

## Assessing the Psychometric Properties of Brief Primal Inventory (PI-18) in Indian Setting

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India is a land of cultural diversity with varied religious, cultural, and spiritual beliefs manifested through traditional customs and rituals. However, there is a lack of psychometrically sound instruments to assess global beliefs about the world. To bridge this gap, the present research aimed to study the Psychometric properties of the Brief Primal Inventory- PI-18, a measure focused on assessing the general beliefs about the world in the Indian setting. Primal World beliefs are the global judgments about the world that guide various personality and Wellbeing outcomes in individuals. A total sample of 645 participants responded to an online survey including the Brief Primal Inventory (PI-18), Scale of Positive and Negative Affect (SPANE), Satisfaction with Life Scale (SWLS), and Flourishing Scale in a bilingual format encompassing both English and Hindi. As a result, it was found that the original three-factor solutions did not get confirmed, and two possible solutions, namely, a four-factor (PI-12) and a single-factor structure (PI-9), were selected as being the most suitable models through exploratory factor analysis. The confirmatory factor analysis indicated acceptable fit indices for the single factor structure in the Hindi sample. The PI-12 and PI-9 versions appear to be reliable and valid measure, as indicated by Cronbach's alpha coefficients of 0.779 and 0.827, respectively. Both factor solutions exhibit significant positive correlations with the affect balance scores, whereas the four-factor solution demonstrates a significant negative correlation with the negative affect scores. However, the magnitude of the correlations was low to moderate..

**Keywords:** Primal World Belief, Wellbeing, Flourishing, Life Satisfaction, Positive affect, Negative affect

Our beliefs serve as the lens through which we perceive and interpret the world around us. These beliefs are often ingrained in cultural, social, and personal backgrounds, and act as cognitive filters that shape our understanding of reality. Primal World beliefs form comprehensive global evaluations of the world, shaping a wide range of aspects related to human personality and well-being outcomes.

Primal World beliefs are defined as “simple, adjectival, goal-relevant beliefs about the general character of the world as a whole, such as the world is an abundant place, or the world is dangerous.” (Ruch et al., 2022, p.385). Primals, in its essence offer descriptions about the world as it appears presently without delving into the origins or causation of its state.

Clifton et al. (2019) conceptualize the world as an enduring place where individuals are constantly situated within. According to their perspective, global judgments about the world significantly influence and direct individuals' actions, shaping behaviors that eventually solidify into enduring and trait-like characteristics of an individual. This suggests that a single, all-encompassing place that can be meaningfully characterized, and humans appear to be constantly within its bounds without ever leaving it, is regarded as ‘the World.’

The existing literature in Psychology has extensively investigated specific types of beliefs. For instance, research has focused on ‘Self Efficacy Belief’ (Bandura, 1978),

'Religious Beliefs' (Macavei & Miclea, 2008), and the 'Cognitive Triad of Negative core beliefs' (Beck, 1976). While these studies predominantly examined beliefs at an individual level, comparatively recent work by Clifton et al. (2019) underscores the significance of context-specific environmental beliefs that contribute to the broader conceptualization of the world's nature, such as whether it is perceived as fascinating, dull and so on.

While certain world beliefs have received prolonged scholarly attention such as the "belief in a just world" (Lerner, 1980), Clifton et al. (2019) endeavored to construct a comprehensive, structured framework to capture the general beliefs that individuals hold about the world as a whole, aiming to map and categorize these overarching beliefs, thus broadening the scope beyond the previously extensively studied specific beliefs. The Primals are described as bipolar dimensions, falling along a spectrum of conceptual attributes anchored by opposites such as 'Interesting' and 'Boring.'

Ludwig et al. (2022) investigated the influence of the global COVID-19 pandemic on an individual's fundamental beliefs regarding the world in order to discern any changes or adaptations in these general beliefs due to the unprecedented circumstances brought about by the pandemic. Despite the expectation that a global threat might prompt negative changes in beliefs regarding the world, the study revealed that Primal world beliefs remained consistent and stable, akin to enduring traits. This suggests that these beliefs might serve as predictors of diverse personality dimensions and could be used to generate insights while designing interventions to alter personality or well-being outcomes in general. On a similar line, Stahlmann and Ruch (2022) investigated the relationship between various character strengths and Primal Beliefs. Their research revealed a positive correlation between the belief in a good world and several character strengths such as spirituality, curiosity, zest, hope, and gratitude.

