

International Peer Reviewed & Refereed Journal

Journal of Indian
Health Psychology

VOL. 13, NO. 1, September, 2018

Editors

Prof. Rajbir Singh

Prof. NovRattan Sharma

Owned, Printed & Published by Dr. N.K. Singh, F-4, 'Hari Sadan', 20, Ansari Road, Daryaganj, New Delhi-110002

Printed at: R.K. Offset, Naveen Shahdara, Delhi-110032.



Journal of Indian Health Psychology

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EDITORIAL

We are happy to deliver the Journal of Indian Health Psychology (JIHP) in the hand of our esteemed readers and subscribers. It is the 13th Volume September issue of JIHP. In this issue, there are total nine articles dealing with various important facets of Health Psychology. In first article on CBT authors have used the therapy to enhance assertiveness and social maturity of college students. Govarthini and Amudha conducted the CBT sessions for two weeks and focused through Psycho - educational, self monitoring, cognitive rehearsals, role playing and home work assignments. In pre-post comparison CBT found to be effective in enhancing social maturity and assertiveness of the target sample. Another article contributed by Sunatak and Devendra examined role of Existential Psychotherapeutic Intervention in the End - of - Life care and positive health. The overview on the selected variable is sizeable and current also. Next article contributed by Shikha and Swaran, deals with the HIV/ AIDS orphans .There is a need to to undertake the research on such neglected sample. Health Psychology Professionals can significantly change the physical and emotional well being of the orphans. The article successfully included the nutritional status of the participants. An article authored by Nautiyal and Velayudhan take up a bold step in health psychology researches. The rape survivors were studied on account of trauma and psychological well being. Needless to say that rape is big trauma and threshes the life of victims. Psychology people should come forward to help and rehabilitate such people by maintaining confidentiality. Dubey and Mishra evaluated the role of Optimism and Perceived Control in well being of Women in Reproductive Age. They demonstrated that optimism emerged as the best predictor of well-being particularly infertile group. At the same time, it was also observed that in the fertile group, personal control significantly predicted women's wellbeing. A study by Vigneshvaran and Krishna highlighted that level of Emotional Intelligence play an important and promotional role in Psychological Well being of School Students. The role of parents and teachers have been greatly emphasised. The authors have also suggested various psycho- social methods to improve the both. Depression and Mental Health are closely associated . A research on old age people carried out by Akshaya and Krishna clearly indicated that there are gender differences in mental health and depression levels. Daily prayers and

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recitation of Mantras have found to produce positive effect on memory and sustained attention of children. Seethalakshmy and Krishna observed that the process of prayer and recitation affects both the hemispheres of the brain which in turn result in good memory and better attention. Lastly, an article contributed by Singh and Sharma presented an empirical review on applications of self regulating strategies for healthy functioning. The investigation took a focus on studies with sample of adolescents highlighting promotional role of self regulation in overall development in general and psycho - social health in specific. The workable strategies have also been enlisted by the authors.

Editors place on record the heartfelt gratitude to all the esteemed contributors with the hope that this volume of the Journal will take Psychological researches from further to more further. Readers may send their valuable inputs directly to the respective authors, however, the suggestions for JIHP are always welcome by the Editors.

Editors

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EFFICACY OF COGNITIVE BEHAVIOUR THERAPY (CBT) IN ENHANCING ASSERTIVENESS AND SOCIAL MATURITY IN COLLEGE STUDENTS

R. Govarthini and N.V. Amudha Devi***

ABSTRACT

The present study examined the efficacy of Cognitive Behaviour Therapy (CBT) in assertiveness and social maturity among college students. One hundred (100) students participated in the study. They were assessed on Rathus Assertiveness Scale and Social Maturity Scale. Fifty two students were selected and exposed to Cognitive Behaviour Therapy for a duration of 45minutes to 1hour every alternative day (week days) for a period of 2 weeks. After completion of 6 sessions, they were reassessed with the same two measures. The Cognitive Behaviour Therapy comprised of psycho-education, self-monitoring, cognitive rehearsal, role play/modeling, and homework assignments. Significant difference was seen on three phases i.e., Pre, Post and Follow-Up. Mean, S.D, Repeated Measures MANOVA was computed to analyze the data. Cognitive Behaviour Therapy was found to be effective in enhancing the level of assertiveness and social maturity among college students.

Keywords: Assertiveness, Social Maturity, Cognitive Behaviour Therapy (CBT).

Assertiveness is an interpersonal communication skill that can be learned and practiced in an ongoing way. It involves recognizing one's right to let others know how their behavior affects you and asking them to change that behavior. Social Maturity permits more detailed perception of social environment which helps every human being to influence the social circumstances and develop stable patterns of social behavior. Hence, both assertiveness and social maturity plays a vital role throughout life. Therefore, it is necessary to inculcate the qualities of assertiveness and social maturity in college students.

** Assistant Professor, Department of Psychology, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore-641043.

Assertiveness generally has been conceptualized as standing up for one's personal rights and communicating thoughts, feelings, and beliefs in a sincere, straightforward, and appropriate manner without violating other's rights (Lange & Jakubowski, 1976).

Social maturity involves learning to properly relate to acquaintances, family, neighbors, friends, and intimate relationships. It involves understanding how to honor and respect those in authority (Hira, 2013).

Cognitive Behaviour Therapy (CBT) refers to a class of intervention that shares the basic premise that mental disorders and psychological distress are maintained by cognitive factors. The core premise of this treatment approach, as pioneered by Beck (1970) and Ellis (1962), holds the maladaptive cognitions contribute to the maintenance of emotional distress and behavioural problems (Hoffmann, et al, 2012).

Molen and Born (2016) attempted a study on Big Five Personality Traits and Assertiveness does not Affect Mastery of Communication Skills. The sample consisted of 143 psychology students. The tools used for data collection was Five Factor Personality Inventory (FFPI), Scale for Interpersonal Behaviour (SIB) and Communication Skill Progress Test (CSPT). The results revealed that the big -five personality factors and assertiveness were not significantly related to the mastery level of the communication skill.

Moore, Hudson, and Smith (2016) conducted a study on the relationship between assertiveness and social anxiety in college students. The sample consists of 60 undergraduate college students. The tools used to collect data were Assertiveness Self-Report Inventory (ASRI) by Herzberger, Chan and Katz, Fear of Negative Emotions (FNE) by Watson and Friend. The collected data were analyzed using Pearson's correlation coefficient. The results revealed that there was negative correlation between assertiveness and social anxiety.

Devanesam, and Saral (2016) undertook a research on assertiveness in women in India. The sample consisted of 156 women. The scales used to measure were Rathus Assertiveness Schedule developed by Rathu (1973). The statistical analysis used was Mean, S.D, t-test and F-test. Results revealed that there was a significant difference in the self-assertiveness of women who had studied arts, science and language as their major subjects.

Manesh, Fallahzadeh, Panah, Koochehbiuki, Arabi, and Sahami (2015) examined the effectiveness of assertiveness training on social anxiety of health volunteers of Yazd. The sample consists of 90 people living in the city of Yazd. The tools used were Social Phobia Inventory (SPI) developed by Turner. Analysis of repeated measures was used to compute the data. Results revealed the importance of assertiveness training is reducing on social anxiety.

Ilkhchi, Poursharifi, and Alilo (2011) conducted a study on the effects of Gestalt and Cognitive- Behavioural therapy group interventions on the assertiveness
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and self-esteem of women with physical disabilities facing abuse. The sample consists of 11 women. The tools used were Rathus Assertiveness Scale (1973). The collected data were analyzed using MANOVA within subject's contrasts and between subject's effects. The results revealed statistically significant outcome effects. Thus, Gestalt and CBT were found to be effective in improving the level of assertiveness and self-esteem among physically disabled facing abuse.

Kumar and Singh (2016) conducted a research on study of relationship between social maturity and leadership experience among educated youth of Abohar. The sample consists of 200 students. The tools used to measure were Social Maturity Scale by Rao (1998), and Leadership Preference Scale by Bhushan (1995). The data were analysed using Pearson product moment correlation. The results showed that there was significant relationship between the social maturity and leadership among educated youth of Abohar.

Manju (2016) conducted a study on social maturity in B.Ed student teachers. The sample consists of 150 B.Ed college students. The tool used were Social Maturity Scale by Rao (1998). The data were analyzed using percentage analysis, t - test and one-way ANOVA. The results revealed that there was significant difference in social maturity of male and female B.Ed students.

Rani and Sowjanya (2016) examined a study on need for life skills and social maturity among adolescent- to get better career. The sample consists of 100 adolescence (50 boys and 50 girls). The tools used to measure were Social Maturity Scale developed by Rao (1998), and Life Skills Self-Rating Scale developed by Anuradha (2009). The data were analyzed using Chi-Square. The results showed that the children from the joint families had more life skills than children from nuclear and extended family. Further comparatively girls had more social maturity than boys.

Objectives

To assess the level of Assertiveness and Social Maturity among College Students.

Enhancing Assertiveness and Social Maturity in College Students through Cognitive Behavior therapy.

Hypotheses

There would be no significant enhancement in Assertiveness and Social Maturity after CBT programme.

METHOD

Sample

Fifty two men and women from Dr. N. G. P College of Arts and Science, Coimbatore, Tamil Nadu, were selected by convince sampling method to serve as the subjects for the study. The subjects were in the age range of 19 - 22 years.

Tools

Assertiveness Scale (Rathu, 1973)

This scale was used to measure the level of assertiveness in the subjects. The scale consists of 30 statements with 6 point rating scale. The questionnaire was given to each of them and they were asked to rank the statements to indicate their response.

Social Maturity Scale (Rao, 1998)

This scale was used to measure the level of social maturity among the college students. The scale consists of three components viz., personal adequacy, interpersonal adequacy, and social adequacy. It is a four point rating scale consisting of 90 items. The students were asked to mark their response on the respective choices based on their experience.

Cognitive Behaviour Therapy

Cognitive Behaviour Therapy (CBT) was pioneered by Aaron Beck 1960's. According to CBT, it is a process of teaching, coaching, and reinforcing positive behaviours. The CBT employs the combination of both Cognitive and Behavioural techniques. The basic principles of CBT as follows:

- Cognition affects behavior and emotion.
- Desired emotional and behavioural change can be achieved through cognitive change.

Change mood states by using cognitive and behavioural strategies:

- o Identifying/ modifying automatic thoughts and core beliefs.
- o Regulating routine, and
- o Minimizing avoidance.
- o Emphasis on "here and now".
- o Preferences for concrete examples.
- o Socratic Questioning
- o Empirical approach to test beliefs

Through CBT people can understand that it is thoughts which cause feelings and behaviours, not external facts, but the way one thinks can be changed to feel/ act better even if the situation does not change.

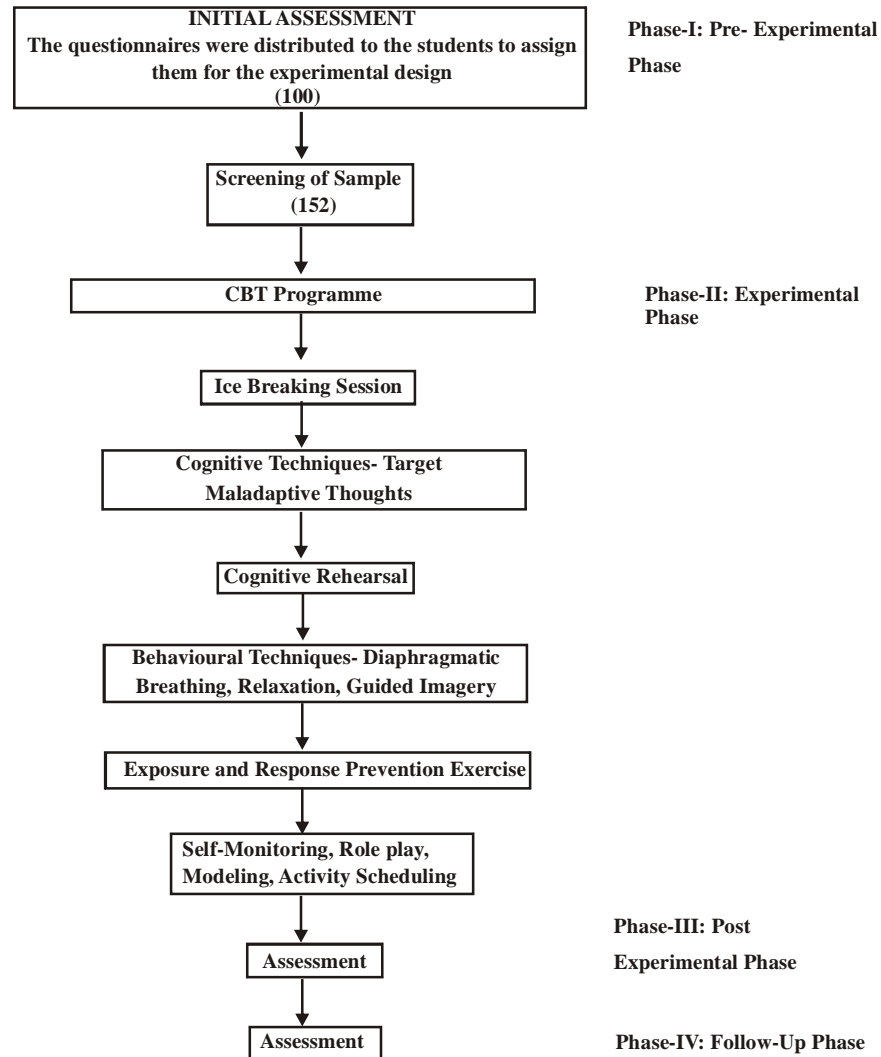


Figure 1: Flow chart of study

Cognitive Rehearsal: In cognitive rehearsal, the participants were taught to imagine how to think about having positive interactions or experiences. Therefore, the participants were asked to relaxed themselves and they were directed to imagine a difficult situation from the past, and then they were asked to think positive way of handling the situation.

