Bhakti Yoga Model: An ideal combination of Ability and Trait Emotional behaviors and its psychometric analysis

1Kirti Maurya, 2Sadhna Dadhore
1Ph.D. Scholar, University of Patanjali, Haridwar, India.
2Ph.D. Scholar, University of Patanjali, Haridwar, India.

Corresponding author
Kirti Maurya

Abstract
Bhakti Yoga is an ideal combination of Emotional Intelligence’s (EI) ability and trait emotional behaviors. In English, the word ‘Bhakti’ may be roughly translated as Emotional Excellence. The aim of the paper is to explain the Bhakti with a right combination of EI components like emotional attitudes. The questionnaire comprises EI’s sub scale components - emotional attitude, its right mix of EI components etc. with 33 items. A sample size of 301 adults is selected for the studies. Its validity and reliability scales are tested using the psychometric analysis. The validation uses conceptual, facial, content validity index, internal reliability and exploratory factor analysis methods. Cronbach’s alpha is found to be 0.75 for the Bhakti and 0.77 to 0.88 for its sub-scales. The items on the Bhakti yoga questionnaire revealed factor loading of ≥ 0.5. The results may be related to Goldberg’s Big Five model.

Keywords: Bhakti yoga, Emotional Intelligence, Validity, Reliability

1. Introduction:

In this paper, the concept of Bhakti Yoga is explained by using the right combination of Emotional Intelligence (EI) components ability and trait behavioral models. Carl Jung identified ‘feeling’ is one of the most important aspects of personality behavior (Jung C. G, 1971). In Himalayas of India, saints practice the feeling aspects of the mind to the extreme levels of behavior. Intelligence (Coleman Andrew M, 2008)
is related to thinking while the excellence is related to perfect feelings observed in day to day behavior. The
authors (Mayer & et al., 2016) cover not only the emotional intelligence but also personal and social
intelligence. While emotions are same in both cases, the bhalti is capability of individuals to feel their own
and emotions of others to have perfect harmony between different feelings and adjust emotions to adapt to
environments or achieve one’s perfect goal. One of the Big five factors of (Goldberg, 2006) is related to
openness to experience which has different types of emotional connotations;

- Complex Emotional Experiences
- Original Emotional Experiences
- Daring Emotional Experience
- Creative (Emotional Experience

An individual who is low in openness to experience probably prefers routinely use thinking over emotions.
He or she sticks to logic what they know, and prefers less abstract arts and entertainment. An individual
who is high in openness to experience is likely someone who has emotional attitude to enjoy the arts,
engages in a career or hobby, and likes meeting new people (Lebowitz, 2017). Further, research linked
openness to experience to broad intellectual skills and intelligence, and may tend to increase with age
(Schretlen et al, 2010; Berkis Faltas, 2017). This indicates that openness to experience leads to gains in
knowledge and skills, and naturally increases as a person ages and has more experiences to learn. Emotional
Intelligence is increasingly being recognized as an important aspect to people from all walks of life
(Wachtel, 1983) and advocates EI as an alternative to economic growth which is socially more responsible,
ethical and satisfying than the present individualistic and materialistic patterns. Some of Emotional
Intelligence (EI) components are like well-being and sociability factors show a significant positive
correlation with proactive networking behavior (Coronas & Blasco, 2016). Given the influence and impact
that emotional likes and dislikes have on a wide range of behaviors, it is vital to have assessment /
measurements of our preferences for bringing emotional excellence. Potential personality traits as
predictors of personal growth have received less attention. Studies have found that dispositional traits self
esteem (Richard & Fex, 1991), self acceptance (Lyndsey, 1978), self efficacy (Tripp, 2000) influence a person’s ability to actualize true potential. Despite various scales on emotions of self being available, there are gaps in having the constructs exclusively on greed and power which are expression of likes and dislikes experienced in daily life situations. Variation in content, format and potential confounders call into question whether individual scales are measuring the same theoretical construct. Therefore, to fully appreciate the predictive and explanatory potential of emotional feelings, rigorous analysis of the structure and psychometrics of a new scale is warranted. The combined concept of emotional abilities and traits not only has openness linkage to knowledge but also to skills which will correlate with creativity, originality, and tendency to explore inner selves with a therapist or psychiatrist, and negatively related to conservative political attitudes (Soldz & Vaillant, 1999). Openness to experience was found to correlate with many traits and ability over time, it was also found to be extremely stable over time - one study explored trait and ability stability over 45 years (Soldz & Vaillant, 1999), and found a relatively strong and significant correlation between the two times of measurement! Concerning the other Big Five Factors, openness to experience is weakly related to neuroticism and extroversion, and is mostly unrelated to agreeableness and conscientiousness (Ones, Viswesvaran, & Resis, 1996). Openness to experience is perhaps the trait that is least likely to change over time, and perhaps most likely will help individual grow. Those high in openness to experience should capitalize on their advantage and explore the world, their selves, and their passions. These individuals make strong and creative leaders, and are the ones most likely to come up with the next big innovation.

