

# **EMOTIONAL INTELLIGENCE AS A PREDICTOR OF PERSONALITY TRAITS AMONG THE FEMALE LEADERS IN ODISHA**

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**Abstract:** The present study was to investigate the relationship between Emotional Intelligence and Personality traits among women leaders of Odisha. In this study, we have taken 2 constructs, one is Personality (measured by Big Five Factor Model) and the other one is Emotional Intelligence (EI- measured by WEIS Scale). The construct personality is having 5 variables in short called as OCEAN and the other construct EI is having 4 variables like Self emotion appraisal in short SEA, Others emotion appraisal in short OEA, use of emotions in short UOE and Regulation of emotions in short ROE. Help of G Power software was taken to calculate the sample size. Analysis was done by the help of SPSS version 23. A sample study comprised of 64 nos. women leaders from different sections were taken. The tests were conducted with the help of likert scale to measure the personality under Big Five Factor Model and Emotional Intelligence under Wongs Emotional Intelligence Scale. To test the hypothesis MANOVA test was conducted. The analysis found that, the null hypothesis is rejected and there is significant relationship between Emotional Intelligence and personality of Women Leaders.

**Keywords:** Emotional Intelligence, Personality, Big Five Factor Model, Wongs Emotional Intelligence Scale, Leadership

## **Introduction:**

*“Yam hi na vyathayanthyethe purusham purusharshabha  
Samadhukha sukham dheeram somruthathvaya kalpathe”<sup>[1]</sup>, [In Sanskrit]  
-- Bhagavad-Gita (Chapter II, Verse 15)*

Emotional Intelligence (EI) may be a relatively new term, not more than 25 years old, but the roots of Emotional Intelligence (EI) can be found in The Bhagavad-Gita, 5000 years ago (Analytic sloka from the Bhagavad-Gita (Chapter II, Verse 15) sums up the entire concept of Emotional Intelligence (EI). It says: a person who is calm and remains unperturbed by either pain or pleasure is the one who attains immortality) where Lord Krishna's Sthithapragnya (Emotionally stable person) is very close to present day's Mayer and Salovey's Emotionally Intelligent person and also the work of Plato, 2000 years ago where he stated, — All learning has an emotional base. Since then, researchers, scientists, educators, and philosophers have worked to prove or disprove the importance of feelings and emotions in day to day life.<sup>[2]</sup>

When psychologists began to write and think about intelligence, they focused on cognitive aspects, such as memory and problem-solving. However, there were researchers who recognized early on that the non-cognitive aspects were also important. David Wechsler referred Intelligence to "non-intellective" as well as "intellective" elements, by which he meant affective, personal, and social factors. Robert Thorndike was writing about "social intelligence" in the late thirties. Unfortunately, the work of these early pioneers was largely forgotten or overlooked until 1983 when Howard Gardner began to write about "multiple intelligence." Gardner proposed that "intrapersonal" and "interpersonal" intelligences are as important as the type of intelligence typically measured by IQ (Intelligent Quotient) and related tests.

Emotional intelligence draws from branches of behavioral, emotional, and communications theories. Goleman is the person most commonly associated with it. But the most distant roots of emotional intelligence can be traced to Charles Darwin's early work on the importance of emotional expression for survival and adaptation. Wayne Leon Payne is credited with first using the term "Emotional Intelligence" in 1985. Soon after, in 1990, John Mayer and Peter Salovey described that, as the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions. In 1997, their four branch model defined emotional intelligence as involving the abilities to perceive, accurately, emotions in oneself and others; use emotions to facilitate thinking; understand the meaning of emotions; and manage emotions.<sup>[4]</sup>

Personality is, what makes you "you". It encompasses all the traits, characteristics, and quirks that set you apart from everyone else. Personality is: "the coherent pattern of affect, cognition, and desires (goals) as they lead to behavior" (Revelle, 2013). In the words of the American Psychological Association (APA), personality is: "individual differences in characteristic patterns of thinking, feeling, and behaving" (APA, 2017). It is "the entire mental organization of a human being at any stage of his development. It embraces every phase of human character... and every attitude that has been built up in the course of one's life." A person's personality tends to be stable throughout life, and it often grows more pronounced over time. In fact, research suggests that as much as half of a person's personality is driven by their genetic makeup; it is biological. The rest is acquired through learning.<sup>[5]</sup>