Diaphragmatic Breathing: Diaphragmatic breathing was taught to the participants for complete relaxation. This breathing exercise could be able to relax fully and gain all of the physiological benefits of relaxation training. When the

students were taught diaphragmatic breathing which is naturally slower and deeper, resulting in better filling and emptying of the lungs, they could feel the internal peace within few seconds of practice.

Guided Imagery: In guided imagery, the participants were asked to image one of the bad situations where they had experienced a disturbing feeling. Then they were trained how to develop healthy responses in facing that situation through imagery technique. The participants were told to actively involve themselves in facing the disturbed situation and think of any possible positive alternative behavior.

Self-Monitoring: The participants were taught how to understand their own thoughts and feelings and behavior and identify their core belief formed due to that. For that they were asked to write down their five important strengths and five important weaknesses and they were slowly taught how to apply the other learned techniques into resolving the weaknesses into strengths.

Activity Scheduling: The participants were given activity scheduling on cognitive assignments, self-monitoring, diaphragmatic breathing which they experience in their day to day life. During the process of training, they were educated on the techniques that uproot the self-enhancing cognitions. (Corey, 2009).

Follow-Up: Follow-up was done after the duration of 1 month of time interval after the post-test, using the Personal Profile, Assertiveness Scale and Social Maturity Scale.

RESULTS AND DISCUSSION

The basic concern of the investigation was to find out the "Efficacy of Cognitive Behaviour Therapy in Enhancing Assertiveness and Social Maturity in College Students". Demographic variables such as age, birth order, gender, educational qualification, number of siblings, family type and socio-economic status were assessed.

The distributions of these seven demographic variables were assessed using the Kolmogorov - Smirnov Goodness of Fit Test, Binomial Distribution and Chi Square test. The results have been discussed in the following manner.

The results shows that normality of distribution of age, gender, educational qualification, no. of siblings, family type and socio-economic status of the college students.

The level of assertiveness and social maturity, differences among the students on the variables namely assertiveness and social maturity are assessed using Repeated Measures Multivariate Analysis of Variance (MANOVA) for the three phases i.e., Pre-Experiment Phase, Post- Experiment Phase and Follow-Up Phase.

Table 1: Distribution of the Students as a function of age

Absolute	Positive	Negative	K-SZ
.249	.249	-.229	1.797*

*p< .05

Kolmogrov - Smirnov Goodness of Fit Test indicated that deviation from normality of the distribution of the age in the group is significant. Thus the group is found to be a homogenous.

Table 2: Gender Distribution of the Students

	Students	Test Prop.	Obs. Prop	Binominal
Male	20		.38	
Female	32	.50	.62	.126*
Total	52			

*p< .05

The binomial test result for the gender difference of the college students are presented in Table 2. It indicates that the difference in the distribution of male and female in the sample is significant.

Table 3: Educational Qualification Distribution of the Students

Category	Students Observed	Expected	Residual	X ²	DF
II UG	19	26.0	-7.0		
III UG	33	26.0	7.0	3.769*	1
Total	52				

*p< .05

The Chi- Square analysis indicated a significant X² value for the educational qualification of the college students is significant.

Table 4: Birth order distribution of the Students

Category	Students Observed	Expected	Residual	X ²	dF
First	25	13.0	12.0		
Middle	5	13.0	-8.0	20.462*	3
Last	16	13.0	3.0		
Only	6	13.0	-7.0		
Total	52				

Table 5: of Siblings Distribution of the Students

<i>Category</i>	<i>Students Observed</i>	<i>Expected</i>	<i>Residual</i>	<i>X²</i>	<i>df</i>
None	9	13.0	-4.0		
One	38	13.0	25.0	66.615*	3
Two	4	13.0	-9.0		
Three	1	13.0	-12.0		
Total	52				

* $p < .05$ **Table 6: Socio-Economic Status of the Students**

Socio- Economic Status	N	Percentage
Upper	0	0
Middle	52	100
Lower	0	0

Table 6 represents the socio-economic status of the students. Maximum number of students belongs to middle status.

Table7: Family Type Distribution of the Students

<i>Category</i>	<i>Students Observed</i>	<i>Expected</i>	<i>Residual</i>	<i>X²</i>	<i>df</i>
Nuclear Family	42	26.0	16.0	19.692	1
Joint Family	10	26.0	-16.0		
Total	52				

* $p < .05$

The Chi- Square test results for the family type distribution of the college students are significant.

To summarize, among the various personal variables studies, age, educational level, number of siblings, birth order, family type, were found to significant. Hence, the normal distribution of the Chi-Square has found to be significant in the demographic factors of the sample. In socio economic status, since, all the students reported with middle level of status, percentage was used to compute the data and it has been resulted that 100% of the samples belongs to middle level of socio-economic status. Thus, the sample was homogeneous intrem of the demographic variables.

Assertiveness**Table 8: Level of Assertiveness(N=52)**

<i>Assertiveness</i>	<i>Number</i>	<i>Percentage*</i>
Probably Aggressive	10	19
Somewhat Assertive	38	73
Assertive	0	0
Situationally Non-Assertive	4	8
Very Non-Assertive	0	0

*Percentages are rounded off

Table 8 shows the level of assertiveness of the sample. The table indicates that 19% of students experiences highly aggressive in achieving their needs, 73% of the sample reported with somewhat assertive level, and only 8% of students were found with situational non-assertiveness. The college students undergo many psychological and physiological issues which result in a low level of assertiveness. Majority of the sample seems to be facing difficulties in asserting themselves. These students were selected for Cognitive Behaviour Therapy (CBT) to enhance the level of assertiveness, and to decrease the level of aggression.

Social Maturity**Table 9: Level of Personal Adequacy in Social Maturity(N=52)**

<i>Personal Adequacy</i>	<i>Number</i>	<i>Percent*</i>
Very High Level Maturity	0	0
High Level Maturity	0	0
Above Average Level Maturity	9	17
Average Level Maturity	0	48
Below Average Level Maturity	16	31
Low Level Maturity	2	4
Very Low Level Maturity	0	0

*Percentages are rounded off

Table 9 represents the level of personal adequacy in social maturity in college students. In the above average level category there are 17% of students. Majority of the students fall under in the average level category (48%) In below average level maturity, there are 31% students. In low level maturity there are 4% of students. Personal Adequacy is highly important to deal with ability to take stress, work, and self-direction .Therefore, this table indicated that these students were in need of enhancing their level of personal adequacy.

Table 10: Level of Interpersonal Adequacy in Social Maturity(52)

<i>Interpersonal Adequacy</i>	<i>Number</i>	<i>Percentage*</i>
Very High Level Maturity	0	0
High Level Maturity	1	2
Above Average Level Maturity	15	29
Average Level Maturity	26	50
Below Average Level Maturity	10	19
Low Level Maturity	0	0
Very Low Level Maturity	0	0

*Percentages are rounded off

Table 10 indicates the level of interpersonal adequacy in social maturity in college students. Majority of the students fall in the category of average level of maturity. Twenty nine percentage of students fall in the category of above average level of maturity, 19% of students fall under the category of below average level of maturity. Only 2% of students were reported with high level of maturity. In interpersonal adequacy, three aspects plays a vital role in every individual, i.e. cooperation, enlighten trust, and communication. When an individual experiences difficulties in any of these aspects, then they face a lot of inadequate interpersonal relationship which turns as a gap between relationships. Therefore, students of the above category were selected and they are exposed to the Cognitive Behaviour Therapy (CBT) to improve the level of interpersonal skills which is one of the main events in communication part between two or more individual. Research indicates that CBT helps to boost-up the level of interpersonal maturity to build-up a high level of relationship maturation and maintenance of family, friends.

Table 11: Level of Social Adequacy in Social Maturity(52)

<i>Social Adequacy</i>	<i>Number</i>	<i>Percentage*</i>
Very High Level Maturity	7	14
High Level Maturity	21	41
Above Average Level Maturity	19	37
Average Level Maturity	5	10
Below Average Level Maturity	0	0
Low Level Maturity	0	0
Very Low Level Maturity		0 0

*Percentages are rounded off

Table 11 represents the level of social adequacy in college students. Fourteen percentage of students scored with very high level of social adequacy, 41% of students reported high level of social adequacy, 37% of students finds to be at above average level of social adequacy, and finally 10% of students are at average

level of social adequacy. Since social adequacy comprises of social commitment, social tolerance and openness to change contribute a major cause for the level of social adequacy. Although social adequacy is so close towards the social maturity, the results revealed that there are students with both high and very high level of social adequacy. Therefore, it is evident that, social adequacy also play a major role in making an individual to fit the best in the society. The social adequacy talks about openness to change, it denotes that, people must be generous enough and broad minded in accepting the changes which happened at present. Thereby, CBT works well in helping the students, to even more develop the quality of social adequacy for the betterment of their life.

Table 12: Mean and S.D for Pre, Post, and Follow-Up in Assertiveness and Social Maturity

		<i>Pre-Test</i>		<i>Post-Test</i>		<i>Follow-Up</i>	
		Mean	S.D	Mean	S.D	Mean	S.D
	Assertiveness	16.60	15.75	27.98	6.14	29.3	5.69
Social	Personal Adequacy	69.92	7.36	74.71	6.17	91.79	2.34
Maturity	Interpersonal Adequacy	73.10	7.32	75.25	6.46	95.19	3.68
	Social Adequacy	87.17	8.40	86.13	7.80	92.81	3.87

Table 12 indicates the mean scores and standard deviation values of assertiveness and dimensions of social maturity in college students. In Assertiveness the mean and standard deviation are 16.60 and 15.75 in pre-test, 27.98 and 6.14 in post-test, and 29.3 and 5.69 in the follow-up phase. In Personal Adequacy the mean and standard deviation are 69.92 and 7.36 in pre phase, mean and standard deviation of the post test are 74.71 and 6.17, and 91.79 and 2.34 in follow-up phase. In the dimension of Interpersonal Adequacy the mean and standard deviation in pre-test are 73.10 and 7.32, in post test the mean and standard deviation are 75.25 and 6.46, and in social adequacy the mean and standard deviation are 87.17 and 8.40 in pre-test, 86.13 and 7.80 in post-test and 92.81 and 3.87 are the mean and standard deviation.

From the table it is clear that the intervention programme on Cognitive Behaviour Therapy (CBT), the techniques that helps students to change their "cognitive distortions" was found to be effective. From the post and the follow-up data it is clear and evident that the intervention program was effective.

Difference was observed in the mean scores on assertiveness and dimensions of social maturity between the three phases of the intervention programme. The techniques of "cognitive distortions" were striking as their negative feelings of self-evaluation of themselves, being diffident about their capabilities, and it also facilitate in changing for better. The treatment of Cognitive Behaviour therapy (CBT) using homework assignments help to develop self-monitoring practices and change their unacceptable behaviour.

Table 13: Approximate 'F' For the Pre, Post, Follow-Up in the Assertiveness and Social Maturity of the College Students

Sources	Effects	Test Name	value	F	Hyp. df	Error df	Sig.
Between Students	Intercept	Pillai's Trace	0.39	16.01	2.00	50.00	*
		Wilk's Lambda	0.61	16.01	2.00	50.00	*
		Hotelling's Trace	0.641	16.01	2.00	50.00	*
		Roy's Largest Root	0.641	16.01	2.00	50.00	*
Within Students	Assertiveness	Pillai's Trace	0.514	26.48	2.00	50.00	*
		Wilk's Lambda	0.486	26.48	2.00	50.00	*
		Hotelling's Trace	1.059	26.48	2.00	50.00	*
		Roy's Largest Root					
Between Students	Intercept	Pillai's Trace	0.93	333.14	2.00	50.00	*
		Wilk's Lambda	0.93	333.14	2.00	50.00	*
		Hotelling's Trace	13.36	333.14	2.00	50.00	*
		Roy's Largest Root	13.36	333.14	2.00	50.00	*
Within Students	Personal Adequacy	Pillai's Trace	0.93	333.14	2.00	50.00	*
		Wilk's Lambda	0.93	333.14	2.00	50.00	*
		Hotelling's Trace	13.36	333.14	2.00	50.00	*
		Roy's Largest Root	13.36	333.14	2.00	50.00	*
Between Students	Intercept	Pillai's Trace	0.92	289.78	2.00	50.00	*
		Wilk's Lambda	0.07	289.78	2.00	50.00	*
		Hotelling's Trace	11.59	289.78	2.00	50.00	*
		Roy's Largest Root	11.59	289.78	2.00	50.00	*
Within Students	Interpersonal	Pillai's Trace	0.34	13.43	2.00	50.00	*

	Adequacy	Wilk's Lambda	0.07	289.78	2.00	50.00	*
		Hotelling's Trace	11.59	289.78	2.00	50.00	*
		Roy's Largest Root	11.59	289.78	2.00	50.00	*
Between	Intercept	Pillai's Trace	0.34	13.43	2.00	50.00	*
Students		Wilk's Lambda	0.65	13.43	2.00	50.00	*
		Hotelling's Trace	0.53	13.43	2.00	50.00	*
		Roy's Largest Root	0.53	13.43	2.00	50.00	*
Social Adequacy	Social	Pillai's Trace	0.34	13.43	2.00	50.00	*
Students	Adequacy	Wilk's Lambda	0.65	13.43	2.00	50.00	*
		Hotelling's Trace	0.53	13.43	2.00	50.00	*
		Roy's Largest Root	0.53	13.43	2.00	50.00	*

