IS MINDFULNESS A PREDICTOR OF LOCUS OF CONTROL?

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Introduction and Review of Literature

Interest in the construct of mindfulness, said to have originated from eastern traditions, has increased in the past few decades. There is now renewed interest in this construct and the volume of literature is seen increasing steadily. Though substantial literature has been accumulated, there is still a lack of clear definition and operationalization of the concept (Cardaciotto, 2005; Grossman, 2008). It has been defined differently depending on the domain of psychology in which it is used.

Cardaciotto (2005) listed a number of definitions and classified them as clinical and nonclinical. The concept has been defined two decades back by Kabat-Zinn (1994) as ‘paying attention in a particular way: on purpose, in the present moment, and nonjudgementally’. However, the oft repeated definition of mindfulness is that it is ‘bringing one’s complete attention to the experiences occurring in the present moment, in a nonjudgmental or accepting way’ (Brown and Ryan, 2003 and Marlatt and Kristeller, 1999). Baer (2003) defined it as ‘the non-judgmental observation of the ongoing stream of internal and external stimuli as they arise’. A simple definition was provided by Brown and Ryan (2004) when they defined it as ‘an open and receptive attention to and awareness of what is occurring in the present moment’. Recently Glomb et al. (2011) defined it as:

“a state of consciousness characterized by receptive attention to and awareness of present events and experiences, without evaluation, judgment, and cognitive filters”.

Mindfulness has been further elucidated by a number of social scientists. For instance, Grossmann and Grossmann (2007) state that the construct includes conscious and attentive contact with others; and certain qualities like tolerance, gentleness, placidity, and acceptance. It helps in the conscious perception of others and the environment, and in being attentive in the present moment (Jacobs and Blustein, 2008). It is also referred to as an act of neutral observation, when one is aware of distractions, and is said to help in re-focusing during distractions. Glomb et al. (2011) elaborates mindfulness as:

“the process of paying attention to what is happening in the moment – both internal (thoughts, bodily sensations) and external stimuli (physical and social environment) – and observing those stimuli without judgment or evaluation, and without assigning meaning to them.”

Fielden (2006) opines that mindfulness is a counter-foil to mental rigidity. According to him while concentration focuses the attention, mindfulness determines the substratum upon which the attention will be focused. According to Brown et al. (2007), awareness and attention are in the heart of mindfulness. It also involves attending to stimuli without imposing judgments, memories, or other self-relevant cognitive manipulations. An analysis of the above literature shows that the common theme shared by them includes the aspects of a state of consciousness, general receptivity, as well as a complete engagement with the present.

In general, mindfulness is an internal psychological practice that can be used in interactions with the world. It helps individuals ‘to step back and focus attention away..."
from anxiety laden thought’ (Jacobs and Blustein, 2008). Recently mindfulness practices have been adapted and modified into several interventions that are widely used in medical and mental health settings. Goldstein (2002) and Kabat-Zinn (1994) are of the opinion that mindfulness can be developed through the regular practice of meditation. The available literature shows that mindfulness is capable of developing friendliness and equanimity; increasing positive qualities like compassion, awareness, insight, wisdom, etc. Mindfulness based stress reduction programs were also found to help improving chronic disorders like pain, depression, anxiety as well as the overall quality of life.

Most of the studies about mindfulness have revolved around therapeutic research (Carmody and Baer, 2008; Ljo’tsson et al., 2010; Sears and Kraus, 2009). The concept is now used in various other fields of science, including psychotherapy, organizational behaviour (Glomb et al., 2011), etc. Mindfulness is found to be linked to physical and mental health (Hardt et al. (2012). Carmody and Baer (2008) found that increase in mindfulness and spirituality tends to decreases psychological distress and related medical symptoms.

The utility of mindfulness has been established in non-clinical cases as well, and a number of studies have presented the positive effects of mindfulness. Sears and Kraus (2009) established that mindfulness increases hope of goal achievement. It also creates emotional well-being (Weinstein et al., 2009), as well as overall well-being (Falkenstrom, 2010; Howell et al., 2010). Other established effects of mindfulness are positive mood states (Giluk, 2009), positive emotions and life satisfaction (Fredrickson et al., 2008), social connectedness (Hutcherson et al., 2008), acting in accord with underlying values and interests (Brown and Ryan, 2003), empathy (Block-Lerner et al., 2007) and intimate relationship quality (Saavedra et al., 2010). Heppner et al. (2008) found mindfulness to have a negative association with hostility and aggression. Its presence is also found to reduce negative affect (Sears and Kraus, 2009; Delgado et al., 2010; and Giluk, 2010).