Recent debates on EI have focused largely on whether EI has predictive power over above personality traits. Several studies have indicated that, trait EI might be a valid construct in the prediction of life satisfaction, somatic complaints, rumination and coping styles (Kluemper, 2008; Petrides, Pita & Kokkinaki, 2007)<sup>[6]</sup>. However, the ability of trait EI in an academic setting is still unclear (Tok & Morali, 2009; Barchard, 2003). Consistent say that emotional intelligence as a construct has been showed to be an independent construct from personality (Caruso, Mayer & Salovey, 2002; McCrae, 2000; Zadal, 2004; Vakola, Tsaousis & Nikolaou, 2004; Shulman & Hemeenover, 2006)<sup>[6]</sup>. Consensus is emerging that a five-factor model of personality can be used to describe the most salient aspects of personality (Goldberg, 1990). Women with high on emotional intelligence are also said to be good in using emotions to guide decision making and encourage open – minded in idea generation, because they can consider multiple points of view especially for those possess high in openness to experience domain.

**Literature Review:** The first formal mention of emotional intelligence appears to derive from a German article entitled "Emotional Intelligence and Emancipation" published in the journal "Praxis der Kinderpsychologie und Kinderpsychiatrie", by Leuner in 1966 (Matthews, et al., 2002). However, the first time that the term "emotional intelligence" appeared in the English literature was in an unpublished doctoral dissertation by Payne in 1986 (Matthews, et al., 2002). Since then, Emotional intelligence has captured the interest of both the popular press (e.g. Cooper & Sawaf, 1997; Goleman, 1995, 1996; Hein, 1997; Stiener, 1997; Wessinger, 1998) and of the scientific researchers (e.g. Davies, et al., 1998; Mayer, Caruso, & Salovey, 2000; Petrides & Furnham, 2000, 2001)<sup>[7]</sup>.

The concept of emotional intelligence can be traced to the notable research of Thorndike (1920), followed by the respective work of Moss and Hunt (1927), and Gardner (1983), in which they discussed and developed the related concept of social intelligence or multiple intelligence. As early as the 1930s, there have been studies of a possible emotional aspect to intelligence. In 1934, David Wechsler (of two well known intelligence tests) wrote of "non-intellective" aspect of intelligence. Gardner (1983) proposed a conceptualization of interpersonal intelligence— the competence to understand other people, and intrapersonal intelligence—the competence to understand the self and apply it effectively in life.

The term 'Emotional Intelligence' was coined and defined by Salovey and Mayer (1990). Despite its recent debut, there are already a number of definitions of EI. These conceptualizations can be divided broadly into two streams: 'ability models' in which EI is defined as a set of cognitive abilities in emotional functioning (Mayer & Salovey, 1997) versus 'mixed trait models' that incorporate a wide range

of personality characteristics and other traits (Bar-On, 2001; Goleman, 1995, 1998; Petrides & Furnham, 2001)<sup>[7]</sup>

Some researchers described that, three main models of emotional intelligence exist. The first model by Peter Salovey and John Mayer perceives E.I. as a form of pure intelligence, that is, emotional intelligence is a cognitive ability (Ability Model). A second model by Reuven Bar-On regards E.I. as a mixed intelligence, consisting of cognitive ability and personality aspects. This model emphasizes how cognitive and personality factors influence general well-being. The third model, introduced by Daniel Goleman, also perceives E.I. as a mixed intelligence involving cognitive ability and personality aspects. However, unlike the model proposed by Reuven Bar-On, Goleman's model focuses on how cognitive and personality factors determine workplace success.

Research has found that significant relationships exist between all three models of E.I.. In addition, emotional intelligence has been consistently compared to three other constructs: **personality**, alexithymia (difficulty in feeling and distinguishing emotions), and leadership. Many traits contained in the Big Five Personality Factor Model are similar to those described by Bar-On and Goleman<sup>[4]</sup> in their models of emotional intelligence.