* - Significance at .05 level

Table 14: Tests of Within Subject Effects

Source	Variable	Type III Sum Of Square	df	Mean Square	F	Sig
Assertiveness	Sphericity Assumed	4259.32	2	2129.66	20.8	*
	Greenhouse-Geisser	4259.32	1.31	3238.78	20.8	*
	Huynh-Feldt	4259.32	1.33	3187.82	20.8	*
	Lower-bound	4259.32	1	4259.32	20.8	*
Error (Assertiveness)	Sphericity Assumed	10440.67	102	102.36		
	Greenhouse-Geisser	10440.67	67.07	155.66		
	Huynh-Feldt	10440.67	68.14	153.219		
	Lower-bound	10440.67	51	204.71		
Personal Adequacy	Sphericity Assumed	1340.85	2	670.42	17.73	*
	Greenhouse-Geisser	1340.85	1.77	756.08	17.73	*
	Huynh-Feldt	1340.85	1.83	731.622	17.73	*
	Lower-bound	1340.85	1	1340.85	17.73	*
Error (Personal Adequacy)	Sphericity Assumed	3856.47	102	37.8		
	Greenhouse-Geisser	3856.47	90.44	42.63		
	Huynh-Feldt	3856.47	93.46	41.26		
	Lower-bound	3856.47	51	75.61		
Interpersonal Adequacy	Sphericity Assumed	15436.62	2	7718.31	343.38	*
	Greenhouse-Geisser	15436.62	1.93	7983.51	343.8	*
	Huynh-Feldt	15436.62	2	7718.31	343.8	*
	Lower-bound	15436.62	1	15436.62	343.8	*
Error (Interpersonal Adequacy)	Sphericity Assumed	2292.7	102	22.47		

Error (Interpersonal Adequacy)	Greenhouse-Geisser	2292.7	98.61	23.25	
	Huynh-Feldt	2292.7	102	22.47	
	Lower-bound	2292.7	51	44.95	*
	Sphericity Assumed	1340.85	2	670.42	17.73
Social Adequacy	Greenhouse-Geisser	1340.85	1.77	756.08	*
	Huynh-Feldt	1340.85	1.83	731.622	17.73
	Lower-bound	1340.85	1	1340.85	17.73
	Sphericity Assumed	3856.47	102	22.47	*
Error (Social Adequacy)	Greenhouse-Geisser	3856.47	90.44	23.25	
	Huynh-Feldt	3856.47	93.46	22.47	
	Lower-bound	3856.47	51	44.95	

Table 15: Tests of Between Subjects Effects

<i>Source</i>	<i>Variable</i>	<i>Type III Sum of Square</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig</i>
Intercept		84653.56	1	84653.56		
	Assertiveness				854.16	*
Error		5.54.43	51	99.107		
Intercept		1227502	1	1227502	17316	
	Personal				95	*
Error	Adequacy	3615.1	51	70.88		
Intercept		1028057	1	1028057		
	Interpersonal				16045	*
Error	Adequacy	3267.64	51	64.07	49	
Intercept		1227502	1	1227502		
	Social Adequacy				17316	*
Error		3615.1	51	70.884	95	

Table 13-15 indicates that, "F" value in both assertiveness and social maturity has been observed appropriately the same values in each category. Thus, the level of significance is very high at 0.05 levels in the level of assertiveness, social maturity- personal adequacy, interpersonal adequacy, and social adequacy of the college students in the Pre, the Post, and the Follow-Up phases.

The results of the Repeated Measures MANOVA for the Assertiveness and Social Maturity are presented in the above tables. It indicates significant differences in the Pre, the Post, and the Follow-up assessment of the students. It was found to be significant at 0.05 level. Hence, CBT plays a vital role in increasing the level of Assertiveness and Social Maturity in College Students, which is evident from the mean scores in the three phases.

All the tables indicate the results of Repeated Measures with MANOVA on Assertiveness and Social Maturity in college students. In this table, the F value shows that there is significant difference among the student in the Pre, the Post and the Follow -Up phases with regard to Assertiveness and Social Maturity. Therefore, the difference level and the significance level has been observed on all categories i.e., assertiveness, social maturity and it's dimensions were represented with high level of assertiveness and social maturity in college students.

In all the tables, it is evident that, there is a significance difference in Follow-up phase of the assessment compared to the Pre, and the Post Phases. The reason is that the students followed the techniques taught during the programme. The students were aware that they are going to face new situations in day-to-day life and also in future and they have to act assertively without violating the rights of others.

To summarize the assertiveness and social maturity in college students were found to be significantly different in the Pre- the Post and the Follow-Up assessment. So the hypothesis "There is no significant enhancement in Assertiveness and Social Maturity after CBT programme", is rejected.

Table 16: Differences in the Pre, Post, Follow-Up of the Students in Assertiveness and Social Maturity

<i>Mean</i>	<i>S.D</i>	<i>Group</i>	<i>Follow-Up</i>	<i>Post</i>	<i>Pre</i>
Assertiveness	16.6	15.75 Follow- Up		*	*
	27.98	6.14 Post	*		*
	29.35	5.69 Pre	*	*	
Social Maturity					
Personal Adequacy	1.58	.19 Follow-Up		*	*
	0.23	.48 Post	*		*
	-1.43	.58 Pre	*	*	
Interpersonal Adequacy	1.7	.25 Follow-Up		*	*
	0.28	.46 Post	*		*
	0.13	.46 Pre	*	*	
Social Adequacy	1.7	.28 Follow-Up		*	*
	1.25	.54 Post	*		NS
	1.35	.57 Pre	*	NS	

*- Significant at 0.05 level

Table 16 shows the Duncan's Multiple Range of Test. This table represents the differences in the three phases of the test with regard to the Assertiveness and Dimensions of Social Maturity. There was a significant difference in the Pre, the Post, and the Follow-Up phases. There was a significance difference found in Follow-Up phase. Students were taught to how to enhance the Assertiveness, dimension of Social Maturity - Personal Adequacy, Interpersonal Adequacy and Social Adequacy. In Social Adequacy not significance level is observed between pre-phase and post-phase, significance level is being observed in follow-up phase. After the Follow-Up phase, the students might have understood the situation and had exhibited their challenging and enhance the Assertiveness and Social Maturity.

To summarize the Assertiveness and Social Maturity in college students were found to have significant differences in the Pre, the Post, and the Follow-Up stages of assessment. Hence, the Cognitive Behaviour Therapy (CBT) helps in enhancing in the level of assertiveness and social maturity to improve both physical and psychological aspects of an individual.

CONCLUSION

- High level of significant differences was observed in the level of Assertiveness. Therefore, the null hypothesis, "There is no difference in the level of Assertiveness in the sample is rejected".

- Significant differences were found in the level of Social Maturity. Therefore, the null hypothesis, "there is no difference in the level of Social Maturity in the sample is rejected".
- The Cognitive Behaviour Therapy was found to be effective in enhancing the level of Assertiveness and Social Maturity in College Students.

Suggestions for Further Research

- Longitudinal research can be conducted on larger sample of students applying Cognitive Behaviour Therapy.
- The research might be expanded to the diversified and cross- cultural samples from different cities and provinces in India as well as internationally for comparison purposes.

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EXISTENTIAL PSYCHOTHERAPEUTIC INTERVENTION IN THE END-OF-LIFE CARE AND POSITIVE HEALTH OUTCOMES: AN OVERVIEW

Suantak Demkhosei Vaiphei and Devendra Singh Sisodia***

ABSTRACT

Existential psychotherapy begins where the modern medical system and formulas created for treating the terminally ill patients end. It is not just a mere philosophical approach to one's illness, but a part of critical medicine that gives a holistic care by providing hope, when cure is not possible. Existential psychotherapy is a humanistic psychotherapy, which aims to uplift the process of meaning making in the midst of medical helplessness, purpose in suffering, to deal with existential stress, alienation, loneliness and provide quality of life with peaceful and meaningful death and dying. The aim of this particular study is to identify some of the emerging themes and principles in regards to existential psychotherapy, through literature review and philosophical enquiries, basing it on the available documents and literatures.

Key Words: End-of-Life Care, Existential Psychotherapy, Anxiety, Depression, Meaning, and Quality of Life.

End-of-life care is an interdisciplinary program mainly focusing on those who are with various terminal illnesses and at the stage of their limited prognosis. However, due to advance in medical technology, diagnostics and other antibiotic therapies, critical care have created bioethical dilemmas that confront physicians while dealing with terminally ill patients who are at the end of their life. This tends to aggravate the isolation and loneliness experienced by the dying individual. Out of many, at present existential and spiritual suffering at the end of life are the most debilitating conditions, yet the most neglected area of care (Nydegger, 2009; Yeolekar et al., 2008; & Boston et al., 2011).

* Research Scholar, Dept. of Psychology, BN University, Udaipur.

** Head, Dept. of Psychology, BN University, Udaipur

Though the most neglected area of care in the country, yet this play an important role in end of life care, as it addresses issues that preoccupy many terminally ill patients from alienation and loneliness to depersonalization, and most importantly giving meaning in suffering and pain in the course of illness (Goddard, 2018). More than any other existing therapies, existential psychotherapy provides a set of fundamental principles that serve as guidelines and structures for meaning-making in the end of life care (Spinelli, 2005). However, looking at the present advance modern medical realm, meaning in suffering has been totally forgotten or neglected, which could actually be a propose solution in the midst of medical helplessness and those untreated emotional sufferings and pain in the course of illness and dying. Patient as a human needs a holistic care with dignity, rather than being use as an experimental object or as a laboratory for testing the effect of modern medicines.

Existential psychotherapy is not just a mere philosophical approach to one's illness, rather a holistic approach to care for dying patient, which provide hope, when cure is not possible. It is a transformational medical therapy providing purpose, improving well-being, peace, and meaningful death, and dying, which the modern medicine fails to provide. Most importantly, existential psychotherapy acknowledges the meaning and purpose in life as a important instrument for well-being and helps the dying individual to look at human condition as a whole and their place within it (Banalities, 2016). The focus as a whole in existential psychotherapy is to form a balance between being aware of death without being overwhelmed by death, which will led to quality decision making in the face of death and dying (Good Therapy, 2018). However, the challenges lies in how than the existential psychotherapy can be applies and implemented effectively in the clinical setting?

Looking at the present end-of-life care practices, meaning making, and quality of life are the two greatest challenges of all time, especially in a country like India. Creating and providing a structure for professionals working in end-of-life setting also remain as the unsolved challenges in Indian health care system. Thus, considering the importance of treating the dying individual's in regards to their beliefs, perspective and values, the propose study is being form mainly focusing on meaning making in the midst of medical helplessness, stress, isolation, loneliness, freedom and its associated responsibilities at the end-of-life. The study adopts the methodology of traditional literature review on the existing available literatures and documents with philosophical inquiry in an attempt to produce positive health outcomes.

PSYCHOTHERAPEUTIC INTERVENTION AT THE END-OF-LIFE CARE: AN OVERVIEW

In general, end-of-life care is an interdisciplinary approach, mainly focus on delivering quality of life by any possible means for those who are suffering

from terminal illness and their families. According to National End of Life Care Program, London (2007), end of life care “is a care that helps all those with advanced, progressive, incurable illness to live as well as possible until they die.” The key issues in end-of-life care includes, pain and symptom control, shared decision-making, psychological and spiritual well-being support, and most importantly quality of life. Maximum amount of care and attention are require in addressing to distressing pain and non-pain symptoms including physical discomfort, emotional suffering, and functional limitations affecting quality of life (Yeolekar et al., 2008). However, in the clinical setting, especially in India at present, medical practitioners frequently underestimate the potential and positive benefits of psychotherapy for seriously medical ill patients, especially those who are months far from death, when psychotherapeutic approach and its intervention have been proven as an effective element for patients struggling with advance life threatening medical illness (Breitbart et al., 2004).

The thought provoking question as Puchalski (2002) set up; how can we meet the patients’ needs, so that they can die at home and avoid treatments that violate their preferences? How can we, as health care providers and as a society guarantee people a peaceful and meaningful death? Chochinov (2006), in describing the new horizons in palliative care stated, “the good palliative care practice oblige us to acknowledge the innate existential nature of distress that accompanies the experience of dying people”. There are no easy answers in meeting the patient needs to the fullest, however, spirituality is an important domain for the propose of solution. Recently, researchers recognizing the importance of existential or spiritual issues for dying patient have begun to conceptually parse out and examine the effect of hopelessness, burden to others, lose of sense of dignity, and loss the will to live on patients approaching to death (Puchalski, 2002 & Cochinov, 2006).

According to Meador (2004), “palliative care informed by spiritual attentiveness allows both the patient and the care providers to give up illusions of therapeutic entitlement to cure and at the same time honor the privilege of intentionally and reverent caring for the dying.” Chronic illness impose extensive coping demands on patients and families, and psychologists has extensively involved themselves and significantly contributed to the treatment of the major disorders of our time such as; heart disease, cancer, AIDS, dementia, diabetes, chronic pain and respiratory ailments and multiple sclerosis (Haley et al., 2003). Understanding the psychological dimension to the work of all involved in palliative care will strengthen the practice of any professional working in the end of life care setting (Tachel, 2003).

In special palliative care contexts, the generic skills of the psychologist are applied in a setting where a person either has been given a terminal diagnosis, or is a relative, a close friend or to those who has been bereaved because of death

(British Psychological Society, 2004). In most of the developed countries, the primary care psychologists are in a prime position to help patients, their relatives, and other health care professionals to navigate and coordinate care along the disease continuum and maximize quality of life no matter what the patient's prognosis (Kasl-Godley, King & Quill, 2014). In his study Rousseau (2000), developed seven approaches that needs to be address in treating the dying patients: Controlling physical symptoms; Providing a supportive presence; Encouraging life review to help recognize purpose, value and meaning; Exploring guilt, remorse, forgiveness, and reconciliation; Facilitating religious expression; Reframing goals; and Encouraging meditative practices focused on healing rather than on cure.

