

Concept of Excellence in Duty Orientation: A New Scale Development

Anjali Prabhakar¹, Rashmi Patel¹, Dipanshi Arya¹, Paran Gowda²

¹ Research scholar, University of Patanjali, Haridwar

² Professor, University of Patanjali, Haridwar

Abstract

Background

Excellence in duty orientation forms the background details from Indian philosophical text books. A scientific interpretation is carried out by scale development processes churned out from Upanishads.

Goal

The goal is to develop a new scale for the concept of excellence in duty orientation by its related verses from Upanishads.

Method

A questionnaire is developed from the Upanishad text books. A sample size of 814 participants are selected by using De Vellis's (2016) thumb rule formula with a ratio 1:20 as an ideal sample size. Data analysis may be done by using Exploratory Factor Analysis (EFA) and Confirmatory Factory Analysis (CFA). The pattern matrix correlation factors are calculated by the principal component analysis method. A scientific 35-item scale may be developed.

Result and Discussion

The Internal consistency or reliability of the excellence scale of 35 item scale is found to be 0.96 which is excellent. The 35-item Excellence scale is a scale that can be administered for the general population, students, adults, and above 60 years as well. This information can be vital for planning in various sectors such as healthcare, education, and employment. A broad age range implies diverse service needs, while a young average age points to a potentially dynamic and growing workforce. This demographic data helps in making informed decisions for economic, social, and policy development.

Keywords: Scale development; Excellence; Duty orientation; Upanishads; Exploratory and Confirmatory factor analysis.

1. Introduction:

The studies carried out by Samantha Pandya (2017) on 3699 on female ethics have encouraged us to take up the concept of Excellence among female and male ascetics. Results show that by choice, they take up the duty orientation lifestyle. It aims to develop a scale for this Excellence concept based on renunciation and service. Excellence stands for perfection and professionalism. The Scale Development process is seldom needed for scientific validation of Philosophical textbooks like Vedas. Samantha Pandya (2017) surveyed 3,699 Hindu women's renunciation across Six-Hindu-based orders and faith-based organizations in India and maps their profile, religiosity, spirituality, reasons for joining the order, and strategies that enhance the quality of life. They validated their studies through scale development. Most of the duty orientation towards excellence concepts are taken from Dayananda, (2008) and Sankaracharya. (2000) Vedic textbooks. The concepts are expressed in the form of verses. In this paper, we have selected about 32 verses. These form the basis for formulating the questionnaire on Excellence in selfless work and renunciation.

Rationale:

The rationale behind selecting the verses on excellence in duty orientation is multifold. For example, the Brahmacharis and Sanyasis are a few people who renunciation their mundane life and chose a spiritual path. A questionnaire is developed based on the selected verse from Philosophical text books. (Sankaracharya, A. 2000; Satyapati 2006; Prakash, A. 2008; Mishra, N. 2007). From these text books, 33 verses related to excellence are developed as a questionnaire. The hypothesis may be stated as “Excellence in action may significantly be related to duty orientation.

2. Methodology:*Sampling:*

A sample size of 814 participants is selected by using De Vellis’s (2016) thumb rule formula which recommends a ratio of 1:20 as an ideal sample size.

Item Generation:

The expert panel comprised 10 experts. The experts assessed the relevance of items about the content domain by applying a tool namely the Content Validity Index (CVI) developed by Waltz (2003). The psychometric analysis involves several quantitative techniques to test the construct validity of the scale. The pattern matrix correlation factors are calculated by the principal component analysis method, with 5 loading factors in the range from 0.4 to 0.93 are calculated using EFA and CFA statistical tools

3. Results

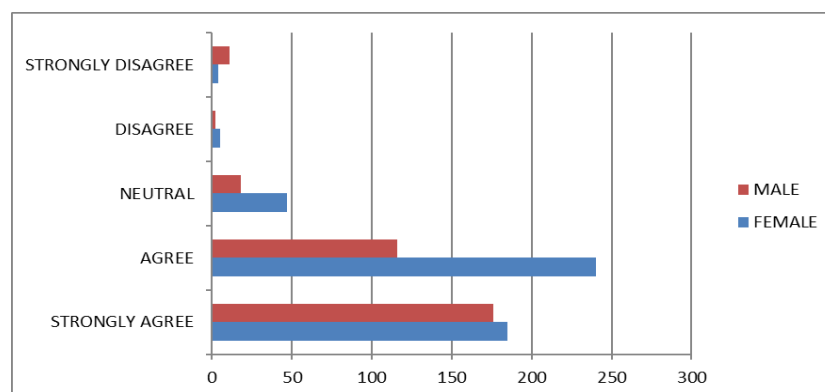
The participant’s ages are shown in Table 1 and Fig.1