Meehan et al. (2022) unveiled the mediating role of the primal belief 'Safe' and 'Enticing in

the relationship between Dark personality traits (e.g., antagonistic narcissism, antagonistic Machiavellianism, psychopathic disinhibition) and beliefs aligned with anti-natalism.

### ***Primal Beliefs and Health***

Within the realms of Health Psychology, Clifton and Kim (2020) hypothesized that scoring low on certain primals may heighten stress reactivity, impacting gene expression associated with inflammatory responses, chronic disorders, and health behavior adaptability. In a similar vein, Agrawal and Dalal (1993) compared the effect of different beliefs about the world on the recovery of Myocardial Infarction (MI) patients in India. The research findings reveal a positive correlation between world beliefs and recovery beliefs in relation to recuperation from myocardial infarction (MI) across various time points. It could be implied that an individual's core primal, such as the world is 'worth exploring,' could potentially forecast or influence their optimism about treatment outcomes and their journey toward recovery.

### ***Association between Primal Beliefs and Experiences***

Clifton (2020) attempted to investigate the influence of experience on Primals and vice versa. Two explanatory frameworks were offered in an effort to establish the link between "Primals" and "Experiences." The central contention of these frameworks revolves around whether Primals are shaped by individuals' experiences or if they primarily influence the way individuals perceive their experiences. These frameworks categorically fall into two distinct types of explanations—namely, "retrospective theories" and "interpretive theories". According to Retrospective theories, human experiences significantly shape the formation of primal, essentially mirroring the content of an individual's personal background (Clifton, 2020). This notion corresponds to Janoff-Bulman (1992) "Shattered Assumption Theory," which posits that trauma disrupts established assumptions about the world. This disruption undermines fundamental beliefs that had previously guided planning action perception and expectation (Janoff-Bulman,

2014). In contrast, interpretive theories posit that “primal” functions as a cognitive lens through which experiences are interpreted, remaining largely unaffected by those experiences. Clifton (2020) hypothesized that “interpretive theories” provide a more robust explanatory framework compared to “retrospective theories,” despite moderate exceptions, notably observed in cases of chronic pain and past trauma, particularly linked to childhood experiences.

### **Primal Beliefs and Wellbeing**

Clifton (2020) highlights the relevance of the ‘Primal World belief’ in Wellbeing studies and interventions like the “three good things” exercise. He laid ten hypotheses recommended for further empirical testing, five delving into primal’s impact on Wellbeing outcomes, namely engagement, meaning, life satisfaction, positive emotions, and overall wellbeing, and five on personality traits such as hope, gratitude, curiosity, interpersonal trust, and overall Wellbeing. Investigating these empirically could open new paths for Positive Psychological Interventions, tailoring them to specific contexts for enhanced effectiveness in addressing psychological outcomes.

### **Assessment Measures**

The Primals Inventory-99 (PI-99) comprehensively assesses all 26 primals identified by Clifton et al. (2019) in their seminal study. Within this inventory, 96 items specifically delineate 22 tertiary primals, typically comprised of 4 to 5 items per scale. Among these, 69 items alongside two additional items collectively constitute the measurement of the three secondary primals: ‘Safe’ (29 items), ‘Enticing’ (28 items), and ‘Alive’ (14 items). Utilizing a six-point rating scale (ranging from 0 for strongly disagree to 5 for strongly agree), the inventory showcases robust internal reliability, with subscales demonstrating high consistency, registering between 0.89 and 0.97. This level of reliability signifies a strong and consistent measurement of these distinct primals and their hierarchies within the inventory.

The Brief Primal Inventory (PI-18) evaluates the three secondary Primals, commonly referred

to as the ‘Big Three’—Enticing, Safe, and Alive—alongside an encompassing primal construct termed ‘good.’ Clifton and Yaden (2021) reported satisfactory reliability across all subscales, ranging between 0.78 and 0.81. This signifies a consistent level of reliability in measuring these specific secondary Primals and the overarching primal concept.