Considering the impact of terminal illness in one's life and all the factors that involves, psychotherapy plays an important role as it focus on better chance to be able to release the built-up tension and anxiety, and make one's life goal oriented, with meaning making as its prime focus (Sobesto, 2014 & Wise, 2013). Though neglected, however, psychologists have the potentially central role in end of life care as they are train to help others explore and make sense of their hopes, aspirations, achievements, disappointments, and relationships. Most specifically, they can provide expert intervention where needed (British Psychological Society, 2004). The psychotherapeutic relationship gives the patient a feeling of comfort, certainty of being respected and valued which helps them view life differently apart from being ill (Sobesto, 2014 & Guex, 1994). After all, spirituality turn out to be the propose solution and answer for delivering peaceful and meaningful death in the course of illness and dying, as it focus on increasing patient's sense of meaning and purpose in life. This meaning-centered approach is however, deeply rooted in the existential theory and therapeutic practices (Breithbart et al., 2004).

Existential Psychotherapy: Meaning and Concept

Existential psychotherapy is a dynamic psychotherapeutic approach that recognizes the importance of meaning and purpose in one's life for the sense of well-being. It is a mid-twenty humanistic psychology, which studies on how people come to terms with the basic givens of human existence, basing on the principles of psychodynamic therapy (Diamond, 2011; Koole, 2010; & Banalities, 2016). Unlike the experimental psychologists, the existential psychologists have rejected the use of experimental methods in their study, thus, preferring to analyze people's subjective experience and personal phenomenology. It is a philosophical method of therapy that focus on the belief that inner conflict within a person is due to the individual's confrontation with the 'givens' of human existence (Koole, 2010 & Wikipedia, 2018). The 'givens' according to Yalom (1980), are the inevitability of death, freedom and its attendant responsibility, existential isolation and meaninglessness. In clinical setting, existential psychotherapy is often misperceived as morbid, arcane, pessimistic, impractical, cerebral, and esoteric

to treatment (Diamond, 2009 & May, 1983/1986). However, looking from the approach of meaning making and therapist-client relationship in treatment, it is an exceedingly practical, concrete, positive, and flexible, and it was Irvin D. Yalom, an American existential psychiatrist, was the first to complete a manual on existential psychotherapy, which delivered both theoretical structure and practical techniques for an approach (Diamond, 2011 & Berry-Smith, 2012). The emerging interest in existential psychotherapy follow several themes which includes: definitional understandings, the needs of patients, interventions, theories of existential suffering, methods and designs, and the responses of palliative providers who care for patients who are at the end of life (Boston et al., 2011). Citing Koole, Greenberg, and Pyszczynski (2006), S.L. Koole (2010) listed out the following five major concerns that are central to current research in Experimental Existential Psychology (XXP):

- First major existential concern is *death*, which refers to the psychological conflict between people's awareness of the inevitability of death versus their desire for continued existence.
- Second major existential concern is *isolation*, arises from the conflict between people's need to feel connected to others versus experiences of rejection and the realization that their subjective experience of reality can never be fully shared.
- The third major existential concern of XXP is people's sense of *identity*, raises from the conflict between people's desire for a clear sense of who they are and how they fit into the world versus uncertainties, because of conflicts between self-respects, unclear boundaries between self and non-self, or limited self-insight.
- *Freedom* is the fourth existential concern, which originated from people's experience of free will versus the external force on behavior and the burden of responsibility for their choices.
- The fifth and the most important major concern in XXP is *meaning* and *stems*, originated from the conflict between people's desire to believe that life is meaningful and the events and experiences that appear random or inconsistent with one's bases of meaning.

Existential psychotherapy is a type of therapy that emphasis on the human condition as a whole through positive approach that appreciate human capacities and aspirations while simultaneously acknowledging its own limitations. It build its principles on the fundamental belief that all people experience intrapsychic conflict due to their interaction with certain conditions inherent in human existence such as; freedom and its associated responsibility; death; isolation; and meaninglessness (Good therapy, 2018). Existential psychotherapy strives to empower and place the person and his/her existential choices back at the center of the therapeutic process. The central features of existential psychotherapy is

to authentically face personal and social responsibility, choice, integrity, courage, rather than escaping existential anxiety, anger and guilt (Diamond, 2011). Most importantly, existential psychotherapy explores what it means to be human in the light of our shared human condition; that is, we may live infinite possibilities, but we are essentially finite creatures (Breitbart et al., 2004). Quoting Fischer (1982), in their study “Psychotherapeutic Intervention at the End-of-Life Care” Breitbart and colleagues (2004) outlined the following six propositions that underlie the basis of existential psychotherapy, which also can serve as the professional guidelines in dealing with the dying patients:

- The capacity for self-awareness (we are finite, yet have the potential to continually grow and become until we die)
- Freedom and responsibility (we can make the commitment to authentically choose a life for ourselves)
- The need for center and the need for others (we can have the courage to be, as well as the experience of aloneness and relatedness)
- The search for meaning (we have the capacity to discard old values, to freely choose new ones, and to continually question and challenge the meaning of life)
- Anxiety as a condition of living (we can experience anxiety as a source of growth, and experience the escape from anxiety)
- Awareness of death and nonbeing (the very realization of eventual nonbeing gives meaning to existence, because it makes every human act count).

Eventually, existential therapist is not confine to the passive, neutral, anonymous, and interpretive role of the psychoanalyst. It require the courage and commitment to truly and genuinely encounter each unique patient, without avoiding his/her own anxiety by hiding behind a rigid professional persona or rote therapeutic technique (Diamond, 2011). Existential psychotherapy does not only address the emotional issues, but also teach people in therapy on how to grow and embrace their own lives and exist in them with wonder and curiosity. The uniqueness of this therapy is that, it does not focus on a person’s past, rather work with the person in therapy to discover and explore the choices in regards to their limited time. It makes people to feel a sense of liberation and the ability to let go the despair associated with insignificance and meaninglessness (Good Therapy, 2018). On the other hand, in contrast with the above statement of Good-Therapy on ‘not dealing with the past,’ Breitbart and colleagues (2004) stated that, existential psychotherapy encourages patients to seriously explore their past, present, and future in terms of meaningful choices and the experiences that created and continue to generate their story. It also offers dying patients a way to bear the burden of their suffering and eventually death with strength and dignity. Most importantly, it helps patients to explore the ‘why’ of their existence and the meaning

of their lives. As per the findings of Breitbart and colleagues, existential psychotherapy create a platform for patients to meaningfully reflect upon and take ownership of their lives which they have chosen and focus on the possibilities that are still available until the moment of their death.

Significance of Existential Psychotherapy

The significance of existential psychotherapy according Ackerman (2017) is that, it helps in guiding the clients/patients in learning to take responsibility for their own choices and making choices that align with their values and help them to live more authentically and to form a realistic and authentic relationship with life. Apart from other existing therapy, existential psychotherapy has the advantage of hindsight. It proceeds through relationship and mainly, the psychotherapist functions as guide, accompanist, and symbol. The therapist is one who has confronted the 'givens' of existence and significantly worked through existential anxiety towards more effective integration (Mendelowitz & Schneider, 2016). In existential psychotherapy, the human relationship between patient and therapist takes precedence over technical tricks, and is not a passive or neural presence in the therapy room. It is not a distant expert magnanimously guiding a patient through self-discovery, rather, the therapist is also a fellow human being who has experienced existential anxiety and fear, and aims to guide others through the difficult process of accepting and living with the inevitabilities of human life (Diamond, 2011 & Ackerman, 2017).

Existential psychotherapy is the therapy that fulfilled the primary goal of palliative and hospice care by improving the patient's quality of life, and focuses on the importance of patient's existential well-being, through eliminating existential and spiritual suffering alongside psychological and physical symptoms through comfort and compassionate care for the dying. The real comfort can come only by building a quality relationship between therapist and the client. Moreover, in focusing upon various inter-relational realms, the existential psychotherapy through their acts of collaborative and clarifying dialogue provides the potential transformative experience. This compassionate, shared, professional, yet profoundly personal human relationship provides both the structured, supportive container and potent existential catalyst for therapeutic transformations (Boston et al., 2011; Diamond, 2011; & Spinelli, 2006).

Among all existing psychotherapy, the existential psychotherapy is the only established form of psychotherapy that focus mainly on psycho-philosophical approach, rather than experimental psychotherapy alone. People at some point misunderstood existential psychotherapy as purely philosophical approach in its nature. However, it is to be noted that, the existential psychotherapy focus on the intra-personal dimensions of human existence and have formulated psychological theories that does not allow the philosophical dimension to come to the fore or to be central (Deurzen, 2015). In its wider approach, the existential

psychotherapist mainly focus on questions having to do with “What and How” of human existence and experience, seeking to assist their patients in striving to focus on their current experience of being in the world, that usually create a positive impact on quality of life for the dying (Spinelli, 2006). The existential suffering sometime is view and understood as a concept distinct from that of spirituality. However, in this approach, the concepts of spirituality and existential suffering are neither discussed separately nor acknowledged a having different meanings (Boston et al., 2011). The central claim of existentialism is acknowledging the essence of existence precedes. Existential psychotherapy addresses issues that preoccupy many people, from alienation and loneliness to depersonalization and above all, it offer meaning. It stress the value and importance of individual experience, and adopt the policy that one is not defined by his/her past, rather he/she is free to create their own life and identity, and is responsible for it (Goddard, 2018).

Citing Lava, Achenbach, & Hoogendijk (1995; 1084; & 1991), Deurzen (2015) stated that, existential psychotherapy focuses on the inter-personal and supra-personal dimensions to capture and question people’s worldviews. It aim to clarify and understand personal values and beliefs, and seek to enable a person to live more deliberately, more authentically, and purposefully, while accepting the limitations and contradictions of human existence. It is symbolizes as humility wounded healer therapy, which heal both the patient and the therapist. It recognizes that the meaning and purpose we feel in life is hugely important to our sense of wellbeing. Existential psychotherapy helps the dying patient to look at human condition as a whole, and their place within it, rather than trying to sort out one’s life just by looking at his/her psyche and life history, which are the source of doubt, anxious, distress, and state of despair (Mendelowitz & Schneider, 2016 & Banalities, 2016). Moreover, the existential psychotherapeutic thinkers like Binswanger, Yalom and Deuzen (1963, 1980, & 1984), avoid restrictive models that categorize or label people, rather look for the universal hypothesis that can be observed cross-culturally.

An Evaluation of Existential Psychotherapy on Meaning-Making

It is important to note another view of existential psychotherapy, that life has meaning under all circumstances, even under suffering. Meaninglessness on the other hand, is also a meaning not yet discovered. Existentialism has a unique perspective on meaning in the face of death and dying that sets it apart from the mainstream philosophies that precede it that, there is no meaning. Moreover, there is no meaninglessness, as every individual in this world can derived meaning from all the circumstances of their existential being (Schulenberg, 2004; Frankl, 1997; & Ackerman, 2017). Yalom (1980) stated that, if existential therapists prioritize one thing, it would be the search for meaning and the need to feel that one’s life has its own meaning. In context of end-of-life, the dying individual’s frequently

ask himself/herself “why is there something rather than nothing,” and sometime experience the process of unclear meaning of their own life.

The existential psychotherapy here plays an important role to help the patient to become self-reflective and enable them to discover the miracle of being, especially in the midst of doubt and wonders, as existential psychotherapy based on the fundamental principle that human beings have the unique capacity to question and reflect upon their own existence. The aim of existential psychotherapy is to liberate oneself from being passive victims of circumstances and invite them to become active participants in their lives through heightened awareness and responsibility. It also enables the dying individual to take meaningful ownership of their life, feelings, choice, and beliefs that promotes authentic relatedness with oneself, the world, and others (Heidegger, 1954, 1968; Deurzen, 1988, 1992, 1997; Breitbart, 2004; & May, 1983).

Though mostly neglected in the clinical setting, existential psychotherapy carried out the most important and difficult task in the end-of-life care, which other health care providers cannot delivered, as it is not an easy task to be truly available to help others in finding meaning in their lives when their existence is in crisis. The meaning of life however, is never given and cannot be transmitted unless a person is willing to search for it independently. Moreover, inner peace develops from finding clarity on what one wants life to be about and understanding what truly matters to us as an individual, outside of the influence of others and even society (Deurzen, 2015 & Banalities, 2016). Here, existential psychotherapy is an excellent method for treating the psychological and emotional instabilities or dysfunctions that stem from the basic anxieties of human life. According to existential thought, one must look within himself/herself to find meaning, to assert values, and to make quality decisions that shapes one’s lives (Ackerman, 2017). Yalom (2008) proposed that, human beings should confront death anxiety in the same way they confront any fear, as it is possible in one’s life to face the anxieties head-on and embrace the human condition of loneliness, to revel in the freedom to choose and take full responsibility for his/her choices. One does not need to arrest feelings of meaninglessness, but can choose new meanings for his/her lives, and able to live life as one’s own adventure (Wikipedia, 2018).

For existential psychotherapists the experience of anxiety is the fundamental ‘given’ of being-in-the-world, and the responses that individuals raise up in order to minimize, deny, or repress intolerable level of anxiety are in themselves, mainly through the ability to reflect within oneself and within an inmate knowledge of one’s own suffering. The human suffering as an individual experience is the central theme in the thinking and writings of the existentialists (Spinelli, 2006 & Boston et al., 2011). Victor Frankl (1997), in his study “Man Search for Meaning” stated that, what is important is not an action in and of itself, but the way action is experienced, the intensity with life is lived, and the notion that a person has the

ability to choose his/her own response to a given situation. What makes a person is not determine by type, rather by who he/she becomes, and most importantly, learning to be anxious in the right way is the key to live a reflective and meaningful life (Boston et al., 2011 & Deurzen, 2015).

