel for quantitative data analysis and NVivo (trial version) by Lumivero, was utilised for qualitative data analysis. The qualitative analysis of open ended questionnaire was undertaken through hierarchy chart, sentiment analysis and word cloud etc.

### Result

According to descriptive statistics using Microsoft Excel, it was observed that 71.9% samples were under stress, out of which 14.04% were observed to be under high level stress. Further, 91.3% of them believe that spiritual practices in their life act as a coping mechanism to relieve stress. The mean score of perceived stress was observed to be at moderate level viz. 16.64 (SD=7.021). Similarly, the mean score of spiritual personality scale, was observed to be. -- 129.51 (SD=13.77). The result of the Spiritual Personality Scale indicated that 47.37% of them are having high level of spiritual personality.

### Correlation of PS with Personality Factors and Score of Spiritual Personality Scale

Literature reviews revealed that PS is associated with personality factors and spiritual personality. Hence, Pearson Correlation coefficient of PS with these factors are assessed and results are indicated in Table 1.

Table 1. Pearson Correlation Output of PS with Personality Factors and Score of Spiritual Personality Scale

Pearson Correlation	Spiritual Personality	EXT_ PF	AGREE_PF	CONSC_ PF	NEUR_ PF	OPENS_ PF
PS	(-) 0.296, p-value <0.001 (Signifi-cant)	(-)0.027, p-value= 0.760 (Insignificant)	(-)0.343, p-value= 0.000 (Significant)	(-)0.263, p-value= 0.002 (Significant)	(-)0.386, p-value= 0.000 (Significant)	(-)0.024, p-value= 0.786 (Insignificant)

Note. IBM SPSS (Trial Version) Output



rejecting null hypothesis H0-1. Pearson Correlation analysis of PS with personality factors indicated that moderate negative correlation exist between PS and agreeableness, neuroticism and conscientiousness personality factors, thereby rejecting null hypothesis H0-2. However, the correlation between PS and extraversion and openness personality factors are insignificant. Further, descriptive statistics has also indicated that more than 90 percentage Indian women believe that spiritual practices reduces their stress at a great extent, even while samples were from different religions. Similarly, moderate negative correlation was observed between PS and spiritual personality score of individual, thereby rejecting null hypothesis H0-3. A multiple linear regression model was formulated, where perceived stress among Indian women was considered as the dependent variable (Y) and significantly correlated variables such as spirituality scale score of individual, agreeableness, neuroticism and conscientiousness personality factors were as independent variables (X1, X2, X3, and X4). ANOVA result was obtained with very high significance ( $p$ -value $<0.001^{**}$ , significant at a 1% level) indicated very high relevance of the model of PS among Indian women, thereby rejecting null hypothesis H0-4. Also, the multiple linear regression model measured R-square value as 0.459, indicating that 45.9% variation in Perceived Stress (Y) among Indian women can be explained by the estimated Sample Regression Plane (SRP), with spiritual personality (X1), agreeableness (X2), neuroticism (X3) and conscientiousness (X4). Further as per result of qualitative analysis, the word cloud as shown in Figure 1 indicated that words such as 'spiritual practice', 'god', 'reduce', 'stress', 'mind' etc are the most recurring frequency words in open ended questionnaire, where samples were asked about their view on spiritual practices and its effect on stress. Also, lion share of positive

or moderately positive sentiments were also observed while assessing the sentiment analysis of effect of spiritual practices on perceived stress, as shown in Figure 2. Hierarchy chart as shown in Figure 3, indicated that the attributed values of the case reflect 'spiritual practice' and 'stress relief' as most coded results of the qualitative analysis.

### **Conclusion**

The multiple linear regression model indicated the fact that the PS among Indian women from various religions, holds significance while defining with four predicting factors viz. spirituality scale score of the individual and three personality factors (Agreeableness, Neuroticism and Conscientiousness). Further, while undertaking qualitative analysis also, it was evident that spiritual practices reduces perceived stress among Indian women from different religions. Thus, by parallel analysis of the quantitative as well as qualitative results, it can be concluded that in India, the spiritual practices works as a coping strategy among women to deal with perceived stress. Thus, even though the perceived stress among Indian women is acting as a challenge to the Sustainable Development Goal (SDG 3.4), the spiritual practices can work towards attainment of SDG 3.4 viz. Good Health and Wellbeing, there by holding a highest value of universal well-being (Rahman & Chattopadhyay,2025) proclaimed by Indian Knowledge System, ie '*Lokah Samasthah Sukhino Bhavanthu*' (Let the whole world to stay happy and cherished).

### **Limitations/ Recommendations**

This study need to be conducted in variety of religions unlike present study having only four religions. As in India, the spiritual practices and norms varies from place to place by virtue of existence of numerous subgroups among major religions itself, and existence of various other ethnic groups, it

is recommended that further elaborated study duly incorporating versatile samples selected from various places of India, need to be carried out. Also, it is recommended to undertake analysis using structural equation models also.

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**Prasanth Puliullathil**, PhD(Psychology) Research Scholar, Department of Psychology, School of PPSH, Chinmaya Vishwa Vidya Peeth University, Warriom Road, Ernakulam, Kerala – 682016, Email : prasanth.cvv210170@cvv.ac.in, Mob: 8921183995

**Satheesh Varma M**, Associate Professor, Chinmaya Vishwa Vidya Peeth University, Warriom Road, Ernakulam, Kerala – 682016, Email : satheesh.varma@cvv.ac.in