Another brief inventory developed by Clifton and Yaden (2021) is PI-6 which assesses the overarching Primal ‘Good’ and accounts for a substantial portion of variance in primal beliefs, approximately one-third. It is notably the most strongly associated Primal with outcomes of significance to individuals, such as wellbeing, depression, and life satisfaction. The reported measure of internal consistency reliability stands at 0.86, indicating a high level of reliability in its assessment.

### **Relevance of Studying Primal Beliefs in the Indian Context**

India is renowned for its cultural diversity and ancient ethnic traditions which manifests its beliefs through religious practices, values, and customs. The assessment of PI-18 in India provides an opportunity to deepen our understanding of ‘Primal World Beliefs.’ Recent efforts, like the German Adaptation of PI-99 by Stahlmann et al. (2020), validated the hierarchical framework and introduced the ‘PI-66-G,’ confirming the existing model and uncovering new secondary Primals. However, exploring PI-18 in a different cultural context is crucial to gauge variations from the German Adaptation, shedding light on potential differences between the two cultural settings.

Based on the existing literature and the unique influence of Primal Beliefs on various life outcomes, the current study seeks to explore the psychometric properties of the Brief Primal Inventory and its correlation with validating scales such as SWLS (Satisfaction with Life Scale) the Flourishing Scale and the SPANE (Scale of Positive and Negative Experience).

### Method

Permission to replicate the scale was sought from the original author. Following this, a data collection booklet containing Informed consent, demographic sheets, and the four scales was prepared to be circulated through an online google survey form. Given the diverse linguistic landscape, the data collection booklet was prepared in both Hindi and English to cater to a broader segment of the population.

### Participants

The study cohort comprised 645 participants aged 18 years and above. Out of the total, 47.13% preferred to respond to the data collection booklet in English, while 52.87% of participants responded to the questionnaire booklet in Hindi. As an initial step, the sample was segregated into two distinct segments based on language preferences, resulting in two independent samples having mutually exclusive participants. Following this, data from 38 participants in the English dataset and 69 participants in the Hindi dataset were excluded. This exclusion was based on an attention check item that required participants to mark 'Slightly Disagree' regarding item 16.

### Sample-1

Following the exclusion of data points based on the attention check item, Sample 1 encompassed 266 participants, aged between 18 and 63 years ( $M = 27.37$ ,  $SD = 6.86$ ), who completed the questionnaire in English. Within this sample, 67.66% identified as female and 30.82% as male with the rest opting not to disclose their gender. Educationally, 71.42% held postgraduate degrees or higher, 22.93% were graduates, 4.13% had completed high school, while the remaining participants had education levels spanning matriculation and primary schooling. Concerning family income, 68.79% reported it as fully sufficient, 24.43% as partially sufficient, 5.64% as insufficient, and remaining participants chose as having no family income. Marital status varied, with 79.23% being single, 17.67% married, 1.50% divorced, and the

remainder being widowed or having other marital statuses. Religious affiliations were diverse, with 81.20% adhering to Hinduism, 7.51% to Islam, and the remaining percentage associated with Christianity, Sikhism, Jainism, Buddhism, and other faiths.

### Sample-2

Sample 2 consisted of 272 participants who completed the survey in Hindi, exhibiting a varied demographic composition. This cohort comprised 39.33% males, 59.92% females, and the remaining chose not to disclose their gender, spanning ages from 18 to 67 years ( $mean = 24.03$ ,  $SD = 9.82$ ). Regarding family income distribution, 53.67% considered it fully sufficient, 31.95% partially sufficient, 10.29% insufficient, and the remaining reported having no family income. Educational attainment displayed diversity, with 12.86% holding postgraduate degrees or higher, 47.79% being graduates, 28.3% completing high school, and the remaining participants reported having primary education, matriculation, or other educational levels. In terms of marital status, 80.88% were single, 18.01% were married, 0.73% were divorced, and the rest indicated alternative marital statuses. Religious affiliations exhibited diversity, with approximately 87.5% adhering to Hinduism and 2.94% to Islam while remaining participants identified as Christian, Jain, Sikh, or other faiths, illustrating the multifaceted religious landscape within the sample.