This factor of openness to experience has made us to explore the emotional aspects of the mind which led us to formulate the concept of BY. The subscales like Emotional likes and dislikes which shapes Bhakti model is a process of neutralizing likes and dislikes is elaborately dealt and expounded in Gita Home Study by (Swami Dayananda Saraswati, 2011). The components of Emotional Excellence are given by in emotional action, right combination of mind and emotional likes and dislikes.

2. Conceptualization of the Bhakti model:
The idea of conceptualizing the Bhakti model is taken from the philosophical text Bhagavat Gita (Jayadayal Goyandka, 2009)

“yasmān nodvijate loko lokān nodvijate cha yaḥ

harṣāmarṣa-bhayodvegair mukto yah sa cha me priyah.”

The Sanskrit terminology meanings are- Yasmat- by whom; na-not; udvijate- are agitated; lokah- people; lokat- from people; na- not; udvijate- are disturbed; cha- and; yah- who; harsha- pleasure; amarsha- pain; bhaya- fear; udvegaih- anxiety; muktah- freed; yah- who; sah- they; cha- and; me- to me; priyah-very dear. (Prabhupada S., 2018).

Roughly, it may be translated as; “he who is not a source of annoyance to his fellow-creatures, and who in turn does not feel vexed with his fellow-creatures, and who is free from delight and envy, perturbation and fear, is one with me”. Out of 18 chapters, 700 verses and 33 items were shortlisted for our studies. Major attitude dimensions which influence emotional excellence in terms of variables relevant to pursuits which everyone involve using money and power were considered to know one’s likes and dislikes orientation, ability to use their EI and their effect in terms of feelings it generates. Greed for money and power is one of the variables chosen for listing the items under each scale as the other variables like ability and traits have subjective connotations. Pool of items under each sub scale namely Emotional Intelligence’s right mix of ability and traits behavior and emotional likes and dislikes were listed in consultation with practitioners in this field of study. One’s pursuit of pleasure is dictated by emotional feelings with outcome of likes and dislikes at times ignoring the set of standards by which human society runs. These standards are common sense rules which ensure that everyone gets their due and no one is unduly at the receiving end building on the principle of mutuality. No one can escape from feelings when one encounters the world but the challenge is to subordinate their feelings in pursuing their duties. When emotions dictate your actions violating the standards it will lead to self- destruction, if it is dictated by emotional intelligence based on standards it leads to emotional excellence. Moreover, most researchers agree that emotions are tightly linked to preferences and get expressed only when valence objects are involved (Lazarus, 1991; and Sherer,
1993). Despite right pursuits, success or failure is not only in one’s hands, but in multiple factors which calls for right attitude in management of results by accepting the results as an order influenced by cause and effect relationship. This process is called right balance of likes and dislikes. In the book “The poverty of Affluence” advocates emotional excellence as an alternative to economic growth which is socially more responsible, ethical and satisfying than the present individualistic and materialistic patterns (Wachtel, 1983). This calls for balancing individual rights with social responsibilities, tempering acquisitive desire with altruism, making life more meaningful not only with work but also with play, creating more options in life with more education, shunning hate, intolerance and abuse of others.

Brain storming and Semi structured interview with the academic community, successful persons were done to know their levels of understanding the construct. The content was analyzed and reviewed with relevant literature, web pages, statements and lectures of scholars in Gita, practitioners and consultation was done with popularly-scientific media on the target topic to gather additional insights to generate item pool. The subscales evolved based on the Gita Home study are: Discretion in good and bad emotions, right mix of ability and trait behaviors, Emotional likes and dislikes and its excellence. Goldberg’s International Personality Item Protocol (Goldberg, et.al. 2006) on Prudence (9 items; Alpha 0.73), anger (10 items; Alpha 0.88) is used to compare with Emotional excellence dimensions, EI for criteria validity. The target groups are participants of youth, teachers, corporate and yoga camp participants.

