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Impact of *Gun*s and *Karma Yoga* on Transformational Leadership

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Abstract. This study examined whether transformational leadership would be affected by the predominance of a particular *Guna* (*Sattva*, *Rajas* & *Tamas*) in a leader and his or her belief in *Karma Yoga*. An experiment was conducted using a sample of 110 marketing executives working in a financial services firm in eastern India. A 2x2 + 1 factorial design was used to manipulate the three *Gun*s (*Sattva*, *Rajas* & *Tamas*) and *Karma Yoga*. *Sattva* and *Rajas* were crossed with *Karma Yoga* (yes or no) to produce four cells, with *Tamas* being the fifth cell. Transformational leadership was the measured variable. Results show that compared to *Rajas*, *Sattva* enhances transformational leadership whereas *Tamas* reduces it. Further, *Karma Yoga* enhances transformational leadership when the leader is *Sattvic*, but does not enhance transformational leadership when the leader is *Rajasic*. Results imply that organizations interested in enhancing transformational leadership should develop *Sattvic* qualities in their managers and encourage them to be duty-oriented.

Keywords: Transformational leadership, *Gun*s, *Karma Yoga*, Duty-Orientation, India.

Transformational leadership is the most desirable form of leadership since it can significantly enhance organizational effectiveness. Bass (1985) demonstrated that transformational leadership was highly correlated with perceived unit effectiveness as compared to transactional factors. House, Spangler and Woycke (1991) found that transformational leadership can significantly enhance presidential effectiveness. Since, the importance of transformational leadership is undisputed, it is important to understand the traits which would lead to a greater perception of transformational leadership in a person. Studies have found that certain personality traits are consistently associated with leadership emergence and effectiveness (Bono & Judge, 2004) and that transformational leaders have a distinct value system (Krishnan, 2001).

Though there is some universality in the paradigm of transformational leadership, it is equally important to appreciate the impact of specific thought processes, values, attitudes and beliefs that are unique to a culture. To understand the mental make-up of a person in the Indian context, two important concepts from Indian philosophy can be used – the *Guna*

theory and the law of *Karma*. The three *Gunas* – *Sattva*, *Rajas* and *Tamas* constitute the psychological nature of human being (Mohan & Sandhu, 1986) and bring out diverse character orientations in human beings (Biswas, 2010). *Sattva* is the purest and the most desirable *Guna* while *Tamas* is the least desirable.

The Indian worldview is characterized by three fundamental beliefs – belief in the *Karma* theory, belief in the existence of the soul (*atma*) and belief in the doctrine of salvation (*mukti*). The doctrine of *Karma Yoga* encompasses all these three beliefs and urges people to intelligently perform action such that the soul is freed from bondage and salvation is attained. The *Guna* theory and the doctrine of *Karma Yoga* form the very essence of Indian philosophy and belief system. Mulla and Krishnan (2010) demonstrated that *Karma Yoga* orientation of a leader enhances transformational leadership. Kejriwal and Krishnan (2004) by conducting an experiment found that *Sattva Guna* as well as *Vedic* worldview (which was operationalized as a combination of *Karma* and *Maya*) enhance transformational leadership.

This study attempted to further the literature on this subject by studying whether a leader in a business organization is seen as more transformational if he or she is high on *Karma Yoga* and has a particular *Guna* orientation. The study also examined the interaction effects of the *Gunas* and *Karma Yoga* on transformational leadership.

Theory and Hypotheses

Transformational Leadership

According to Burns (1978), leadership can be either transactional or transformational. Transactional leadership occurs when one person takes the initiative in making contact with others for the purpose of an exchange of valued things (Burns, 1978, p.19). On the other hand, transforming leadership occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality (Burns, 1978, p.20). Thus, the essential difference between transactional and transformational leadership is that whereas transactional leadership focuses on satisfying current wants, transformational leadership addresses real needs and higher moral development. Burns (1978, p.46) stated that the ultimate test of moral leadership is its capacity to transcend the claims of the multiplicity of everyday wants and needs and expectations, to respond to the higher levels of moral development, and to relate leadership behaviour – its roles, choices, style, commitments – to a set of reasoned, relatively explicit, conscious values.

Bass (1985) identified four factors of transformational leadership – charisma, inspirational motivation, intellectual stimulation, and individualized consideration. Charisma can be sub-divided into idealized influence attributed and idealized influence behaviour. It is important to note that charisma is a relationship between a leader and follower and not a personality characteristic of the leader. Therefore, charisma exists only if followers say that it does or followers behave in specific ways (House, Spangler & Woycke, 1991).

