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Meditation and Locus of Control in Relation to Altitude

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ABSTRACT

The present study analyses the effect of meditation on locus of control of two groups(regular practitioners of meditation and non meditators) at two different altitudes (2535ft and 13500ft above sea level). The two groups comprised of Buddhist monks/Regular practitioners of meditation) and some locals in Yol Cantt (2535ft) and Lamayuru (13500ft). In the study it has been hypothesized that group one (Buddhist monks/Regular practitioners of meditation) at both the altitudes are inclined towards internal locus of control (internalism) whereas the second group is more inclined towards external locus of control (externalism). Total 100 individuals, 25 monks and 25 laymen from both areas were assessed by administering Rotter's locus of control scale. Self-reported responses of the subjects were recorded, scored and subjected to 't'test analysis. It was established that group practicing regular meditation (monks) is more inclined towards internal locus of control. The study has suggested that the individual practicing meditation at both the altitudes have more inclination towards internal locus of control and non regular practitioner have also shown inclination towards internal locus of control at higher altitude. Subjects who are following some religious practices, creative art etc. also have more of internalism. Internalism is also more prevalent in high altitude.

Keywords: *Rotter's Locus Of Control Scale, Bar Graph, Internal And External Locus Of Control*

Locus of control is an important part in personality psychology and an important personality trait that explains the extent to which an individual can control his life events. This concept was developed by Rotter in 1954. A person's locus of control can be conceptualized as internal or external, based on his belief that he can control the events in his life or some external force is responsible for the same. Individual with high internal locus of control believes that events in his life derive primarily from their own actions; for example, if a person with an internal locus of control does not perform well, as he wanted to on a test, he would blame it on lack of preparedness on his part. If he had performed well on a test, he would attribute this to the ability

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to study. People who have external locus of control believe that many things that happen in their lives are out of their control. They believe that their own actions are the result of external factors that are beyond their control.

Di Nardo (1979), found that those who have internal locus of control encounter less number of intruding thoughts and have better self control. Locus of control also enhances self efficacy and it has been revealed from the study of Smith**, R.E. (1989)**.**Angela C. (2005)** conducted a study on locus of control and self efficacy revealing the fact that internal locus of control predicts the neuro-endocrine cortisol response to stress. Meditation has been practiced since antiquity as a component of numerous religious traditions and beliefs. Meditation often involves an internal effort for self regulating mind. A number of studies have been done meditation and its impact on different parts of the brain.

Nayak. D. R (2013) studied the impact of meditation on alienation and locus of control in IT professionals. The level of alienation was reduced in IT professionals. Meditation is often used to clear the mind and ease many health issues, such as high blood pressure, depression, anxiety etc. Hence there is a strong relation between meditation and locus of control.

Leland St. Charles (2010) studies the relationship between four theoretically related but distinct concepts- mindfulness, self compassion, self efficacy and locus of control. The study was successful in establishing an empirical support to the theoritical relationship between mindfulness and self compassion. All the correlations between the four constructs were significant.

Objective

1. To study the effect of meditation on the locus of control in regular practitioners of meditation (Buddhist monks) with laymen/ non mediators at two altitudes.
2. To study the effect of meditation on locus of control of regular practitioners at both high and low altitude

Hypothesis

1. There will be significant difference between the regular practitioners of meditation and non practitioners in relation to locus of control at different altitudes.
2. There will be significant difference in the locus of control of regular practitioners of meditation at both the altitude.

METHOD

Sample

The sample has been collected from Gyoto Monastery Yol cantt and lamayuru monastery Ladakh. 25 mediators (Buddhist monks) and 25laymen are assessed at each place by using Rotter's Scale.

Inclusion Criteria*:*

1. Age group between the 25-50 years.
2. More than five years of mediation has been taken into consideration.
3. For Non meditators- locals from different profession were assessed.

Exclusion Criteria:

1. Below five years of meditation period is not considered for group one.

2. Below 25 years of age is not considered.

Sample size:

100 subjects (50monks and 50layperson)

25 monks and 25 laymen are taken at each place for study

Location*:*

Dharamshala, Himanchal Pradesh, Lamayuru Ladakh.