The Emotional Excellence questionnaire contains 33 items in four sections besides two sections taken from International Personality Item Pool which has 19 items. To validate the understanding of the questionnaire, papers on relation between biological behavior and psychological behavior (Madhan kumar et al., 2013) and molecular behavior with respect to psychological behavior (Kumar, & et al 2014) was explored. A Psychometric analysis flow chart (Fig.1) of EE is terms of its Validate and reliability procedures are shown in the form of flow chart. The hypothesis may be stated as Bhakti yoga may be a related to a right combination of Ability and Traits emotional behaviors.” The research problem may be stated as; “how to achieve Bhakti using EI as a tool?” The purpose of the study is to develop and validate the Bhakti model.
of behavior using a questionnaire that focuses on the emotional attitudes, right combination of ability and trait characteristics of mind.

3. Hypothesis

The hypothesis may be stated as “Bhakti yoga may be related to a right combination of ability and emotional trait behaviors.”

The hypothesis is based on the question posed by (Thingujam, 2008) - whether emotional intelligence makes any sense in clinical psychology? May be in the west, Emotional Intelligence makes sense. The emotional intelligence scale given by Mayer-Salovey-Caruso Emotional Intelligence Test; Toronto Alexithymia Scale (Lumley et al, 2005; Warwick & Nettelbeck, 2004) are made use in the clinical laboratories. But in the Eastern countries, the scenario is viewed differently. The emotional feelings are difficult to be majored. So we made a hypothesis based on the above statement where feelings are related to perfect combination of ability and trait behaviors. In Bhagwat gita verse number 66 chapter number 2 it is brought out that emotional intelligence has the limitation of not having the right combination of intelligence (yuktasya bhavana) and hence based on this statement, we made the hypothesis of right combination leads to Bhakti Yoga.

In the self-report model, as explained and argued by (Thingujam, N. S., 2008) questions the concept of Emotional Intelligence- Does it make sense in clinical psychology?. This makes sense in India and in oriental countries at large. In the clinical studies of Alexithymia, self-report measure where feeling matters and not the intelligence.

And hence we proposed the above hypothesis where intelligence and analysis are preceded by excellence.

4. Methodology

To validate the Bhakti model, the methodology uses a questionnaire where:

a) Conceptualization of the scale.

b) Translational validity: content validity and Face validity.

c) Construct validity: factor analysis.

d) Reliability tests: internal consistency (Cronbach’s alpha) tests are carried out
The sampling units for factor analysis was adults (n = 301) from the general population at Madurai. The sample was recruited using a snowball sampling technique.

4.1 Content validity

Content validity was undertaken to ascertain whether the content of the questionnaire was appropriate and relevant to the study purpose. Content validity indicates the content reflects a complete range of the attributes under study and is usually undertaken by five or more experts (Pilot & Hunger 1999; DeVon et al. 2007). To estimate the content validity of the questionnaire, the researchers clearly defined the conceptual framework of emotional excellence by undertaking a thorough literature review and seeking expert opinion. Once the conceptual framework was established, six purposely chosen practitioners in selfless service, questionnaire design, and editor of Gita Home study were asked to review the draft 36 item Bhakti to ensure it was consistent with the conceptual framework. Each reviewer independently rated the relevance of each item on the EE to the conceptual framework using a 5 point Likert scale (1 = strongly disagree, 2 = Disagree, 3 = Partly agree, 4 = Agree and 5 = Strongly Agree). The Content Validity Index (CVI) was used to estimate the validity of the items (Lynn, 1996). According to the CVI, a rating of five indicates the content is valid and consistent with the conceptual framework (Lynn 1996). Therefore, three items on the draft EE were deemed to be invalid because they yielded CVIs of 5/8 = 0.62 to 6/8 = 0.75 and were removed from the questionnaire. The relevant items under other constructs which were connected were also removed. All the remaining items were valid with CVIs ranging from 0.87 (7/8) to 1 (8/8) and were retained.