In the organizational set up, the studies by Fielden (2006) and Jacobs and Blustein (2008) are noteworthy. Fielden (2006) found that mindfulness within organizations helps individuals to develop better self-awareness; and understand the rational, emotional, spiritual and psychological self. He further elaborates that as awareness of multiple layers of self-emerge, maturity within and across the various self-layers emerge. Another advantage of mindfulness is that the mindful self is aware of likelihood of any chaos, particularly when the individual enters into domains wherein disorder type situation exists. Jacobs and Blustein (2008) established that mindfulness is capable of providing employees with an effective means to deal with uncertain unemployment conditions, and to cope with ‘anticipation stress’ associated with employment; in the present increasingly uncertain and ambiguous work environment.

Mindfulness is also found to be related to response flexibility (Chatzisarantis and Hagger, 2007), persistence (Evans et al., 2009) and working memory (Glomb et al., 2011; and Jha et al., 2010). Response flexibility occurs when one is able to pause before responding to an environmental stimulus. An individual having response flexibility, rather than responding to workplace events habitually and invariantly, will have the power to act in alignment with his goals, needs, and values (Brown et al., 2007). Another major advantage of mindfulness: that reduces the extent to which
people see barriers to goal accomplishment as indications of their competency.

All the above studies in general and that mindfulness may be associated to locus of control (LOC). As in the case of mindfulness, interest in the study of LOC began with problems encountered in individual psychotherapy. In the initial stages the construct was considered as a personality variable (Lefcourt, 1976). LOC is a concept developed by Julian Rotter in the 1950s (Rotter, 1954). This concept represents how a person’s decision making ability is influenced. LOC is incorporated into theoretical models as it is capable of initiating planned changes. According to Firth et al. (2004) LOC is:

“… the extent to which people believe they or external factors such as chance and powerful others are in control of the events that influences their lives.”

According to Allen et al. (2004):

“Research on locus of control suggests that individuals vary in their expectancies regarding their ability to control events affecting them and their tendencies to attribute the causes of their successes or failures to either internal or external sources.”

Rotter (1966) states that LOC measures an individual’s expectancies for internal vs. external control of reinforcement; thus presenting two locus of control – the internal and external loci. Those with a low LOC score are internals. Internal LOC (ILOC) is defined as ‘a predominance of outcomes perceived to be determined by one's own behavior and characteristics’. They make their own choices and consider that it is their own behavior, capacities, or attributes that determine the rewards they obtain. Rotter (1966) defined external LOC (ELOC) as ‘outcomes perceived to be determined by chance, fate, or other outside forces’. They make decisions based on the desire of others, and have a belief that receiving of rewards in life are beyond their control.

Rotter (1966) is of the opinion that internals possess high expectancies about their ability to control normal events, and often attribute success or failure to themselves. Externals, on the other hand, have considerably low expectancies of control and attribute success or failure to the external sources. Examples of some external sources, as stated earlier include specific situations, other people, fate, etc. Internals are likely to exhibit greater intrinsic motivation, and are more achievement oriented.

In the organisational set up, a more internal locus is considered desirable, as those having it possess the qualities like personal control and self-determination. Internals assume responsibility of their own behaviour, and are found to be resistant to influences from other people (Srivastava, 2009). They tend to make more independent judgments, in addition to trying hard to control others behaviour. Since internals exhibit greater intrinsic motivation, they tend to be more achievement oriented and hence are likely to report lower turnover intentions. Those higher in age or higher in organisational structures tend to be internal in nature. Externals are generally stressed and suffer from depression as they become more aware of work situations and life strains (Srivastava, 2009). A research on entrepreneurs and managers by Rahim (1996) found that persons with high internal LOC believes that they can cope with stress effectively. It is also a predictor of job performance (Judge et al., 2003). No specific study seems to have empirically examined the relationship between mindfulness and LOC. The present work attempts to fill this gap in literature.

The mindfulness is capable of reducing the extent to which people see barriers to goal accomplishment as indications of their competency. Based on this finding and that
of Glomb et al. (2011) that mindfulness is linked to physiological balance and awareness; and the growing research in this area, it is hypothesized that:

**H1:** Mindfulness will be a predictor of internal locus of control (ILOC);

**H2:** Mindfulness and internal locus of control (ILOC) are positively related;

**H3:** There is no significant relationship between mindfulness and external locus of control (ELOC).

The most frequently used scale to assess LOC is Levenson's (1974) IPC scale, which has been used in various populations, the world over. A few such studies include Chang (1989) in Hong Kong; De la Coleta (1987) in Brazil; Galli et al. (1986) in Italy and Germany; Hong and Bartenstein (1982) and Hyman et al. (1991) in Australia; Kaufmann et al. (1995) in Russia; Singh and Chaudhary (1984) in India; Walkey (1979) in New Zealand; etc. A number of comparative inter-country studies have also been done using IPC Scale. Some of them include Reimanis and Posen (1980) in USA, Nigeria and Zimbabwe; and Chandler et al. (1981) in India, Japan, South Africa, USA and Yugoslavia, etc. Using a massive sample of 11,000 Jensen et al. (1990) conducted a comparative study among nine European nations (Belgium, Denmark, France, Germany, Ireland, Italy, Netherlands, Spain and UK). The efficiency of the scale has thus been proved beyond doubt.