The principles of existential psychotherapy extend to a widening clinical domain, and its perspectives apply far beyond the clinical setting. Here the principles such as, freedom, experiential reflection, and responsibility are being propagated in work and educational settings and even in religious and political realms as well (Mendelowitz & Schnelder, 2007). The psychotherapeutic process of existential therapy is then to elicit, clarify and put into perspective all the current issues and contradictions that are problematic. Thus, the ultimate therapeutic search is about allowing the client to reclaim personal freedom and a willingness and ability to be open to the world in all its complexity (Deurzen, 2015). However, looking at the current situation (mainly in India), it is sad to say that, the existential issues are yet still ill defined in its concept, a neglected symptoms of suffering, and little is known about its effectiveness concerning its interventions, though can be widely effective in the end-of-life care (Boston et al., 2011). It is important to know the existential attempt of the meaning-centered psychotherapy, as it is to explore the complex relationship between meaning and illness. It also offers a therapeutic and healing alternative that may help patients confront the existential challenges that are being produces by life threatening medical illness (Breitbart et al., 2004). Moreover, within the existential psychotherapeutic relationship, the therapist is the 'other' who serves a representative of all others in the client's wider world relations. Most importantly, the therapist is also the 'other' who challenges the client's beliefs and assumptions regarding others and their impact and its effect upon his/her ways of being (Spinelli, 2006). On the other hand, the importances of sensitivity and trust relations, as well as the awareness of the individual nature of patients are also an important existential concern, and the challenges of assessing and treating the existential domain includes consideration of the subjective nature of its expression and the personal experiences of vulnerability by clinicians who witness their patients' suffering.

The uniqueness of existential psychotherapy as one observes, can takes many different shapes and shapes and forms unlike other therapy, but it always observes the therapeutic exploration of what is true for the patient at the given condition (Deurzen, 2015). The strength of existential psychotherapy lies in its objectives, as it focus on authentic living with courage and in humility, and another important objective would be learning to reflect for oneself and effectively communicating with others in search of meaning and purpose in suffering and dying. Thus, effectively implementing the existential psychotherapy in palliative end-of-life care can contribute to the desperately needed reform in the prevailing world of complexity, discernment, and inquiry. The reform that all healers are summon

and challenges in dealing with anxiety, pain, and sufferings in the end-of-life care (Tillich, 1952; Buber, 1923, 1929; & Mendelowitz & Schnelder, 2007).

CONCLUSION AND CHALLENGES

The existential psychotherapy is a revolutionary therapy that seeks to find ways for patients and families to improve well-being, patients own version of purpose and meaning in suffering and dying, which the modern medicines fail to provide. It begins where the existing medical system and formula end, having its ultimate goal as using coping most effectively by enhancing patients' sense of meaning and purpose in life. The existential psychotherapy also encounter the medical realms and the world on different levels that connect to give dying patient own definition of reality, freedom of choice, and to overcome anxieties about life under any circumstances. Apart from other existing medical therapy, the uniqueness of existential therapy lies in its commitment to give positive changes in one's life, and help them to move forwards with a life that the dying individual wanted to live and a better future within the limited time period for survivor (Boston et al., 2011 & Banalities, 2016). Most importantly, it seeks for purpose and the need to feel that one's life has its own meaning, which every human as whole are longing to have. The therapy also helps in developing awareness about the treatment principles and theories given before or during the medical treatment. Moreover, it is quite adaptable in clinical setting, and can be widely use along with other approaches of medicare in treating people with life threatening medical illness.

As per the findings of the present philosophical inquiry, the combinations of both medical and existential approaches in the end-of-life care setting can maximize the effectiveness of both and will promote greater sense of recovery (Good therapy, 2018). As it is well notify that apart from the existing medical illness, the patients with terminal illness and those who are nearing death frequently confronted with several existential symptoms, spiritual sufferings, and psychological distress. Thus, the combination of medical and existential approaches can also enlarge the worldview of the dying individual towards self, illness, sufferings, and others that involves, and its outcome will resulted in better quality of life in the face of death and dying.

Existential psychotherapy in its approach can provide an awareness of one's own inner resources in the midst of existential and medical challenges and sufferings. It often seeks for the way to successfully provide and implement constant joy, delight, celebration of life, perfect love, and freedom. The therapy also provide a platform where one can enhance self-consciousness, by making oneself to see things more nearly/clearly as they are, and increasingly experience one's existence as real (Mendelowitz & Schnelder, 2007; James, 1902, 1936; & Becker, 1973). The existential psychotherapy has produce some of the most

eloquent case studies in their existing professional literatures that helps the terminally ill patients in many positive ways in the course of their illness mostly characterize by physical pain and emotional sufferings, which kept the dying patient in debilitating condition. Though the existential psychotherapy took many forms and shapes in its approach, which people seen it as confusing and lack of clarity, it always requires a philosophical exploration of what is true for the individual and leads to greater recognition of what is true for human beings in general. Thus, affording the beginning of a genuine philosophical stance, which make it easier to tackle life's inevitable darkness and adversity (Deurzen, 2015).

However, it is also important to know its limitation in the clinical setting, as the existential psychotherapy in its long run has lack of consistency, and clarity in the way it is define and understood. Though the most challenging and demanding area of care in end-of-life care, setting the existential psychotherapy is neglected and untouched area of care due to the confusion over its definition, lack of conceptual understanding, few documented interventions, and most importantly, due to the absences of appropriate training among the palliative care providers as a whole. (Boston et al., 2011).

The challenges of existential psychotherapy also lies in its nature of approach, as it incorporate many techniques or idea from the other form of therapy such as, cognitive, behavioral, narrative, and others, that usually create confusion for the end-of-life care providers. However, the existential psychotherapy sessions depend on the productive and close relationship between therapist and the client to success (Ackerman, 2017). This being the reason, it is important for the clinicians and other care providers working in the end-of-life care need to be mindful of their own choices and consider treatment options from a critical approach (Boston et al., 2011). So, the emerging needs of the hours is to systematically explore existential psychotherapy by removing confusions and its inconsistency issues and implement to its fullest for better health outcomes, in which the dying individual finds his/her purpose in meaning in life that produce quality of life.

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NUTRITIONAL STATUS, CLINICAL FEATURES AND DEGREE OF IMMUNOSUPPRESSION OF HIV/AIDS ORPHANS IN INDIA

Shikha Verma* and Swaran Lata**

ABSTRACT

The present study examined the nutritional status, ART adherence, immunological staging (CD4 count) and WHO clinical staging among HIV/AIDS orphans. The sample of the study consisted of 116 were HIV/AIDS orphans (71 boys and 45 girls). Mean age of HIV/AIDS orphans was 11.98 years (boys mean age was 10.17 years and girls mean age was 12.15 years) living in the orphanages. The nutritional status was assessed according to Body Mass Index (BMI). BMI was calculated by children's matric BMI table. The HIV/AIDS orphans were identified on the basis of progression of infection, with the help of WHO clinical staging and presence or absence of the number of CD4 cell in a cubic millimetre of blood, with the help of WHO age specific immunologic categorizations. The adherence rate was checked by asking the HIV/AIDS orphans if he/she has missed any dose. Results indicated insignificant gender difference between HIV/AIDS orphan boys and HIV/AIDS orphan girls on nutritional status. HIV/AIDS orphans had good follow-up and ART adherence. Most of the HIV/AIDS orphans were on stage 1 and 2 of immunological stages (CD4 count) and WHO clinical stages. Significant positive correlation was found between immunological staging (CD4 count) and WHO clinical staging among HIV/AIDS orphans. HIV/AIDS orphans should be helped to develop healthy coping strategies and therefore help to improve their physical and emotional well-being.

Keywords: ART adherence, HIV/AIDS orphans, Immunological staging (CD4 count), Nutritional status and WHO clinical staging

* Assistant Professor, Psychology Department, A. N. D. N. N. M. Mahavidyalaya, Kanpur, 208012, U.P., India. Mob. No.-8765078064, Email Id- shikha22bhugmail.com

** Assistant Professor, Psychology Department, Faculty of Social Sciences, Banaras Hindu University, Varanasi-221005, U.P., India. Mob. No.-8765439007, Email Id- swaran80@gmail.com

Human immunodeficiency virus/ acquired immune deficiency syndrome (HIV/AIDS) is one of the best known deadly diseases in the world, due to its devastating impact on communities, families, children and development. Worldwide, 34 million people are presently living with HIV/AIDS out of which 17 million are HIV/AIDS orphans. India is the second home of largest number of HIV/AIDS orphans in the world after South Africa. In this century HIV/AIDS orphans' crisis is an emerging problem. In next five years the proportion of orphaned children is expected to double and remain exceptionally high till 2020 or 2030 (Sen, 2007). This makes the problem of AIDS orphans significant in our country.

HIV/AIDS orphan is a fresh area of research in India. HIV/AIDS orphans are children whose one or both parents expired due to AIDS before being 15 years of age (UNAIDS, WHO and UNICEF 2001). Children less than 18 years who have lost their mother (maternal orphan), father (paternal orphan) or both parents (double orphan) because of HIV/AIDS are HIV/AIDS orphans (AIDS Committee of Actuarial Society of South Africa, 2003).

HIV/AIDS orphans are at higher risk of bad health and co-morbid infections. Thus, they are unable to understand the cause of their illness. They are not able to adhere perfectly to the ART regime and do not have access to proper nutrition. HIV/AIDS orphans suffer from under nutrition which leads to delayed development. Proper nutrition and perfect ART adherence are the important requirements for their long and healthy life. Good nutrition increases the immunity and reduces the risk of co-morbid infections. ART adherence leads to increase in the CD4 count in the blood which also increases the immunity of the body (Verma & Lata, 2016).

In Nigeria, Oladokun, Brown, Aiyetan, Ayodele and Osinusi (2009) found no significant difference between HIV/AIDS orphans and HIV-infected children on weight-for-age (WAZ), weight-for-height (WHZ) and height-for-age (HAZ). 68.1% (n=110) of the HIV/AIDS orphans were found to be malnourished. In China, He, & Ji, (2007) assessed the influence of HIV/AIDS orphanhood on children's nutritional status. Results revealed that out of all children (n=186) 4.84% were stunted and 1.61% severely stunted, 3.23% were underweight and 1.08% severely underweight, 9.14% were wasted and 2.69% severely wasted. They found that HIV/AIDS orphans had significantly lower Body Mass Index (BMI) and were thinner than HIV-infected children.

Bhattacharya, Rajeshwari and Saxena (2010) found that HIV/AIDS orphans and HIV-infected children both had good follow-up and 95% adherence to the medicines. Vreeman, Wiehe, Ayaya, Musick, & Nyandiko (2008) reported that 29% (n = 445) of HIV/AIDS orphans and HIV infected children were ART non-adherent. Nyandiko, Ayaya, & Nabakwe (2006) found in his research that 75% of HIV/AIDS orphans and HIV infected children and/or their accompanying

caregivers reported perfect adherence to ART on every visit, as assessed by the clinician. No significant difference was found between HIV/AIDS orphans and HIV-infected children.

Shah, (2008) found that in HIV-infected children, most children were presented in clinical staging B whereas HIV/AIDS orphans were presented in clinical staging A, B or C. Myint, Aye, Moe, & Kyaw (2012) found that in clinical staging of HIV (n=147), 36 HIV/AIDS orphans (60%) were in stage 1, 16 (26.7%) in stage 2 and 7 (11.7%) in stage 3 and only one (1.7%) in stage 4. Nyandiko et al., (2006) revealed that there was no significant difference in the proportion of HIV/AIDS orphans identified as symptomatic (clinical stage B or C) when compared to HIV-infected children. Kapavarapu, Bari, Perumpil, Duggan and Dinakar (2011) also revealed that the majority of the HIV/AIDS orphans (82%, 70/85) had mild disease (WHO clinical stage 1 and 2) while the remaining 18% had advanced disease (WHO clinical stage 3 and 4).

Myint et al., (2012) found that only 3 HIV/AIDS orphans (5%) (n=147) had CD4 less than 200 and 39 (65%) had CD4 above 200. Kikuchi, Poudel, Muganda, Majyambere, & Otsuka (2012) found that CD4 count differed significantly between the four orphan status e.g. paternal orphans, maternal orphans, double orphans and HIV-infected children. Bhattacharya et al., (2010) found that the HIV/AIDS orphans had severe immunosuppression (defined as absolute CD4 count < 250 cells/mm³ or CD4 percentage < 15%). The maternal orphans were more severely immunosuppressed. Nyandiko et al., (2006) and Oladokun et al., (2009) revealed that CD4 cell percentage of HIV/AIDS orphans was not significantly different from HIV-infected children. Nyandiko et al., (2006) revealed that only age was found to be significantly associated with CD4% fluctuations, older children had more rapid increases in CD4 cell percentages.

RATIONALE OF THE PRESENT STUDY

HIV/AIDS is an emerging area of research as research on Indian HIV/AIDS orphans is limited. Present research is being conducted for understanding the state of HIV/AIDS orphans. In literature survey numerous studies were found related to HIV/AIDS children but research on HIV/AIDS orphans is scarce in India. Studies on HIV/AIDS orphans have been mostly conducted in Uganda (Atwine, Cantor-Graae, & Bajunirwe 2005), Sub-Saharan Africa, Kenya (Okawa et al., 2011), Zimbabwe (Nyamukapa et al., 2010), South Africa (Cluver, Orkin, Gardner, & Boyes, 2012) and China (Lin, Zhao, Li, Stanton, Zhang, Hong, Zhao, & Fang, 2010; Hong, Li, Fang, Zhao, Lin, Zhang, Zhao, & Zhang, 2010). There is paucity of studies on nutritional status, ART adherence, WHO clinical staging and CD4 count among HIV/AIDS orphans. Little is known about the relation between nutritional status, ART adherence, WHO clinical staging and immunological staging (CD4 count) among HIV/AIDS orphans.

