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ASSESSMENT OF EMOTIONAL INTELLIGENCE OF SCHOOL CHILDREN

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ABSTRACT

The purpose of the study was to assess the Emotional Intelligence of six hundred twenty Seven school children (298 boys and 329 girls) of using Emotional Intelligence scale by Kumar and Narain (2011). The age of children ranged from 13 years to 18 years children. This scale has four dimensions i.e. understanding emotion, understanding motivation, empathy and handling relations. Data were subjected to descriptive statistics (Mean and Standard Deviation), MANOVA followed by ANOVA Least Significance Difference Test of Post-hoc Analysis. The level of significance was set at .05 level. The Descriptive analysis of data indicated that Emotional Intelligence of boys and girls of age 13 to 18 years was at moderate level. Although, Emotional Intelligence of boys of age 13 years, 14 years and 15 years was higher than Emotional Intelligence of the girls of same age. On the other hand the Emotional Intelligence of girls of age 16 years, 17, years and 18 years was higher than the Emotional Intelligence of the boys of same age groups. A multivariate analysis of variance to determine the effect of age and gender on emotional intelligence and its sub factors. The main effect of age and gender were found significant, as Wilks' Lambda= .879, F (20, 2031) =4.040; .973, F (4,612)=4.26, for age and gender respectively were significant. Analysis of variance to Gender based revealed that boys and girls of 13 to 18 years of age differ significantly on Understanding Motivation and Empathy. The difference on Understanding emotions and Handling relations was statistically insignificant. Further, one way Analysis of variance according to age revealed significant difference on understanding motivation, empathy and handling relations for boys and girls of age 13 to 18 years. Whereas, the mean difference on understanding emotions among these age groups was statistically insignificant.

Key words: Emotion, Intelligence, boys, Girls, Age, Children, motivation, Empath

1. INTRODUCTION

Emotions have great role in our lives, effecting our personal and social adjustment. For a satisfactory life, the balance between needs and environment is maintained through emotions. During initial development of a child, in classroom setting the emotions have important role. Where teacher is expected to have emotional intelligence ability for promoting student's achievements.

Emotional intelligence is considered as set of self-perceived skills such as motivation, optimism, peer-relation, confidence and coping with stress which defines the personality dispositions (Carmen, 2011). Emotional intelligence and positive results have relationship in many areas of life like creative (Guastello, and Hanson, 2004) academic achievements, physical health, psychological health and self- perceived creativity (Chang, 2005). The self-esteem is considered as potential link between emotional intelligence and life satisfaction (Lourdes ,Natalio and Mario , 2011). It organizes the capacity to process and adopt information effectively. Intellectual problems solving requires processing of emotion information which may be different than the non-emotional intelligence. Emotional intelligence is also considered as emotional competence for finding solutions (Mayer and Solovey, 1993). Emotionally intelligent person does not mean that one has no emotions or it is not express but it is the ability to subordinate the emotions for the objectives those are decided (Elena, 2010). Ability based measure of emotional intelligence has direct and moderate effect on individual performance like interpersonal or public speaking effectiveness.

The interaction of righteous emotional intelligence explains incremental variance both in public speaking and effective group behavior as well as academic performance. It is important that individual should have emotional intelligence and must be motivated to use it (Joseph, 2006). Individuals with high trait emotional intelligence measure are considered that they are in touch with their emotions, which can be controlled in such a way that promotes well-being. Thus individuals enjoy happiness of higher levels (Adrian and Petrides, 2003). Emotional intelligence can generate good and strong personal relationship amongst children by developing abilities to recognize, understand and to manage the emotions. The purpose of present investigation was to assess emotional intelligence of 13 years to 18 years old school going children.

2. METHODS AND MATERIALS

2.1 Subjects

Six Hundred Twenty Seven (298 boys and 329 girls) children 13 years to 18 years of age were randomly selected as subjects of the study. These children were selected from government and private schools of Jabalpur district of MP.

2.2 Measures

The Emotional Intelligence was evaluated using Emotional Intelligence Scale given by Kumar and Narain, (2011) and published by National Psychological Corporation Agra. This scale has four sub sections and it comprises of thirty one questions. The sub sections are; understanding emotions, understanding motivation, empathy and handling relations. Participants were asked to accurately indicate their responses from each questions "yes" and "no" basis.

2.3 Statistical Analysis

Data on Psychological well-being and its sub scale were subjected to descriptive analysis (Mean and Standard Deviation), ANOVA and followed by Least Significance Difference (LSD) Test of Post-hoc analysis were used.

3. RESULTS AND DISCUSSION

To find out the significance of differences between means of various dimensions of Emotional intelligence among boys and girls children of M.P mean, SD, ANOVA was computed. Data pertaining to these analyses have been presented in table 1 to 7.

TABLE 1
DESCRIPTIVE STATISTICS OF EMOTIONAL INTELLIGENCE OF BOYS AND
GIRLS OF THIRTEEN TO EIGHTEEN YEARS OF AGE.

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Variables	Sex	13 Y	ears	14 Years		15 Years		16 Years		17 Years		18 Years	
		Μ	SD	Μ	SD	Μ	SD	Μ	SD	Μ	SD	Μ	SD
Satisfaction	М	39.46	6.68	39.58	7.90	40.44	4.99	38.24	6.25	39.54	5.56	40.55	6.91
	F	38.20	4.82	39.23	5.38	39.98	4.42	40.68	4.59	41.77	4.35	40.29	4.58
Efficiency	М	39.42	5.45	37.41	9.08	41.92	4.74	39.68	6.60	41.14	4.51	41.81	6.50
	F	40.18	5.64	39.98	5.02	40.57	5.18	41.56	3.13	43.54	3.51	41.64	4.32
Sociability	М	38.42	5.91	37.25	7.65	42.40	5.02	40.44	6.78	40.06	7.34	40.83	9.53
	F	39.78	6.77	37.58	4.99	39.26	5.55	37.48	6.02	37.60	4.51	41.47	5.99
Mental	М	37.74	7.04	36.68	8.93	42.04	6.19	40.18	4.89	40.18	6.75	42.95	6.29
Health	F	38.73	5.77	36.31	6.92	39.07	6.64	37.24	6.38	39.66	7.02	41.18	5.62
Interpersonal	М	37.82	7.31	39.09	7.10	44.14	6.68	40.94	6.10	43.81	6.29	43.65	6.59
Relation	F	38.59	5.88	39.70	6.01	40.82	6.93	41.50	5.78	42.14	4.54	42.50	3.73
Total	М	192.82	24.32	190.04	36.04	210.94	19.85	199.48	25.00	204.75	24.36	209.82	30.71
Psychological	F	195.50	20.76	192.82	21.21	199.73	20.95	198.46	18.00	204.73	14.26	207.10	14.93
Well -being													

The data on Emotional Intelligence in table-1 revealed that school children of 13 to 18 years of age when compared with norms of scale have average level (21 to 26) of Emotional Intelligence (Understanding Motivation, Understanding Emotions, Empathy and Handling Relations).

A multivariate analysis of variance to determine the effect of age and gender on emotional intelligence and its sub factors. The main effect of age and gender were found significant, as Wilks' Lambda= .879, F (20,2031) =4.040; .973,F(4,612)=4.26, for age and gender respectively were significant at .05 level.

TABLE 2ANALYSIS OF VARIANCE ON DIFFERENT MEASURES OF PSYCHOLOGICALWELL-BEING OF BOYSAND GIRLS OF THIRTEEN TO EIGHTEEN YEARS OF AGE

Factor	Variables	Source of	df	Sum of	Mean of	F-value
		variance		Squares	Square	
Gender	Understanding	Between groups	1	.108	.108	.107
	emotions	Within group	615	621.105	1.010	
	Understanding	Between groups	1	7.999	7.999	4.303*
	motivation	Within group	615	1143.121	1.859	
	Empathy	Between groups	1	10.833	10.833	5.220*
		Within group	615	1276.303	2.075	
	Handling	Between groups	1	5.186	5.186	2.063
	relations	Within group	615	1546.319	2.514	

*Significant at .05 level.

