EFFICACY OF INTENTIONAL INTELLIGENCE INTERVENTION PROGRAM IN DEVELOPING SELF ESTEEM OF YOUNG LEARNERS IN RELATION TO THEIR LOCUS OF CONTROL

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Abstract

This experimental study was undertaken to examine the effect of Intentional intelligence intervention program (IIIP) on Self esteem among adolescents in relation to their Locus of control. For this pre-test post-test control group design was employed. Self prepared Intentional intelligence intervention modules were administered to a sample of 160 adolescents. Self prepared scale to measure Self esteem among adolescents was used and through 2X2 factorial design, gains on Self esteem were studied. Pre-test Post-test results revealed that the ninth graders in the experimental group demonstrated significantly higher mean gain scores on Self esteem when compared to the control group. Also a significant difference was found between the groups with internal and external Locus of control on Self esteem. Moreover, a significant interaction was found between Intentional intelligence intervention and Locus of control on self esteem of adolescents.

Keywords: Intentional intelligence; self esteem; Locus of control; adolescents.

Introduction

Since the mid-1980s, the nature of the relationship of people and internal events has become an increasing focus of interest, both theoretically and clinically. Researchers have investigated how the interpretations people attach to symptoms they experience

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can serve to maintain and exacerbate psychological problems. At the same time, they have sought effective ways of helping people to question and test these interpretations, and to formulate credible alternatives, which allow people to respond to their own thoughts, emotions and body sensations in new and more helpful ways (Fennell, 2004). Since then various models have been developed which have proven positive results on the human psychological domain. The development of intentional intelligence intervention program which incorporated mindfulness, meditational and yoga based practices and activities has also found to be a great contributor in the field of psychological domain. It has enhanced the impact of core meditation for adolescents and extended its range in surprising directions. As adolescence is a period of life from puberty to maturity when an adolescent struggle with the notion of acceptance in the most challenging and complicated period (Cantwell and Svajian, 1974; Berger, 1983), so during this time, they have difficulties consolidating all the information they receive about the self. So there arises the need for knocking a door for such type of meditational experiences for mind training. Wallace (1999) proffers: "all things are preceded by the mind". Intentional intelligence holds the potential for organizational researchers to not only measure one's generative thought processes, but map these processes into individual and organizational outcomes. Ramsey and Fitzgibbons (2005) define Intentional intelligence as something which looks at the foundational level of "being" - thoughts. Steingard (2008) states "Intentional Intelligence bridges the gap between "conscious awareness" and the "practical applications" of how the mind manifests successful or unsuccessful actions. While Intentional intelligence talks primarily about the machinations of the mind and not "a silent, unbounded, timeless inner domain" the mind is actually anchored in and supported by a spiritual source." Collins (2010) added "Human beings should spend their limited time on earth, most of it experienced in relation to organizations, developing their spirituality by intentionally becoming better people and making the world a better place." Intentional intelligence can be operationalized as a dynamic cognitive process. A snapshot of one's mental interiority is categorized into positive, negative, and neutral thoughts. At any given time, we are capable of both identifying and evaluating being mindful of particular thoughts. While we maintain untold numbers of thoughts in our mind and memory, only a certain subset of these can enter our awareness at a particular moment. Of the universe of possible thoughts, we can choose particular thoughts upon which to focus our attention (Steingard, 2008). Intentional intelligence is defined as one's ability to (a) identify one's current thoughts and (b) choose positive thoughts in one's mind (Steingard and Dufrene, 2011).

Self-esteem can be either global or specific and there is a relationship between these two facets of self-esteem. Global self-esteem refers to an all round feeling of self-worth and confidence. Specific self-esteem refers to a feeling of self-worth and confidence with regard to a specific activity or behaviour (Lawrence, 2006). According to Branden, (1995) Self-esteem has two interrelated components. One is a sense of basic

confidence in the face of life's challenges: self-efficacy. The other is a sense of being worthy of happiness: self-respect. Self-esteem is likely to arise in middle childhood. Self-esteem or self-worth of the child refers to a relative measure between the child's self-image and ideal (or desired) self, i.e. in the words of James (1890), self-esteem can be considered as the ratio of "our actualities to our supposed potentialities". A low self-esteem therefore indicates a large discrepancy between the self-image and the ideal-self, and may be exhibited through several operations by the child (Lawrence, 1996).