Objectives

On the basis of review of literature the following objectives were formulated for the study:

1. To explore the nutritional status, ART adherence, immunological staging (CD4 count) and WHO clinical staging of HIV/AIDS orphans.
2. To assess the relationship between- nutritional status, ART adherence, immunological staging (CD4 count) and WHO clinical staging among HIV/AIDS orphans.

Hypotheses

On the basis of review of literature the following objectives were formulated for the study:

- H₁**. ART adherence would be positively related to (a) immunological staging (b) WHO clinical staging and (c) nutritional status.
- H₂**. Immunological staging (CD4 count) would be positively related to (a) WHO clinical staging and (c) nutritional status.
- H₃** WHO clinical staging would be positively related to nutritional status.

METHOD

Sample

A sample of 116 HIV/AIDS orphans (71 boys and 45 girls) were selected for the study. Mean age of HIV/AIDS orphans was 11.98 years (boys mean age was 10.17 years and girls mean age was 12.15 years) living in the orphanages. There are limited HIV/AIDS orphanages in North India. Data was collected from Varanasi, Allahabad, Lucknow and Delhi NCR.

Tools

Nutritional status was assessed according to Body Mass Index (BMI) for age. BMI-for age was calculated by CDC Table for Calculated Body Mass Index Values for Selected Heights and Weights for ages 2 to 20 years (Centres for disease control and prevention, U.S., 2013). The BMI-for age growth charts for boys and girls was used to interpret the BMI number in to percentile for child and adolescent sex and age. The weight status category for calculated BMI-for-age percentile is interpreted as (Underweight = Less than 5th percentile, Healthy weight = 5th percentile to less than 85th percentile, Overweight = 85th percentile to less than 95th percentile, Obese = equal to or greater than the 95th percentile).

WHO Clinical staging: The HIV/AIDS orphans were categorized on the basis of progression of infection, with the help of WHO Clinical staging.

WHO Age Specific Immunologic Categorizations: The HIV/AIDS children were categorised on the basis of presence or absence of the number of CD4 cell in a cubic millimetre of blood, with the help of WHO age specific immunologic categorizations.

Adherence guidelines recommended by NACO: The adherence rate was checked by asking the HIV/AIDS orphans if he/she has missed any dose. The bottle/blister packet was checked and estimated level of adherence was written (e.g. >95%= <3 dose missed in a period of 30 days; 80-95%= 3 to 12 dose missed in a period of 30 days; <80%= >12 dose missed in a period of 30 days). Formula to be used is number of tablets/dose actually taken by a patient for a particular time period divided by number of tablets/dose prescribed for the time period into 100.

RESULTS

Nutritional Status of HIV/AIDS Orphans

Result related to HIV/AIDS orphans on nutritional status, presented in Table 1 and Figure 1 show that 38 % (27) of HIV/AIDS orphan boys were underweight, 60.6 % (43) were healthy weight and only 1.4% (01) was overweight. 26.7 % (12) of HIV/AIDS orphan girls were underweight, 71.1 % (32) were healthy weight and only 2.2% (01) were overweight. Table 2 shows the mean and SD value of HIV/AIDS orphan boys and girls on nutritional status 32.37 (7.92) and 31.40 (9.68) depicting insignificant differences between HIV/AIDS orphan boys and girls.

Table 1: Nutritional Status of HIV/AIDS orphan boys and girls

<i>Weight status category for calculated BMI-for-age percentile</i>	<i>HIV/AIDS Orphans</i>	
	Boys (n=71)	Girls(n=45)
Underweight Less than 5 th percentile	27 (38.0%)	12 (26.7%)
Healthy weight 5 th percentile to less than 85 th percentile	43 (60.6%)	32 (71.1%)
Overweight 85 th percentile to less than 95 th percentile	01 (1.4%)	01 (2.2%)

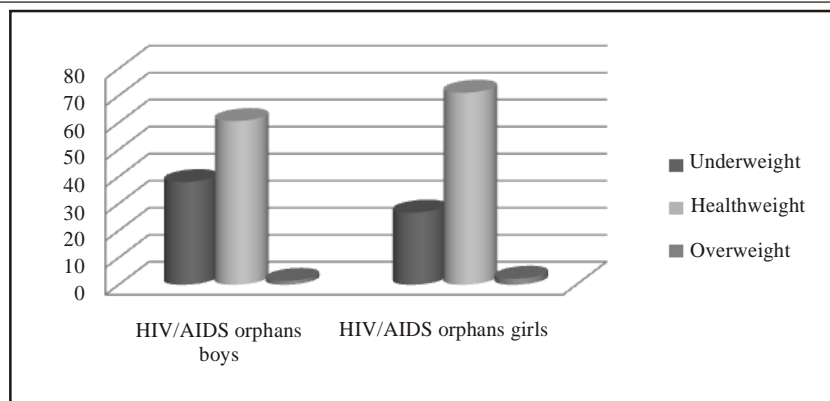


Figure 1: Nutritional Status of HIV/AIDS orphan boys and girls

Table 2: Mean SD and t-Value indicating difference between HIV/AIDS orphan boys and girls

	<i>BoysMean (SD)</i>	<i>GirlsMean (SD)</i>	<i>T</i>	<i>P</i>
Nutritional status	17.75(4.64)	18.28(2.35)	1.84	.068

ART Adherence of HIV/AIDS orphans

All HIV/AIDS orphans were infected from their mother at the time of birth. In HIV/AIDS orphans 91(78%) were on ART and 25 (22%) were not on ART. ART adherence of HIV/AIDS orphans on the basis of missed doses in a period of 30 days is show in Table 3. In which 24 (26.37%) HIV/AIDS orphans had 80-95% of ART adherence and 67 (73.63%) HIV/AIDS orphans had 95% ART adherence.

Table 3: ART Adherence of HIV/AIDS orphans on the basis of missed dose in a period of 30 days

<i>Level of ART Adherence</i>	<i>HIV/AIDS Orphans</i>
3-12 Dose (80-95%)	24 (26.37 %)
<3 Dose (95%)	67 (73.63 %)

HIV/AIDS orphans at different WHO Clinical Staging and Immunological Staging (CD4 count)

HIV/AIDS Orphans at different WHO clinical and immunological staging (CD4 count) is presented in Table 4. In which 69 HIV/AIDS orphans were found to be on stage 1 of the clinical and immunological stages, 5 HIV/AIDS orphans were found on clinical stage 1 and on immunological stage 2, 1 HIV/AIDS orphan was found on clinical stage 1 and on immunological stage 3. On the other hand 5 HIV/AIDS orphans were on immunological stage 1 and on clinical stage 2, 3 HIV/AIDS orphans were on immunological stage 1 and on clinical stage 3. Overall 75 (64.66%) HIV/AIDS orphans were on clinical stage 1 and 77 (66.38%) HIV/AIDS orphans were on Immunological stage 1 with CD4 count above 500/mm³. 12 HIV/AIDS orphans were on stage 2 of the clinical and immunological staging, 2 HIV/AIDS orphans were on clinical stage 2 and on immunological stage 3, 1 HIV/AIDS orphan was on clinical stage 2 and on immunological stage 4. On the other hand 2 HIV/AIDS orphans were on immunological stage 2 and on clinical stage 3. Overall 20 (17.24%) HIV/AIDS orphans were on clinical stage 2 and 18 (15.52%) HIV/AIDS orphans were on immunological stage 2 with CD4 count 350-499/mm³. 12 HIV/AIDS orphans were on stage 3 of the clinical and immunological staging. Overall 16 (13.79%) HIV/AIDS orphans were on clinical stage 3 and 15 (12.93%) HIV/AIDS orphans were on immunological stage 3 with CD4 count 200-349/mm³. At last 5 HIV/AIDS orphans were on stage 4 of the

clinical and immunological staging. Overall 5 (4.31%) HIV/AIDS orphans were on clinical stage 4 and 6 (5.17%) HIV/AIDS orphans were on immunological stage 4 with CD4 count below 200/mm³.

Table 4: HIV/AIDS orphans at different WHO clinical and immunological staging (CD4 count)

WHO Clinical Stage	Immunological stage				Total
	stage 1 (CD4> 500mm ³)	stage 2 (CD4> 350-499mm ³)	stage 3 (CD4200 -349mm ³)	stage 4 (CD4< 200mm ³)	
stage 1	69	05	01	00	75 (64.66%)
stage 2	05	12	02	01	20 (17.24%)
stage 3	03	01	12	00	16 (13.79%)
stage 4	00	00	00	05	05 (4.31%)
Total	77 (66.38 %)	18 (15.52 %)	15 (12.93 %)	06 (5.17 %)	116 (100%)

Correlational Analysis

Results related to correlations are presented in Table 5. It shows that ART adherence was non- significantly positively correlated with immunological staging (r =.169, p>0.05), WHO clinical staging (r = .077, p>0.05) and nutritional status (r =.128, p>0.05). Immunological staging (CD4 count) was significantly positively correlated with WHO clinical staging (r = .596, p<0.01) and non- significantly positively correlated with nutritional status (r =.048, p>0.05). WHO clinical staging was non- significantly positively correlated with nutritional status (r = .169, p>0.05) in HIV/AIDS orphans.

Table 5: Summary of correlational analysis of HIV/AIDS orphans

	ART Adherence	Immunological staging	WHO clinical staging	Nutritional Status
ART Adherence	——	.169	.077.	.128
Immunological staging		——	.596**	.048
WHO clinical staging			——	.169
Nutritional Status				——

*p<0.05, **p< 0.01

DISCUSSION

Nutritional status of HIV/AIDS Orphans

Human immunodeficiency virus (HIV) infects the cells of the immune system and destroys the T helper lymphocytes, or T cells, which are crucial to the immune system. When HIV virus enters in the body, the virus is able to copy itself over and over and increasing its ability to kill CD4 and T cells. Within 2 - 4 weeks after HIV infection many symptoms develop like fever, swollen glands, sore throat,

muscle and joint aches, pains, fatigue and headache. Anti-Retroviral Therapy (HIV treatment) starts when CD4 cell count goes down around 350. Due to medication common side effects occurs like diarrhea, nausea, dizziness, insomnia, skin rashes, dry mouth, weight loss, stomach pain etc. As the children are going through these opportunistic infections and bearing side effects of medications it becomes difficult to retain healthy body and leads to weight loss. Lack of appetite may lead to insufficient intake of green vegetables, fruits, meat and milk as per the recommendations. Thus the HIV/AIDS orphans lose weight, become thinner and have shunted growth, thus become low on nutritional status. Result indicates insignificant gender difference between HIV/AIDS orphan boys and HIV/AIDS orphan girls on nutritional status. HIV/AIDS orphan boys and girls suffer from HIV infection and opportunistic infections. Due to these health problems and strict ART regime they undergo retarded growth, development and thus have low nutritional status. These finding are in accordance with researches done by Myint et al., (2012) who revealed that no significant difference has been reported in nutritional status of HIV/AIDS orphan boys and girls as they are struggling with HIV infection and going through various co-morbid infections.

ART adherence of HIV/AIDS orphans

ART adherence of HIV/AIDS orphans is good. 78.44% of HIV/AIDS orphans were found to be on ART while 21.56% had still not started with ART. 73.63% of HIV/AIDS orphans had 95% ART adherence and 26.37% had 80-95% of ART adherence. HIV/AIDS orphans had good follow-up and adherence to the medicines. This could be because of proper treatment and counseling by health care professional and government initiatives (Bhattacharya et al., 2010). Low cost and free antiretroviral drugs have shown to improve ART adherence, however adherence requires more than free ART. All health care team members including physicians, physician assistants, nurse practitioners, pharmacists, medication managers, and social workers play integral roles in successful adherence programs. They provide information about HIV, including the natural history of the disease, HIV viral load and CD4 count and expected clinical outcomes according to these parameters and therapeutic and prevention consequences of ART non-adherence. For enhancing ART adherence they use adherence-related tools to complement education and counseling interventions (e.g., pill boxes, dose planners, reminder devices), community resources to support adherence (e.g., visiting nurses, community workers, family, peer advocates) and motivational interviews. They also record follow up on missed visits. Provide outreach facilities for those patients, who drop out of care, use peer or paraprofessional treatment navigators, provide incentives to encourage clinic attendance or recognize positive clinical outcomes resulting from good adherence. All these strategies improved ART adherence in HIV/AIDS orphans (AIDS info 2014).

HIV/AIDS Orphans at Different WHO Clinical Staging and Immunological Staging (CD4 count)

According to data most of the HIV/AIDS orphans were on immunological stage and clinical stage 1 and 2. 64.66% of HIV/AIDS orphans were found to be on immunological stage 1 and 66.38% on clinical stage 1, 17.24% on immunological stage 2 and 15.52% on clinical stage 2, 13.79 on immunological stage 3 and 12.93% on clinical stage 3 and only 4.31% were found to be on immunological stage 4 and only 5.17% on clinical stage 4. The possible reason behind this is that the age range of the sample of the study was from 11 to 14 years and they are mainly identified to be infected through their mother or parents. They have been identified during birth under the prevention of mother to child transmission program (PMTCT). Mother to child transmission is the leading cause of HIV infection in children. It remains a major public health problem worldwide, with the greatest burden in resource poor settings. Infants and children with HIV are more likely to become ill and die shortly after birth. PMTCT programs provide a package of services that ideally include: counseling and testing for pregnant women, short course preventive ARV regimens to prevent mother to child transmission, counseling and support for safe infant feeding practices, family planning counseling or referral and referral for long term ART for the child. In addition, where possible, these programs serve as an entry point for full ART services for the entire family, thus protecting the family unit and preventing the tragedy of a generation of orphans (Bush & George, 2002). Shah I. (2008) found that HIV/AIDS orphans were mostly in clinical staging A, B or C.