F .05(5,615) = 3.04

Analysis of data in table-2 revealed that boys and girls of 13 to 18 year of age differ significantly on two out of four measures of Emotional Intelligence i.e. Understanding

Motivation and Empathy. The differences on Understanding Emotions and Handling Relations was statistically insignificant at .05 level.

TABLE 3 ANALYSIS OF VARIANCE ON DIFFERENT MEASURES OF EMOTIONAL INTELLIGENCE OF BOYSAND GIRLS OF THIRTEEN TO EIGHTEEN YEARS OF AGE

Factor	Variables	Source of variance	df	Sum of Squares	Mean of Square	F-value
Age	Understanding emotions	Between groups Within group	5 615	7.077 621.105	1.415 1.010	1.401
	Understanding motivation	Between groups Within group	5 615	35.594 1143.121	7.119 1.859	3.830*
	Empathy	Between groups Within group	5 615	31.649 1276.303	6.330 2.075	3.050*
	Handling relations	Between groups Within group	5 615	83.947 1546.319	16.789 2.514	6.677*

*Significant at .05 level, .F .05(5,615) =3.04

One way analysis of variance data in table-3 revealed that of boys and girls of 13 to 18 years of age differ significantly on Understanding motivation, Empathy and Handling relations, sub factor of Emotional Intelligence. Whereas, the mean difference on Understanding Emotion sub factor of Emotional Intelligence, among these age groups was groups was statistically insignificant at .05 level.

In the case of significant F-ratio Least Significance Difference of Post- hoc comparisons were used to find out the significance of difference between ordered paired means of different age groups on understanding motivation, empathy and handling relations and the data pertaining to this has been presented in table 4 to 7

TABLE 4 SIGNIFICANCE OF DIFFERENCES BETWEEN ORDERED PAIRED MEANS OF EFFICIENCY-A SUB FACTOR OF EMOTIONAL INTELLIGENC OF BOYS AND GIRLS OF THIRTEEN TO EIGHTEEN YEARS

13	14	15	16	17	18	MD	C.I.
years	years	years	years	years	years		
5.54	5.47					0.07	0.35
5.54		5.48				0.06	0.36
5.54			5.46			0.08	0.37
5.54				6		-0.46*	0.37
5.54					6.02	-0.48*	0.37
	5.47	5.48				-0.01	0.36
	5.47		5.46			0.01	0.36
	5.47			6		-0.53*	0.37
	5.47				6.02	-0.55*	0.37
		5.48	5.46			0.02	0.37
		5.48		6		-0.52*	0.38
		5.48			6.02	-0.54*	0.38
			5.46	6		-0.54*	0.38
			5.46		6.02	-0.56*	0.38
				6	6.02	-0.02	0.39

*Significant at .05 level.

Analysis of data in table-4 revealed that there is significant difference on understanding motivation between mean scores of 13 and 14 years (0.46), between 13 and 15 years (0.46), between 13 and 16 years (0.48); between 14 and 15 years (0.53), between 14 and 16 years (0.53); between 15 and 16 (0.52); and between 17 and 18 years (0.02).

Whereas, the mean difference between mean scores of 13 and 14 years (0.07), between 13 and 15 years (0.06), between 13 and 16 years (0.08); between 14 and 15 years (0.01), between 14 and 16 years (0.02); and between 17 and 18 years (0.02) were insignificant, as the mean difference were less than the required least significant values it to be significant at .05 levels.

TABLE 5
SIGNIFICANCE OF DIFFERENCES BETWEEN ORDERED PAIRED MEANS OF
SOCIABILITY, -A SUB FACTOR OF EMOTIONAL INTELLIGENCE OF
BOYS AND GIRLS OF THIRTEEN TO EIGHTEEN YEARS

13	14	15	16	17	18	MD	C.I.
years	years	years	years	years	years		
7.91	7.83					0.08	0.37
7.91		7.77				0.14	0.38
7.91			7.48			0.43*	0.39
7.91				7.28		0.63*	0.39
7.91					7.8	0.11	0.39
	7.83	7.77				0.06	0.38
	7.83		7.48			0.35	0.38
	7.83			7.28		0.55*	0.39
	7.83				7.8	0.03	0.39
		7.77	7.48			0.29	0.40
		7.77		7.28		0.49*	0.40
		7.77			7.8	-0.03	0.40
			7.48	7.28		0.2	0.40
			7.48		7.8	-0.32	0.40
				7.28	7.8	-0.52*	0.41

*Significant at .05 level.

Analysis of data in table-5 revealed that there is significant difference on empathy between mean scores of 13 and 16 years (0.43), between 13 and 17 years (0.63); between 14 and 17 years (0.55); between 15 and 17 (0.49), and between 17 and 18 years (0.52).

Whereas, the mean difference between mean scores was of 13 and 14years (0.08), 13 and 15years (0.14), 13 and 18years (0.11); between 14 and 15 years (0.06), between 14 and 16 years (0.35), between 14 and 18 years (0.03), between and 15 and 16 years (0.29), between 15 and 18years (0.03); between 16and 17years (0.2) and between 16 and 18years (0.32) were insignificant, as the mean difference were less than the required least significant values it to be significant at .05 levels.

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TABLE 6
SIGNIFICANCE OF DIFFERENCES BETWEEN ORDERED PAIRED MEANS OF MENTAL HEALTH -
A SUB, FACTOR OF EMOTIONAL INTELLIGENCE OF BOYS AND GIRLS OF THIRTEEN TO
EIGHTEEN YEARS

13	14	15	16	17	18	MD	C.I.
years	years	years	years	years	years		
7.11	7.21					-0.1	0.41
7.11		6.79				0.32	0.42
7.11			6.27			0.84*	0.43
7.11				6.38		0.73*	0.43
7.11					6.98	0.13	0.43
	7.21	6.79				0.42	0.42
	7.21		6.27			0.94*	0.42
	7.21			6.38		0.83*	0.43
	7.21				6.98	0.23	0.43
		6.79	6.27			0.52*	0.49
		6.79		6.38		0.41	0.44
		6.79			6.98	-0.19	0.44
			6.27	6.38		-0.11	0.44
			6.27		6.98	-0.71*	0.44
				6.38	6.98	-0.6	0.45

*Significant at .05 level.

Data in table-6 revealed that there is significant difference on handling relations between mean scores of 13 and 16 years (0.84), between 13 and 17 years (0.73); between 14 and 16 years (0.94), between 14 and 17 years (0.83); between 15 and 16 (0.52); and between 16 and 18 years (0.71). Whereas the mean difference between mean scores of 13 and 14 years (0.01), between 13 and 15 years (0.32), between 13 and 18 years (0.13); between 14 and 15 years (0.42), between 14 and 18 years (0.23), between 15 and 17 years (0.41), between 15 and 18 years (0.19); between 16 and 17 years (0.11) and between 17 and 18 years (0.6) were insignificant, as the mean difference were less than the required least significant values it to be significant at .05 levels.