### Measures

*Short Primal Inventory (PI-18; Clifton and Yaden, 2021)*: It is a multidimensional scale that comprises 18 items that measure secondary Primals, namely, ('Enticing', 'Safe', and 'Alive') and the pooled item score contributes to the measure of Primary Primal (Good). It uses a six-point Likert response format (0 = strongly disagree to 5 = strongly agree) with seven reverse-coded items. Additionally, the scale has an attention check item (item-16) that requires participants to mark 'Slightly Disagree'. If participants fail to adhere, their data shall be excluded. The internal consistency reliability for all the subscales ranged from 0.83-0.88

(Clifton & Yaden, 2021). The questionnaire was translated into Hindi following the standard forward and back translation method (Beaton et al., 2000).

**Satisfaction with Life Scale (SWLS; Diener et al., 1985):** The Satisfaction with Life Scale (SWLS) comprises five items that evaluate an individual's overall cognitive judgment of life satisfaction using a 7-point Likert scale, ranging from 7- "strongly agree" to 1- "strongly disagree." Pavot et al. (1991) reported a coefficient alpha of 0.85 for the original scale. In the Indian context, Singh et al. (2021) validated the scale, specifically for the Hindi version, yielding an alpha coefficient of 0.82. This validation confirms the scale's reliability in evaluating life satisfaction among the Indian population.

**Scale of Positive and Negative Experience (SPANE; Diener et al., 2010):** The Scale of Positive and Negative Experience (SPANE) is a brief twelve-item instrument designed to assess both positive (six items) and negative (six items) feelings, denoted as SPANE-P and SPANE-N, respectively, based on their frequency of occurrence in the past month. The resulting combinations of these evaluations yield an affect balance score (SPANE-B), recognized as a critical determinant of overall Wellbeing. In an Indian context, the psychometric properties of this scale demonstrated strong internal consistency reliability, with Cronbach's  $\alpha$  coefficients ranging between 0.80 and 0.95 (Singh et al., 2016). Additionally, for the Hindi version, Mishra and Dixit (2017) reported Cronbach's alpha values of 0.73 for SPANE-P, 0.77 for SPANE-N, and 0.77 for SPANE-B, affirming the reliability of the scale in assessing emotional experiences among Hindi-speaking populations.

**The Flourishing Scale (Diener et al., 2010):** The flourishing scale comprises eight items that generate composite scores reflecting an individual's self-esteem, purpose, perceived functioning, and optimism. This scale offers a single score for the overall psychological Wellbeing, utilizing a 7-point Likert response format. The original scale exhibited an internal

consistency reliability of 0.86. However, in the Indian validation study conducted by Singh et al. (2016), Cronbach's alpha values varied between 0.80 and 0.77, indicating robust internal consistency when assessing wellbeing, specifically in the Indian context. The Cronbach alpha for the Hindi version of the scale was found to be 0.75 (Srivastava et al., 2020).

### **Procedure**

The data was majorly collected through online mode via google form. The form comprised the consent form, demographic details (age, gender, education qualification, family income level, marital status, and religion), and the aforementioned scales. All the participants provided Informed consent before filling out the questionnaires. Except for the Short Primal Inventory (PI-18), which followed Beaton et al.'s (2000) standard guidelines for forward and backward translation, all selected scales were available in both English and Hindi languages. The participants were able to choose the preferred language, namely, Hindi and English. Some of the participants who expressed a preference for the Hindi language encountered discomfort during the data collection process. Consequently, a subset of data points (n=35) was gathered using an offline mode to accommodate their needs and enhance their convenience.

### **Ethical Standards**

The research conducted adhered to the principles outlined in the 1964 Declaration of Helsinki and its subsequent revisions, ensuring alignment with established ethical guidelines and standards.

### **Data Analysis**

To evaluate the psychometric characteristics of PI-18 within the Indian context, a series of analytical procedures, including item analysis, exploratory factor analysis (EFA), and confirmatory factor analysis (CFA), were systematically performed. The resulting structures derived from these analyses were subsequently cross-examined with established validating scales. The software used was SPSS version 20 for item analysis and EFA, while Amos was used for Confirmatory Factor Analysis.