In correlational analysis insignificant positive correlation was found between ART adherence and immunological staging (CD4 count) in HIV/AIDS orphans. Regular adherence to ART increases the level of CD4 count in the blood. Thus, good adherence is essential for increasing the CD4 count in the blood. Regular and proper intake of drugs helps in increasing the CD4 count in the blood. Results suggest that most patients in this study reported regular adherence to ART and some had average adherence. Sefren, Kumarasamy, James, Raminani, Solomon, Mayer (2005) found that ART adherence was associated with change in CD4 since initiation of ART.

Insignificant positive correlation was found between ART adherence and WHO clinical staging and ART adherence and nutritional status in HIV/AIDS orphans. ART adherence has been found to be effective in increasing the CD4 count and showed improved health and weight in HIV/AIDS orphans. Increase in CD4 count increases the immunity of the body thus protecting it against various opportunistic infections (clinical stages). Thus, it promotes the health and development of the body. Perfect ART adherence helps in decreasing the viral load and thus increasing the CD4 count and thus the immunity of the body. With strong immunity the body actively fights with all types of infections and keeps it

sound and healthy. This leads to improved weight and thus nutritional status. ART adherence along with optimal nutrition, shelter and family support are the required critical contributory factors for good outcomes in HIV/AIDS orphans (Nyandiko et al. 2006; Kapavarapu, et al., 2011).

Significant positive correlation was found between immunological staging (CD4 count) and WHO clinical staging in HIV/AIDS orphans. Several discrete clinical phases can be recognized along the continuum, and they correlate with the degree of immunodeficiency that arises with progress of HIV infection. Like CD4 count and viral load testing, recognition of these clinical findings included in WHO system is an important method for identifying HIV-infected individuals at high risk for morbidity and mortality. Increase in CD4 count increases the immunity of the body thus protecting it against various opportunistic infections.

Insignificant positive correlation was found between immunological staging (CD4 count) and nutritional status in HIV/AIDS orphans. HIV virus infects and destroys the CD4 count in the blood, reducing the immunity of the body and thus the nutritional status of the body. Higher the CD4 count better the nutritional status. Healthier body, more generation of CD4 cells in the blood.

Insignificant positive correlation was found between WHO clinical staging and nutritional status in HIV/AIDS orphans. With strong immunity the body actively fights with all types of infections and keeps it sound and healthy. This leads to improved weight and thus nutritional status protecting it against various opportunistic infections.

CONCLUSION

Children who grow up without both or either of their parents face innumerable challenges. The situation is worse for AIDS orphans. No significant gender difference between HIV/AIDS orphan boys and HIV/AIDS orphan girls on nutritional status was found. HIV/AIDS orphans had good follow-up and ART adherence. Most of the HIV/AIDS orphans were on stage 1 and 2 of immunological stages (CD4 count) and WHO clinical stages. Significant positive correlation was found between immunological staging (CD4 count) and WHO clinical staging in HIV/AIDS orphans. Efforts should be done to increase sensitivity and awareness among caretakers about the health requirements of HIV/AIDS orphans.

Improved quality of food, involving sufficient amount of green vegetables, fruits, meat and milk as per the recommendations in daily meal should be provided to HIV/AIDS orphans for their better nutritional status. This should enable HIV/AIDS orphans to develop healthy coping strategies and therefore improve their physical and emotional well-being. HIV/AIDS orphans should be taught strategies to boost their hope and optimism, which would benefit them in coping with illness by improving their life satisfaction and recovery process.

Limitations and Suggestions for Future Research

The limitations observed during the process of completion of present study are being presented and may be applied for improving future research on HIV/AIDS orphans. The present study was conducted on a small sample. Future research may consider a wider range sample and longer study period. The present study focuses on gender difference but not on different types of HIV/AIDS orphans group, numbers of girls are less than HIV/AIDS orphans boys. This is because there are few HIV/AIDS orphan girls enrolled in North Indian orphanages. Future research may include equal number of HIV/AIDS orphans boys and girls for better interpretation of the results. The present study explored the current status of PSS but did not plan any intervention programs for their betterment. Future research may include interventions for their overall development and betterment.

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TRAUMA AND PSYCHOLOGICAL WELL-BEING OF RAPE SURVIVORS

Richa Nautiyal and A. Velayudhan***

ABSTRACT

India is often recognized as a country with fast-growing economy and progressive indicators of human development have shown an upward trend. Nevertheless, over the last few decades there has been a growing concern over the increased reporting of rape in India which seems to be rather paradoxical. According to Hilberman, rape represents as an “act of violence and humiliation in which the victim experiences not only overwhelming fear for her very existence, but an equally overwhelming sense of powerlessness and helplessness that hardly few others events in one’s life can parallel”. The ill effects of the traumatic experiences of a rape survivor can manifest in symptoms at a psychological, behavioral or physical level. The survivor may have to fight feelings of humiliation and guilt due to the prevalence of various myths and prejudices in the society. This severely hampers the possibility of the survivor revealing the horrendous incident or coming forward to seek any kind of professional help for their physiological and psychological maladies. This study tries to understand to what extent such a trauma can influence a person’s overall sense of psychological well-being. Trauma Symptom Inventory by Briere (1996) and Ryff’s Psychological Well-Being Scales (1989) were used on 50 rape survivors for the present study. Results indicated that although there was no significant relationship between the overall score of psychological well-being and trauma, negative relationships were seen between the dimensions of the two variables which clearly shows that the trauma effects a person’s well-being in an adverse way.

Keywords: Rape, Rape Survivors, Trauma, Psychological Well-being, Kerala.

* ICSSR Doctoral Scholar, Department of Psychology, Bharathiar University, Coimbatore – 641 046, email: redrose4richa@gmail.com

** Professor and Head, Department of Psychology, Bharathiar University, Coimbatore – 641046, email: avelayudham@rediffmail.com

Rape, the most common form of violence against women, has been a part of human culture and is a profound violation of woman's bodily integrity and can be a form of torture. The subject of rape comprises more than the actual physical act as it involves many factors such as law and customs, social and political events and so on. While the physical reality of rape has been unchanged over time and place, the perceptions, ideas and laws about rape have changed (Smith, 2004). The definition of rape differs according to factors such as time and place; however rape is recognized as a crime that typically is committed by a man forcing another person to have sexual intercourse against their will, intercourse by force (Smith, 2004).

Ryff (1995) stated psychological well-being as "striving for perfection that represents the realisation of one's own true potential." Consequently, Verma, Mahajan and Verma (1989) termed well-being as subjective feelings of contentment, happiness, sense of achievement, utility, satisfaction with life experiences and one's role in the world or work, belongingness with no distress, discontent and worry. According to Shek (1997) and Sastre and Ferriere (2000) psychological well-being a subjective feeling of contentment, happiness, satisfaction with life's experiences and of one's role in the world of work, sense of achievement, utility, belongingness and no distress, dissatisfaction or worry etc. It emphasizes positive characteristics of growth and development

Psychological trauma refers to the impact of an extreme stressor critical incident on an individual's psychological and biological functioning. This process and its aftermath have been the subject of extensive scrutiny during the past five years (American Psychiatric Association, 1994; Beall, 1997; Danieli, 1998; Dean, 1997; Everly & Lating, 1995; Flannery, 1994, 1998; Pynoos, 1994; Roth & Friedman, 1998; Sommer & Williams, 1994; Tomb, 1994b; Van Der Kolk & McFarlane, 1996; Wilson & Raphael, 1993; Yehuda, 1998).

Peichl (2007) describes trauma as a toxic condition, a mixture of intense anxiety, absolute helplessness and loss of control. According to Levine (1997), the factor that determines whether an event could be classified as traumatic to the person is whether its impact remains unresolved. The importance of the perception of the real nature of an event by an individual is tantamount to ascertaining whether an experience was traumatic to a person. It is also the perception of the event that will determine the extent and nature of the impact it has on the person.

The present study was conducted in order to understand the negative effect of trauma on psychological well-being of rape survivors. It is important to recognize and focus on aspects of well-being and trauma that need to be specifically targeted in order to improve their overall mental health. It also emphasizes on the benefit of having a dualistic approach while dealing with rape survivors. It stresses that remedial strategies shouldn't just focus on resolving

trauma but also improving their well-being as they are significantly related to each other.

Objective

The aim of the present study was to examine the relationship between psychological well-being and trauma among rape survivors.

Hypothesis

There would be a significant relationship between psychological well-being and trauma among rape survivors.

METHOD

Sample

The data for the study was collected from 50 female rape survivors, residing in licensed home, using purposive sampling.

Tools

Ryff's Psychological Well-Being Scales (Ryff, 1989): *Ryff's Psychological Well-Being Scales* is a 42 item self-rating inventory that encompasses six areas of psychological well-being: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance. Subjects have to respond on a six-point format ranging from 1 = "strongly disagree" to 6 = "strongly agree". Responses to negatively scored items are reversed in the final scoring on the dimension assessed.

Trauma Symptom Inventory (Briere, 1996): The Trauma Symptom Inventory is a 100-item self-report measure of posttraumatic stress and other psychological sequel of traumatic events. Respondents are asked to rate how often each symptom has happened to them in the past six months. Items are rated on a 4-point frequency scale ranging from 0 (never) to 3 (often).

RESULTS

Correlation was used to assess the relationship between the dimensions of Trauma and psychological well-being. Initially the correlation was computed between total scores on Psychological Well-being and Trauma. The obtained value was -.108, which was not found to be statistically significant indicating that there is no relationship between the overall scores of trauma and psychological well-being among rape survivors. This may be due to a variety of reasons but the main one being that they have still not got over the trauma completely which maybe hampering any progress the individuals are making to lead a normal life. Even though there is no significant relation between psychological well-being and trauma, there still is a negative relation. This result accentuates how trauma can affect the way individuals lead their life and can obstruct them from attaining a progressive outlook towards their existence.

Table 1: Intercorrelations between the dimensions of Psychological Well-Being and Trauma among rape survivors.

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Autonomy	-											
2. Environmental Mastery	-.110	-										
3. Personal Growth	-.143	.160	-									
4. Positive Relations	.275	-.081	-.337*	-								
5. Purpose In Life	-.365**	-.083	-.227	-.122	-							
6. Self-Acceptance	.079	-.126	-.146	.171	-.388**	-						
7. Dissociation	.084	.172	-.033	-.148	.005	-.142	-					
8. Anxiety	.028	.318*	.070	-.012	-.134	-.158	.331*	-				
9. Depression	.189	-.289*	.018	.082	.052	-.034	-.457**	-.310*	-			
10. Sati	.037	-.212	-.119	.010	.050	-.287*	-.373**	-.275	.149	-		
11. Sleep Disturbance	.066	-.172	.099	-.066	-.233	.079	-.203	-.225	.037	.083	-	
12. Sexual Problems	.000	.102	-.142	.178	-.010	.049	.326*	.230	-.115	-.200	.055	-

*p < .05; **p < .01

Table 1 shows the relationship between dimensions of trauma and psychological well-being. It reveals that majority of the dimensions are negatively related and some positively, while some are not significantly related.

The analysis showed a negative association between the dimensions of depression and environmental mastery. Depression is one of the major outcomes of any traumatic event. The above result shows how working on mastering one's environment, rather than giving up, can significantly reduce depression.

The data also indicates that there is a significant relationship between Sexual abuse trauma index and self-acceptance. This is an important aspect of the study, it signifies in what manner accepting one's own self and the immediate situation can improve one's way of being. It emphasizes the importance of having faith and confidence in one's ability to cope, in reducing the traumatic experience in an individual's life.

Another significant relationship was seen between the dimensions of anxiety and environmental mastery. One of the major reasons for such results is that the survivors are more susceptible to flashbacks, nightmares and ruminating thoughts of not just the incident but also of everything that followed. This in turn affects their psychological well-being and is also responsible for their heightened sense of distress. Another factor might be that the individuals are away from home in a licensed home which might be having an adverse effect on their psyche.

However, other dimensions such as autonomy, positive relation, purpose in life and personal growth are not significantly correlated to any other dimensions of trauma. This may be because of the severity of trauma that they have gone through. Individuals take time to reconcile with the adverse effect of the incident which in a way colors how they think about their life and relations in general.

There is a strong association within most of the dimensions of trauma and psychological well-being which emphasizes on the reliability of the test.

CONCLUSION

The results show the relationship between dimensions of trauma and psychological well-being. It reveals that some of the dimensions are negatively related and some positively, while some are not significantly related. The result shows that negative relationship between the dimensions of depression and environmental mastery. It also indicates that there is a significant association between Sexual abuse trauma index and self-acceptance. Another substantial association was seen between the dimensions of anxiety and environmental mastery. However, other dimensions such as autonomy, positive relation, purpose in life and personal growth are not significantly correlated to any other dimensions of trauma. There is a strong association within most of the dimensions of trauma and psychological well-being.

Although there is no significant relationship between the overall score of psychological well-being and trauma, still it is relevant as it has a negative relationship which clearly shows how trauma can affect a person's overall well-being in an adverse way.