 TABLE 7

 SIGNIFICANCE OF DIFFERENCES BETWEEN ORDERED PAIRED MEANS OF INTERPERSONAL

 RELATIONS -A SUB, FACTOR OF EMOTIONAL INTELLIGENCE OF BOYS AND GIRLS OF

 THIDTEEN TO FICHTEEN VEADS

13	14	15	16	17	18	MD	C.I.
years	years	years	years	years	years		
23.21	23.47				-	-0.26	0.96
23.21		22.79				0.42	0.99
23.21			22.02			1.19*	1.00
23.21				22.44		0.77	1.01
23.21					23.43	-0.22	1.00
	23.47	22.79				0.68	0.99
	23.47		22.02			1.45*	0.99
	23.47			22.44		1.03*	1.00
	23.47				23.43	0.04	1.00
		22.79	22.02			0.77	1.02
		22.79		22.44		0.35	1.03
		22.79			23.43	-0.64	1.03
			22.02	22.44		-0.42	1.04
			22.02		23.43	-1.41*	1.04
				22.44	23.43	-0.99	1.05

*Significant at .05 level.

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Analysis of data in table-7 revealed that there is significant difference on total scores of emotional intelligence between mean scores of 13 and 16 years (1.19); 14 and 16 years (1.45), 14 and 17 years (1.03) and 16 and 18 years (1.41).

The mean difference between mean scores of 13 and 14 years (0.26), between 13 and 15 years (0.42), between 13 and 17 (0.77), between 13 and 18 years (0.22); between 14 and 15 years (0.68), between 14 and 18 years (0.04); between and 15 and 16 years (0.77), between 15 and 17 years (0.35), between 15 and 18 years (0.64); between 16 and 17 years (0.42) and between 17 and 18 years (0.99) were insignificant, as the mean difference were less than the required least significant values it to be significant at .05 levels.

4. DISCUSSION

The results of descriptive analysis indicated the moderate level Satisfaction, Efficiency, Sociability, Mental health and Interpersonal relation among male children of 13 to 18 years age. Where as, the girls at seventeen years had higher level of Efficiency and boys at fifteen, seventeen and eighteen years had higher level of interpersonal relations.

A multivariate analysis of variance indicated the significant main effects of age and gender as Wilks' Lambda= .817, F (25, 2271) =5.074; .953, F (5,611)=5.24, for age and gender respectively were significant.

To find out the significance of differences between gender of various age groups on five sub-factors of psychological well-being, Analysis of variance indicated the the significant differences among gender on three out of five measures of Psychological Well-being viz. Efficiency, Sociability and Mental Health where as, the mean difference on Satisfaction and Interpersonal relations sub factor of Psychological Well-being, among these age groups was statistically insignificant.

To find out the significance of differences among gender and age on five sub-factors of psychological well-being, F-ratio resulted significant differences among boys and girls of 13 to 18 years of age on Efficiency, Sociability, Mental Health and insignificant. Differences on Interpersonal relations, sub factors of Psychological Well-being.

To find out the significant of difference between ordered paired means of different age groups on these factors Least Significance Difference of Post-hoc comparisons expressed the significant variations among various age groups male and female children on on five sub-factors of psychological well-being

5. CONCLUSIONS

Within the limitation of the current study following conclusions were drawn:

- 1. Boys of 13 to 18 years age have moderate level of Psychological Well-being.
- 2. Girls of 13 to 18 years age have moderate level of Psychological Well-being.
- 3. Gender wise psychological well-being of girls of age groups 13 years and 14 years was higher than the boys of same age groups. Whereas, Psychological Well-being of boys of age groups 15 years, 16 years, 17 years and 18 years is higher than the groups of corresponding age groups.
- 4. Psychological well-being of boys and girls of 13 to 18 years has age wise variation. Initially the psychological well-being has declined in the age of 14 years when compared to 13 years of age. In the age groups of 15 years, it improved and again declined in the age groups of 16 years. Thereafter 17 years and 18 years of age groups have shown improvement in the Psychological well-being.

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- 5. Gender wise analysis of variance data revealed that boys and girls differ on three out of five measures of Psychological Well-being viz. efficiency, sociability, and mental health. The mean difference on satisfaction and interpersonal relations a sub factor of psychological well-being among boys and girls was statistically insignificant at .05 level.
- 6. Age wise analysis of variance data of Psychological Well-being children 13 to 18 years of age revealed that they differ significantly on efficiency, sociability, mental health and interpersonal relations, sub factors of psychological well-being. The mean difference on satisfaction, sub factors of psychological well-being among age groups was statistically insignificant at .05 level.
- 7. Overall boys and girls of age groups 13 to 18 years of age have moderate level Psychological Well-being.

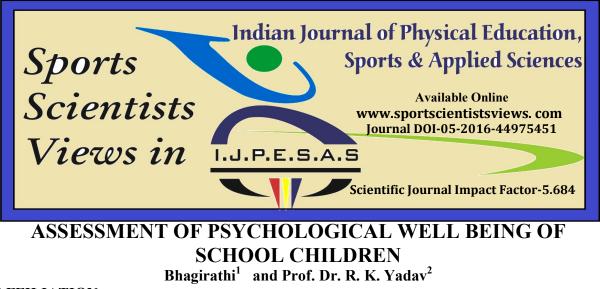
6. SUGGESTION

The results of this study suggest that a comprehensive approach and programmed isneeds to be evolved and implemented for improving Psychological Well-being of school going children.

REFERENCES

- Adrian and Petrides.(2003). Trait Emotional Intelligence and Happiness.Social Behavior and Personality. 31, (8), 815-823.
- **Carmen L.(2011).** Emotional intelligence and academic attainment of British secondary school children: a cross sectional survey. Educational Studies. 38,(5), 521-539.
- Elena L, (2010). Methods of developing children's emotional intelligence. Social and Behavioral Sciences. 5, 2227-2233.
- Guastello, S.J, and Hanson C.A. (2004). Creativity, Mood Disorders, and Emotional Intelligence. Creative behavior. 38, (4), 260-281.
- Joseph C Rode, (2006). Emotional Intelligence and individual performance: Evidence of direct and moderated effects. Journal of Organizational Behavior. 28, (4), 399-421.
- Kumar and Narain, (2011). Emotional Intelligence Scale, India-Agra: National Psychological Corporation .
- Lourdes R, Natalio E, and Mario Pena.(2011). Perceived emotional Intelligence, Self-Esteem and Life Satisfaction in Adolescents.Psychosocial Intervention. 20, (2), 227-234.
- Mayer and Solovey, (1993). The Intelligence of Emotional Intelligence. Intelligence. 17, (4), 433-442.

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ABSTRACT

Six Hundred Twenty Seven school children (298 boys and 329 girls) ranging 13 to 18 years of age were assessed for Psychological Well-being. Using Psychological Well-being scale by singh and Choudhary, (2012). This scale consists of five dimensions viz. satisfaction, efficiency, sociability, mental health and interpersonal relations. Data collected were subjected to descriptive statistics (mean and standard deviation), MANOVA followed by ANOVA, followed by Least Significance Difference test of Post-Hoc analysis. Descriptive Analysis of data revealed that Psychological Well-being of boys and girls of age 13 to 18 years was at moderate level. Psychological Well-being of girls of age 17 years, (Efficiency) and boys of age 15 years, 17 years and 18 years have higher Interpersonal Relations. A multivariate analysis of variancedetermine the effect of age and gender on psychological well-being and its sub factors. The indicated significant main effects of age and gender as Wilks' Lambda= .817, F (25, 2271) =5.074; .953, F (5,611)=5.24, for age and gender respectivelywere significant at .05 level. Analysis of variance with to gender revealed that boys and girls of 13 to 18 years of age differ significantly on efficiency, sociability and mental health. The differences on satisfaction and interpersonal relation were statistically insignificant. Further, one way Analysis of variance according to age revealed that there was significant difference on efficiency, sociability and mental health and interpersonal relations. Whereas the mean differences on satisfaction among these age groups was statistically insignificant at 0.05 level.

Key Words: Psychological Well-being and school children.