Table 1: Participants

Parameter	Age
Minimum Age	18 Years
Maximum Age	76 Years
Average Age	28 Years

This table gives the age distribution of a population, indicating the youngest individual is 18 years old and the oldest is 76 years old. The average age is 28 years, suggesting a predominantly young population.

The initial item pool consisting of 50 items was vetted by 10 experts to assess the degree to which the items taken together constitute an adequate operational definition of a construct i.e. content validity. Based on expert comments, we have reduced the items to 35. The CVI value is found to be 0.93.

**Fig 1: Gender-Based Response on the concept of Excellence in Action based on Upanishads**

It may be seen from Fig.1, that Female population strongly agree and agree compared to Male population as per the Likert's scale.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.96
Bartlett's Test of Sphericity	Approx. Chi-Square	14404.68
	Df	595
	Sig.	<0.001

The table presents results from two statistical tests used to evaluate the suitability of data for factor analysis. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy is 0.96, indicating excellent adequacy, meaning the data is highly suitable for factor analysis. Bartlett's Test of Sphericity checks if the correlation matrix is significantly different from an identity matrix. The approximate Chi-Square value is 14404.68 with 595 degrees of freedom and a significance level <0.001, indicating that the correlations between items are sufficiently large for factor analysis. Both results suggest the data is appropriate for this type of analysis.

Exploratory factor analysis (EFA) and Confirmatory Factor Analysis (CFA):

Maximum Likelihood Analysis method of factor extraction with pattern matrix rotation (Table 3) Results of the Scree plot (Fig. 2) technique indicated extraction of five factors from the 35 variables (Table 3). Factor loading measures ranged from 0.40 to 0.93. Since all the factor load values of all the 35 variables were greater than 0.40, all of them were retained in the scale for next-level confirmatory factor analysis (Fig.3).

Table 3: Exploratory Factor Analysis loading factors- Pattern matrix

Items	Exploratory Factor Analysis loading factors- Pattern matrix				
	1	2	3	4	5
V8	0.745				
V7	0.694				
V9	0.663				
V10	0.641				
V13	0.545				
V4	0.493				
V5	0.441				
V6	0.401				
V15		0.817			
V17		0.805			
V14		0.736			
V19		0.713			
V18		0.537			
V16		0.414			
V26			0.763		
V33			0.64		
V2			0.595		
V1			0.546		
V31			0.526		

V30			0.525		
V32			0.524		
V29			0.516		
V27			0.46		
V28			0.451		
V21				0.684	
V24				0.638	
V3				0.557	
V22				0.504	
V12				0.49	
V11				0.431	
V25				0.638	
V20				0.557	
V23				0.504	
V34					0.945
V35					0.943

The Table 3 presents the factor loadings from an Exploratory Factor Analysis (EFA) using a pattern matrix, showing the relationship of variables (V1 to V35) with five factors. Variables with high loadings (values close to 1) are strongly associated with the respective factors. For example, V8 to V6 load on Factor 1, V15 to V16 on Factor 2, V26 to V28 on Factor 3, V21 to V23 on Factor 4, and V34 to V35 on Factor 5. These loadings help identify the underlying structure of the data, indicating which variables group together under each factor.