Tool Used*:*

Rotter's locus of control scale

- About: This scale is a measure of control beliefs. There are 29 Items.
- Reliability: Internal consistency estimates for Rotter's Locus of Control Scale ranged between 0.65 and 0.79.
- Test-retest reliability estimates for Rotter's Locus of Control Scale ranged between 0.49 and 0.83 Validity: Correlation with the Marlowe-Crowne Social Desirability Scale ranged between -0.41 and -0.12
- A higher score = External Locus of Control
- A lower score = Internal Locus of Control

Measure

Locus of control for both regular practitioner of meditation and non meditators were assessed at two altitudes by using Rotter's locus of control scale which is the most widely used tool for assessing inclination towards internalism or externalism.

Procedure

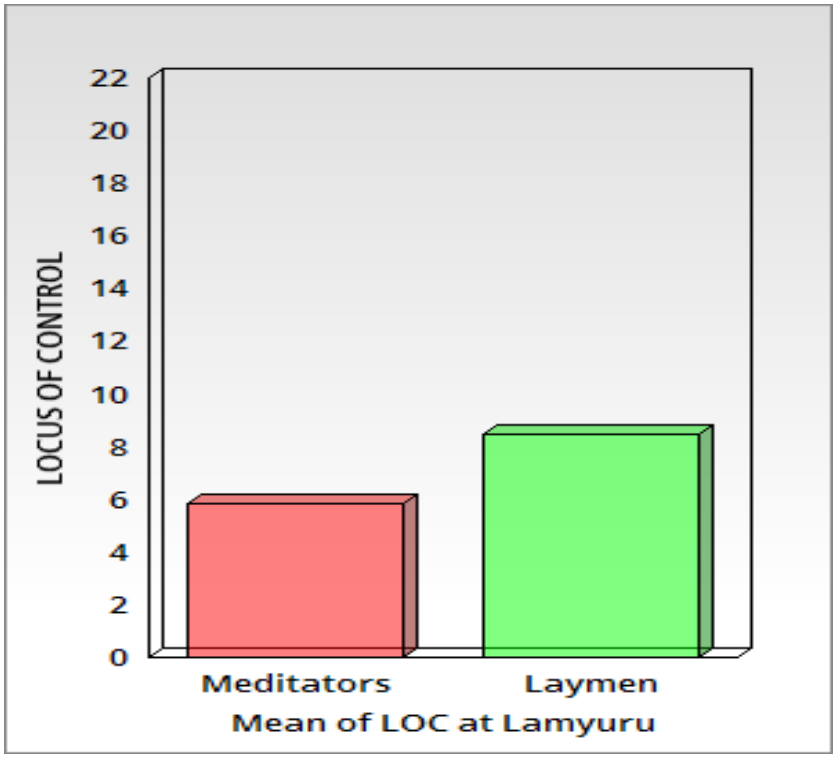
The Buddhist monks with good knowledge of English were taken into consideration and confidentiality was assured. Final sample comprised of 25 regular practitioners Buddhist monks (meditators) 25 laymen (non meditators). The study was done in two areas i.e Dharamshala in Himanchal Pradesh and Leh in Jammu and Kashmir. All the subjects were Indian, Nepalese and Tibetans residing in India. The two groups in both the areas were equally balanced for age, sex and educational level. The two groups were assessed by using Rotter's scale, an established tool consisting of 29 statements (where each statement consists of 2 items (a) and (b)). The data was tabulated and subjected to 't' test and two way ANOVA, to analyze the difference between two groups, as far as locus of control is concerned. A total of 100 Rotter's locus of control scale were utilized in the test.