4.2 Face validity

Face validity evaluates the appearance of the questionnaire in terms of feasibility, readability, consistency of style and formatting, and the clarity of the language used (Haladyna 1999; Trochim 2001; DeVon et al. 2007). To determine the face validity of the model, an evaluation form was developed to help respondents assess each question in terms of 291 respondents from colleges were randomly selected with a 5-point Likert scale (1 = Strongly disagree, 2 = Disagree, 3 = Partly agree, 4 = Agree and 5 = Strongly Agree).
4.3 Construct validity

Construct validity is a scale’s ability to measure what it is supposed to measure (Haynes, Richard, & Kubany, 1995; Hinkin, 1998). Construct validity refers to the degree to which the items on an instrument relate to the relevant theoretical construct (Kane 2001; DeVon et al., 2007). According to the study (Hinkin, 1998), it is stated that gathering further evidence of construct validity can be accomplished by examining the extent to which the scales correlate with other measures designed to assess similar constructs (convergent validity) and to which they do not correlate with dissimilar measures (discriminate validity). It would also be useful to examine relationships with other variables with which the measures would be expected to correlate (criterion-related validity). To estimate the degree to which any two measures are related to each other we typically use the correlation coefficient. That is, we look at the patterns of intercorrelations among our measures. Correlations between theoretically similar measures should be "high" while correlations between theoretically dissimilar measures should be "low".

4.4. Factor analysis

Exploratory Factor Analysis is a statistical method which is commonly used during instrument development to cluster items into common factors, interpret each factor according to the items having a high loading on it, and summarize the items into a small number of factors (Bryman & Cramer 1999). It is a method used to examine the relationships among variables without determining a particular hypothetical model (Bryman & Cramer 2005). Loading refers to the measure of association between an item and a factor (Bryman & Cramer 2005). A factor is a list of items that belong together. Related items define the part of the construct that can be grouped together. Unrelated items, those that do not belong together, do not define the construct may be deleted (Munro 2005). EFA helps researchers define the construct based on the theoretical framework, which indicates the direction of the measure (DeVon et al. 2007) and identifies the greatest variance in scores with the smallest number of factors (Delaney, 2005; Munro, 2005). It is essential to have a sufficiently large sample to enable factor analysis to be undertaken reliably (Bryman & Cramer, 2005). Although, the number of participants required undertaking factor analysis remains under debate, a minimum
of five participants per variable is generally recommended (Munro, 2005). However, to ensure an appropriate sample size was obtained for the current study to enable factor analysis to be undertaken two criteria were considered:

1) Kaiser-Meyer-Olkin (KMO) sampling adequacy
2) Factor loadings and the correlation between a variable and a factor (Hayes 2002).
3) Principal component analysis method of extraction was adopted in this study.

5. Results

5.1. Internal Reliability values

Items were subjected to a reliability check as it is an essential issue in scale development and refers to the amount of variance attributable to the true score of the latent construct (De Vellis, 2003). Internal consistency is determined by calculating coefficient alpha and the items which are high reliability were retained and the rest were dropped. Cronbach’s Coefficient Alpha which is derived from the assumption that if all the items are drawn from the domain of a single construct, responses to the items composing the measurement model should be highly correlated (Hatcher, 1994). Cronbach’s alpha is equivalent to the average of the all possible split-half estimates and is the most frequently used reliability statistic to establish internal consistency reliability (Trochim, 2001; DeVon et al., 2007). If an instrument contains two or more subscales, Cronbach’s alpha should be computed for each subscale as well as the entire scale (Nunnally & Bernstein 1994; Devon et al. 2007). Therefore, Cronbach’s alpha was computed for each subscale. Calculation of Cronbach’s estimate is done with the help of a statistical package designed to calculate this reliability estimate. The values are given in Table 1.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Construct</th>
<th>Number of items</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Emotional Intelligence</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Our values (Table 1) are found to be in the high level of internal reliability range of 0.75 to 0.88 values. Generally, the Cronbach alpha coefficient ranges from 0 to 1 with a minimum of 0.6 while other studies suggest that anything above 0.7 suggest high levels of internal reliability (Hair et al., 1992). Nunnally suggested that an alpha value of 0.7 is acceptable (Nunnally, 1978). Many studies have used reliability to test their modified service quality scale that ranged from 0.6 to 0.96.