1. INTRODUCTION

Psychological well-being is combination of feeling good and functioning effectively for well going life. Sustainable psychological well-being does not mean individual to always feel good; the painful emotions (grief, failure and disappointment) is part of normal life. For long term well-being it is essential to manage these negative emotions within the limits. When the negative emotions are extreme and very long lasting then psychological well-being is compromised which affects the person's ability to function in his or her daily life. The idea of functioning effectively leads to the development of one's life having some control over one's life having a sense of fulfillments of purpose and enjoying positive relationship (Felicia, 2009).

The people with high happiness and well-being have attribution style that are more selfenhancing and more enabling compare to those low in psychological well-being. The positive emotions lead to positive cognition which, in turn, develops positive emotions (**Ryan and Deci,2001**). People who experience positive emotions evaluate themselves and others more positively to show more confident, optimistic and generous way in interpersonal situation (**Forgas, 2002**).

High psychological well-being like (life satisfaction, absence of negative emotions, optimism and positive emotions) cause better health and survival. The key characteristic of good life is dependent on good cultures in which these flourish (Edgerton, 1992). Positive mind set is related to protective psychological and behavioral aspects like greater social connectedness, optimism, perceived social support and preference for adoptive and coping responses. The positive mind set is also associated with exercising regularly, not smoking and a prudent diet (Steptoe, Docksay and Wardle, 2009). Psychological well-being is consistently and positively related with measure of physical health. Moreover levels of psychological well-being tend to change over the life span (Ryff, Singer and Love, 2004). There has been concern with why and how people experience their life in positive ways for both cognitive judgments and affective reaction. For such study diverse terms as happiness, satisfaction, morale and positive effect have been used. It is concluded that happy person comes out as young, healthy, well paid, welleducated, religious, extroverted, and optimistic, with high self-esteem and a wide range of intelligence (Wilsons, 1967). Rutter (1979) indicated that emotional disturbance during adolescence is somewhat higher than observed during childhood or later adult life. The brain activation of child development is reported to have appearance of differences patterns. The purpose of present investigation was to assess psychological well-being of 13 years to 18 years old school going children.

2. METHODS AND MATERIALS

2.1 Subjects

Six Hundred Twenty Seven (298 male and 329 female) children from 13 to 18 years of age were randomly selected as subjects of the study. These children were selected from Government and Private schools of Jabalpur district of Madhya Pradesh.

2.2 Measures

The Psychological Well-being was evaluated using Psychological Well-being scale given by Sisodia and Choudhary, (2012) and published by National Psychological Corporation Agra. This scale has five sub sections with ten questions in each sub section and accordinglythe scale comprises of total fifty questions. The sub sections are Satisfaction, Efficiency, Sociability, Mental Health and Interpersonal Relations. Participants were asked to accurately indicate their responses to each item on the 5 point likert scale from 1, strongly disagree and 5, strongly agree.

2.3 Measures

Data on Psychological well-being and its sub scale were subjected to descriptive analysis (Mean and Standard Deviation), ANOVA and followed by Least Significance Difference (LSD) Test of Post-hoc analysis were used.

3. RESULTS AND DISCUSSION

To find out the significance of differences between means of various dimensions of Psychological well-being among boys and girls children of M.P mean, SD, ANOVA was computed. Data pertaining to these analyses have been presented in table 1 to 8.