House, Spangler and Woycke (1991) used a study of U.S. presidents to test the effect of personality and charisma on leadership effectiveness. Presidential behavioural charisma was strongly predicted by activity inhibition and need for power. Charisma was found to be positively and significantly related to presidential direct action and presidential subjective, economic and social performance. Thus, charisma is an important component of leadership effectiveness.

Judge and Bono (2004) measured the Big Five traits (extraversion, neuroticism, openness to experience, agreeableness and conscientiousness) and their relationship with

transformational leadership. They found extraversion to be positively linked and neuroticism to be negatively linked to transformational leadership. However, there was considerable variability in the correlation of conscientiousness, agreeableness and openness to experience with transformational leadership. They also found that the Big Five explained 12% of the variability in charisma and only 5% and 6% of the variability in ratings of intellectual stimulation and individualized consideration.

Various studies have also been done with respect to the value systems and ethical preferences of transformational leaders. Banerji and Krishnan (2000), while studying the ethical preferences of transformational leaders found that inspirational leadership was negatively related to the leader's preference for bribery and favouritism and intellectual stimulation was negatively related to preference for bribery.

Krishnan (2001) showed that transformational leaders gave higher priority to terminal values such as 'a world at peace' over 'national security' and a 'world of beauty' thus indicating that they value collective welfare more than personal welfare. They also gave preference to moral values (such as loving, responsible, etc.) over competence values (such as intellectual). This validates Burns' (1978) claim that transformational leadership is essentially a moral leadership. It is also interesting to note that followers emulate only the terminal value systems of transformational leaders but not their instrumental value systems (Krishnan, 2000).

Chatterjee and Krishnan (2007) studied the impact of spirituality and political skills on transformational leadership. Spirituality was found to be significantly correlated to attributed charisma, individualized consideration and aggregate transformational leadership, while political skills did not enhance transformational leadership. The study further revealed that the introduction of political skills reduced the impact of spirituality on transformational leadership. Aswegen and Engelbrecht (2009) found that altruism influences transformational leadership positively, and that transformational leadership in turn has a positive effect on the ethical climate in an organization.

Another important variable that impacts transformational leadership is emotional intelligence. Barling, Slater and Kelloway (2000) showed that emotional intelligence is associated with three aspects of transformational leadership, namely idealized influence, inspirational motivation and individualized consideration. Clarke (2010) found that emotional ability accounts for 4% in variation in the transformational leadership dimensions of idealized influence and individualized consideration after controlling for personality. Conora (2010) showed that certain competencies of emotional intelligence such as interpersonal, adaptability and general mood had the highest correlations with transformational leadership.

The study of transformational leadership is important because there is sufficient evidence to show that transformational leadership enhances organizational effectiveness. Bass (1985) found that transformational leadership was highly correlated with perceived unit effectiveness as compared to the transactional factors. House, Spangler and Woycke (1991) found significant correlation between transformational leadership and presidential effectiveness.

It is also important to note that studies actually prove that transformational leadership is not something static but can be enhanced through training and feedback. Kelloway, Barling and Helleur (2000) conducted a study on a sample of employees of a provincial health care corporation in Canada. Training and feedback were found to significantly enhance transformational leadership. An interesting finding of the study was that the combination of

training and feedback was not associated with higher ratings of transformational leadership than either intervention alone. This shows that the two may be interchangeable largely.

The Three Gunas

According to the *Sankya* School of Indian Philosophy, the entire universe including the human mind is a manifestation of *mula prakriti* which is constituted of the three *Gunas*, namely *Sattva*, *Rajas* and *Tamas* (Kaur & Sinha, 1992). These *Gunas* are the primal attributes embedded in every being. *Gunas* co-exist and people can have more than one *Guna* at the same time, with one of them predominating (Kaur & Sinha, 1992). It is the varying proportions of the expression of different *Gunas* that contributes to and brings out diverse character orientations in human beings (Biswas, 2010).

The dominant *Guna* can be identified along different dimensions like faith, food, sacrifice, austerity, gift, obligatory work, knowledge, action, agent, intellect, determination, happiness, etc. One can be *Sattvic* on one dimension, *Rajasic* on another and *Tamasic* on yet another (Kejriwal & Krishnan, 2004). Further, in a person, the degree of *Gunas* does not remain constant and keeps changing from time to time (Mohan & Sandhu, 1986).