5.2 Factor analysis

To ensure having an appropriate sample size, Kaiser-Meyer-Olkin (KMO) measure is used and to prove the correlation matrix is an identity matrix Bartlett's Test of Sphericity is calculated. Table 2 given pretest for factor analysis data for the adequacy of scales:

<table>
<thead>
<tr>
<th>Test</th>
<th>Area</th>
<th>Emotional Intelligence</th>
<th>Right mix of ability and behavioral traits</th>
<th>Emotional likes &amp; dislikes</th>
<th>Bhakti yoga</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td></td>
<td>0.914</td>
<td>0.908</td>
<td>0.910</td>
<td>0.688</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td>Approx. Chi-Square</td>
<td>956.852</td>
<td>1120.925</td>
<td>1240.19</td>
<td>216.606</td>
</tr>
<tr>
<td>Df</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

This measure varies between 0 and 1, and values closer to 1 are better. A value of 0.6 is a suggested minimum number. To ensure having an appropriate sample size to undertake the factor analysis, the KMO sampling adequacy on the Emotional Excellence Scale was conducted. The KMO statistic varies between 0 and 1. A value of 0 indicates that the sum of partial correlations is large in comparison to the sum of correlations, which indicates diffusion in the pattern of correlation, and that factor analysis is inappropriate. A value close to one indicates factor analysis will yield distinct and reliable factors (Field 2005). Kaiser (1974) recommended accepting values ≥0.5 and described values between 0.5 and 0.7 as mediocre; 0.7 and 0.8 as good, 0.8 and 0.9 as great, and > 0.9 as superb. Therefore, using Kaiser’s scale, the sampling adequacy value for their constructs are more than 0.9 and it was 0.6 for Bhakti yoga. Likewise, (Steven, 2002) suggested that a factor is reliable if it has 10 or more variables with loadings of 0.5 and ≥ 150 participants. Given that the KMO of the first analysis of the draft Emotional excellence Scale was 0.9 and all variables had loadings ≥ 0.5, the sample size of 301 was considered to be adequate to enable factor analysis to be undertaken. Since the KMO measure of sampling adequacy meets the minimum criteria, we do not have a problem that requires us to examine the anti-image Correlation Matrix.

Bartlett's Test of Sphericity:

Bartlett's test of sphericity tests the hypothesis that the correlation matrix is an identify matrix; i.e. all diagonal elements are 1 and all off-diagonal elements are 0, implying that all of the variables are uncorrelated. If the significant value for this test is less than our alpha level, we reject the null hypothesis that the population matrix is an identity matrix. The significant value for this analysis leads us to reject the null hypothesis and conclude that there are correlations in the data set that are appropriate for factor analysis. This analysis meets this requirement. Taken together, these tests data (Table 3) provides a minimum standard which should be passed before a factor analysis (or a principal components analysis) should be conducted.

Table 3 Data of final four factor solution of the Bhakti questionnaire according to the Principal Component Analysis with Vari max rotation and the internal consistency of each factor
### Emotional Intelligence ($\alpha=0.78$)

<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Items</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I make efforts to earn more income for my family</td>
<td>0.691</td>
</tr>
<tr>
<td>2.</td>
<td>I get my work done at any cost through any mode</td>
<td>0.649</td>
</tr>
<tr>
<td>3.</td>
<td>I put hard work to purchase assets for the future</td>
<td>0.682</td>
</tr>
<tr>
<td>4.</td>
<td>I make efforts to purchase new varieties</td>
<td>0.675</td>
</tr>
<tr>
<td>5.</td>
<td>I take efforts to look pleasant in appearance</td>
<td>0.74</td>
</tr>
<tr>
<td>6.</td>
<td>I perform better when there is power</td>
<td>0.724</td>
</tr>
<tr>
<td>7.</td>
<td>I spend on people to echo my views</td>
<td>0.671</td>
</tr>
<tr>
<td>8.</td>
<td>I will give incentive for increasing the performance</td>
<td>0.678</td>
</tr>
<tr>
<td>9.</td>
<td>My choices are decided by my likes and dislikes than the purpose</td>
<td>0.646</td>
</tr>
<tr>
<td>10.</td>
<td>When I have money, I give others before I take</td>
<td>0.557</td>
</tr>
</tbody>
</table>