Personality characteristics of a leader can affect his or her organizational behavior. The personality traits of leader often become the center of attention due to its relationship with emotional stability while playing their role as a leader within an organization. Recent studies also demonstrate that personality traits are closely related to the achievement within an organization, especially with work performance, career development, leadership effectiveness (Barrick et.al, 2001, Judge et al., 1999<sup>[8]</sup>). Emotional intelligence and personality traits are two important constructs of psychology and there is substantial evidence that how these two constructs are related to each other.

There is another question that whether gender relates to EI and personality traits. There is scarcity of attention paid to gender differences on EI and Personality traits. It has been established stereotype that women tend to be more expressive than their counterpart men. They are believed to understand and recognize other's emotions better and possess greater empathy as being more perceptive (Aquino, 2003; Tapia & Marsh II, 2006). Existing literature yields contradictory findings on EI e.g. females were found higher (Katal & Awasthi 2005; Singh, 2002) and some others witnessed males as higher on EI (e.g. Chu, 2002)<sup>[9]</sup>.

Mohanty and Devi (2010)<sup>[10]</sup> conducted study on gender difference. Sample size of 60 girls and boys were used. Result indicates that girls have higher scores than boys. Which means girls are positive, optimistic and well aware of their emotions than boys. Mishra and Ranjan (2008)<sup>[10]</sup> investigated the effect of gender differences on emotional intelligences. Sample size of 80 participants was used in which 40 were males and 40 were females. Results indicate that gender difference effect emotional intelligence. Males have high score than females which shows that males have more resistant power against difficulties and to control and manage stress and their emotions in more positive way.

Significant gender differences were found in the results, with women scoring higher on Emotionality and men scoring higher on Self-Control, Sociability, and the global score. Such results are consistent with those obtained with the English version of the TEIQue.<sup>[11]</sup> They also echo those of Feingold (1994) who meta-analyzed gender differences in personality and found that women were more agreeable (more sensitive, etc.) and men more emotionally stable.<sup>[12]</sup> Theoretically, the fact that women scored higher on Emotionality is coherent with Western norms according to which expressing emotions is generally viewed as "unmanly" (Brody, 2000 Brody, L. R. 2000)<sup>[13]</sup>. Empirically, it is in line with findings obtained using the EQ-I (Slaski, 2001 Slaski, M. 2001)<sup>[14]</sup> and with data that showed that men scored slightly higher on alexithymia than women (Parker, Taylor, & Bagby, 2003 Parker, J. D. A., Taylor, G. J. and Bagby, R. M. 2003.

In the same vein, the fact that men scored higher than women on Self-Control is on one hand consistent with the divergent socialization of emotion as a function of gender (e.g., "Boys don't cry") and on the other hand in line with findings obtained using the EQ-I (i.e., men > women on stress management)<sup>[15]</sup>. On the other hand, the finding that men scored higher than women on Sociability could seem odd at first sight, especially as women are commonly thought to have higher social skills than men. However, a closer look at the subscales that compose the Sociability factor revealed that this factor does not refer to dimensions such as empathy or ability to initiate/maintain close relationships (which abilities are part of the Emotionality factor) but rather to dimensions such as the ability to assert oneself or to influence other's emotions and decisions, which are more easily attributed to males.<sup>[16]</sup>

From a theoretical perspective, the constructs of EI and personality traits are held to be "generally indistinguishable" (Davies et al., 1998; Ciarrochi et al., 2000) with EI presented as a fusion of emotional stability, personality type and interpersonal skills (Bar-On, 2000). Affective aspects of personality (for example, extraversion and agreeableness) and interpersonal skills (for example, the ability to handle conflict and to communicate succinctly) are fully integrated as part of EI (Petrides et al., 2007)<sup>[17]</sup>.