RESULT

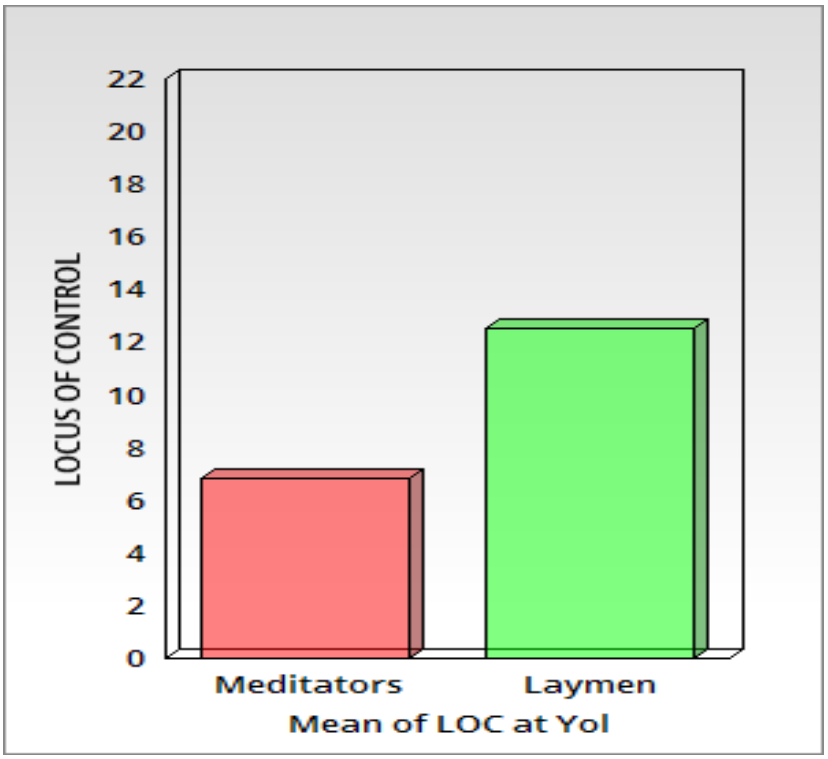
Table 1, 't'-Test Analysis of Locus of control in practitioners and non practitioners

Groups	**Mean of locus of control**		**SD of locus of control**	**"t" values**	**'p'value**
	LOC	**Interpretation**			
Regular practitioners of mediation in Lamayuru (13500ft)	5.82	Internal Locus of control	1.35	4.0767	P=0.0002 p<0.05
Laymen in Lamayuru(13500ft	8.48	Internal Locus of control	2.97		
Regular practitioner of mediation in Yol(2535ft)	6.84	Internal Locus of control	1.65	1.7203	p=0.0918 p<0.05
Laymen in Yol (2535ft)	12.52	External Locus of control	2.86		

To analyze the data statistically, t-test has been used. Results of analyses are given in Table-1. "t" test analysis was done to explore the difference between the locus of control among meditators and non meditators at both the altitudes. In Rotter's locus of control scale since the minimum score is 0 and maximum is 23 therefore 11.5 is taken as the median point of the scores. The tabulated values show that the locus of control of regular meditators of Gyoto monastery, Yol cantt (M=6.84) is more inclined towards internalism in comparison to laymen (M=12.52) who are inclined towards externalism and the difference found to be significant (t= 1.720, p =0.0918 i.e p<0.05). The table1 also shows that the monks at high altitude in Lamayuru have inclination towards internalism (M=5.82) and the laymen are also inclined towards internalism (M=8.48) and hence the difference is significant (t=4.0767, p-0.0002). LOC of Meditators and Laymen in Lamayuru.



