



## EFFECT OF INTEGRATED YOGA ON AGREEABLENESS AND PERFORMANCE OF EMPLOYEES

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### Abstract

*The personality of employees determine the performance of employee. Agreeableness is one of the Big Five Personality traits which affects the performance of employee. An empirical study is made to assess the effect of practicing Integrated Yoga on personality traits, including agreeableness of employee. 51 employees are given Yoga Intervention for four months and another 51 employees are not given any intervention. Using Big Five Personality Inventory, data is collected before, in the middle, and at the end of the study. The analysis of data using SPSS showed that agreeableness among employees in Integrated Yoga Intervention group improved significantly ( $p < .01$ )*

**Key words:** Personality, Performance of Employee, Agreeableness, Integrated Yoga

In the present knowledge based society, human resources are the most important resource for the progress. Personalities of employees shape the behaviours in the workplace and thus their performance. Development of the personalities to suit the changing requirements of the organization has become an important duty of the management.

**What is personality:** According to Murray R. Barrick and Michael K. Mount "Personality is an individual's relatively stable and enduring pattern of thoughts, feelings and actions"<sup>1</sup>. The term personality trait refers to enduring personal characteristics that are revealed in a particular pattern of behaviour in a variety of situations. Many efforts are made to identify the primary traits that govern behaviour and these efforts resulted in long lists. Out of these Big Five Personality Model is most widely used in identifying and classifying traits. The Big Five Personality Model, supported by an impressive amount of research suggests that the five basis of dimensions underlie all others and encompasses most of the significant variation in human personality<sup>2</sup>. The Big Five Personality traits are Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism. Among these, Agreeableness, its importance in job performance and impact of practice of Integrated Yoga on agreeableness are studied in the present research. The facets of agreeableness are Trust (forgiving), Straight forwardness (not demanding), Altruism (warm), Compliance (not stubborn), Modesty (not show off), tender mindedness (sympathetic).

### Importance of agreeableness in job performance:

Agreeableness is relevant because they are better liked and they are more compliant and confirming. In jobs requiring significant teamwork or frequent interpersonal interactions, higher performance and lower levels of deviant behaviors

very important<sup>3</sup>. Conscientiousness, extraversion, and agreeableness are positively correlated with job satisfaction (Judge, Heller, & Mount, 2002)<sup>4</sup>. Workplace deviance was more likely to be endorsed with respect to an individual when both the perception of the workplace was negative and emotional stability, conscientiousness, or agreeableness was low<sup>5</sup>. Witt et al. (2002) argued that the interaction between conscientiousness and agreeableness is most relevant for 'jobs requiring substantial cooperative interaction'<sup>6</sup>. Employees with high levels of conscientiousness and agreeableness are more likely to possess the resources required to excel in bank teller jobs requiring speed, accuracy, and customer service. It is critical for positions with frequent interpersonal interactions to be filled by employees who have high levels of both conscientiousness and agreeableness<sup>7</sup>. Elisa Ilardaet found that the strongest correlations with team work are found to be with extraversion, total emotional intelligence, agreeableness<sup>8</sup>. Cooper (1997), Vakola, Tsaousis, and Nikolaou (2003) found that the relationship between extraversion, openness, agreeableness, conscientiousness and attitude were all found to be linked to being adoptable to change in an organization<sup>9</sup>. Agreeableness was significantly related to interpersonal teamwork behavior, collective efficacy also was found to moderate the relationship between agreeableness and interpersonal teamwork behavior. Agreeableness and interpersonal teamwork behavior relationship is stronger for those in high collective efficacy groups<sup>10</sup>. Agreeableness, and Emotional Stability are positively related to different aspects of contextual performance<sup>11</sup>. Agreeable individuals are better able to resolve conflict or facilitate its resolution when it arises (Frederick p. Morgeson, Matthew h. Reider, Michael a. Campion, 2005)<sup>12</sup>