### Method:

#### Objectives:

- To find out the relationship between EI and personality types of women leaders

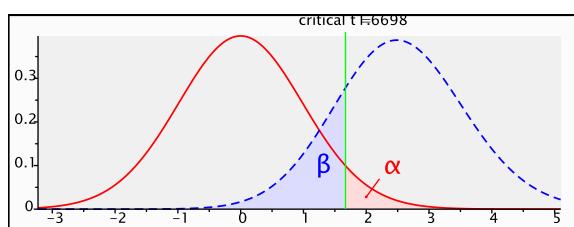
#### Hypothesis

The selection of hypothesis relies on the following notions.

$H_0$  = There is no relationship between Emotional Intelligence & Personality

$H_1$  = There is a positive relationship between Emotional Intelligence & Personality

**Sample:** A sample of study conducted among 64 women leaders from Odisha consists of entrepreneurs, social leaders, organizational leaders etc. Since the sample was very much specific, other criteria like Age range, community, educational background etc are not considered. The sampling technique applied for drawing out the sample was convenience sampling. Researcher has set 5%  $\alpha$  value, as the maximum chance of incorrectly rejecting the  $H_0$ . Since the researcher has set 0.20 as  $\beta$  value, the researcher is willing to accept 20% chance of missing an association of the given population sample. Alternatively, researcher has set power value to 80% ( $1 - \beta$ ) which is the chance of finding an association of the population. Keeping in view the above value of  $\alpha$ ,  $\beta$  and power (p), the sample size for this one tail test is 64. And the PSS graph is as below.



(Probability Sample Size (N)=64, considering  $\alpha$  error 0.05 and  $\beta$  error 0.20)  
And the protocol power analysis value are as follows. (Source- G Power 3.1.9.2)

t tests - Correlation: Point biserial model

Analysis: A priori: Compute required sample size

Input: Tail(s) = One

Effect size  $|\rho|$  = 0.3

$\alpha$  err prob = 0.05

Power ( $1 - \beta$  err prob) = 0.80

Output: Non centrality parameter  $\delta$  = 2.5158836

Critical t = 1.6698042

Df	=	62
Total sample size	=	64
Actual power	=	0.8005036

(Critical-t- is the standard error which is a measure of the error that we expect to find in the value obtained for the sample mean)

#### **Instruments:**

**Big Five Inventory:** The most prevalent personality framework is the “**Big Five**” or the “**Five-factor model**” of personality. Not only does this theory of personality apply in multiple countries and cultures around the world (Schmitt et al., 2007), there is a valid and reliable assessment scale for measuring the five factors. The five factors grew out of decades of personality research, growing from the foundations of Cattell’s 16 factors and becoming the most accepted model of personality to date. This model not only confirms its validity as a theory of personality but also establishes its validity on an international level. These five factors do not provide completely exhaustive explanations of personality, but they are known as the “**Big Five**” because they encompass a large portion of personality-related terms. The five factors are not necessarily traits in and of themselves, but factors in which many related traits and characteristics fit. A popular acronym for the Big Five is “OCEAN.” The five factors are Openness to experience, Conscientiousness, extroversion, agreeableness & neuroticism. A self report 44 item questionnaire is used in a liker scale to measure the Personality of the respondents.

**Wongs Emotional Intelligence Scale:** In 2002, Wong and Law developed a self-report EI scale named as the Wong and Law EI Scale (WLEIS) based on the work of Mayer and Salovey (1990). The WLEIS contains 16 items Likert-type self-report statements. Studies done by Karim (2010), Mulla et.al., (2008) and Kim and Agrusa (2011) provided evidence for the reliability and validity of the WLEIS scale. WEIS consists of two parts. The first part contains 20 scenarios and respondents have to choose one option that best reflects their reaction in each scenario. The second part contains 20 ability pairs and respondents are required to choose one out of the two types of abilities that best represents their strengths. Wong’s Emotional Intelligence Scale (WEIS) is a self-report EI measure, developed for Chinese respondent (Wong et al., 2007). Wong and Law (2002) explained that EI is an ability to understand ones own emotions and those of others and to control emotions in diverse situations and they suggested that EI consists of four dimensions : Others emotion appraisal (OEA), use of emotion (UOE), self-emotion appraisal (SEA), and regulation of emotion (ROE).