### Results

In order to revalidate the scale, both the English and Hindi datasets underwent confirmatory factor analysis to confirm the original factor structure of PI-18. However, the model did not demonstrate an acceptable fit. Subsequent to this, an item analysis and exploratory factor analysis (EFA) were executed on the English Dataset (n=266), leading to the identification of two prospective factor structures: a four-factor and a single-factor structure. These selected models were subjected to comprehensive psychometric assessment, including item analysis, to evaluate their psychometric properties further.

#### **Item Analysis and Exploratory Factor Analysis**

The item analysis within the English dataset (n=266) revealed item means ranging from 2.42 to 4.05 (SD= 0.84 to 1.40), except for one item (Item-11) with a lower mean (1.65), which was deleted. The observed skewness values

ranged from -1.515 to 0.576, while values for kurtosis spanned between -0.965 and 2.972. The observed values conformed to the established norms for distribution characteristics, aligning with the guidelines proposed by Curran et al. (1996). These guidelines recommend values below 2.0 for skewness and below 7.0 for kurtosis as optimal indicators. However, an additional item was removed (Item 5) due to a low corrected item-total correlation (-0.021), falling below 0.2, as suggested by Field (2005). The remaining 16 items have corrected item-total correlation ranging between 0.291 and 0.598.

The Bartlett's test of Sphericity yielded a statistically significant result ( $p < 0.001$ ). Moreover, the Kaiser-Meyer-Olkin (KMO) value was 0.828, which surpassed the threshold of 0.60, as outlined by Kaiser (1974), signifying adequate sampling adequacy for conducting factor analysis. Following this, the English dataset underwent exploratory factor analysis utilizing Principal Component Analysis. Through an exploration of multiple factor structures

**Table 1. Final Items of the PI-12 factor structure**

Items	Enticing	Alive	Safe	Vitality
1. The World is an abundant place with tons and tons to offer. (Item-7)		.789		
2. No matter where we are or what the topic might be, the world is fascinating. (Item-8)		.814		
3. No matter where we are, incredible beauty is always around us. (Item-18)		.736		
4. It often feels like events are happening in order to help me in some way. (Item-2)	.755			
5. What happens in the world is meant to happen. (Item- 4)	.823			
6. Everything happens for a reason and on purpose. (Item-16)	.830			
7. I tend to see the world as pretty safe. (Item-3)			.831	
8. On the whole, the world is a dangerous place. (Item-10)			.756	
9. Most things and situations are harmless and totally safe. (Item-17)			.766	
10. Most things in life are kind of boring. (Item-6)				.826
11. The world is a somewhat dull place where plenty of things are not that interesting. (Item-9)				.775
12. Most things have a habit of getting worse. (Item-13)				.651
Percentage of variance	30.71	14.006	10.681	9.965
Eigen Value	3.695	1.681	1.282	1.196
Alpha reliability	.705	.735	.703	.650

employing Promax rotation, two specific Factor Solutions emerged and were ultimately chosen.

#### **A Four-Factor Solution**

Exploratory Factor Analysis was performed on the remaining 16 items using principal component analysis and Promax rotation. This process extracted four factors with Eigen values greater than one and factor loading above 0.50. Initially, three items (Items 12, 14, and 15) were omitted in the first iteration due to high cross-loading (0.50 and above). Following this, an extra item (Item-1) was excluded as it did not exhibit loading on any factor in the subsequent round.

The resulting scale, comprising 12 items, demonstrated factor loadings ranging from 0.651 to 0.831, detailed in Table 1. Notably, this novel four-factor structure diverged from the established three-factor structure of the PI-18 (Clifton & Yaden, 2019) by dividing the components associated with the 'Enticing' primal into two distinct factors. Additionally, an extra item initially linked to the 'Safe Primal' is now loaded alongside this newly formed factor. This deviation effectively restructured the items within the 'Enticing' category, leading to a significant reconfiguration of the original factor structure. The four-factor solution explained 65.44% of the total variance, exhibiting a reliability of 0.779 alpha for the entire scale.

Item analysis of the twelve items revealed values in the acceptable range. For instance,

the mean values range from 2.657 to 4.052 (SD=0.844 to 1.309), with skewness ranging between -1.515 and -0.206 and kurtosis between -0.758 and 2.972. Furthermore, the corrected item-total correlation fell within the acceptable range of 0.240 to 0.540 (Field, 2005). Overall, the obtained measure comprises four factors, namely enticing, alive, safe, and an additional new factor, having three items each.