LOC of Meditators and Laymen in Yol



LOC of Meditators and Laymen at both Lamayuru and Yol

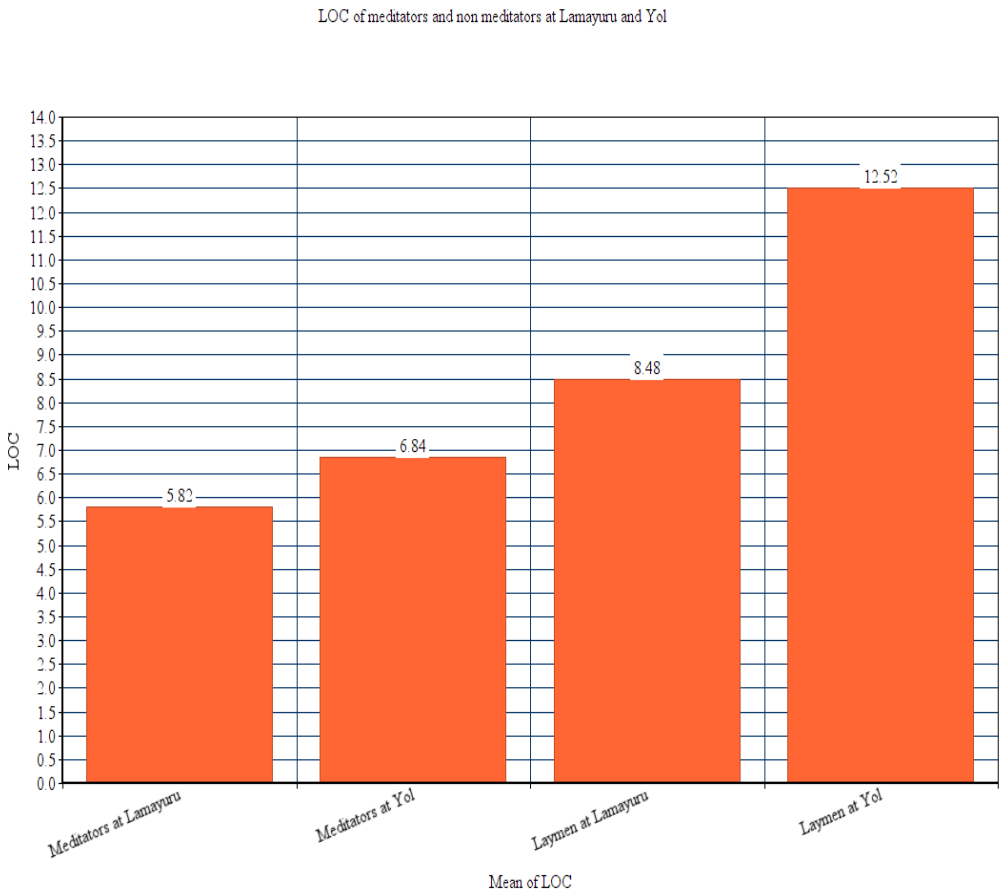


Table 2

Groups	t test	'p'values
Regular practitioners of meditation in Lamayuru (13500ft)	4.0767	P=0.0002
Laymen in Lamayuru (13500ft)		
Regular practitioner of meditation in Yol(2535ft)	1.7203	p=0.0918
Laymen in Yol (2535ft)		
Regular practitioners of meditation in Lamayuru (13500ft)	2.3922	p=0.0207
Regular practitioner of meditation in Yol (2535ft)		
Laymen in Lamayuru (13500ft)	4.8991	p<0.0001
Laymen in Yol (2535ft)		

Table 3, Table for two way ANOVA values

F	Calculated value	'p' value	Interpretation
F for Altitude	51.39	6.91	Significant
F for Meditation	143.68	6.91	Significant
F for interaction	19.50	6.91	Significant

The tabulated value in Table 2 reveals a significant difference between the regular practitioners of meditation in Lamayuru and Yol Cantt (t=2.3922, p=.0207,p<0.05). Hence the monks at high altitude have more inclination towards internalism than the monks or regular practitioners at low altitude. It also clears the fact that Laymen in Lamayuru are more inclined towards internalism as compared to laymen in Yol who have more inclination towards externalism and hence there is a significant difference between the two(1=4.8991,p<0.0001).The two way ANOVA shows that the locus of control has a significant relationship with altitude and meditation. Table 3 shows a significant relationship (F=6.91) for interaction. The F value for altitude (F=51.39) and meditation (F=143.68) also shows a significant relationship. Hence meditation has greater impact of locus of control than altitude although altitude is also affecting locus of control positively.

DISCUSSION

To study the effect of meditation on the locus of control in regular practitioners of meditation(Buddhist monks) with laymen/ non meditator, two group of 25 each were assessed and analysed (one who are daily practitioners of meditation and non practitioners). The study was conducted at two different altitudes. Rotter's locus of control scale was used to assess the locus of control. Meditation helps in building internal locus of control in individuals.

The study conducted by **Eric Garland (2009)** revealed the importance of mindfulness in positive appraisal. Author analyzed that positive appraisal is an important component of meaning based coping that enables the individual to adapt successfully in harsh conditions of life and mindfulness meditation helps in positive appraisal. Hence these two are interconnected. This study is a strong support to the current research.