The higher levels of mindfulness would significantly predict higher levels of self-esteem (Brown & Ryan, 2003). Recent experimental evidence has shown that mindfulness buffers self-esteem from negatively valenced social experiences, which in turn reduces defensive reactions to social threats (Lakey, Kernis, Heppner, & Lance, 2008). Moreover, mindfulness training is said to foster a self-awareness that is "nonself-evaluative," minimizing the redundant processing of negative self-referent information that could lead to low self-esteem (Brown et al., 2007). Harrison, Manocha and Rubia (2004) investigated meditation as a family treatment method for children with ADHD, using the techniques of Sahaja Yoga Meditation (SYM). Results showed improvements in children's ADHD behaviour, self esteem and relationship quality. Sharma (2004) worked experimentally on 80 adolescent jail inmates at Burail Jail, Chandigarh to find the effect of yoga and meditation practices on their self esteem self disclosure emotional intelligence and social adjustment. It was found that training in Yoga and Meditation practices was found to be effective in enhancing the Self Esteem of jail inmates as compared to those who did not have any formal training in yoga and meditation practices. Thompson and Waltz (2008) examined the relationship between mindfulness, self-esteem, and unconditional self-acceptance on 167 university students. Positive correlations were found between mindfulness, self-esteem, and unconditional self acceptance. Koole, Govorun, Cheng and Gallucci (2009) investigated whether meditation may reduce such inner conflicts by promoting congruence between implicit and explicit self-esteem. Relative to control conditions, meditation led to greater congruence between explicit self-esteem, assessed via self-report, and implicit self-esteem. Low implicit self-esteem was further associated with a slow-down of explicit self evaluation, an effect that mediated the greater congruence between implicit and explicit self-esteem in the meditation condition. These results suggest that meditation encourages people to rely more on intuitive feelings of self-worth. Norwood, Murray, Nolan and Bowker (2011) designed, implemented, and evaluated a school-based programme that aimed to increase self-esteem and positive body image among preadolescent boys and girls from a public school in Eastern Ontario. Results indicated that, for both boys and girls, participation in the programme was associated with significantly higher levels of self-esteem and positive body image. Mubeen and Gayatridevi (2013) reported that after Positive Therapy, majority of the adolescents adjustment level enhanced to 'Good'/'Excellent' levels, their Self-esteem had

drastically enhanced to 'High Self-esteem' , their Anxiety level reduced to 'Low'/'Very Low' levels and their Academic Achievement had improved drastically. Pepping, O'Donovan and Davis (2013) presented two studies that clearly presented and demonstrated that mindfulness and self-esteem are related, and, importantly, that mindfulness training has direct positive effects on self-esteem. Golec de Zavala, Lantos and Bowden (2017) investigated the effects of yoga poses on subjective sense of energy and self-esteem. Their study demonstrated the positive results.

Objectives

1. To develop Intentional intelligence intervention modules for adolescents
2. To develop and standardize self esteem scale.
3. To identify children with internal and external Locus of control.
4. To administer Intentional intelligence intervention program on adolescents.

Testing Objectives:

1(a). To study whether experimental and control groups differ in mean gain scores on variable of Self esteem.

1(b). To study whether internal and external Locus of control groups differ in mean gain scores on variable of Self esteem.

1(c). To study whether there is any interaction between Intentional intelligence intervention program and Locus of control on Self esteem of adolescents.

Hypotheses

1(a) There exists no significant difference between control and experimental groups in mean gain scores on Self esteem of adolescents.

1(b) There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Self esteem of adolescents.

1(c) There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Self esteem of adolescents.

Delimitations

- The study was delimited to Government schools of Chandigarh affiliated to CBSE.

- The Intentional intelligence intervention was delimited to 56 working days.

- The study was confined to 160 students of IX standard studying in three CBSE affiliated schools of Chandigarh.

- The data collected for the present study was quantitative in nature.

Method

Pre-test post-test control group design was used for random allocation of 160 adolescents in experimental and control groups comprising 80 adolescents (40 with internal and 40 external locus of control) in control group and 80 adolescents (40 with internal and 40 external) in experimental group. Random sampling technique was used to select three schools of Chandigarh. 2X2 factorial design was computed by ANOVA for the mean gain scores on Self esteem.

Procedure

The present study was conducted on ninth class students of three Government schools of Chandigarh. From the initial sample of 350 ninth graders studying in Government schools of Chandigarh, a sample of 184 adolescents (82 exhibiting internal and 102 exhibiting external locus of control) was selected for the study. From this sample randomly 40 students each with internal and external locus of control were allotted to experimental and control groups. The final sample of 160 was randomly selected to make experimental and control groups with 80 students each, in such a manner that both the groups will have 40 adolescents with internal and 40 with external locus of control. Pre test on Self esteem was administered on experimental and control groups. And then 56 days' intentional intelligence intervention was given to the experimental group and the control group was debarred from any kind of intervention. After the experiment Self esteem was again measured on both the groups.