Next, the four-factor solution was subjected to confirmatory factor analysis on the Hindi dataset. However, the model did not demonstrate an acceptable fit.

The resultant delineation of four factors effectively captures the fundamental construct. Among these factors, three factors precisely correspond to the initial factor structure namely, 'Enticing,' 'Safe,' and 'Alive'. (Clifton et al., 2019). An additional factor emerged that comprised items from both the 'Enticing' and 'Safe' primal factors. This emergent factor is denoted as 'Vitality' due to its closest approximation to the shared essence within the three items that characterize the world as low perceived level of 'Boring,' 'dull,' and prone to worsening circumstances.

#### **A Unifactor Solution**

Since the four-factor model was not confirmed on the Hindi dataset, a different model was explored by constraining the factor count to one, aiming to distill the comprehensive category of the primal beliefs. To achieve this, the English dataset with sixteen items underwent

**Table 2. Item analysis of Finally selected items (PI-12)**

Items	Mean	SD	Corrected Item Total Correlation	Cronbach's Alpha if Item Deleted
1. The World is an abundant place with tons and tons to offer.	4.052	1.038	.479	.758
2. No matter where we are or what the topic might be, the world is fascinating.	4.033	0.844	.378	.768
3. No matter where we are, incredible beauty is always around us.	3.921	0.942	.540	.754
4. It often feels like events are happening in order to help me in some way.	3.785	1.114	.501	.755
5. What happens in the world is meant to happen.	3.593	1.309	.357	.771

**Table 3. Factor loadings and Item Analysis of the finally selected items of the Unifactor structure items ranging between 0.542 and 0.765.**

Items	Factor Loadings	Mean	SD	Corrected Item-total Correlation	Cronbach's Alpha if Item Deleted
1. In Life, there's way more beauty than ugliness.	.542	3.902	1.138	.423	.821
2. The World is an abundant place with tons and tons to offer	.602	4.052	1.038	.481	.815
3. No matter where we are, incredible beauty is always around us.	.676	3.922	.942	.557	.808
4. It often feels like events are happening in order to help me in some way.	.679	3.785	1.114	.564	.805
5. The Universe needs me for something important.	.701	3.379	1.391	.572	.805
6. Everything happens for a reason and on purpose.	.692	3.872	1.149	.580	.803
7. I tend to see the world as pretty safe.	.558	2.763	1.244	.449	.819
8. Most things in the world are good.	.765	3.624	1.096	.660	.795
9. Most things and situations are harmless and totally safe.	.634	2.657	1.204	.523	.810

exploratory factor analysis (EFA) utilizing Principal Component Analysis and Promax rotation, limiting the factors to one. In the first iteration, five items were removed as they did not exhibit loading on any factor (Items 6, 8, 9, 4, 12). Subsequently, in the second round, another item was eliminated for the same reason (Item-13). Consequently, a finalized ten-item single-factor structure emerged, demonstrating factor loadings with acceptable psychometric characteristics.

The resultant ten-item structure was subjected to confirmatory factor analysis using the Hindi Dataset. Following the removal of one item (Item-10) due to low regression weights, the model showed a good fit (Table 4).

The nine-item structure demonstrated better-fit indices, which prompted a reassessment of the exploratory factor analysis, unveiling factor load

A subsequent item analysis unveiled mean scores ranging from 2.66 to 4.05 (SD= 0.942

**Table 4. The Results of Confirmatory Factor Analysis on Unifactor Structure (PI-18) on Hindi dataset**

Measures of goodness of fit	Acceptable Value	Obtained Value
$\chi^2/df$	<5 (Garver & Mentzer, 1999)	2.049
RMSEA	<.10 (MacCallum et al., 1996)	.062
SRMR	<.08 (Hu & Bentler, 1999)	.067
CFI	>.90 (Hu & Bentler, 1998)	.915
GFI	>.90 (Tabachnick & Fidell, 2007)	.958

RMSEA root-mean-squared error of approximation, SRMR standardized root-mean-square residual, GFI goodness-of-fit index, CFI comparative fit index;  $\chi^2/df$  ratio of Chi-square to degrees of freedom.