GIRLS OF THIRTEEN TO EIGHTEEN YEARS OF AGE. Variables Sex 13 Years 14 Years 15 Years 16 Years 17 Years 18 Years												
Sex	x 13 Years		14 Years		15 Y	ears	16 Y	ears	17 Y	ears	18	Years
	M	SD	Μ	SD	Μ	SD	Μ	SD	Μ	SD	Μ	SD
M	39.46	6.68	39.58	7.90	40.44	4.99	38.24	6.25	39.54	5.56	40.55	6.91
F	38.20	4.82	39.23	5.38	39.98	4.42	40.68	4.59	41.77	4.35	40.29	4.58
М	39.42	5.45	37.41	9.08	41.92	4.74	39.68	6.60	41.14	4.51	41.81	6.50
F	40.18	5.64	39.98	5.02	40.57	5.18	41.56	3.13	43.54	3.51	41.64	4.32
М	38.42	5.91	37.25	7.65	42.40	5.02	40.44	6.78	40.06	7.34	40.83	9.53
F	39.78	6.77	37.58	4.99	39.26	5.55	37.48	6.02	37.60	4.51	41.47	5.99
М	37.74	7.04	36.68	8.93	42.04	6.19	40.18	4.89	40.18	6.75	42.95	6.29
F	38.73	5.77	36.31	6.92	39.07	6.64	37.24	6.38	39.66	7.02	41.18	5.62
М	37.82	7.31	39.09	7.10	44.14	6.68	40.94	6.10	43.81	6.29	43.65	6.59
F	38.59	5.88	39.70	6.01	40.82	6.93	41.50	5.78	42.14	4.54	42.50	3.73
М	192.82	24.32	190.04	36.04	210.94	19.85	199.48	25.00	204.75	24.36	209.82	30.71
F	195.50	20.76	192.82	21.21	199.73	20.95	198.46	18.00	204.73	14.26	207.10	14.93
	Sex M F M F M F M F M F M	Sex 13 Y M M 39.46 F 38.20 M 39.42 F 40.18 M 38.42 F 39.78 M 37.74 F 38.73 M 37.82 F 38.59 M 192.82	Sex 13 Years M SD M 39.46 6.68 F 38.20 4.82 M 39.42 5.45 F 40.18 5.64 M 38.42 5.91 F 39.78 6.77 M 37.74 7.04 F 38.73 5.77 M 37.82 7.31 F 38.59 5.88 M 192.82 24.32	Sex 13 Years M 14 Years M M 39.46 6.68 39.58 F 38.20 4.82 39.23 M 39.42 5.45 37.41 F 40.18 5.64 39.98 M 38.42 5.91 37.25 F 39.78 6.77 37.58 M 37.74 7.04 36.68 F 38.73 5.77 36.31 M 37.82 7.31 39.09 F 38.59 5.88 39.70 M 192.82 24.32 190.04	Sex 13 Years M 14 Years M M SD M 39.46 6.68 39.58 7.90 F 38.20 4.82 39.23 5.38 M 39.42 5.45 37.41 9.08 F 40.18 5.64 39.98 5.02 M 38.42 5.91 37.25 7.65 F 39.78 6.77 37.58 4.99 M 37.74 7.04 36.68 8.93 F 38.73 5.77 36.31 6.92 M 37.82 7.31 39.09 7.10 F 38.59 5.88 39.70 6.01 M 192.82 24.32 190.04 36.04	Sex13 Years M14 Years M15 Years MM39.46 6.68 39.58 7.90 40.44 F 38.20 4.82 39.23 5.38 39.98 M 39.42 5.45 37.41 9.08 41.92 F 40.18 5.64 39.98 5.02 40.57 M 38.42 5.91 37.25 7.65 42.40 F 39.78 6.77 37.58 4.99 39.26 M 37.74 7.04 36.68 8.93 42.04 F 38.73 5.77 36.31 6.92 39.07 M 37.82 7.31 39.09 7.10 44.14 F 38.59 5.88 39.70 6.01 40.82 M 192.82 24.32 190.04 36.04 210.94	Sex13 Years M14 Years M15 Years MM39.46 6.68 39.58 7.90 40.44 4.99 F 38.20 4.82 39.23 5.38 39.98 4.42 M 39.42 5.45 37.41 9.08 41.92 4.74 F 40.18 5.64 39.98 5.02 40.57 5.18 M 38.42 5.91 37.25 7.65 42.40 5.02 F 39.78 6.77 37.58 4.99 39.26 5.55 M 37.74 7.04 36.68 8.93 42.04 6.19 F 38.73 5.77 36.31 6.92 39.07 6.64 M 37.82 7.31 39.09 7.10 44.14 6.68 F 38.59 5.88 39.70 6.01 40.82 6.93 M 192.82 24.32 190.04 36.04 210.94 19.85	Sex13 Years M14 Years M15 Years M16 Years MM39.46 6.68 39.58 7.90 40.44 4.99 38.24 F 38.20 4.82 39.23 5.38 39.98 4.42 40.68 M 39.42 5.45 37.41 9.08 41.92 4.74 39.68 F 40.18 5.64 39.98 5.02 40.57 5.18 41.56 M 38.42 5.91 37.25 7.65 42.40 5.02 40.44 F 39.78 6.77 37.58 4.99 39.26 5.55 37.48 M 37.74 7.04 36.68 8.93 42.04 6.19 40.18 F 38.73 5.77 36.31 6.92 39.07 6.64 37.24 M 37.82 7.31 39.09 7.10 44.14 6.68 40.94 F 38.59 5.88 39.70 6.01 40.82 6.93 41.50 M 192.82 24.32 190.04 36.04 210.94 19.85 199.48	Sex13 Years M14 Years M15 Years M16 Years MM39.46 6.68 39.58 7.90 40.44 4.99 38.24 6.25 F 38.20 4.82 39.23 5.38 39.98 4.42 40.68 4.59 M 39.42 5.45 37.41 9.08 41.92 4.74 39.68 6.60 F 40.18 5.64 39.98 5.02 40.57 5.18 41.56 3.13 M 38.42 5.91 37.25 7.65 42.40 5.02 40.44 6.78 F 39.78 6.77 37.58 4.99 39.26 5.55 37.48 6.02 M 37.74 7.04 36.68 8.93 42.04 6.19 40.18 4.89 F 38.73 5.77 36.31 6.92 39.07 6.64 37.24 6.38 M 37.82 7.31 39.09 7.10 44.14 6.68 40.94 6.10 F 38.59 5.88 39.70 6.01 40.82 6.93 41.50 5.78 M 192.82 24.32 190.04 36.04 210.94 19.85 199.48 25.00	Sex13 Years M14 Years M15 Years M16 Years M17 Y MM39.46 6.68 39.58 7.90 40.44 4.99 38.24 6.25 39.54 F 38.20 4.82 39.23 5.38 39.98 4.42 40.68 4.59 41.77 M 39.42 5.45 37.41 9.08 41.92 4.74 39.68 6.60 41.14 F 40.18 5.64 39.98 5.02 40.57 5.18 41.56 3.13 43.54 M 38.42 5.91 37.25 7.65 42.40 5.02 40.44 6.78 40.06 F 39.78 6.77 37.58 4.99 39.26 5.55 37.48 6.02 37.60 M 37.74 7.04 36.68 8.93 42.04 6.19 40.18 4.89 40.18 F 38.73 5.77 36.31 6.92 39.07 6.64 37.24 6.38 39.66 M 37.82 7.31 39.09 7.10 44.14 6.68 40.94 6.10 43.81 F 38.59 5.88 39.70 6.01 40.82 6.93 41.50 5.78 42.14 M 192.82 24.32 190.04 36.04 210.94 19.85 199.48 25.00 204.75	Sex13 Years M14 Years M15 Years M16 Years M17 Years MM39.466.6839.587.9040.444.9938.246.2539.545.56F38.204.8239.235.3839.984.4240.684.5941.774.35M39.425.4537.419.0841.924.7439.686.6041.144.51F40.185.6439.985.0240.575.1841.563.1343.543.51M38.425.9137.257.6542.405.0240.446.7840.067.34F39.786.7737.584.9939.265.5537.486.0237.604.51M37.747.0436.688.9342.046.1940.184.8940.186.75F38.735.7736.316.9239.076.6437.246.3839.667.02M37.827.3139.097.1044.146.6840.946.1043.816.29F38.595.8839.706.0140.826.9341.505.7842.144.54M192.8224.32190.0436.04210.9419.85199.4825.00204.7524.36	Sex13 Years M14 Years M15 Years M16 Years M17 Years M18 MM39.466.6839.587.9040.444.9938.246.2539.545.5640.55F38.204.8239.235.3839.984.4240.684.5941.774.3540.29M39.425.4537.419.0841.924.7439.686.6041.144.5141.81F40.185.6439.985.0240.575.1841.563.1343.543.5141.64M38.425.9137.257.6542.405.0240.446.7840.067.3440.83F39.786.7737.584.9939.265.5537.486.0237.604.5141.47M37.747.0436.688.9342.046.1940.184.8940.186.7542.95F38.735.7736.316.9239.076.6437.246.3839.667.0241.18M37.827.3139.097.1044.146.6840.946.1043.816.2943.65F38.595.8839.706.0140.826.9341.505.7842.144.5442.50M192.8224.32190.0436.04210.9419.85199.4825.00204.7524.36209.82

TABLE 1 DESCRIPTIVE STATISTICS OF PSYCHOLOGICAL WELL-BEING OF BOYS AND GIRLS OF THIRTEEN TO EIGHTEEN YEARS OF AGE.

The data in on Psychological Well-being for boys and girls in table-1 indicated that the children of 13 to 18 years age group have moderate level (16 to 43)of Satisfaction, Efficiency, Sociability, Mental health and Interpersonal relation. Where as, the girls at 17 years had higher level of Efficiency, and boys at 15 years, 17 years and 18 years had higher level of interpersonal relations (43 to 48). Subsequently univariate tests were conducted for age and gender with measures of Psychological Well-being and their sub factors as dependent variables. Data pertaining to this has been presented in table 2 to 7.

A multivariate analysis of variance determine the effect of age and gender on psychological well-being and its sub factors. The indicated significant main effects of age and gender as Wilks' Lambda= .817, F (25, 2271) =5.074; .953, F (5,611)=5.24, for age and gender respectively were significant at .05 level.

TABLE 2

ANALYSIS OF VARIANCE ON DIFFERENT MEASURES OF PSYCHOLOGICAL WELL-BEING OF BOYSAND GIRLS OF THIRTEEN TO EIGHTEEN YEARS OF AGE

Factor	Variables	Source of variance	df	Sum of Squares	Mean of Square	F-value
Gender	Satisfaction	Between groups Within group	1 615	23.658 19497.049	23.658 31.703	.746
	Efficiency	Between groups Within group	1 615	160.344 18803.062	160.344 30.574	5.244*
	Sociability	Between groups Within group	1 615	166.452 25563.098	166.452 41.566	4.005*
	Mental health	Between groups Within group	1 615	246.953 26852.825	246.953 43.663	5.656*
	Interpersonal Relations	Between groups Within group	1 615	75.778 23404.533	75.778 38.056	1.991

*Significant at .05 level. F .05(5,615) =3.04

Analysis of data in table-2 revealed that boys and girls differ on three out of five measures of Psychological Well-being viz. Efficiency, Sociability and Mental Health where as, the mean difference on Satisfaction and Interpersonal relations sub factor of Psychological Well-being, among these age groups was statistically insignificant at .05 levels.