Measures

1. Intentional intelligence intervention modules (developed by the researcher).
2. Scale to measure Self esteem of adolescents (developed by the researcher).
3. Locus of control scale for children by Nowicki and Strickland (1973) (adapted by the investigator).

Results and discussions

1. **Descriptive analysis for Self esteem and its Dimensions**

Table 1(a): Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of pre test scores on Self esteem of experimental and control group

Var.	Gp	N	M	SEM	Mdn	SD	Sk	SE of sk	Ku	SE of ku.
Self esteem	EG	80	98.18	1.13	97.00	10.12	.59	.27	.46	.53
	CG	80	98.62	.96	97.50	8.65	.56	.27	-.09	.53

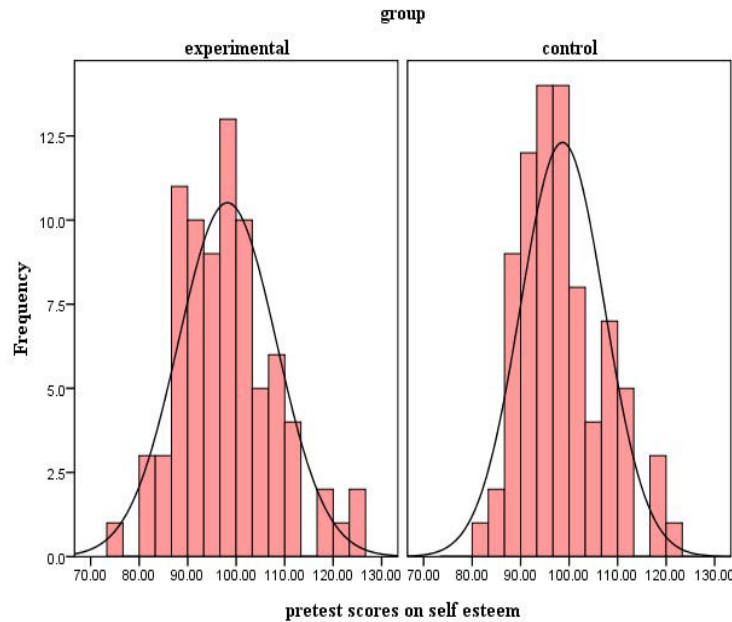**Fig 1(a).** **Histograms showing pre test scores on Self esteem of experimental and control group**

Table 1 (a) and figure 1(a) above specify that the arithmetic mean and median are nearly equal for both the experimental and control group of pre test scores on Self esteem. The coefficient of skewness for Self esteem was found to be positive. Positive skewness means that the adolescents scoring higher in the scale were less in number than the adolescents scoring low. Both skewness and kurtosis coefficients were found to be within the acceptable range of -2 to +2. On the whole the values of skewness and kurtosis for the pre test on Self esteem were found to be within acceptable limits of normality. Hence it can be safely concluded that the pre test scores of Self esteem was normally distributed.

Moreover, the test of homogeneity of variance was not significant as Levene's value is 1.195, p=0.276 for Self esteem (p>0.05). Also the sampling within the groups was random. So assumptions to run two-way ANOVA were all met.

As the assumptions of normality, random sampling and homogeneity were found to be satisfied for the data. So 2X2 ANOVA was computed through SPSS package to test the hypotheses.

2. Descriptive and inferential statistics for mean gain scores on Self esteem

Table 1(b): Descriptive statistics for mean gain scores on Self Esteem Dependent Variable: Self Esteem Mean Gain Scores

Group	Locus of Control	Mean	Std. Deviation	N
Experimental	Internal	8.1250	6.57184	40
	External	3.5750	5.52796	40
	Total	5.8500	6.45353	80
Control	Internal	.8750	4.53583	40
	External	.0000	3.98072	40
	Total	.4375	4.26301	80
Total	Internal	4.5000	6.69215	80
	External	1.7875	5.11313	80
	Total	3.1438	6.09035	160

Table 1(C): Summary of 2X2 ANOVA for Mean Gain Scores on Self Esteem Dependent Variable: Self Esteem Mean Gain Scores

Urce	Type III Sum Of Squares	df	Mean Square	F	Sig.
Corrected Model	1601.169[a]	3	533.723	19.379	.000
Intercept	1581.306	1	1581.306	57.415	.000
Group	1171.806	1	1171.806	42.546	.000
Locus of Control	294.306	1	294.306	10.686	.001
Group * Locus of Control	135.056	1	135.056	4.904	.028
Error	4296.525	156	27.542		
Total	7479.000	160			
Corrected Total	5897.694	159			