### Emotional likes and dislikes ($\alpha=0.88$)

<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Items</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I have to earn more for the well being of family</td>
<td>0.751</td>
</tr>
<tr>
<td>2.</td>
<td>I cannot succeed if I am too straight forward</td>
<td>0.595</td>
</tr>
<tr>
<td>3.</td>
<td>I am assessed by what assets I have</td>
<td>0.697</td>
</tr>
<tr>
<td>4.</td>
<td>I like to have the new varieties in the market</td>
<td>0.556</td>
</tr>
<tr>
<td>5.</td>
<td>The way we dress earns the respect from others</td>
<td>0.777</td>
</tr>
<tr>
<td>6.</td>
<td>I need power to perform better</td>
<td>0.719</td>
</tr>
<tr>
<td>7.</td>
<td>I like other people valuing my views</td>
<td>0.741</td>
</tr>
<tr>
<td>8.</td>
<td>Reward / punishment will give good results.</td>
<td>0.695</td>
</tr>
<tr>
<td>9.</td>
<td>Family first, others next</td>
<td>0.743</td>
</tr>
<tr>
<td>10.</td>
<td>When I have the money, I prioritize for my family than others</td>
<td>0.746</td>
</tr>
</tbody>
</table>

### Bhakti yoga ($\alpha=0.75$)

<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Items</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unfulfilled longing in my family life have been pressing me</td>
<td>0.826</td>
</tr>
</tbody>
</table>
2. I have concerns to protect the assets earned for my family | 0.794
3. I am concerned about my future | 0.838

On the first run PCA, the total variance of the draft excellence factors was 45.290% for the construct EI components ability and traits, 48.223% for right mix, 49.725% for emotional likes and dislikes and 67.186% for emotional excellence; which means at least 45% of the variance could be explained by common factors and is considered to be reasonable (Field, 2005). The communalities of the items on the equanimity, likes and dislikes and Bhakti were > 0.4. In case of EI, the values of communalities were > 0.4 except for one item which scored 0.310. When Kaiser’s criterion was applied to the draft Bhakti, four factors had Eigen values 1.00 in the first run PCA. A Screed plot was compiled on the first PCA and indicated that there were one to two factors for each construct.

That is, the two tests suggested retaining a different number of factors (Steven, 2002) and (Field, 2005). The screed plot and Eigen values are accurate to determine how many factors should be retained when the sample is 250 and communalities (variance of the variables) are 0.6, or when the questionnaire has more than 30 variables and communalities are 0.7.

To undertake the most appropriate interpretation, the loading values were carefully examined using Hair, Anderson, (Tatham & Black’s 1998) guideline for practical significance, which indicates a factor loading of ±0.3 for which the item is of minimal significance, ±0.4 indicates it is more important, and ±0.5 indicates the factor is significant.

5.4 Bhakti Model

The model Fig.2 illustrates that Bhakti of an individual is determined by frame of emotional mind (FoM) of the individual. Empirically, frame of mind is the independent variable and Bhakti is the dependent variable. It also portrays that the relationship between frame of mind and Bhakti is linear and positive, i.e. the higher the value of FoM, the higher the value of Bhakti.
The relationship between the independent variables and the dependent variable is expressed in three different simple linear regression equations and they are presented as follows.

\[
\begin{align*}
\text{Eqn. 1:} & \quad x_1 = \lambda_1 F + e_1 \\
\text{Eqn. 2:} & \quad x_2 = \lambda_2 F + e_2 \\
\text{Eqn. 3:} & \quad x_3 = \lambda_3 F + e_3
\end{align*}
\]

Where,

\[
\begin{align*}
x_1 & = \text{Emotional Intelligence} \\
x_2 & = \text{Right Mix of emotions} \\
x_3 & = \text{emotional likes and dislikes} \\
\lambda_i & = \text{Factor Loadings} \\
e & = \text{respective error factors} \\
F & = \text{Factor (Frame of Mind emotions)}
\end{align*}
\]

The construction of emotions of constructs of various relationships of independent variable mind i.e. inside the emotional mind is shown in the Fig. 3.

Relationship among the independent variables is shown as one-factor model and the equations are as given below.