TABLE 3

ANALYSIS OF VARIANCE ON DIFFERENT MEASURES OF PSYCHOLOGICAL WELL-BEING OF BOYSAND GIRLS OF THIRTEEN TO EIGHTEEN YEARS OF AGE

Factor	Variables	Source of	df	Sum of	Mean of	F-value
		variance		Squares	Square	
Age	Satisfaction	Between groups	5	259.150	51.830	1.635
-		Within group	615	19497.049	31.703	
	Efficiency	Between groups	5	946.904	189.381	6.194*
		Within group	615	18803.062	30.574	
	Sociability	Between groups	5	1021.411	204.282	4.915*
		Within group	615	25563.098	41.566	
	Mental health	Between groups	5	2011.787	402.357	9.215*
		Within group	615	26852.825	43.663	
	Interpersonal	Between groups	5	2189.131	437.826	11.505*
	Relations	Within group	615	23404.533	38.056	

*Significant at .05 level, .F .05(5,615) =3.04

The analysis of variance data in table-3 showed that boys and girls of 13 to 18 years of age differ significantly on Efficiency, Sociability, Mental Health and Interpersonal relations, sub factors of Psychological Well-being. Whereas, the mean difference on Satisfaction sub factor of Psychological Well-being, among these age groups was statistically insignificant at .05 levels.

In case of significant F-ratios on Efficiency, Sociability, Mental Health and Inter Personal relation Least Significance Difference of Post-hoc comparisons was used to find out the significant of difference between ordered paired means of different age groups on these factors and the data pertaining to this has been presented in table 4 to 8.

OF P	OF PSYCHOLOGICAL WELL-BEING OFBOYS AND GIRLS OF THIRTEEN TO EIGHTEEN YEARS							
13	14	15	16	17	18	MD	C.I.	
years	years	years	years	years	years			
39.85	38.87					0.98	1.45	
39.85		41.23				-1.38	1.50	
39.85			40.62			-0.77	1.51	
39.85				42.34		-2.49*	1.53	
39.85					41.73	-1.88*	1.52	
	38.87	41.23				-2.36*	1.49	
	38.87		40.62			-1.75*	1.50	
	38.87			42.34		-3.47*	1.52	
	38.87				41.73	-2.86*	1.51	
		41.23	40.62			0.61	1.55	
		41.23		42.34		-1.11	1.57	
		41.23			41.73	-0.5	1.56	
			40.62	42.34		-1.72*	1.58	
			40.62		41.73	-1.11	1.57	
				42.34	41.73	0.61	1.59	

 TABLE 4

 SIGNIFICANCE OF DIFFERENCES BETWEEN ORDERED PAIRED MEANS OF EFFICIENCY-A SUB FACTOR

 OF PSYCHOLOGICAL WELL-BEING OFBOYS AND GIRLS OF THIRTEEN TO EIGHTEEN YEARS

*Significant at .05 level.

Analysis of data on Efficiency in table-4revealedsignificant differences between mean scores of 13 and 17 years (2.49), between 13 and 18 years (1.88); between 14 and 15 years (2.36), between 14 and 16 years (1.75), between 14 and 17 years (3.47), between 14 and 18 years (2.86); and between 16 and 17 years (1.72).

Whereas, the mean difference between mean scores of 13 and 14years (0.98), between 13 and 15years (1.38), between13 and 16years (0.77); between and 16 and 17years (0.61) between 15 and 17years (1.11), between 15 and 18years (0.5); between 16and 18years (1.11); and between 17 and 18years (0.61) were insignificant, as the mean difference were less than the required least significant values it to be significant at .05 levels.

TABLE 5SIGNIFICANCE OF DIFFERENCES BETWEEN ORDERED PAIRED MEANS OF SOCIABILITY, -ASUB FACTOR OF PSYCHOLOGICAL WELL-BEING OF BOYS AND GIRLS OF 13 TO 17 YEARS

13	14	15	16	17	18	MD	C.I.
years	years	years	years	years	years		
39.18	37.44		-	•		1.74*	1.66
39.18		40.8				-1.62	1.72
39.18			38.96			0.22	1.73
39.18				38.83		0.35	1.75
39.18					41.15	-1.97*	1.75
	37.44	40.8				-3.36*	1.71
	37.44		38.96			-1.52	1.72
	37.44			38.83		-1.39	1.74
	37.44				41.15	-3.71*	1.73
		40.8	38.96			1.84*	1.78
		40.8		38.83		1.97*	1.80
		40.8			41.15	-0.35	1.79
			38.96	38.83		0.13	1.81
			38.96		41.15	-2.19*	1.80
				38.83	41.15	-2.32*	1.82

*Significant at .05 level.

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Analysis of data on Sociability in table-5indicated significant difference between mean scores of 13 and 14 years (1.74), between 13 and 18 years (1.97); between 14 and 15 years (3.36), between 14 and 18 years (3.71); between 15 and 16(1.84), between 15 to 18(1.97); between 16 and 18 years (2.19) and between 17 and 18 years (2.32). Whereas, the mean difference between mean scores of between 13 and 15 years (1.62), between 13 and 16 years (0.22), between 13 and 17 years (0.35); between 14 and 16 years (1.52), between 14 and 17 years (1.39); between 15 and 18 years (0.35); and between 16 and 17 years (1.13) were insignificant, as the mean difference were less than therequired least significant valuesit to be significant at .05 levels.

OF BOYS AND GIRLS OF THIRTEEN TO EIGHTEEN YEARS								
13	14	15	16	17	18	MD	C.I.	
years	years	years	years	years	years			
38.29	36.47					1.82*	1.70	
38.29		40.52				-2.23*	1.77	
38.29			38.71			-0.42	1.78	
38.29				39.92		-1.63	1.80	
38.29					42.08	-3.79*	1.79	
	36.47	40.52				-4.05*	1.75	
	36.47		38.71			-2.24*	1.76	
	36.47			39.92		-3.45*	1.78	
	36.47				42.08	-5.61*	1.78	
		40.52	38.71			1.81	1.82	
		40.52		39.92		0.6	1.84	
		40.52			42.08	-1.56	1.84	
			38.71	39.92		-1.21	1.85	
			38.71		42.08	-3.37*	1.85	
				39.92	42.08	-2.16*	1.87	

SIGNIFICANCE OF DIFFERENCES BETWEEN ORDERED PAIRED MEANS OF MENTAL HEALTH -A SUB, FACTOR OF PSYCHOLOGICAL WELL-BEING OF BOYS AND GIRLS OF THIRTEEN TO EIGHTEEN YEARS

TABLE 6

*Significant at .05 level.

Analysis of data in table-6 revealed that there is significant difference on Mental health between mean scores of 13and 14 years (1.82), between 13 and 15 years (2.23), between 13 and 18 years (3.79); between 14 and 15 years (4.05), between 14 and 16 years (2.24), between 14 and 17 years (3.45), between 14 and 18 years (5.61); between 16 and 18 years (3.37) and between 17 and 18 years (2.16). Whereas, the mean difference between mean score of between 13and 16 years (0.42), between 13 and 17 years (1.63); between and 15 and 16 years (1.81), between and 16 years (0.6) and between 15 and 18 years (1.56) were insignificant, as the mean difference were less than the required least significant value sit to be significant at .05 levels.

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TABLE 7 SIGNIFICANCE OF DIFFERENCES BETWEEN ORDERED PAIRED MEANS OF INTERPERSONAL RELATIONS -A SUB, FACTOR OF PSYCHOLOGICAL WELL-BEING OF BOYS AND GIRLS OF THIRTEEN TO FIGHTEEN VEARS

EIGHTEEN YEARS								
14	15	16	17	18	MD	C.I.		
years	years	years	years	years				
39.44					-1.19	1.59		
	42.45				-4.2*	1.65		
		41.22			-2.97*	1.66		
			42.97		-4.72*	1.68		
				43.08	-4.83*	1.67		
39.44	42.45				-3.01*	1.64		
39.44		41.22			-1.78*	1.65		
39.44			42.97		-3.53*	1.67		
39.44				43.08	-3.64*	1.66		
	42.45	41.22			1.23	1.70		
	42.45		42.97		-0.52	1.72		
	42.45			43.08	-0.63	1.72		
		41.22	42.97		-1.75*	1.73		
		41.22		43.08	-1.86*	1.73		
			42.97	43.08	-0.11	1.74		
	years 39.44 39.44 39.44 39.44	years years 39.44 42.45 42.45 42.45 39.44 42.45 39.44 42.45 39.44 42.45 39.44 42.45 39.44 42.45 39.44 42.45 39.44 42.45 39.44 42.45	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		

*Significant at .05 level.