Main effect of Intentional intelligence intervention on Self esteem was found to be significant with F value equals to 42.546 as depicted in table 1(c). This proves that there exists a significant difference between experimental and control groups. Hence hypothesis No. 1(a) - *"There exists no significant difference between control and*

experimental groups of adolescents in mean gain scores on Self esteem" is rejected. Moreover, to find which group did better, the mean gain score of the experimental and control group were compared. Table 1(b) reveals that the mean gain score on Self esteem of experimental group is 5.8500 and of control group is 0.4375. So based on these values it can be safely concluded that experimental group improved much better than the control group. This finding of experimental group performed better than control group can also be confirmed by visually examining the figure 1(b):(i).

The main effect of Locus of control was found to be significant with F value 10.686 as shown in table 1(c). This yields that there exists a significant difference between internal and external Locus of control groups. Hence hypothesis no.1 (b)- "There exists no significant difference between internal and external Locus of control groups of adolescents in mean gain scores on Self esteem" stands rejected. Now, to determine the performance of both the groups the mean gain scores were compared from the table 1(b). The mean gain score of the group containing adolescents with internal Locus of control is 4.5000 where as with external Locus of control is 1.7875 which proves that the internal Locus of control group overtook the other group in performance and exhibited higher scores than the other. Additionally, Figure 1(b):(ii) presents it graphically.

Figure 1(b):   Showing mean gain scores corresponding to main effect of (i) Intentional intelligence intervention   (ii) Locus of control on Self esteem

(i)   **(ii)**
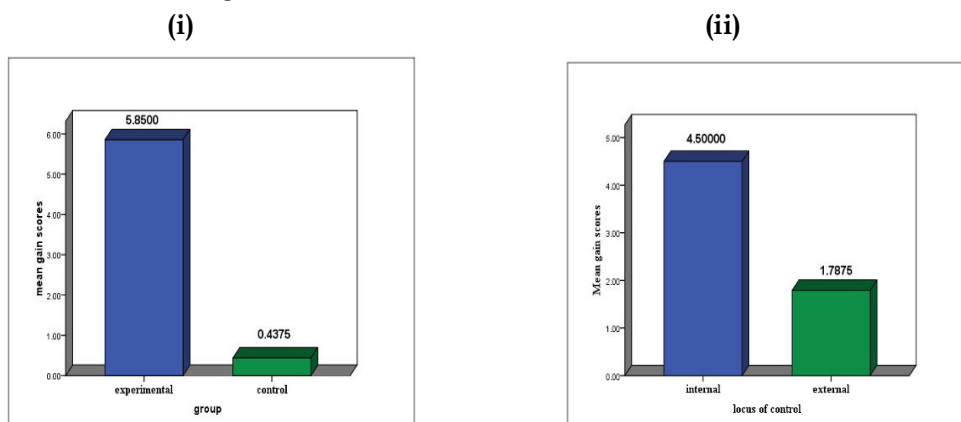
As shown in table 1(c), F value for the interaction effect of Intentional intelligence intervention and Locus of control was found to be 4.904 which indicates that the interaction between them was significant. This further implies that the intervention and two types of Locus of control interacted to produce significant effect on Self esteem. Hence the hypothesis no 1 (c)-"*There exists no significant interaction between Intentional intelligence intervention program and Locus of control on Self esteem*" stands rejected. Furthermore, the next step was to check which groups differ significantly on Self esteem as a function of two factors; t ratios were calculated for all

the possible combinations of experimental/ control groups and internal/external Locus of control on mean gain scores of Self esteem. The t – ratios are presented in table 1(d) and figure 1 (c):(ii) indicates the graph of interaction.

Table 1(d): Showing t values for different combinations of groups and Locus of control (GXL) for mean gain scores on Self esteem

	G1L1	G1L 2	G2L1	G2L2
G1L1		3.351*	5.742*	6.688*
G1L 2			2.388*	3.319*
G2L1				0.917 NS
G2L2				

G1- experimental group   **L1**- internal Locus of control   *significant at 0.01 level
G2- control group   **L2**- external Locus of control   NS- not significant

A further analysis of results obtained (from table 1 (d)) revealed that:

- (Refer t- value=3.351) The sub group of adolescents of internal Locus of control of experimental group (M= 8.125) had significantly improved much on Self esteem than the sub group of adolescents having external Locus of control of the same experimental group (M=3.575).