**Is personality changeable?** Whether personality is changeable is an issue of long debate. According to Allport, one of the pioneers in research on personality, personalities are stable dispositions of an individual<sup>13</sup>. This is well known as the theory of Personality Trait Consistency. Mischel (1968) introduced what has been called Situationalism. It suggests that human behaviour is largely dependent on situations. He made two empirical arguments 1) that personality traits only have a correlation of about 0.30 with personal behaviour in any given situation and 2) the cross sectional behaviour is also only around 0.20-0.30.<sup>14</sup> The study of both personality trait theory and situationalism is called Interactionism. Rather than saying that situations determine behaviour (which ignores differences in individual reactions) or that personality determines behavior (which is misleading because of low cross situational consistency of behavior) Interactionism expresses it differently.<sup>15</sup> In some studies empirical data show that personality traits change throughout the life time. Mean level changes in personality traits have been demonstrated in young adulthood (Helson & Moane, 1987)<sup>16</sup>, midlife (Dudek & Hall 1991)<sup>17</sup> and old age (Field & Millsap 1991)<sup>18</sup>. Interactionist approach allows us to assume that the person is free because his personality is not genetically determined and that some of his personality traits may vary because of his own decisions (Jose Hernandez and Ricardo Mateo 2012)<sup>19</sup> From the above discussion it is clear that personality can be changed by environment and environment can act as the facilitator for personality development.

**Personality Development- Integrated Yoga as the facilitator:** Yoga is becoming popular in all parts of the world and recognising the importance of it the United Nations declared June 21<sup>st</sup> as World Yoga Day. However only a little research has been done on yoga and most of it is related to application of yoga to improve health of people. Very little research has been done on the application of yoga to human resource management or to improve organizational performance. To fill this gap, an effort has been made in the present study. An analysis of the term Yoga, as given by different scriptures and gurus in different contexts is as follows. Patanjali, an ancient *Yoga* sage, defines *Yoga* as *Yogab Citta vritti Nirodhab* – Yoga is a technique used to still the fluctuations of the mind to reach the central reality of the true self (Iyengar, 1966)<sup>20</sup>. Patanjali's *Yoga Sutras* outline a skillful way of conducting life that fosters moderation and harmony (Becker, 2000)<sup>21</sup> According to Yoga Vashishta (3.9.32) *Manah Prasamanopayab Yoga ityabhidhiyate* – Yoga is a skillful and subtle process to calm down the mind. Mahadevan (2008) made important conceptual analysis of application of Bhagavadgita to organizational management and how it envisages the importance of one being agreeable and cooperative for team work<sup>22</sup>. Bhagavadgita is an important scripture on Yoga. It