**Table 5. Correlation matrix of the Factor Solutions (PI-12 and PI-9 For English dataset) with validating Scales**

	F1	F2	F3	F4	PI-12	PI-9	SWLS	SPANE -P	SPANE -N	SPANE -B	Flourishing
F1	1										
F2	.389**	1									
F3	.359**	.362**	1								
F4	.314**	.154*	.225**	1							
PI-12	.708**	.701**	.724**	.620**	1						
PI-9	.703**	.721**	.708**	.248**	.859**	1					
SWLS	.072	.026	.072	.076	.088	.038	1				
SPANE -P	.189**	.015	.074	.070	.118	.090	.481**	1			
SPANE -N	-.131*	-.066	-.134*	-.046	-.135*	-.127*	-.328**	-.279**	1		
SPANE -B	.202**	.049	.128*	.073	.157*	.135*	.510**	.821**	-.778**	1	
Flourishing	.037	.012	-.011	.002	.012	.002	.397**	.414**	-.345**	.477**	1

Note. F1-F4 Factor of PI; PI-12 -total of the PI scale and PI-9 unifactor of PI; SWLS- Satisfaction with Life Scale; SPANE-P Positive Feelings; SPANE-N- Negative Feelings; SPANE-B- Affect balance.

\*\*Correlation is significant at 0.05 level (Two-tailed)

\*Correlation is significant at 0.01 level (Two-tailed)

to 1.392), skewness between -1.515 to -.206, kurtosis spanning from -.672 to 2.927, and corrected item-total correlations ranging from 0.423 to 0.660 with alpha reliability as 0.827. This unifactor structure accounted for 42.708% of the variance and Eigen value 3.844.

### **Reliability and Validity**

The Cronbach's alpha for the four-factor solution was found to be 0.779, while the reliability values for each individual factor ranged from .650 to .735. In both the English and Hindi versions, the unifactor structure displayed Cronbach's alpha values of 0.827 and 0.728, respectively, indicating reliability in the acceptable range.

### **Correlation with the Validating Scales**

Regarding the correlation with the validating scales, Table 5 illustrates the relationships among four-factor factors PI-12, unifactor structures (PI-9) and validating scales.

The analysis revealed that there is no noticeable correlation between primal world beliefs and well-being factors like life satisfaction and flourishing. However, SPANE exhibited a moderate level of correlation with overall

scores in the English dataset (see table no. 5). Additionally, the research shows a lack of significant correlation between the unifactor structure (PI-9) and key well-being indicators such as life satisfaction, positive and negative experiences, and flourishing in Hindi data set. These results underscore the importance of considering cultural and linguistic variations when exploring the interplay between primal world beliefs and well-being indicators.

### **Discussion**

The primary objective of this study was to explore the psychometric attributes of the Brief Primal Inventory (PI-18) within the Indian context. Furthermore, the research aimed to study the relationship between Primal World beliefs and various indicators of well-being, including Life satisfaction, flourishing, positive and negative experiences. According to the Census of India (2011), 43.63% comprise Hindi speaking population therefore, the data collection was obtained in both English and Hindi.

To the best of our knowledge, the current study marks the first attempt to examine the

factorial validity and psychometric properties of PI-18 in the Indian Context. The Original PI-18 scale developed in the Western setting assesses the three core primals known as the 'Big Three': 'Safe,' 'Enticing,' and 'Alive. The pooled items form the Primary Primal 'Good,' representing an overall measure reflecting these fundamental aspects of human experience.

The present study failed to confirm the original three-factor structure comprising eighteen items resulting in the proposal of a revised factor structure that notably diverges from the original scale framework.