**Procedure:** A convenient sample of 64 women leaders from Odisha were approached. The respondents were explained about the purpose of the study and their consent were taken for the study participation. They were affirmed that, all the information and identity will be kept confidential and will be utilized for the research purpose only. They were handed over the study questionnaire. Some respondents , those who were not 100% savvy with vernacular language in interpreting the questions, were handed over a translated version (odia medium- a local language) questionnaire. And in most of the cases, the researcher has to explain and clarify some of the questions which are having similar meanings to avoid confusion and bias. All the respondents were asked to complete the questionnaire within 15-20 minutes in order to avoid manipulative answers about their personality factors. After completion of the questionnaire, each participant was thanked for cooperation and participation. The study data was tabulated further and analyzed with the help of SPSS version 23. In the present study, the researcher simply tried to measure the relationship between Emotional Intelligence and Personality of Women Leaders and how EI affect their Personalities.

**Results:** The Table-1 & 2 shows the Cronbach’s Alpha for WEIS and Five Factor Model. The Cronbach alpha Value for all variables of BFFM and EI (WEIS) indicates that, all items are having high internal consistency and are suitable for the study population.

**Table 1:** Cronbach Coefficient Alpha value for Internal Consistency & Reliability Analysis (BFFM)

Variables	Cronbach alpha Value	No of items
Extraversion	0.730	8

Agreeableness	0.861	9
Conscientiousness	0.768	9
Neuroticism	0.763	8
Openness to experience	0.812	10

**Table 2:** Cronbach coefficient Alpha value for Internal Consistency & Reliability Analysis (EI)

Variables	Cronbach alpha Value	No of items
Self Emotion Appraisal	0.767	4
Others Emotion Appraisal	0.800	4
Use of Emotions	0.751	4
Regulating of Emotions	0.714	4

In SPSS, the researcher has performed canonical correlation using the **manova** command with the **discrim** option.

**Table 3:** EFFECT.. WITHIN CELLS Regression  
Multivariate Tests of Significance (S = 4, M = 0, N = 26 1/2)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.78378	2.82686	20.00	232.00	.000
Hotellings	1.37172	3.66934	20.00	214.00	.000
Wilks	.36376	3.26846	20.00	183.36	.000
Roys	.51649				

**Table 4:** Eigen values and Canonical Correlations

Root No.	Eigen value	Pct.	Cum. Pct.	Canon Cor.	Sq. Cor
1	1.06821	77.87406	77.87406	.71867	.51649
2	.16038	11.69163	89.56568	.37177	.13821
3	.12408	9.04532	98.61101	.33224	.11038
4	.01905	1.38899	100.00000	.13674	.01870

**Table 5:** Dimension Reduction Analysis

Roots	Wilks L.	F	Hypoth. DF	Error DF	Sig. of F
1 TO 4	.36376	3.26846	20.00	183.36	.000
2 TO 4	.75233	1.40485	12.00	148.45	.170
3 TO 4	.87299	1.33527	6.00	114.00	.247
4 TO 4	.98130	.55254	2.00	58.00	.578

From the Table-4 data, it is clear that, the Pillais score is 0.78738 which is a positive value ranging within 0 to 1 with F-value 2.826 which is significant at 5% level as p- value 0.000. This clearly indicates that, the null hypothesis is rejected. In the same table, is found that, the Hotellings-Lawley trace is 1.37172 and Wilks Lambda is 0.36376 and all are having significance p-value 0.000. The Roys is the greatest root calculated from the largest eigen value and same as the 1<sup>st</sup> root of the dimension reduction analysis (Table-5). All the above 4 tests are significant and all 4 tests reject the null hypothesis, and the alternate hypothesis is accepted.

**Conclusion:** Researcher concluded that, Emotional Intelligence and Personality Factor are positively Correlated and the Alternative Hypothesis is Correct and the Null Hypothesis is rejected. It is seen that, the finding is consistent with most of literature.

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