**Relationship # 1**

\[
\hat{y} = \alpha + \beta_1 x_1 + \epsilon_1
\]

where

\[
\begin{align*}
\hat{y} & = \text{Bhakti} \\
x_1 & = \text{Difference in emotions} \\
\beta_1 & = \text{Regression Coefficient}
\end{align*}
\]
\[ \varepsilon_1 \text{ - Error} \]
\[ \alpha = \text{Intercept} \]

**Relationship \# 2**

\[ \hat{y} = \alpha + \beta_2 x_2 + \varepsilon_2 \]

Where

\[ \hat{y} = \text{Bhakti} \]
\[ x_2 = \text{Evenness of emotional mind} \]
\[ \beta_2 = \text{Regression Coefficient} \]
\[ \varepsilon_2 = \text{Error} \]
\[ \alpha = \text{Intercept} \]
Relationship # 3

\[ \hat{y} = \alpha + \beta_3 x_3 + \epsilon_3 \]

where

\[ \hat{y} = \text{Bhakti} \]
\[ x_3 = \text{emotional likes and dislikes} \]
\[ \beta_3 = \text{Regression Coefficient} \]
\[ \epsilon_3 = \text{Error} \]
\[ \alpha = \text{ Intercept} \]

Relationship #4

\[ \hat{y} = \alpha + \beta_4 F + \epsilon_4 \]

where

\[ \hat{y} = \text{Bhakti} \]
\[ F = \text{Frame of emotions (Factor of } x_1, x_2, x_3) \]
\[ \beta_4 = \text{Regression Coefficient} \]
\[ \epsilon_4 = \text{Error} \]
\[ \alpha = \text{ Intercept} \]

On the basis of these tests, items were eliminated from the factor pattern matrix of the excellence when the factor loading was less than ±0.5. The decision to eliminate such items was confirmed using (Steven, 2002) Guideline of Statistical Significance for Interpreting Factor Loadings. Steven’s Guideline is based on sample size and suggests that the statistically acceptable loading for 50 participants is 0.72, for 100 participants 0.51, and for 200-300 participants 0.29-0.38. The sample size used in the EE validation process was 301: as a result, three items with a loading <0.3 were deleted. The remaining items with a
loading ≥ 0.4 were accepted. One remaining item had a loading of 0.47, but was accepted because it was important to the relevant factor.

5.5 Internal Consistency Reliability

Cronbach’s alpha was computed for the revised emotional excellence scale after construct validation was computed and was 0.84, which indicates a high correlation between the items and the constructs is consistently reliable. The alpha computed for each of the four subscales also exceeded the minimum value for a new tool: all subscales were ≥ 0.70. A scale was developed to measure Emotional Growth. The Cronbach Alpha for all the study items was greater than 0.70.

5.6 Criterion validity

To test construct validity, Pearson’s correlation coefficients were calculated between the excellence constructs and scales measuring similar constructs. After a careful review of literature, two scales namely Prudence and Anger both are emotional scales were selected from Goldberg International Personality tool. Prudence was assumed to positively correlate with our scale ‘able and trait behavior’. Anger was supposed to negatively correlate with our scale ‘right combination’. Results of correlation analysis showed that items of scales prudence and discretion action were positively correlated (p = 0.63) and items of scales anger and evenness of mind were negatively correlated (p = -0.74). The Pearson Correlation Coefficients of the both the analyses were significant at 0.01 levels (two-tailed).

6. Final Questionnaire

The final Emotional excellence Questionnaire includes four subscales:

a) Subscale one: “Emotional intelligence” which accounted for 45.29 % of the total variance. This factor includes ten items and reflects information about how people face their dilemmas in their daily pursuits. The highest loading items were: I take efforts to look pleasant in appearance (factor loading of 0.74) and I perform better when there is power (0.72).
b) Subscale 2: Right mix of ability and trait behaviors accounted for 48.23% of variance and includes ten items with very high factor loadings ranging from 0.79 to 0.82. These items refer to the respondent’s state of emotion / feeling based on their likes and dislikes in their life. I worry about the results (factor loading of .72) and results will disturb my enthusiasm (factor loading of .74)

c) Subscale 3: “emotional likes and dislikes” accounted for 49.725% of the variance and includes ten items. It focuses on people’s beliefs in their walks of life. The way we dress earns the respect from others (factor loading of .77), I have to earn more for the well being of family (factor loading of .75) and When I have the money, I prioritize for my family than others (factor loading of .746).