The IPC scale has three dimensions for locating control over ones' life. The IPC scale posits three dimensions to the locating control over ones' life – internal (I), powerful others (P) and chance (C) (Sherman and Ryckman, 1980). Underlying the three dimensions is the distinction between certain controlling factors that are internal and external to an individual (Kaufmann et al., 1995). A study by Singh and Chaudhary (1984) using IPC scale on Indian population found C to be above I and P. However, the study conducted among postgraduate students, used a mere 38 samples. The present study intends to apply the IPC scale on a larger sample and find out the dynamics of the three factors. The hypotheses thus formulated for the study is:

**H4:** Indian students will locate control over the events of their lives more internally (I), less in powerful others (P) and in chance (C).

**Method**

Data was collected from a random sample of 146 (71 males and 74 females) BTech students from across Kerala. Students from senior classes were given priority in the collection of data. Data for the study was collected in between certain training sessions. The ages of the samples collected ranged from 19 to 24 years.

The scales used for the study are the mindfulness dimension of the ‘Spirituality Questionnaire’ by Hardt et al. (2012) and IPC scale (Levenson, 1974). The mindfulness dimension of ‘Spirituality Questionnaire’ has reported good reliability (Cronbachs alpha of .89), medium positive inter-correlations, and higher convergent than discriminant correlations. The IPC scale which is used to measure LOC has 24 items on three subscales of eight items each – Internal (I), Powerful others/External (P), and Chance (C). The scale which enjoys high levels of consistency, reliability and validity has been used in a multitude of studies the world over (Chang, 1989; De la Coleta, 1987; Galli et al., 1986; Hyman et al., 1991; Jensen et al., 1990; Kaufmann et al., 1995; etc.). The Cronbachs alpha of the present sample was found to be 0.71, which is well above the acceptable standards.
**Results and Discussion**

Regression analysis was done to test the tenability of H1 that ‘Mindfulness will be a predictor of ILOC’. The value of R square was found to be 0.085; and the F is 13.282, which is significant. The analysis, thus, proves that mindfulness is a predictor of internal locus of control. Thus, the first hypothesis is accepted. This seems to substantiate the finding of Glomb et al. (2011) that mindfulness can be linked to once physiological balance and awareness. Further, the mindfulness has the capability to reduce the perception of individuals that barriers to goal accomplishment are indications of incompetency. An individual who is mindful will have general expectancies regarding his ability to control certain events that could affect him – in other sense possess ILOC. He would also have the tendency to attribute the causes of either successes or failures to his own capability or capacity.

Correlation analysis was done to find out the tenability of the next two hypotheses. The results of the correlation analysis are presented in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>ILOC</th>
<th>ELOC</th>
<th>CHANGE</th>
<th>LOC</th>
<th>MFS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILOC</td>
<td>1</td>
<td>0.150</td>
<td>0.135</td>
<td>0.559**</td>
<td>0.180*</td>
</tr>
<tr>
<td>ELOC</td>
<td></td>
<td>1</td>
<td>0.310**</td>
<td>0.746**</td>
<td>-0.015</td>
</tr>
<tr>
<td>CHANGE</td>
<td></td>
<td></td>
<td>1</td>
<td>0.734**</td>
<td>-0.013</td>
</tr>
<tr>
<td>LOC</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.105</td>
</tr>
<tr>
<td>MFS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
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*Note: * significant at 0.05 level, ** significant at 0.01 level

The correlation analysis revealed that there is a significant positive correlation (at 0.05 level) between mindfulness and ILOC. Thus, the hypothesis that “Mindfulness and internal locus of control are positively related” is accepted. Mindfulness being a state of consciousness that is characterized by receptive attention towards present events and experiences (Glomb et al., 2011); those having it is likely to perceive that outcomes are determined by their own behavior and characteristics. They prefer to make their own choices and are likely to have belief in their behaviours, capacities, and attributes (Rotter, 1966). This concurs with the findings of Sears and Kraus (2009) that mindfulness increases the hope of goal achievement. Further, a study by Foster and Gale (1973), cited by Phares (1976) showed significant relationship between academic performance and LOC. They established that internals achieved significantly higher grades than externals. Thus, there is consistency in literature that LOC has significant and important relationship to one’s mastery, or lack of mastery, with the surroundings.