discusses about importance of being agreeable and cooperative for the progress of society and self. The spirit of sharing and unconditional giving (the virtue of *Yajna*) is the basis on which everything in the world sustains. The Gods bless the living beings with this virtue and in turn the living beings give back to the Gods using this principle. The concept of mutual dependence is the corner stone behind ancient Indian living *Yajna* way of living about sharing, giving back to the system and not organizing life in a pure “selfish” or “what is in it for me to enjoy” mode. These three together play the central role of ensuring sustainability in the long run. If we take such an approach to work we will indeed be free of several layers of bondage that we ourselves have inflicted on us. Such an approach to work will take us to the pinnacle of what we need to achieve in life. It essentially means that the peace of mind and happiness for which we are struggling hard will indeed be ours. According to Swamy Vivekananda, every one can become divine by psychic control (Raja Yoga), devotion (Bhakti Yoga), Knowledge of self (Jnana Yoga), Selfless action (Karma Yoga). According to him it is possible to bring perfection in a person. He suggests four ways for it viz., by Work (Karma Yoga), by Worship (Bhakti Yoga), by Philosophy (Jnana Yoga), by Psychic control (Raja Yoga). Yoga practice which aim at the integral development of the personality by a fine combination of the above four methods of yoga viz., Karma Yoga, Bhakti Yoga, Jnana Yoga and Raja Yoga is called as Integrated Yoga. Based on the above principles Swamy Vivekananda Yoga Anusandhana Samsthan (S-VYASA) University, Bengaluru, developed a Holistic and Integrated Yoga Module. It encompasses the philosophy of Raja yoga (Asanas, pranayama, dhyana etc), Karma Yoga (path of detached actions), Jnana Yoga (knowledge of self), Bhakti Yoga (trust in the supreme order). Practicing this knowledge may bring out complete transformation of one's personality on physical, mental, emotional and spiritual levels which, among other things, strengthen his performance levels. In modern times, some research has been done on application of Yoga for personality development which as such the concept of Karma Yoga emphasizes on being agreeable to results of the work, while performing one's duties with excellence. It emphasizes the importance of being agreeable to performing one's duties, Svadharma, even such a duty is menial or not rewarding (Pandey and Naidu)<sup>23</sup>. According to Srinivas (1994), a series of techniques collectively known under the general label, '*Yoga*,' way of management of human resources is better than western methods. He further states that *Yoga* is a well formulated approach to planned change.<sup>24</sup> Aditi Kejriwal and Venkat R. Krishnan (2004) made a study on what the organizations can do for enhancing transformational leadership by using the Guna (Sanskrit word for 'personality') framework and by reinforcing the Vedic worldview and made recommendations for: Designing



training programmes to develop Sattva and reduce Tamas, Building team-orientation and self-sacrifice for directing energies towards super ordinate goals, Base organizational policies on a competency framework built around Sattva and a Vedic orientation<sup>25</sup>. In a study by Sony Kumari (2008) it is proved that practice of yoga improves Emotional Intelligence and Emotional Competence<sup>26</sup>. Sudhir Deshpande (2009) in a randomised control trail of the effect of yoga on personalities of 226 people stated that practice of yoga develops Sattva Guna(balanced personality)<sup>27</sup>. According to Tikhshyam Ganpath et al(2012) practice of Yoga can improve Emotional Quotient in employees and can enable them to excel in execution<sup>28</sup>. Agreeableness dimension of personality was significantly positively correlated with all the five dimensions of Organisational Citizenship Behaviour.<sup>29</sup> Hasmukh Adhia(2009) conducted an important study relating to Improving Organisational Citizenship Behaviour by practice of Integrated Yoga by employees<sup>30</sup>. It is established in the study that by practice of Integrated Yoga that Emotional Intelligence can be enhanced and Job Burnout or Stress can be reduced and improve Organisational Citizenship Behaviour.

**Empirical study details:** The salient features of the method of this study are The aim of the study is to see if Agreeableness is improved by practice of Integrated Yoga; The subjects for the study were 102 employees (after considering drop outs from the study), 51 of them practicing Integrated Yoga (Intervention Group) and the remaining 51 of them not practicing Integrated Yoga(Control group); Employees-men and women, with normal health as declared by the subjects are included in the study; Those who have any previous experience of any Yoga program or presently following any type of Yoga program or taking any medication for psycho somatic problems or self occupied people or retired people are excluded from the study; The subjects for intervention group are taken from people who come voluntarily to learn and practice Integrated Yoga in Andhra Pradesh Yogadhyana Parishad a state government organization in Hyderabad. Subjects for control group were taken from employees in different organizations in Hyderabad, who volunteered to participate in the study; The period of study is four months i.e from 1<sup>st</sup> October 2014 to 31<sup>st</sup> January 2015; The subjects in the intervention group practiced Integrated Yoga for 4 months( 100 days, after deducting holidays, absents etc) for 1.5 hours a day; The daily program of intervention contains Surya Namaskaras (Sun salutations), Asanas (Body postures), Pranayama (Breath regulation exercises), Self Awareness Meditation and 10 minutes lecture on application of traditional Indian knowledge to modern work and personal lives; Every month a lecture viz., Jnana yoga class for 1 hour on application of traditional Indian knowledge is conducted