There exists no universal agreement among authors with respect to naming of the *Gunas*. *Sattva* has been translated as Illumination (Das, 1987), Stability (Sebastian & Mathew, 2002), Purity and Illumination (Chakraborty, 1988) and Awareness (Kejriwal & Krishnan, 2004). Similarly, *Rajas* is equated with Activity and Attachment (Chakraborty, 1988), Activation (Sebastian & Mathew, 2002), Passion (Bhal & Debnath, 2006) and Dynamism (Kejriwal & Krishnan, 2004). Kaur and Sinha (1992) have further sub-divided *Rajas* into *Rajas* Positive and *Rajas* Negative. According to them, *Rajas* Positive consists of love of fame, passion and power, while, *Rajas* Negative consists of strife and unrest. Authors have translated *Tamas* as Indolence and Delusion (Chakraborty, 1988), Inertia (Sebastian & Mathew, 2002), Dullness (Bhal & Debnath, 2006) and Inertness (Kejriwal & Krishnan, 2004).

Various studies have been undertaken to understand the relationship and hierarchy of the three *Gunas*. Das (1987) showed that the three *Gunas* are exclusive of each other and are negatively correlated at significant levels. Further, *Rajas* is closer to *Sattva* than *Tamas* in the hierarchy (Das, 1987). This finding was confirmed by Biswas (2010). It is also clear that *Sattva* is preferred to *Rajas* and *Rajas* to *Tamas*. Mohan and Sandhu (1986) using a sample of 54 male and 57 female students in college showed that both males and females rated *Sattva* as the highest desired *Guna* followed by *Rajas* and *Tamas*.

Studies have been conducted to find out the variables that impact *Gunas*. Deshpande, Nagendra and Nagarathna (2008) studied the efficacy of Yoga and physical exercise on the *Gunas* and general health of 226 healthy subjects of both sexes aged between 18-71 years. The Yoga (Y) group practiced an integrated Yoga module that included *asanas*, *pranayam*, meditation, notional correction and devotional sessions. The control group practiced mild to moderate physical exercise (PE). Their results showed that while there was a significant increase in the *Sattva* scores of both Y and PE groups, the increase in the Y group was higher than in the PE group. On the other hand, there was a decrease in the *Rajas* and *Tamas* scores in both the groups, the decrease in *Rajas* being higher in the PE group.

Various authors have also studied the correlation between *Gunas* and organizational behaviour and ethics. Kaur and Sinha (1992) measured the co-relation of the three *Gunas* with various constructs of Organizational Behaviour such as Least Preferred Co-worker (LPC) Score, Leader-Member Exchange (LME), Work Ethic (WE), Personal Effectiveness (PE), Self-Actualizing Behaviour (SAC) and Organizational Effectiveness (OE). *Sattva Guna*

was found to be positively related to all these constructs except the LPC score. *Tamas Guna*, on the other hand, had either negative or insignificant relationship with all the variables. An important distinction was observed between the *Rajas* Positive and *Rajas* Negative *Guna*. Whereas, *Rajas* Positive was found to be positively related to LPC score, work ethics and self-actualizing behaviour, *Rajas* Negative was negatively related to work ethics.

Biswas (2009) empirically analyzed the relationship between *Gunas* and Organization Citizenship Behaviour (OCB). Three variables - helping behaviour, civic virtue and sportsmanship constituted the OCB construct. Biswas (2009) showed that *Sattva Guna* is positively related to helping behaviour and sportsmanship while *Rajas* is positively related to civic virtue and helping behaviour. *Tamas Guna* was found to be negatively related to civic virtue. Bhal and Debnath (2006) conducted a study on 273 Information Technology (IT) professionals to find out whether *Gunas* can be effectively used to predict ethical conduct in organizations. Results showed that ethical behaviour reduces as one moves from *Sattva* to *Rajas* to *Tamas*. Those high on *Rajas* are likely to indulge in software piracy if the organization expects them to. However, people high on *Tamas* go a step further. They do not even consider software piracy as unethical and are likely to indulge in it for their personal benefit.