Through exploratory factor analysis, two possible factor solutions emerged that reduced the number of items from the original scale. For instance, the four-factor structure bifurcated the 'Enticing' primal into two distinct factors, resulting in four factors, each containing three items. The items clustered onto the fourth factor depicting the world as 'Dull,' 'Boring,' and 'Worthless', might not exclusively signify an 'enticing' belief. These descriptors potentially diverge from the core essence of an 'enticing' perspective, questioning the uniqueness of this representation within that factor. Moreover, the items concerning a "dull" or "boring" world seem to encapsulate multiple facets or dimensions of belief, warranting their division into distinct factors to more accurately capture the intricate nuances of participants' perspectives. Additionally, numerous studies have emphasized how cultural orientation affects the understanding of different aspects, such as attributional bias and reward allocation (Al-Zahrani & Kaplowitz, 1993; Kim et al., 1990). This suggests that culture significantly influences how individuals perceive and interpret various concepts. In the context of this study, it could be contended that cultural differences might play a crucial role in shaping distinct interpretations of the notion of 'Enticing' among diverse cultural backgrounds. The cultural lenses through which individuals perceive their surroundings and experiences may contribute to variations in the understanding and significance attributed to the concept of 'Enticing.' Unfortunately, the model did not converge on the Hindi dataset, warranting further confirmatory studies on a

larger sample to accept or reject this model in the Indian setting. However, the findings of this study provide preliminary evidence of the psychometric properties, demonstrating acceptability.

The emergence of a nine-item unifactor structure demonstrating an acceptable fit among the Hindi-speaking participants underscores a noteworthy finding. The convergence of nine items from the initial pool of eighteen items under a single factor, evenly representing each of the three secondary primals, highlights a unifying dimension transcending the individual secondary primals. This parallels Clifton and Yaden's (2021) study, which developed a six-item unifactor structure focusing on the Primal 'Good'. Together, these findings affirm the existence of an overarching dimension that underlies and links all the Primals, suggesting a fundamental commonality within these diverse constructs.

The research lends partial support in establishing a relationship between Primal World Beliefs and well-being indicators as measured through the SPANE, life satisfaction, and the flourishing scale. This deviation in correlation may indeed stem from substantial conceptual differences between the construct captured by the primal world beliefs and the essence encapsulated by the validating scales. Consequently, it becomes essential to delve deeper into the conceptual framework, considering potential cultural variations and contextual intricacies that might impact the perception and manifestation of primal world beliefs.

However, to gain deeper insights into this construct's nature and its associations with diverse wellbeing outcomes, an advanced methodology beyond mere correlational exploration is imperative. Employing robust methodologies can unveil context-specific beliefs linked to distinct wellbeing outcomes, offering a more comprehensive understanding of their interrelationships. This approach allows for a nuanced exploration, providing deeper insights into the intricate dynamics between beliefs and various aspects of wellbeing.

Primal World Beliefs is a novel construct within the realms of Positive Psychology that explores how the overarching perceptions of the world influence mental health, general wellness, and various life achievements or experiences. These dimensions encompass various emotional and psychological states, providing insight into individuals' perceptions and experiences regarding feelings of safety, allure, and vitality.

Given that the construct holds significant potential to reshape the landscape of Positive Psychology by delineating an overall belief about the world that could possibly underlie both pathology and wellbeing, it still remains in a nascent phase. The findings from this study reveal a notable departure from the Western inventory, suggesting the need for further investigations into the factors contributing to this divergence. Future research endeavors should prioritize conducting confirmatory studies of the proposed models in various settings encompassing diverse cultural contexts. Utilizing larger sample sizes in these studies would enhance the robustness and generalizability of the findings. Exploring how cultural, societal, and individual factors influence the perception and conceptualization of these primal beliefs across different populations could provide valuable insights into understanding and refining this construct within the broader spectrum of Positive Psychology.

### Conclusion

The current study represents an initial exploration into the concept of 'Primal World Belief' within the Indian context. The single-factor structure demonstrated adequate goodness-of-fit measures in both languages, suggesting its potential as a promising instrument for evaluating global beliefs about the world within the Indian context. While prior research has delved into this construct concerning various life outcomes like depression and personality, the study uniquely contributes by establishing a distinct association between Primal World Belief and Affect Balance. Future investigations should employ more robust methodologies to further explore this association.

A major limitation of our study lies in the use of convenience sampling. Additionally, the questionnaire's language posed a conceptual deviation upon translation. Subsequent research endeavors should focus on simplifying the language and ensuring smoother translations.

Despite these limitations, our study offers a tool for assessing general world beliefs for bilingual use. This tool holds potential in Clinical and wellbeing research, serving as a screening instrument to tailor interventions according to individual beliefs. It could significantly contribute in designing targeted interventions aimed at enhancing overall wellbeing.

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