by the first author on the following topics, either thru oral lectures or audio visual presentations. 1) Yogah Karmasu Koushalam 2) Six Dimensions of Karma Yoga 3) Axioms of meaningful work 4) Lord Krishna as modern manager; The subjects in the control group were not given any intervention; In order to prove or disprove the hypothesis, data was collected for both the groups before the study i.e, on October 1<sup>st</sup> 2014, in the middle of the study i.e on December 1<sup>st</sup> 2014, at the end of the study i.e., on 31<sup>st</sup> January 2015; and The Big Five Inventory developed by Oliver P.John and Sanjaya Srivastava was used<sup>61</sup>. It contains 44 questions and 9 of them are related to agreeableness. It is a five point Likert scale and has a Cronbach Alpha reliability of .82 and validity of .92<sup>30</sup>

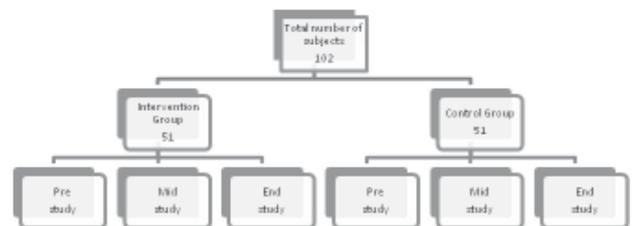


Figure 1: A schematic representation of the study plan

Table 1: Age and job experience of Intervention group and Control subjects

	Age of I. G.	Experience of I. G.	Age of C. G.	Experience of C. G.
Mean	34.784	10.627	32.21	7.2157
std dev	6.6677	6.1722	4.7744	4.265

Table 2: Sector wise distribution of subjects

Sectors	Intervention group	Control group
IT and related	21	20
Finance and related	14	13
Others	16	18

Table 1 represents age and experience of subjects. The average age of subjects in intervention group is 34.7 years with standard deviation of 6.6 where as the average age of subjects in control group is 32.21 with standard deviation of 4.77. The average experience of subjects in intervention group is 10.6 years with standard deviation of 6.17 where as the average experience of subjects in control group is 7.21 years with standard deviation of 4.2 years. The average experience of subjects of intervention group is about 3.4 years more than that of control group. Average age of subjects in intervention group is more by only 2.5 years than that of control group. Table 1 shows that the background of subjects in terms of age and experience in control group and intervention group is similar.

Table 2 represents the industries in which the subjects are employed. For the sake of study, the industries are divided as 1) Information Technology and related services like BPO, electronics 2) Finance and related services include banking, insurance, mutual funds, accounting services 3) those who



do not fall under the above two are categorized as 'others'. The table shows the similarity in distribution of the subjects in both control group and intervention group.

Table 3: Agreeableness in Intervention and Control group during the study

Table with 7 columns: Intervention Group (Pre, Post1, Post2), Control Group (Pre, Post1, Post2), Mean, SD, Change. Rows show mean scores and standard deviations for both groups at three time points.

Table 3 represents the average changes in the agreeableness among the subjects in intervention group and control group. Since the total number of items in agreeableness are nine and scales are five, the maximum score is 45. The pre study i.e., base line data shows that score of agreeableness is 28.22 with standard deviation of 4.51 in subjects of intervention group whereas the same for control group is 28.51 and 4.21 respectively which show that the subjects have similar traits before the study.

Since the design of the study requires repetitive studies of the same subjects, Repetitive Measures ANOVA i.e. RMANOVA test was used to analyse the data which are collected before the study(pre study), in the middle of the study(post1 study) and at the end of the study(post2 study) both for intervention group and control group. The results are shown in the table 4.

Table 4: Agreeableness between groups

Table with 3 columns: Time factor, Group, Significance (p value). Rows show comparisons between Y1 vs c1, Y2 vs c2, and Y3 vs c3 at Pre, Post 1, and Post 2 stages.