There is significant correlation between *Gunas* and spirituality (measured under the following dimensions – cognitive orientation, experiential dimension, essential well-being, paranormal beliefs and religiousness) (Bhal & Debnath, 2006). *Sattva* shows a positive relationship with cognitive orientation towards spirituality and religiousness dimensions, while *Tamas* has a negative correlation with essential well-being. *Rajas* does not show any relationship with any dimension of spirituality. Sebastian and Mathew (2002) found a significant degree of positive correlation between parapsychological investigation (psi) and *Sattva* in females. For males, the correlation co-efficient was positive but not statistically significant.

Narayanan and Krishnan (2003) measured the impact of *Sattva* and *Rajas Guna* on transformational leadership and *Karma Yoga*. Their study showed that three dimensions of *Sattva Guna* (sympathy, accepting pain and motivation to work) enhanced transformational leadership whereas the attribution dimension of *Sattva Guna* (“I have no grudge against myself or anybody else for my sufferings”) predicted transformational leadership negatively. Further, whereas *Sattva Guna* did not predict *Karma Yoga*, two dimensions of *Rajas Guna* were found to have reduced *Karma Yoga*. Kejriwal and Krishnan (2004) found that *Sattva* and *Sattva-Rajas Guna* enhanced transformational leadership whereas *Tamas* reduced it. It is often assumed that active and passionate persons make good leaders. However, an interesting finding of the study was that a *Sattva-Rajas* combination did not enhance transformational leadership more than *Sattva* alone.

Sattva Guna is characterized by qualities such as purity, discrimination, serenity, transparency, compassion, goodness and altruism (Kaur & Sinha, 1992). *Rajas* consists of love of fame, passion and unrest (Kaur & Sinha, 1992) and *Tamas* consists of indolence and delusion (Chakraborty, 1988). Compared to *Rajas* and *Tamas*, *Sattvic* qualities resemble those of a transformational leader who is supposed to be moral and altruistic and raise his or her followers to higher levels of morality. Thus it was hypothesized that:

Hypothesis 1: A person high on *Sattva Guna* will be perceived as more transformational than a person high on *Rajas* or *Tamas*.

Tamas Guna is characterized by anger, greed, ignorance, confusion, inertia darkness and brutality (Kaur & Sinha, 1992). A person who is himself or herself inert and immoral

cannot inspire others to greater efforts or morally uplift them. Further, *Rajas* is closer to *Sattva* than *Tamas* in the hierarchy of the *Gunas* (Das, 1987). Thus, it is hypothesized that:

Hypothesis 2: A person high on *Tamas Guna* would be perceived as less transformational than a person high on *Rajas*.

Karma Yoga

The word '*Karma*' is derived from the Sanskrit root *kri* which means doing, affairs or activity and includes all action that a person performs whether they are of body, speech or mind. The word *yoga* means a device or intelligent method. Since, the ultimate goal of all beings is to free the soul from the cycle of birth and death, *Karma Yoga* can be defined as a technique for intelligently performing actions such that the soul is not bound by the effects of the action (Mulla & Krishnan, 2010). *Karma Yoga* is made up of three dimensions: a sense of obligation or duty towards others, an absence of desire for rewards, and a sense of equanimity which enables one to be neutral to environmental influences (Mulla & Krishnan, 2007).

Several studies have been done to understand the profile of persons high on *Karma Yoga*. Mulla and Krishnan (2007) found that people high on *Karma Yoga* showed a distinct value system from those low on *Karma Yoga*. They gave significant preference to other-oriented values in case of terminal values and greater preference to moral values as far as instrumental values are concerned. Individuals' scores on *Karma Yoga* were also found to be highly correlated with emotional intelligence. Mulla and Krishnan (2008) showed that empathetic concern and *Karma Yoga* are highly correlated. Moreover, the relationship between empathic concern and *Karma Yoga* is substantially stronger for individuals who are low on personal distress as compared to those who are high on personal distress.

Mulla & Krishnan (2006) studied the impact of *Karma Yoga* on two facets of the personality trait of conscientiousness, viz. dutifulness and achievement striving. *Karma Yoga* was operationalized as *Karma Yoga*- sense of duty and *Karma Yoga* - absence of desire for rewards. Belief in Indian philosophy was significantly related to *Karma Yoga* – sense of duty. There was moderate support for their hypothesis that dutifulness was more strongly related to *Karma Yoga* when achievement striving was low than when it was high. They also found that the 'absence of desire for rewards' dimension of *Karma Yoga* enhanced life satisfaction.