The third hypothesis that “There is no significant relationship between mindfulness and external locus of control (ELOC)” is also accepted, since the score of -0.015 does not indicate any significant correlation. As Rotter (1966) put in, those with high ELOC perceive outcomes to be determined by chance, fate, or other outside forces. They normally make decisions based on the desire of others. Their belief is that receiving rewards in life are beyond their control. The acceptance of this hypothesis may be due to the fact that mindfulness, which denotes being in the present; and ELOC cannot go together.

The fourth hypothesis was that “Indian students will locate control over the events of their lives more internally (I), less in powerful others (P) and in chance (C)”.

*Journal of Applied Management and Investments*
This means that Indian students are likely to have higher levels of ILOC. In order to test the tenability of this hypothesis, the descriptive statistics of the three LOCs were assessed. The descriptive statistics are presented in Table 2.

Table 2. Descriptive Statistics of the Sample

<table>
<thead>
<tr>
<th></th>
<th>ILOC</th>
<th>ELOC</th>
<th>CHANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>30.19</td>
<td>22.86</td>
<td>24.16</td>
</tr>
<tr>
<td>SD</td>
<td>3.83</td>
<td>4.91</td>
<td>4.82</td>
</tr>
</tbody>
</table>

The results reveal that the mean value of ILOC (30.19) is higher than ELOC (22.86) and Chance (24.16). Thus, the third hypothesis is also accepted. This is in deviation to the findings of Singh and Chaudhary (1984). In their study conducted on 38 post graduate student, they established that Indian students locate Chance (36.30) over External (34.03) and Internal (35.27) LOC. The changes that took place in the Indian society in the past few decades, wherein the present generation maintains a higher sense of self-worth and independence could have attributed to this result. Further, the global outlook generated since globalization could have changed the thought pattern of the youth, as against the time when Singh and Chaudhary (1984) conducted their study.

Conclusion
Mindfulness is the conscious and attentive contact with others; and includes certain badly required qualities like tolerance, gentleness, placidity, and acceptance. Jacobs and Blustein (2008) is of the opinion that it helps individuals to think and focus their attention away from anxiety laden thought. It is a concept that needs to be researched further.

Existing evidences shows that mindfulness is capable of having positive effects on emotional and social skills (Baer, 2003; and Salmon et al., 2004). Some such skills include the ability to feel in control, making meaningful relationships with others, accepting experiences without denying the facts, managing difficult feelings, being calm, resilient, compassionate and empathic, etc. Mindfulness has also been established to have beneficial effects on the emotional wellbeing, mental health, ability to learn as well as physical health of individuals. A host of studies (for instance Jha et al., 2007; Chambers et al., 2008; Zeidan et al., 2010) have established the positive impact of mindfulness on intellectual skills; in addition to its capacity to improve sustained attention, Visio-spatial and working memory, concentration, etc. All these qualities are essential, if organizations are to make best use of their invaluable human resources, in the current competitive environment. The finding of the present study that mindfulness is a predictor of internal locus of control is significant. Similarly significant is the finding that mindfulness and ELOC are not related. It denotes that an individual having mindfulness with weigh ILOC more than ELOC and Chance. Further, individuals with high ILOC is found to make their own choices; and consider their behaviours, capacities, or attributes to determine the rewards they obtain (Rotter, 1966). As such, it should be the intention of progressive managements to inculcate the concept of mindfulness in their key employees.

A host of easy and relatively inexpensive interventions can facilitate mindfulness fairly quickly. Its presence is capable of making life enjoyable to the individuals. This
could also have ripple effects and benefit the organization in a very large way. A band of mindful employees, who consider themselves to be the reasons of their rewards, will go a long way in leading their respective organizations to greater heights in this competitive world.

Acknowledgment
The paper is part of a research undertaken with the help of grant-in-aid from ICSSR, New Delhi. The author expresses his sincere thanks to ICSSR for the help.

References


Giluk, T.L. (2010), Mindfulness-based stress reduction: Facilitating work outcomes through experienced affect and high-quality relationships, Doctoral dissertation, Available at Iowa Research Online.


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Abstract
Mindfulness, an internal psychological practice that can be used in interactions with the world, helps individuals to focus attention away from anxiety laden thought. The concept, which was focused primarily for its clinical utility, is now being increasingly used in the organizational scenario. Locus of Control is the extent to which people believe that they (internal locus of control) or external factors, such as powerful others (external locus of control) and chance are in control of the events that influence their lives. The present study established that mindfulness is a predictor of internal locus of control. This finding brings to light the need to inculcate mindfulness among key employees if organizations are to scale greater heights in the current competitive environment.

Keywords: mindfulness, external locus of control, internal locus of control, chance