Analysis of data on interpersonal relations in table-7 revealed significant difference between mean scores of 13 and 15 years(4.2), between 13 and 16 years(2.97), between 13 and 17 years (4.72), between 13 and 18 years (4.83); between 14 and 15 years (3.01), between 14 and 16 years (1.78), between 14 and 17 years(3.53), between 14 and 18 years(3.64); between 16 and 17 years(1.75), and between 16 and 18 years(1.86).

Whereas the mean difference between mean scores of 13 and 14years (1.19); between and 15 and 16years (1.23), between 15 and 17years (0.52), between 15 and 18years (0.63); and between 17 and 18 years (0.11) were insignificant, as the mean difference were less than the required least significant valuesit to be significant at .05 levels.

1011	TOTAL SCORE OF PSYCHOLOGICAL WELL-BEINGOF BOYS AND GIRLS OF THIRTEEN TO EIGHTEEN YEARS								
13	14	15	16	17	18	MD	C.I.		
years	years	years	years	years	years				
194.34	191.62					2.72	5.98		
194.34		205.23				-10.89*	6.22		
194.34			198.97			-4.63	6.25		
194.34				204.74		-10.4*	6.32		
194.34					208.47	-14.13*	6.30		
	191.62	205.23				-13.61*	6.17		
	191.62		198.97			-7.35*	6.20		
	191.62			204.74		-13.12*	6.27		
	191.62				208.47	-16.85*	6.25		
		205.23	198.97			6.26	6.42		
		205.23		204.74		0.49	6.49		
		205.23			208.47	-3.24	6.47		
			198.97	204.74		-5.77	6.51		
			198.97		208.47	-9.5*	6.50		
				204.74	208.47	-3.73	6.57		

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Significant at .05 level.

Analysis of data on psychological well-being as whole in table -8 revealed significant differences between mean scores of 13 and 15 years (10.89), between 13 and 17 years (10.4), between 13 and 18 years (14.13); between 14 and 15 years (13.61), between 14 and 16 years (7.35), between 14 and 17 years (13.12), between 14 and 18 years (16.85) and between 16 and 18 years (9.5).

4. DISCUSSION

The results of descriptive analysis indicated the moderate level Satisfaction, Efficiency, Sociability, Mental health and Interpersonal relation among male children of 13 to 18 years age. Where as, the girls at seventeen years had higher level of Efficiency and boys at fifteen, seventeen and eighteen years had higher level of interpersonal relations.

A multivariate analysis of variance indicated the significant main effects of age and gender as Wilks' Lambda= .817, F (25, 2271) =5.074; .953, F (5,611)=5.24, for age and gender respectively were significant.

To find out the significance of differences between gender of various age groups on five sub-factors of psychological well-being, Analysis of variance indicated the the significant gender on three out of five measures of Psychological Well-being viz. differences among Efficiency, Sociability and Mental Health where as, the mean difference on Satisfaction and Interpersonal relations sub factor of Psychological Well-being, among these age groups was statistically insignificant.

To find out the significance of differences among gender and age on five sub-factors of psychological well-being, F-ratio resulted significant differences among boys and girls of 13 to 18 years of age on Efficiency, Sociability, Mental Health and insignificant. Differences on Interpersonal relations, sub factors of Psychological Well-being.

To find out the significant of difference between ordered paired means of different age groups on these factors Least Significance Difference of Post-hoc comparisons expressed the

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significant variations among various age groups male and female children on on five sub-factors of psychological well-being

5. CONCLUSIONS

Within the limitation of the current study following conclusions were drawn:

- 1. Boys of 13 to 18 years age have moderate level of Psychological Well-being.
- 2. Girls of 13 to 18 years age have moderate level of Psychological Well-being.
- 3. Gender wise psychological well-being of girls of age groups 13 years and 14 years was higher than the boys of same age groups. Whereas, Psychological Well-being of boys of age groups 15 years, 16 years, 17 years and 18 years is higher than the groups of corresponding age groups.
- 4. Psychological well-being of boys and girls of 13 to 18 years has age wise variation. Initially the psychological well-being has declined in the age of 14 years when compared to 13 years of age. In the age groups of 15 years, it improved and again declined in the age groups of 16 years. Thereafter 17 years and 18 years of age groups have shown improvement in the Psychological well-being.
- 5. Gender wise analysis of variance data revealed that boys and girls differ on three out of five measures of Psychological Well-being viz. efficiency, sociability, and mental health. The mean difference on satisfaction and interpersonal relations a sub factor of psychological well-being among boys and girls was statistically insignificant at .05 level.
- 6. Age wise analysis of variance data of Psychological Well-being children 13 to 18 years of age revealed that they differ significantly on efficiency, sociability, mental health and interpersonal relations, sub factors of psychological well-being. The mean difference on satisfaction, sub factors of psychological well-being among age groups was statistically insignificant at .05 level.
- 7. Overall boys and girls of age groups 13 to 18 years of age have moderate level Psychological Well-being.

6. SUGGESTION

The results of this study suggest that a comprehensive approach and programmed isneeds to be evolved and implemented for improving Psychological Well-being of school going children.

REFERENCES

- Edgerton, R.B. (1992). Sick societies: Challenging the myth of primitive harmony. New York: Free Press.
- Felicia A, (2009). Psychological Well-being: Evidence Regarding its Causes and Consequences. Applied Psychology: Health and Well-Being, 1(2), 137-164.
- Forgas, J.P. (1999). Feeling and doing: Affective influences on interpersonal behavior. Psychology Inquiry, 13, 1-28.
- Rutter, M.(1979). Changing youth in a changing society. London: the Nuffield Provincial Hospitals' Trust.
- **Ryan, R.M, andDeci, E.L. (2000).** The darker and brighter sides of human existence: Basic psychological needs as a unifying concept. Psychological Inquiry, 11(4), 319-338.
- Ryff, C.D., Singer, B.H., and Love, G.D. (2004). Positive health: Connected well-being with biology. Journal of the Royal Society, 359, 1383-1394.
- Steptoe, A., Dockray, S., and Wardle, J (2009). Positive affect and Psychological processes relevant to health. Journal of personality, 77, 1747-1776.
- Sisodia and Choudhary, (2012). Psychological Well-being scale, India-Agra: National Psychological Corporation.

EFFECT OF SIX MONTHS SUPERVISED YOGIC PRACTICES ON POSITIVE MENTAL HEALTH OF COLLEGE STUDENTS

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ABSTRACT

Mental health of college students is an important issue. Mental health issues can hamper students progress. Apart from negative aspects of mental health it also has positive side also. Positive aspect of mental health includes self acceptance, ego strength and philosophy of life. These factors are also important in all round excellence of a student. In this context the usefulness of yoga in psychological well-being has been documented scientifically but its impact on positive mental health of college students has not been assessed so far. The aim of the present study was to assess the impact of six months supervised yogic practices on positive mental health of college students. To conduct the study 30 collegiate students (Average age 20.12 years) were selected as sample. To assess positive mental health of selected college students, inventory prepared by Agashe and Helode (2007) was preferred. In this single group experimental design six months yoga program was prepared and selected subjects took part in it. The positive mental health of selected subjects were assessed before the commencement of yoga program, after 02 months, after 04 months and after 06 months. Results obtained from Repeated Measure ANOVA revealed that positive mental health of selected college students was enhanced significantly after participating in six months supervised yoga program. It was concluded that supervised yoga program even of short duration is beneficial in enhancing positive mental health of college students.