Another important area of study has been the correlation between the *Karma Yoga* orientation of the leader and its impact on his or her transformational leadership. Mulla and Krishnan (2010) studied whether the *Karma Yoga* of a leader and the follower's belief in Indian philosophy enhanced transformational leadership. *Karma Yoga* was conceptualized as made up of three dimensions: duty orientation, indifference to rewards and equanimity. Only the duty-orientation aspect of *Karma Yoga* was found to affect three dimensions of transformational leadership, viz. charisma (attributed), charisma (behaviour) and inspirational motivation. They also found that a leader's *Karma Yoga* was more strongly related to charisma, when a follower's belief in Indian philosophy was high as compared to when the follower's belief was low. They concluded that the relationship of belief in Indian philosophy is strongest with duty-orientation because sense of duty constitutes the core of the philosophy of *Karma Yoga*. The other two dimensions are perhaps the consequence of the duty-orientation, which manifest over a period of time. Kejriwal and Krishnan (2004) also found that the belief in *Karma* enhanced transformational leadership.

Mehra and Krishnan (2005) empirically tested the effect of *Svadharm*a orientation on transformational leadership and followers' trust in the leader. They defined the *Svadharm*a of a manager as consisting of the following dimensions – appropriate role behaviours, including protecting in-group members and favouring them over others, maintaining respect and

obedience for superiors and loving and caring for juniors and dependents. They found that *Svadharm*a orientation of a leader significantly enhanced transformational leadership.

Efforts have also been made to understand whether transformational leadership can enhance the duty orientation and spirituality of followers and help to increase their commitment towards the organization. Krishnan (2007) found that transformational leadership enhances the *Karma Yoga* and spirituality of followers. Krishnan (2008) studied the relationship of transformational leadership with followers' *Karma Yoga*, spirituality, organizational identification and normative organizational commitment. *Karma Yoga* was found to be positively related to spirituality which was in turn related to organizational identification. *Karma Yoga* was also positively related to normative commitment. The *Karma Yoga* of followers was significantly enhanced by the transformational leadership exhibited by their superiors. This study thus showed that transformational leaders, by enhancing the *Karma Yoga* and oneness of followers, increase their organizational identification and normative commitment and help to address the goals of the organization.

Madhu and Krishnan (2005) studied the impact of transformational leadership and *Karma Yoga* on five dimensions of organizational citizenship behaviour - altruism, conscientiousness, sportsmanship, courtesy, and civic virtue. The presence of both *Karma Yoga* and transformational leadership had an enhanced effect on altruism, conscientiousness and courtesy. An interesting finding of the study was that even though transformational leadership by itself enhanced altruism and conscientiousness, it did not predict courtesy. Courtesy was enhanced only when there was an interplay between transformational leadership and *Karma Yoga*. This study thus showed that the transformational leadership of a manager will lead to higher display of organizational citizenship behaviour, if it is combined with *Karma Yoga*.

Transformational leadership is grounded in morality and ethical conduct and being duty oriented is seen as doing the right or ethical thing in the Indian context (Mehra & Krishnan, 2005). Moreover, concern for others is the basis for transformational leadership and there exists a very high correlation between empathetic concern and *Karma Yoga* (Mulla & Krishnan, 2008). Thus, it is hypothesized that:

Hypothesis 3: *Karma Yoga* orientation will enhance transformational leadership.

Method

In order to test the hypotheses, we conducted an experiment on a sample of 118 employees working in the marketing division of a financial services firm in eastern India. Complete data were obtained from 110 respondents, the response rate being 93%. The sample consisted of 58 males and 52 females with a median age of 26. The employees were randomly chosen and assigned to one of five cells.

Experimental Design

A (2 x 2 + 1) design was used to produce five different treatments. *Sattva* and *Rajas* were manipulated in the factorial design along with the presence or absence of *Karma Yoga*. This gave us a 2 x 2 design and four cells. The fifth cell represented a leader high on *Tamas Guna*. A combination of *Tamas* and *Karma Yoga* was not possible, given that a person cannot be ignorant and lazy and at the same time understand cause-effect chain and have a duty orientation. The dependent variable was transformational leadership.