d) Subscale 4: “Bhakti Yoga” accounted for 67.18% of the variance and includes three items. All the items were negatively worded to know the reality of the individuals to avoid social desirability. Four items explore the search for purpose and meaning in life: I am concerned about my future (factor loading of .75) Unfulfilled longing in my family life have been pressing me (factor loading of .75) and I have concerns to protect the assets earned for my family (factor loading of .75)

The items were rated on a Likert scale of 1-5 where one represents strongly disagree=1, disagree=2, Partly agree=3, agree=4, and strongly agree=5.

7. Discussion

From the studies on Bhakti model, it is learnt that there is always a possibility of Bhakti experience which is generally ignored during the fit of emotions: anger or anxiety or happiness. We explored solutions for that type of emotions in this paper. Given situations make the past emotions (sorrow, fear, anxiety, happiness etc.) to surface which gives us an opportunity to be free of them. The problem is with our perception that the past emotions are mutually exclusive, but in reality they are interconnected and are offshoots of one basic problem. The present psychological model deals with resolving the problems of the past individually, but to understand the present makeup because of the network of interactions is too complex for anybody to comprehend fully. Hence, we need to resolve that whatever the emotion is, it is
there for a reason, and respond to the situations in an appropriate manner with the belief that we are limitless and understanding of the order.

What it calls for is to acknowledge the presence and understanding emotions root causes and transform ourselves by understanding the role of laws /order behind it to overcome such blocks. This transformation happens when we bridge the gap between understanding and emotions. To overcome emotional loads arising out of the past, we need to know the roles of emotions and intellect which are impulsive and responsive to orientation. Bridging is possible when alignment of mind and intellect is required for emotional growth through earnest endeavor which ensures that the past patterns no longer come in the way of our having healthy attitude and behaviors.

Our results are nearly comparable with Goldberg’s big five personality model openness to experience. Hogan Personality Inventory (HPI) and the Corresponding Preliminary IPIP Scales Measuring similar constructs are given (Table 4);

**Table 4. Experience seeking constructs data of IPIP and HPI comparison with API (Acharya Personality Inventory).**

<table>
<thead>
<tr>
<th>Number of Items</th>
<th>Mean Item Inter correlation</th>
<th>Coefficient alpha</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPIP HPI API</td>
<td>IPIP HPI API</td>
<td>IPIP HPI API</td>
<td>IPIP vs AIP</td>
</tr>
<tr>
<td>3+3 =6 6 33</td>
<td>0.25 0.26 0.27</td>
<td>.66 0.68 0.76</td>
<td>0.63 [0.819]</td>
</tr>
</tbody>
</table>

Note: The value in the bracket in the last column indicates the correlation value obtained by us

The implications of the study will be useful with the data of the refined correlation values between the constructs in measuring the improved emotional intelligence and skills through excellence with the construct - emotional seeking which is Goldberg’s openness to experience. However, further research is required in modifying the items and relate with IPIP.
8. Conclusions

The results of the validity testing on the Bhakti scale indicated that it is an accurate scale. Content validity helped to assess whether the content was relevant to the concept of Bhakti defined for the study. Factor analysis assessed the theoretical construct of the Bhakti questionnaire. The internal reliability (alpha) shows the recommended level for clinical use; and test-retest indicated stability of the responses to the items on the Bhakti over time. Therefore, the Bhakti scale could be used in excellence development program for unraveling the status of one’s EI, its right mix, emotional attitude and its relation to Bhakti.

Hence, the Questionnaire is a valid and reliable research tool which can be generalized to a wider population of the people.

Acknowledgement

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References:


• Schretlen, David J., Van Der Hulst, Egberdina J., Pearlson, Godfrey D., & Gordon Barry, (2011), A Neuropsychological Study of Personality: Trait Openness in Relation to Intelligence, Fluency, and Executive Functioning.


Fig. 1. A flow chart depicting the process used to validate the Bhakti Questionnaire.
Fig: 2 Model on Bhakti Yoga

E I = Emotional Intelligence

E A T B = Emotional Ability & Trait Behavior

E L D = Emotional Likes & Dislikes
Constitution of frame of emotional mind