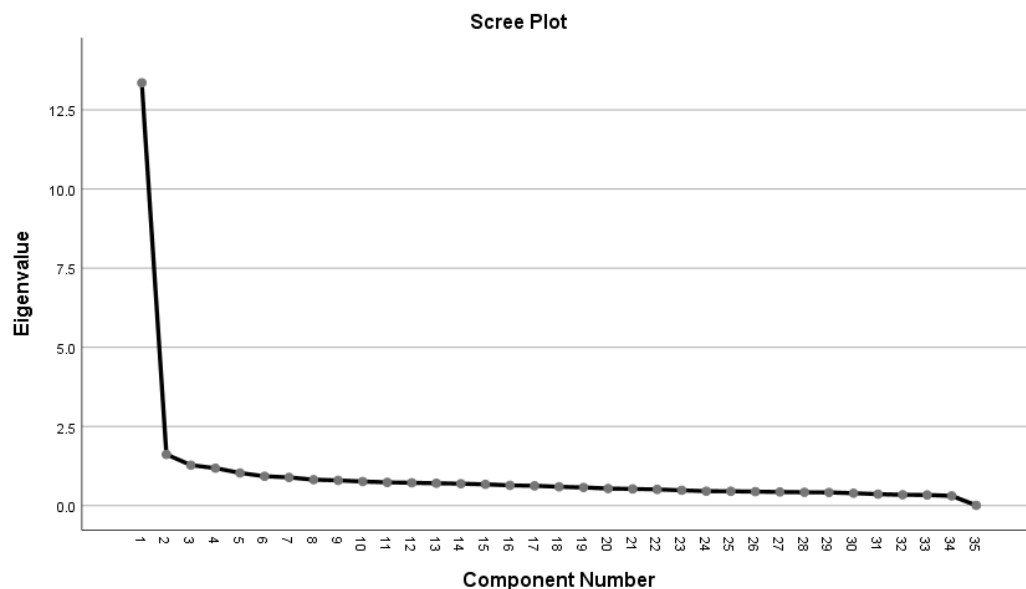


Fig 2: Scree Plot showing the Variance graphically with items

The eigen values of the items are with in factor 1 (Fig.2)

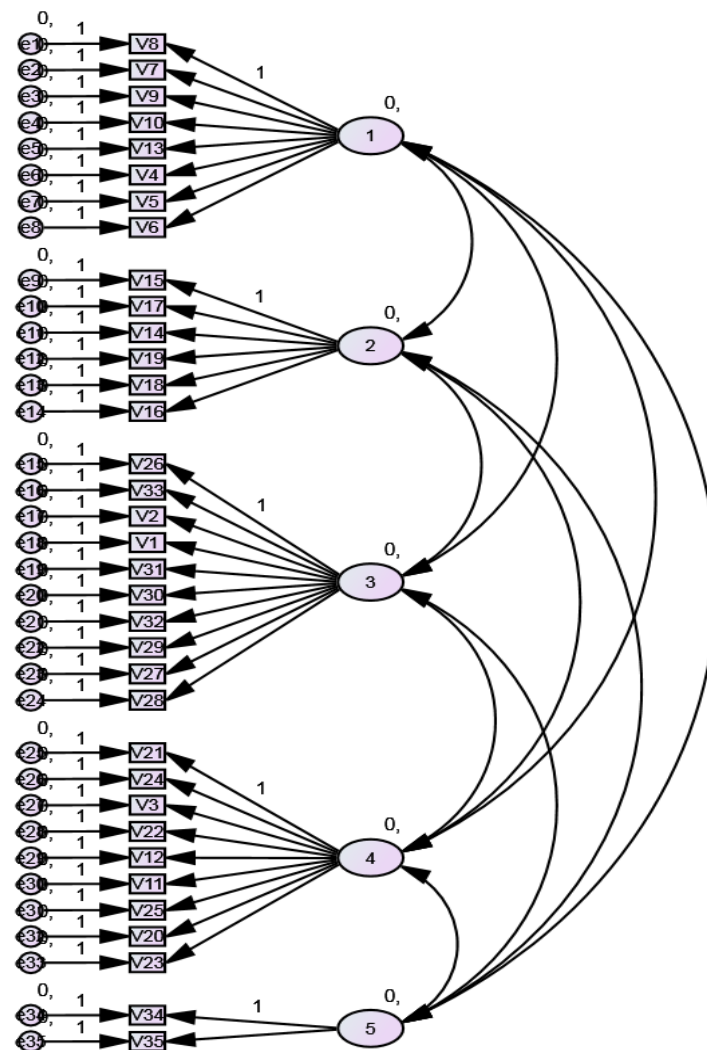


Fig.3 AMOS Diagram for human excellence scale 35

The figure is a structural equation model (SEM) showing the relationships between 35 observed variables (V1 to V35) and five latent factors (1 to 5). Each observed variable is linked to a latent factor, representing high factor loadings and indicating which factor it predominantly measures. The error terms (small circles) represent unique variances for each observed variable. Inter-factor correlations (double-headed arrows) show the relationships between different latent factors, suggesting they share some common variance. This model visually represents the underlying structure identified through Exploratory Factor Analysis (EFA), illustrating how the observed variables group together under distinct latent factors.