Manipulations

Gunas and *Karma Yoga* were manipulated by having an actor, Manisha play the role of a business leader in the experiment. The objective of the experiment was to measure the perceived transformational leadership of the actor. The hypotheses stated that the perceived transformational leadership would vary depending upon *Gunas* and the presence or absence of *Karma Yoga*. Manipulations were done by first distributing a note with a description of the actor based on the relevant cell and then by the actor enacting the role as per the given description. The background information of the actor was the same for all the five cells. The description of the actor varied according to the cell to which the participants belonged. For example, in the cell which had both *Sattva* and *Karma Yoga* present, the description of *Sattva* as well as *Karma Yoga* was distributed. In the cell in which the actor was to be shown as *Sattvic* but without having the belief in *Karma Yoga*, only the description for *Sattva* was distributed. To increase the interaction of the participants with the actor, the participants were made to play a game based on prisoner's dilemma. During the game, the actor enacted the relevant manipulation using gestures, words and actions. The actor used very calm, pleasant, smiling, friendly gestures, words and actions when *Sattva* cell was enacted. The actor used an entirely different set of gestures, words and actions such as being lazy, bored, and sleepy when the *Tamas* cell was enacted. For *Rajas*, the actor displayed a forceful personality which included elements of hyper activeness, worry, enthusiasm, selfishness. The actor enacted the presence of *Karma Yoga* by talking about duty orientation and by not being affected by success or failure.

Procedure

The game played by the participants was modelled on prisoner's dilemma. Each cell had 21-24 participants. The cell was further divided into four groups of six persons each and each group chose a negotiator from among its group members. The groups had the option to either cooperate or not cooperate with the other groups and their payoffs depended upon both the option chosen by them and the option chosen by the other groups. The result of the game was irrelevant to the experiment and was only a means to ensure interaction between the actor and the participants.

The participants were told that the game was a team building exercise and that it would help them gain insights about themselves. They were also told that the game would provide them with insights on how they perceived other people and so they had to pay close attention to others including the actor. Close observation of the actor ensured that the participants perceived the manipulated variables better. Wherever possible, the actor ensured that an appropriate representation of the cell was portrayed to the participants in the form of comments, suggestions, gestures, posture, and other actions. Such interactions with the participants helped them understand the role played by the actor. The actor explained the rules of the game and made each group choose a negotiator. When the negotiators came forward to discuss their respective strategies, the actor made certain comments and acted in a way that was appropriate to the manipulated cell. The groups decided to either cooperate or not cooperate and indicated their choice with the help of a token that represented their choice. Their choice remained unknown to the other groups and was declared by the actor along with the results at the end of each round.

At end of the game, the participants were asked to answer a questionnaire with 50 items (20 items to check the validity of the manipulation and 30 items to measure the extent to which they found Manisha transformational).

The manipulation of *Gunas* was checked through a nine item scale developed for this study. Questions were asked on dimensions such as food, leisure, interests, accepting pain etc. Each question had three statements (one for each *Guna*) and the participants had to choose one statement, which they felt applied to Manisha the best. The reasoning behind this forced choice method was that on a particular dimension, if a person is high on one *Guna*, he or she has to be necessarily low on the other *Gunas*. The *Sattva*, *Rajas* and *Tamas* scores given by each participant was calculated by adding up the questions for which he or she chose one of the three *Gunas*. Karma Yoga was measured through 11 items, on a five point Likert scale. After dropping two items, we got a Cronbach Alpha of 0.545 for the items of *Karma Yoga*. We used analysis of variance to check whether the cells were seen as designed. Results showed that the four scales (*Sattva*, *Rajas*, *Tamas* and *Karma Yoga*) had significantly higher means in the cells in which they were present than in which they were absent. The *Sattva*, *Rajas* and *Tamas* score were significantly higher in the cells in which they were shown as present ($p < .001$). *Karma Yoga* was also found to be significantly higher in yes-*Karma Yoga* cells than in the no-*Karma Yoga* cells ($p < .05$).

Measures

Krishnan's (2009) 30-item Transformational Leadership Questionnaire was used to measure the transformational leadership of Manisha as perceived by the participants. Transformational leadership was measured on five factors - idealized influence attributed, idealized influence behaviour, inspirational motivation, intellectual stimulation and individualized consideration. The Cronbach alpha for intellectual stimulation was below acceptable levels and thus, this factor was dropped from the measure. For the other factors, the Cronbach alpha was between .573 and .667. Pearson's correlation for the factors ranged from .496 to .622 ($p < .01$ for all factors). We took the means of these four highly correlated factors (idealized influence attributed, idealized influence behaviour, inspirational motivation and individualized consideration) to create a composite transformational leadership score.