Keywords : Positive mental health, college students, yoga

INTRODUCTION

The term mental health is difficult to define because of encompasses such wide area. According to Manninger (1930) it is basically the adjustment towards other people and world for happiness. Controlling temper and social accepted behaviour are included in the definition by Meninger. Apart from negative aspect of mental health such as depression and anxiety, psychologists also propagated the positive aspect of mental health. They incorporated factors such as self confidence, ego strength, self acceptance, enthusiasm towards life events etc. in the definition of positive mental health. According to Vaillant (2003) positive mental health comprise of multidimensional issues. He incorporated subjective well-being, good coping ability and emotional intelligence in defining positive mental health. Strupp and Hadley (1977) conceptualize positive mental health in the form of self acceptance, ego strength and philosophy of life. Psychologists have opined that mental health is more than the psychological issues faced by an individual. They opined that excellence in work can be achieved with the help of positive mental health. So the issue of positive mental health is of great importance for college students. Yoga has been considered as therapeutic tool for overall welling since ancient times. Researchers like Carrington et al. (1980), Baldwin (1999), Deshpande et al. (2008), Knobben (2013), Hendriks et al. (2017), Vaishnav et al. (2018) have explored the impact of yogic practices on psychological wellbeing and noted meaningful association between yoga and mental health. So far impact of yoga on positive mental health of college students has not been conducted , hence the present study planned.

HYPOTHESIS

It was hypothesized that six months of supervised yogic exercise program will enhance positive mental health in college students.

METHODOLOGY:

The following methodological steps were taken in order to conduct the present study.

Research Design :-

Single group experimental design.

Sample :-

To conduct the study 30 collegiate students (Average age 20.12 years) were selected as sample. The sample was selected from colleges operational in Haridwar. The sample comprise of college students from various educational streams. The selection of sample was based on purposive sampling.

Tools:

Positive Mental Health Inventory:

To assess positive mental health of selected college students, three dimensional positive mental health inventory prepared by Agashe and Helode (2007) was adopted. This inventory assesses positive mental health on the basis of self acceptance, ego strength and philosophy of life. This inventory consists of 36 questions for overall assessment of positive mental health. This inventory is highly reliable and valid.

Yogic Exercise Program:

Six months yoga exercise program was prepared by the researchers. Asanas with supine, prone and sitting position such as Savasan, Ardha, Chakrasan, Padmasan, Pranayam, OM chanting and Anulom Vilom etc. were part of this yogic exercise program of one hour duration. **Procedure:**

Ethical considerations regarding experimental research have been followed in this study. 30 college students were selected and subjected to six months supervised yoga program. The yoga program is of 1 hour duration and conducted on 5 days a week for six months. Data on positive mental health was taken prior to beginning of study period, after 02 months, after 04 months and after 06 months.

Analysis of data with the help of Repeated measure ANOVA results is presented in table 1 and 2 respectively.

ANALYSIS OF DATA:

i ubic i						
Repeated Measures ANOVA – Test of Within Subject Effects						
Time Interval	N	Positive N	Iental Health			
I lille lilter var	18	Mean	S.D.			
Pre-test	30	11.50	1.75			
After 02 months	30	11.76	2.45			
After 04 months	30	14.46	2.76			
Post test	30	18.23	5.28			
F= 25.07, p<.01						

Table 1

Results obtained through Repeated Measures ANOVA indicate changes in mean scores on positive mental health changes during study period of six months. The pre test mean score on positive mental health was 11.50 after 02 months it was 11.76, after 04 months it was 14.46 while at the end of study period it was 18.23. (F=25.07, p<.01)

Since reported F ratio was found to be statistically significant, pairwise comparison was carried out.

I all wise Comparison with Significance Level .05							
Mean (I)	Mean (J)	Mean Difference (I-J)					
	After 02 months	26					
Pre-test	After 04 months	-2.96*					
	After 06 months	-6.73*					
After 2 months	After 04 months	-2.70*					
After 2 montuis	After 06 months	-6.46*					
After 04 months	After 06 months	-3.76*					

Table 2Pairwise Comparison with Significance Level .05

* Significant at .05 level

Perusal of entries shown in table 2 reveal that mean score on positive mental health increased significantly after 04 months from start of study period and at the end of 6 months of study period as compared to pre-test mean scores. The mean difference of 2.96 and 6.73 also confirms these facts at .05 of statistical significance.

No significant different was observed in pre-test mean positive mental health score and mean positive mental health score after 02 months. The mean difference of 0.26 was not found to be statistically significant.

Perusal of entries shown in table 2 reveal that mean score on positive mental health increased significantly after 04 months from start of study period and at the end of 6 months of study period as compared to mean scores on positive mental health after 02 months from commencement of study period. The mean difference of 2.70 and 6.46 also confirms these facts at .05 of statistical significance.

Perusal of entries shown in table 2 reveal that mean score on positive mental health increased significantly after 06 months from start of study period as compared to mean scores on positive mental health after 04 months from commencement of study period. The mean difference of 3.76 also confirms these facts at .05 of statistical significance.

RESULT AND DISCUSSION:

Result indicate that positive mental health in college students was enhanced after participating in six months supervised yoga program. It has been reported that yoga is useful in positive mood states and attitude along with its ability to set aside the negative and distractive thoughts. Swatmarama (1998) also reported that by controlling the prana we can regulate our minds towards positive thoughts.

CONCLUSION

The results of the investigation concluded that supervised yoga program even of a short duration is beneficial for positive mental health of college students. It may also be concluded that yoga practices needs to be encouraged in higher education institutes for betterment of positive mental health of students.

REFERENCES

- 1. Agashe, C.D. and Helode, R.D. (2007). Positive Mental Health Inventory, Psychoscan, Wardha (MS).
- 2. Baldwin, M. C (1999). Psychological and physiological influences of Hatha Yoga training on healthy, exercising adults. (yoga, stress, wellness). Dissertation Abstracts International Section A: Humanities and Social Sciences 60, 1031.
- Carrington, P., Collings, G.H., Benson, H., Robinson, H., Wood, L.W., Lehrer, P.M., Woolfolk, R.L. and Cole, J.W. (1980). The use of meditation-relaxation techniques for the management of stress in a working population. Journal Occupational Medicine. 22(4):221-31.
- 4. Deshpande, S., Nagendra, H.R. and Raghuram, N. (2008). A randomized control trial of the effect of yoga on verbal aggressiveness in normal healthy volunteers. Int J Yoga, 1(2):76-82.
- 5. Hendriks, T., Joop De Jong and Cramer, H. The Effects of Yoga on Positive Mental Health among Healthy Adults: A Systematic Review and Meta-analysis. The Journal of Alternative and Complementary Medicine, Vol. X, Number X, 1-13.
- 6. Knobben, S. (2013). A meta-analysis of the effectiveness of yoga on mental health; taking on a dual perspective reflecting the medical and positive perspective of mental health. Master's Thesis, University of Twente, the Netherlands, Faculty of Behavioral sciences and Psychology.
- 7. Meninger, K.A. (1930): The human mind. Alfred A. Knopf, New York.
- 8. Strupp, H.H. and Hadley, S.W. (1977): A tripartite model of health and therapeutic outcome. American Psychologists, Vol. 32, No. 3.
- 9. Swatmarama. commentary by Swami Muktibodhananda. 3 rd ed. Hatha Yoga Pradipika, Munger, India: Yoga Publications Trust; 1998. p. 150.
- 10 Vaishnav, B.S., Vaishnav, S.B., Vaishnav, V.S. and Varma, J.R. (2018). Effect of yoganidra on adolescents well-being: A mixed method study. Int J Yoga; 11:245-8.