4. Discussion

Hamaya (2018) and Pandya, (2017), discusses ‘ascetics’ or renunciation and excellence by females in Haridwar, North India in giving gifts, blessings, and excellence methods teachings while one leads the life of ascetics. And also, she relates female asceticism in Hinduism has far been less examined than that of male renunciation. The

research studies by Samantha Pandya (2017) on 3699 Hindu women ascetics used 2 scales to measure religiosity and spirituality – the Duke University Religiosity and Spirituality Assessment Scale. In this paper, we have used a Likert scale ranging from 1 to 5 indicating strongly disagree (1 mark) Agree – 2 marks, and Neutral -3 marks, 4 – marks for Agree, and 5 – marks for Strongly agree. In the present paper, Fig.2 bar diagram shows the gender difference in assessing the Vairagya quantitatively. The females score more percentage (96%) than male members (76.67%) in agreeing with excellence, strongly agree (90%) than males (80%), Neutral more females (98%) than males (40%), Disagree females more (50%) than males (30%) and strongly disagree females (20%) less than males (40%). Samata's (2017) findings show the same trend in agreeing for taking up Excellence in action as a way of life. However, there is a need for further research in strictly taking up purely ascetic target groups and finding significance in Pandya, (2017). and others' work.

5. Conclusions

This research paper traces the origin of Excellence in action from the Upanishads

With the basis of 35 verses from Vedas, we developed and validated Excellence Scale – a 35-item scale. This paper carries out the 35-item scale development on Excellence which will be useful in understanding the Vairagya better. The present-day development of scale and its link to duty orientation activities such as gender issues, women empowerment, women welfare, and wellness could be related. It outlines the broader context of renunciation in South Asian religious traditions and then focuses on the Hindu concept of vairagya. Starting in the 1980s research on women's renunciation was published and began to disrupt conventional paradigms for understanding Hindu renunciation. Despite the increase in excellent work on the subject in the last two decades, this paper suggests that future research is needed to understand their contribution to excellence in duty orientation activities.

6. Funding

This research did not receive any grant from funding agencies - public, commercial, or not-for-profit sectors.

7. Conflict of interest:

Authors and coauthors-, declare that they have no conflict of interest.

References:

- [1] Dayananda. (2008). Yajurved Bhasha Bhashya. Shradhannanda Anusandhan Prakashan Kendra, Gurukul Kangri University.
- [2] DeVellis, R. F. (2012). *Chapter 6: Factor Analysis.Scale development: Theory and applications*
- [3] DeVellis, R. F. (2016). *Scale development: Theory and applications*(Vol. 26). Sage publications
- [4] Hamaya, M. (2018). The circle of gift giving: a case study of female 'lay ascetics' and holy feasts in Haridwar, North India. *Contemporary South Asia*, 26(1), 34-50.
- [5] Likert R. A technique for the measurement of attitudes. *Archives of psychology*. 1932.
- [6] Mishra, N. (2007). Nyaya Darshan. Chaukhamba, Sanskrit Bhavan, Varanashi.
- [7] Malhotra AK. An Introduction to Yoga Philosophy: an annotated translation of the Yoga Sutras. Routledge; 2017 Jul 31.
- [8] Pandya, S. P. (2017). Lifelong commitment to ascetic life and orders: Hindu women renunciants in India. *Cogent Social Sciences*, 3(1), 1293469.
- [9] Prakash, A. 2008). Samkhyadarshan. AarshVidya Prachar Nyas, Aliyabad, Shamirped, RangaRedy, Telangana
- [10] Satyapati (2006). Yoga Darshan. Darshan Yoga Maha Vidyala Aryavan Rojar Sabarkantha, Gujrat.
- [11] Satchidananda S. The Yoga Sutras of Patanjali: Translation and Commentary by Sri Swami Satchidananda.
- [12] Sankaracharya, A. (2000). Ishadinounpishad. Gita presses Gorakhpur.
- [13] Waltz CF, Strickland OL, Lenz ER, editors. Measurement in nursing and health research. Springer publishing company; 2010 Apr 17.
- [14] White DG. The Yoga Sutra of Patanjali: A Biography. Princeton University Press; 2014 May 25.