Results

To test the hypotheses, analyses of variance of transformational leadership across different combinations of the five cells were performed, results of which have been tabulated in Table 1. The leader was rated as significantly more transformational when she was *Sattvic* than when she was *Rajasic* or *Tamasic*, thus supporting Hypothesis 1. To compare between *Sattva* and *Rajas*, both the yes-*Karma Yoga* and the no-*Karma Yoga* cells of *Sattva* and *Rajas* were considered. However, when *Sattva* was compared with *Tamas*, we considered only the *Sattva* and no-*Karma Yoga* cell. This was done because *Tamas* did not have a yes-*Karma Yoga* cell.

The leader was rated as significantly less transformational when she was *Tamasic* than when she was *Sattvic* or *Rajasic*, thus supporting Hypothesis 2. For the purpose of this analysis, *Tamas* was compared separately with *Rajas* and no-*Karma Yoga* cell and *Sattva* and no-*Karma Yoga* cell.

Karma Yoga was found to enhance transformational leadership when the leader was *Sattvic* but not when the leader was *Rajasic*, thus partially supporting the Hypothesis 3. We also did a univariate analysis with transformational leadership as the dependent variable and *Karma Yoga* and *Sattva* as the independent variables. The interaction effect between *Sattva* and *Karma Yoga* was found to be significant ($p < .005$).

Table 1. Analysis of Variance of Transformational Leadership across Cells

Independent Variable	n	M	n	M	F
		<i>Sattva</i>		<i>Rajas</i>	
<i>Sattva</i> compared to <i>Rajas</i>	46	2.75	43	2.43	*5.70
		<i>Sattva</i>		<i>Tamas</i>	
<i>Sattva</i> compared to <i>Tamas</i>	24	2.53	21	1.87	**18.80
		<i>Tamas</i>		<i>Rajas</i>	
<i>Tamas</i> compared with <i>Rajas</i>	21	1.87	21	2.57	**32.80
		<i>Karma Yoga Yes</i>		<i>Karma Yoga No</i>	
<i>Karma Yoga</i> (yes/no) with <i>Sattva</i> present	22	2.98	24	2.53	*4.77
<i>Karma Yoga</i> (yes/no) with <i>Rajas</i> present	22	2.30	21	2.57	3.30

* = $p < 0.05$; ** = $p < 0.001$

Discussion

The results of this study provide support for the hypothesized impact of *Sattva* and *Tamas* on transformational leadership. The study shows that *Sattva* enhances transformational leadership whereas *Tamas* reduces it, thus supporting the findings of Kejriwal and Krishnan (2004). The previous study had been conducted on a group of school children; however this study shows the same findings even when conducted on a sample of people working in a corporate organization. Kejriwal and Krishnan (2004) had operationalized *Vedic* worldview as *Maya* and *Karma* and found that when the leader was *Sattvic*, whether she had a *Vedic* worldview or not did not significantly affect transformational leadership. However, this study shows that when a leader is *Sattvic*, he or she is perceived as more transformational if he or she also has a *Karma Yoga* orientation.

In this study, our third hypothesis was only partially supported. Results indicate that *Karma Yoga* enhances transformational leadership when the leader is *Sattvic* but does not do so when the leader is *Rajasic*. One possible explanation for the same can be that people high on *Rajas* are essentially transactional leaders and the transformational effects of *Karma Yoga* are not able to overcome this transactional nature of *Rajasic* leaders. Further research can be done on a larger sample to understand the reasons for *Karma Yoga* not enhancing transformational leadership in a person high on *Rajas*.

The findings of the study show that organizations can benefit significantly by building a corporate culture that promotes *Sattvic* qualities in the managers. Kelloway, Barling, and Helleur (2000) showed that transformational leadership can be enhanced with training and feedback. Organizations can introduce trainings and team building exercises that will help managers imbibe *Sattvic* qualities such as calmness and the ability to remain unaffected even in the face of adversity and reduce *Tamasic* qualities. They can encourage managers to consume *Sattvic* food.

An important finding of the study is that *Karma Yoga* enhances transformational leadership only in *Sattvic* persons. Thus, resources and energy should be spent in inculcating a duty orientation only in such people.

Conclusion

This study shows the effect of personality traits and belief systems on transformational leadership from the perspective of Indian culture and philosophy and finds support for the hypotheses that *Sattva* enhances transformational leadership whereas *Tamas* reduces it. We also found that *Karma Yoga* enhances transformational leadership when the leader is *Sattvic* but does not do so when the leader is *Rajasic*. Our research was conducted in a financial services firm. Future research can be conducted in different industries and even different cultures.

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