Table 4 shows that the difference in agreeableness among subjects in intervention group and control group before the study i.e, baseline data is not significant (p>.05). It shows that the score of agreeableness is relatively same in the subjects of both groups before study. Post 1 data i.e data in the middle of the study show that there is significant increase in the agreeableness in intervention group compared to control group (p < .001).Post 2 study i,e data at the end of the study shows that there is significant increase in the agreeableness in intervention group compared to control group (p < .001).

Table 5: Agreeableness with in groups

Table with 3 columns: Group, Time factor, Significance (p value). Rows show comparisons between Pre vs post 1, Pre vs post 2, and Post 1 vs post 2 for both Yoga and Control groups.

Table 5 shows changes in agreeableness with in Intervention group and control group during the study. It shows a continuous increase in agreeableness from beginning to middle(p<.001), middle to end(p<.001) and beginning to end (p<.001) in subjects of intervention group . There is no significant increase in agreeableness from beginning to middle(p>0.05), middle to end(p>.05) and beginning to end (p>.05) in subjects of control group

Notes:\*\* indicates that the values are significant; Pre,post1,post2 means the Study before intervention (baseline data), study in the middle of intervention, study at the end of intervention respectively; Y1,Y2,Y3 means yoga group(intervention group) at the time of before study, middle of study, after study; and C1,C2,C3 means control group at the time of before study, middle of study, after study

Limitations of the study and recommendations:The subjects are from different organizations and sectors. The changes in environment of their respective organizations and sectors during the study period may affect their responses. For further research, It is recommended to have subjects from the same organization.The control group is not given any intervention, which may affect their interest to give response to the questionnaires and affect it's accuracy. Considering the ethical issues it is difficult for an outsider to insist on interest of subjects of control group while giving responses. For further research, it is recommended to give some non yoga intervention to control group.It is recommended for further research that if the intervention for both groups is given with in the organization, the same physical and office environment for all subjects in both groups can ensure better accuracy, unbiased responses.

Conclusions

The following conclusions can be drawn from the study - Personality traits of employee especially agreeableness has an impact on the performance of employee; Personality is changeable by suitable environment and training; Practice of Integrated Yoga brings a positive transformation in the personality traits especially Agreeableness and the implication of the above points is that practice of Integrated Yoga can improve the performance of employee.

References

M.R.Barrick, The Big Five Personality Dimensions and Job Performance:Ameta analysis," Personnel Psychology, Spring 1991, pp 1-26
Stephen P.Robbins, Timothy A.Judge, Neharika Vohra, Organisational Behavior, Pearson Education: Prentice hall, 2011), p.128