J.C.Smith (1978) studied 20 undergraduates to assess their locus of control and attention while meditation. The study was successful in establishing the fact that students with internal locus of control had increased performance in meditation and vice versa. Hence the meditator group appraises the situation in positive manner, as the hardiness factor increases and individual is able to have internal locus of control because of which they believe that they are the masters of their own destiny.

The results of present study depict that although the locus of control of practitioners and non practitioners in Lamayuru is internal (M=5.82,M=8.48) still they have a significant relationship (t=1.720, p=0.0919). Hence the locus of control of practitioners is more towards internalism than the non practitioners. The locus of control of practitioners in Yol is internal (M=6.84) while that of non practitioners is external(M= 12.52)therefore there is a significant relationship between the groups(t=1.720,p<0.0001). Not only this the meditators in Lamayuru (M=5.82) and Yol(M=6.84) also have a significant relationship(t=2.392, p=0.0207) which shows that altitude plays an important role as far as locus of control is concerned. The laymen in Lamayuru have internal locus(M=8.48) whereas laymen in Yol have external locus of control(M=12.52) which

clarifies that there is a significant relationship between the two (t=4.89,p=0.0001). Laymen in high altitude are more towards internals than the low altitude.

Many studies have been conducted in high altitude saying that the physiological function of the long time meditators do not change in the harsh climatic conditions. Research conducted by **Alex Haney(2006)** on long term meditation practitioners (buddhist tradition and Vedic tradition) established that the subjects had many parallel level of improvement in sensory acuity, perceptual style, cognitive functions indication enhancement in awareness which is going against the normal physiological researches in high altitude. Hence it supports the present research that reveals a good interaction between the altitude (F=51.39) and meditation (143.88) in relation to locus of control. The research also establishes that meditation has a greater impact on locus of control than altitude

It has been found that those laymen who are involved in meditative activities, spiritual practices and creative activities like music dance painting have more inclination towards internal locus of control. Even the research by **Angela C. (2005)** Roddenberry) shows how an individual's self efficacy increases with high inclination towards internalism. The mean of laymen in Lamayuru is 8.48 whereas the mean of laymen in Yol is 12.52(Table 1) which shows that people in high altitude have more inclination towards internalism (F=51.39). It has also been established that those individuals who meditate are more inclined towards internalism (f=143.68) whereas those who are not into meditation or any kind of spiritual activity are more inclined towards externalism. Subjects who are into spiritual practice, musical practice, dancing also have more inclination towards internalism.

It has been found that laymen who are into meditative activities have internal locus of control. They do not believe in destiny rather they have faith on karma theory, whereas laymen who are not into any kind of meditation practice believe in the destiny. They believe that their life events are controlled by external forces. Maximum number of assessed monks, in both the areas fall in between 04-10 score of Rotter's locus of control scale, laymen following meditative activities, fall between 07-19 score on Rotter's locus of control scale whereas laymen who are not following meditative activities fall between15-23.

CONCLUSION

The study was conducted to investigate the under mentioned objectives

1. To study the effect of meditation on the locus of control in regular practitioners of meditation (Buddhist monks) with laymen/ non mediators at two altitudes.
2. To study the effect of meditation on locus of control of regular practitioners at both high and low altitude

Meditation has been accepted as a therapy by many therapist. Therapies like MBSR, MBCT are now used by many psycho therapy centers all over the globe. **Dr Jon Kabat Zinn** has been a

pioneer to device multiple mind training techniques. Meditation is the therapy for many psychological disorders. It can work when other psychotherapies are ruled out of the scene. Present research is an example of how meditation helps in changing the inclination from external locus of control to internal locus of control. Researches reveal that internalism increases self efficacy and hardiness of an individual.

Current research helps in understanding the nature of locus of control inrelation to mediation and altitude. People in high altitude despite of the harsh conditions, believe in themselves and hence they have internal locus of control. It acts a buffer when the individual leaves everything on luck. But luck is the resultant of the karmas; we have done in our past. Hence this study has suggested that meditation helps in changing the locus of control and individual starts believing in his own self.

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