- (Refer t- value= 5.742) The sub group of adolescents of internal Locus of control of experimental group (8.125) had significantly higher scores on Self esteem than the sub group of adolescents having internal Locus of control of the control group (M=0.875).

- (Refer t- value= 6.688) The sub group of adolescents having internal Locus of control of experimental group (M=8.125) had significantly higher scores on Self esteem than the sub group of adolescents having external Locus of control of the control group (M=0.000).

- (Refer t- value= 2.388) The sub group of adolescents having external Locus of control of experimental group (M= 3.575) had significantly higher scores on Self esteem than the sub group of adolescents having internal Locus of control of the control group (M=0.875).

- (Refer t- value= 3.319) The sub group of adolescents of external Locus of control of experimental group (M=3.575) had significantly higher scores on Self esteem than the sub group of adolescents having external Locus of control of the control group (M=0.000).

- (Refer t- value= 0.917) The sub groups of adolescents having internal and external Locus of control of the control group did not differ significantly on Self esteem.

Figure 1(c): (i) Showing mean gain scores of main effect corresponding to Intentional intelligence intervention and Locus of control on Self esteem (ii) graph showing interaction effect of Intentional intelligence intervention and Locus of control on Self esteem

(i)   **(ii)**
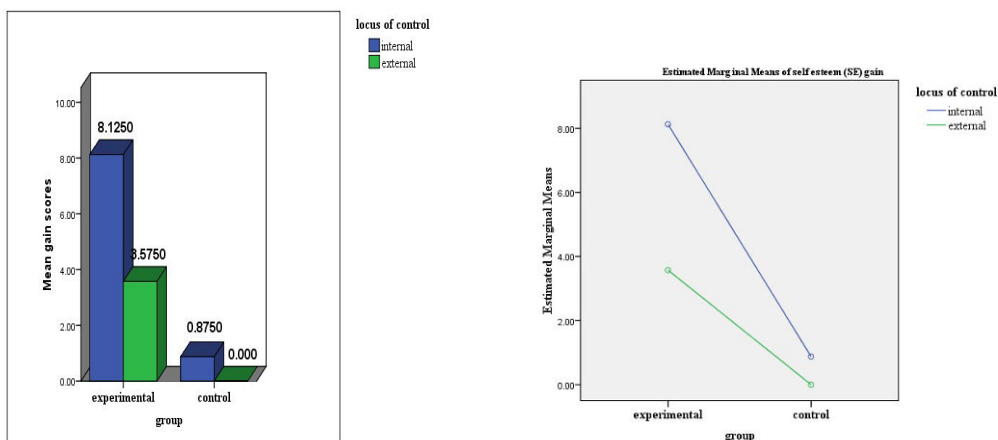
Logical Discussion and evidences supporting the findings

Findings emerging from this research paper are supported by various studies that incorporated meditational mindfulness and yoga based interventions including Fennell and Jenkins (2004) and Heppner and Kernis (2007) who found that mindfulness training has positive benefits on Self esteem. Brown and Ryan (2003) claimed mindfulness to be a healthier alternative to self-esteem. Consistent with this possibility, several cross sectional studies have reported an association between higher levels of mindfulness and increased self-esteem (Brown and Ryan, 2003; Michalak, Teismann, Heidenreich, Strohle, and Vocks, 2011; Rajamaki, 2011; Rasmussen and Pidgeon, 2011; Thompson and Waltz, 2008). Among the various explanations for experimental group's better performance on Self esteem, one being- Individuals with low self-esteem have cognitive biases based on past experiences, and deep beliefs about the self that are frequently negative. Mindfulness, however, allows an individual to transcend these schemas, and to instead focus non-judgmental attention on the present moment without excessive influence of these cognitive biases. High levels of mindfulness should thus serve as a buffer to low self-esteem, with individuals higher in mindfulness more able to step back from potentially negative thoughts about the self (Pepping, O'Donovan and Davis, 2013). Maintaining one's attention in the present moment with an attitude of non-judgment allows one to become less reactive to and more accepting of one's immediate experience (Shapiro, Carlson, Astin, and

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Freedman, 2006). This suggests that the pupils who experience such type of practices have higher self-esteem that is secure and based on a heightened awareness and acceptance of self traits (Thompson and Waltz, 2008; Brown, Ryan and Creswell, 2007). Further it was also found that the adolescents with internal Locus of control performed better on Self esteem over the external ones. This finding is consistent with the findings of other researchers like (Judge and Bono, 2001; Kliewer and Sandler, 1992; Pruessner et al. 2005).

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