- Stephen P. Robbins, Timothy A. Judge, Neharika Vohra, Organisational Behavior, Pearson Education: Prentice Hall, 2011), p.131
- Timothy A. Judge, Daniel Heller and Michael K. Mount, Five-Factor Model of Personality and Job Satisfaction: A Meta-Analysis Journal of Applied Psychology 2002, Vol. 87, No. 3,
- Colbert, Mount, Harter, Witt, & Barrick, Interactive Effects of Personality and Perceptions of the Work Situation on Workplace Deviance Journal of Applied Psychology, Vol. 89, No. 4
- L.A. Witt, Lisa A. Burke, Murray R. Barrick, Michael K. Mount, Interactive Effects of conscientiousness and Agreeableness on Job performance, Journal of Applied Psychology, 2002, Vol 87, No 1
- Russell P. Guay, In-Sue Oh, Daejeong Choi, Marie S. Mitchell, Michael K. Mount and Kanghyun Shin, The Interactive Effect of Conscientiousness and Agreeableness on Job Performance Dimensions in South Korea, International Journal of Selection and Assessment Volume 21 Number 2 June 2013
- Irarda, Frindley, Emotional Intelligence and Propensity to be a team player, E-Journal of Applied Psychology : Emotional Intelligence, 2 (2), 19 -29 (2006)
- Cooper R.K (1997), Applying Emotional Intelligence in Workplace, Training and Development, 51, 31-38
- Kevin Tasa, Sears and H. Schat, Personality and teamwork behavior in context: The cross-level moderating role of collective efficacy, Journal of Organizational Behavior 32, 65–85 (2011), Published online 2 February 2010 in Wiley Online Library, DOI: 10.1002/job.680
- Hogan, J. & Holland, B. 2003, "Using theory to evaluate personality and job performance relations: A socio-analytic perspective", Journal of Applied Psychology, vol. 88, pp.100-112.
- Frederick, Matthew, Michael, selecting individuals in team settings: the importance of social skills, personality characteristics, and teamwork knowledge, Personnel psychology 2005, 58, 583–611
- G.W. Allport, Personality: A psychological Interpretation (New York: Holt, Rinehart & Winston, 1937)
- Mischel, W. 1968. Personality and assessment. New York: Wiley
- Cloninger, S.C. 1996. Theories of Personality: Understanding Persons. Eaglewood Cliffs, NJ: Prentice Hall
- Helsen, R. and Moane, G. 1987. 'Personality change in women from college to midlife'. Journal of Personality and Social Psychology, 53:176-186
- Dudek, S.Z and Hall, W.B 1991. 'Personality consistency: eminent architects 25 years later'. Creativity Research Journal, 4:3, 213-231
- Field, D. and Millsap, R.E. 1991. 'Personality in Advanced Old Age: Continuity or Change?' Journals of Gerontology, 46:6, 299-308
- Jose Hernandez and Ricardo Mateo 'Indications of virtues in Conscientiousness and its practice through continuous improvement', Business Ethics: A European review, Vol 21, number 2, April 2012
- Iyengar B.K. Light on yoga. New York: Schocken Books; 1966.
- Becker T.E. Foci and bases of commitment: Are they distinctions worth making! Acad Manage J 1992;35:232-44.
- Mahadevan, B. (2008). "Management Lessons from the Bhagavad Gita", *Vedanta Kesari*, December 2008, pp 558-561.
- Pande N, Naidu R.K. Anasakti and health: A study of non-attachment. Psychol Dev Soc J 1992;4:89-104.
- Srinivas K.M. Organization development: Maya moksha. In: Kanunga R.N, Manuel M, editors. Work Motivation Models for Developing Country. New Delhi: Sage Publications; 1994.
- Aditi Kejriwal and Venkat R Krishnan, Impact of *Vedic* Worldview and *Gunas* on Transformational Leadership, *Vikalpa*, Volume 29, No 1, January - March 2004
- Sony Kumari, Alex Hankey, H.R. Nagendra, Effect Of Smet On Emotional Dynamics Of Managers, *Voice Of Research*, vol. 2 issue 1, June 2013, issn no. 2277-7733
- Sudheer Deshpande et al., A Randomized Control Trial Of The Effect Of Yoga On *Gunas* (Personality) And Health In Normal Healthy Volunteers, *International Journal of Yoga*, January 06, 2009
- Tikhe Sham Ganpat et al., Yoga Therapy for developing Emotional Intelligence in mid-life managers, *Journal of Midlife Health*, Vol 2, issue 1, Jan-Jun 2011, issn 0976-7800
- Akhilendra K. et al., Does Personality Predict Organisational Citizenship Behaviour among Managerial Personnel, *Journal of the Indian Academy of Applied Psychology* July 2009, Vol. 35, No. 2, 291-298.
- Hasmukh Adhia, H.R. Nagendra, B. Mahadevan, Impact Of Yoga Way Of Life On Organizational Performance, *International Journal of Yoga*, DOI: 10.4103/0973-6131.72631
- John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (Vol. 2, pp. 102–138). New York: Guilford Press.