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ROLE OF OPTIMISM AND PERCEIVED CONTROL IN WELL-BEING OF WOMEN IN REPRODUCTIVE AGE

Anubhuti Dubey and Kirti Mishra***

ABSTRACT

The study examined the role of psychological resources i.e. optimism and personal control on different domains of well-being in women in their reproductive age. The study was carried out in Gorakhpur with women aged between 20-45 years, divided into fertile and infertile groups based on their fertility status. Data was taken from a large sample of 303 women using standardized scales. Correlation and stepwise multiple regression analysis were used to analyze the data. Findings revealed that optimism emerged as a best predictor of well-being in infertile group. However, in fertile group personal control significantly predicted women's well-being. Thus, it is evident that different psychological resources enhance the well-being of fertile and infertile women.

Keywords: Reproductive age, Happiness, Personal control, Optimism, Life satisfaction, Quality of life

Reproduction is a means of propagating life. Typically, pregnancy and childbirth are associated with positive emotions (Geller, 2004). People tend to believe that parenthood entails substantial social (companionship, intimacy, support), developmental (maturity and growth), and existential (expansion of self and opportunities to love, be loved, and feel useful and needed) benefits. Human beings want to have children not only for the joy of it but as a deep desire to continue their generation and leave a valuable memory of themselves (Ehsanpour et al, 2009). Parenthood is also culturally salient, because of social expectations towards parenthood in many societies.

* Professor, Department of Psychology, DDU Gorakhpur University, Gorakhpur (U.P.), India (Corresponding Author, Email: anubhutiddu@rediffmail.com)

** Ph.D., Department of Psychology, DDU Gorakhpur University, Gorakhpur (U.P.), India

Fertility is an object of household regulation and is responsive to the cost and incentives faced by households. People have their own ideas about the family size, the importance of the male child, and so forth. As these beliefs are rooted in religion, culture and tradition, there is also a deep attachment to them. Infertility is best understood as a socially constructed process whereby individuals come to define their ability to have children as a problem, to define the nature of that problem and to construct an appropriate course of action. In India with prevalence of infertility nearly 26%, the prevalence of primary infertility is about 2%. In Indian culture blame for absence of and desired number and sex of children is unquestioningly placed on the women and this becomes a threat to her status in society, leading to serious consequences such as husband's remarriage, divorce, emotional harassment and deprivation. Fertility mentions a sequence of stages of emotional reactions that are observed among infertile individuals over time.

Infertility creates a psychological burden. Throughout our lives, we face a series of challenges and problems. For some, these challenges stem from the stress of dealing with losses or life's transitions and for others these stresses stem from biological disorders which can lead to years of pain for the individual and the family. At such distressing circumstances the psychological resources help in coping with these problems and to maintain well-being.

Some of the psychological resources like, optimism (Scheier & Carver, 1985), future orientation (Agarwal, 2003; Dubey, 2008), personal control (Dubey, 2012), hope (Snyder, 2000), happiness (Diener, Suh, Lucas, & Smith 1999), resilience (Rutter, 2008), positive emotions (Dubey & Agarwal, 2007) had been extensively researched in psychology. Perceived control and optimism are key resources in the present study which were found significant in studies with cancer, diabetes, and heart patients (Dubey, 2003; Dubey & Sharma, 2006; Dubey & Agarwal, 2008).

Perceived control or Personal control refers to a person's self-assessment of control on a various aspect of life, the ways and means to acquire expected outcomes and to avoid unexpected ones. Person with generalized control belief use more problem focused coping than person with external control belief (Anderson, 1977), seemingly because individuals who have intense internal control belief are likely to believe that their own efforts will be effective in changing outcome of stressful situation. Furthermore, perceptions that the illness was controllable were significantly and positively associated with psychological wellbeing (Hagger & Orbell, 2003).

Optimists are people who expect good things to happen to them. They assumed that when a goal is of sufficient value, then the individual would produce expectancy about attaining that goal (Scheier & Carver, 1985). Martin Seligman (2002) has conceptualized optimism as an explanatory style. According to his perspective, optimistic people explain negative events or experiences by attributing

the cause of these to external transient specific factors such as the prevailing circumstances. A straightforward influence of optimism and pessimism is on how people feel when they encounter problems. When confronting difficulty, people's emotions range from enthusiasm and eagerness to anger, anxiety, and depression. The balance among feelings relates to differences in optimism. Optimists expect good outcomes, even when things are hard (Carver & Scheier, 2001). Optimistic participants were the least distressed after a disappointing event, further contradicting the idea that optimists are more vulnerable to disappointment than pessimists (Litt et al., 1992).

Diagnosis of infertility directly affects women's well-being. It creates lots of anger, depression and anxiety which reduce happiness, positivity and life satisfaction. Well-being is a complex construct that concerns optimal psychological functioning and experience. In part, this reflects the increasing awareness that just as positive affect is not the opposite of negative affect and well-being is not the absence of mental illness. General wellbeing is the subjective feelings of contentment, happiness, satisfaction with life's experiences and of one's role in the world of work, sense of achievement, utility, belongingness and no distress, satisfaction or worry. Positive and negative affects, happiness, life satisfaction and quality of life are major components of well-being which is considered in present study.

Positive affect consists of pleasant emotions or feelings such as joy and happiness. It results from commitment to and striving for positive of joviality (Cheerful, happy, lively) self assurance (Confident, strong, daring) and attentiveness (alert, determined, Concentrating). Negative affect consists of unpleasant feelings or emotions such as sadness and fear. It results from the preoccupation with baying to avoid negative incentives. Positive and negative affect represent spontaneous, ongoing emotional reactions to everyday experience. Life circumstances (education, income, etc.) seem to have relatively small effects on affective experience, unless these circumstances directly impact the person's immediate life situation (e.g., causing stress, conflict, or poor sleep) (Kahneman et al., 2004). Negative affective states have been associated with increased anxiety and depression in patient populations (Watson, Clark & Tellegen, 1988) and have been identified as a prospective risk factor for hypertension (Jonas & Lando, 2000). Leventhal, Hansell, and Diefenbach (1996) found that individuals with higher levels of negative affect were more likely to report subjective complaints, physical symptoms, and high levels of anxiety. Also, individuals with high negative affect have been reported as more likely to have a negative perception of their health and report greater numbers of physical complaints (Williams et al., 2002). Finally, research has shown that health problems can aggravate negative affect (Leventhal & Patrick-Miller, 2000) which in turn can reduce well-being.

Happiness is a pleasant emotional experience, the affective component of subjective well-being (Campbell, Comverse & Rodgers, 1976; Diener, 1984). Happiness is a positive feeling such as joy. Martin Seligman (2002) uses happiness and well-being interchangeably. According to him, happiness is both positive feelings (such as ecstasy and comfort) and positive activities that have no feeling component at all. The degree in which one experiences these feelings most of the time is one's level of enduring happiness. Personality studies of happiness show that happy and unhappy people have distinctive personality profiles (Diener, Lucas & Oishi, 2002). Happy people are extraverted, optimistic and have high self-esteem and an internal locus of control. In contrast, unhappy people tend to have a high level of neuroticism. Earlier researches related to happiness and health suggested that happiness works as a shield against health-related stress. Cohen, Doyle, Turner, Alper, and Skoner (2003) found that happiness was associated with less symptom reporting.

Life satisfaction is a global assessment of a person's quality of life according to his/her chosen criteria. Satisfaction with life is a cognitive judgmental process and one of the two components of subjective well-being; the other component is the emotional or affective component (Diener & Emmons, 1985). The judgment about the domains of life by the individual is dependent upon the comparison between the existing and the standards set by the individual. Different domains of life like family, marriage, education, occupation, health and so on, are important at one time or another but life satisfaction is not the evaluation of various segments of life one by one. Veenhoven (1984) also pointed out that some people may be happy with a particular domain of their life but unhappy with other or relatively satisfied with one and dissatisfied with other. Similarly, it is also possible that an individual might be satisfied with most of the domains of his life and shall be dissatisfied with life on the whole. That is why; life satisfaction is defined as a global evaluation by a person of his or her life (Diener & Emmons, 1985). When measured in a global framework, life satisfaction shows considerable stability over time (Heady & Wearing, 1989). Researches on the self-perception of health indicated that there is a strong association between life satisfaction and self-reported health. Inal and associates (2007) found that health-related behaviours like physical activities significantly and positively related to life satisfaction.

Quality of life is a multidimensional construct composed of functional, physical, emotional, social and spiritual well-being (Peterman et al 2002). Several definitions and models of quality of life have been postulated, defining quality of life as the 'goodness of life' (Zautra & Goodhart, 1979) or as including happiness, morale and life satisfaction (Okun, Olding & Cohn, 1990). WHO (World Health Organization, 1991) has defined "quality of life as 'individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns." This definition

also indicates that quality of life is a self-report assessment from the individual, which is not directly related to reports or judgments of others. Chronic illness may influence an individual's functional status, symptom perceptions, and health-related quality of life. (Hu & Meek, 2005) found in a study that health related quality of life is significantly predicted by negative emotions. Montazeri (2008) suggests that interventions programme in breast cancer patients have a positive effect to health related quality of life, despite the negative effects of the disease (Oshumi et al., 2009).

The aim of present study was to investigate the role of two psychological resources, i.e. optimism and perceived control in well-being of women in reproductive age. Past researches had shown that the problem of infertility not only affects the physical health but also the overall well-being. The quality of life of the infertile women is found to be poor than their normal counterparts. Earlier research reviews (Aliyeh & Laya, 2007; Andrews, Abbey & Halman, 1991) also showed the same trend among infertile women.

Hypotheses

- 1) Optimism and personal control will positively predict happiness in both fertile and infertile groups.
- 2) Optimism and personal control will positively predict positive affect and negatively predict negative affect in both groups.
- 3) Optimism and personal control will positively predict quality of life in fertile and infertile groups.
- 4) Optimism and personal control will positively predict satisfaction with life in both groups.

METHOD

Sample

The sample consisted of 303 women aged 20 to 45 years. Out of them 200 women had fertility related problems and 103 had children. The average years of marriage was 15 years and all of them belonged to middle social class, having at least high school pass certificate.

Tools

Each participant was asked to complete 6 questionnaires. These are as follows:

Life Orientation Test (LOT) (Optimism): Dispositional optimism was measured by using the life orientation test (LOT) developed by Scheier & Carver (1985). LOT is self report measure of nine items. In addition to these, there are four filler items. LOT assesses individual differences in global optimism defined in terms of generalized expectancies for positive versus negative outcomes. The scale has an internal reliability (Cronbach alpha) of 0.76 and test-retest reliability

of the Hindi version of the LOT was found to be high i.e. ($r = 0.70$) by Dubey (2003). Participants were asked to indicate degree of agreement with each item of the scale on a five point scale ranging from (1) strongly disagree (2) disagree (3) neutral (4) agree (5) strongly agree.

Personal Control Scale: This scale of personal control was developed by Agarwal, Dalal, Agarwal & Agarwal (1994). This measures patient's perceived controllability over their lives in general. The scale consist of 8 items dealing with patients perception of personal control over different domains, own health, mental peace, future events, financial security, fulfillment of goals, future peace and happiness. The items are rated on a five point scale ranging from (1) no control to (5) total control. The maximum score on this scale is 40 and the minimum is 8. The higher score denotes the greater degree of personal control. The coefficient alpha for this scale was found 0.78.

The Reversed Oxford Happiness Scale (OHI): The Oxford happiness inventory has been developed by Argyle, Martein and Crossland (1989). It was devised as a broad measure of personal happiness. Some of its properties were reviewed by Argyl, Martein and Lu (1995). The OHI comprises 29 items, each involving the selection of one of four options that are different for each item. Each item was presented in four incremental levels numbered 0 to 3. The OHI follows the design and format of the Beck depression inventory (BDI) (Beck, Ward, Mendelson, Hock & Erbaugh 1961). OHI demonstrated high scale reliability with value 0.92. The inter item co-relation for the OHI ranged from 0.03 to 0.58, means 0.28.

Positive Affectivity and Negative Affectivity Scale (PANAS): The PANAS was developed by Watson, Clark & Tellegen (1988). This scale has 20 items. Each item is rated on a 5 point scale ranging from (1) very slightly or not at all to (5) extremely, to indicate the extent to which the respondent has felt this way in the indicated time frame. This scale has been used to measure affect at this moment. The Cronbach's alpha coefficients for positive affect was 0.88 and for the negative affect it was 0.87. Test-retest co-relation for positive affect was 0.68 and 0.71 for negative effect.

Temporal Satisfaction with Life Scale (TSWLS): To assess overall satisfaction with life of the respondents this scale was developed by Pavot, Diener & Suh (1998). This scale consists of 15 items. Amongst them five items were related to past satisfaction, five to present satisfaction and five to future satisfaction. All the items of TSWLS were keyed in a positive direction. The items were scored on a seven point scale ranged from (1) strongly disagree to (7) strongly agree. All the items were positively keyed; therefore, scoring the TSWLS involves a summation of the 15 items. Scores on the scale could range from 15 to 105. Each sub-scale would have a response range of 5 to 35 and means of each of the sub-scale would be statistically comparable. The alpha reliability of

the test was found to be 0.92 and retest reliability (a 4 week interval) was 0.83 (Pavot, Diener & Suh, 1998). This Hindi version of the scale was developed by Dubey (2003) and was found significantly and positively correlated ($r = 0.79$) with that of original English version. The retest reliability of Hindi version, after an interval of eight weeks was 0.77. This scale was also co-related with short version of satisfaction with life scale and a coefficient of correlation of 0.74 was found.

WHO quality of life Scale (Brief): Quality of life was measured by WHO QOL – Brief. This questionnaire is the short version of the long scale WHOQOL-100. In order to assess the quality of life this questionnaire was developed by a team of researchers of world health organization namely Saxena, Chandirmani and Bhargawa (1998). The scale consists of 26 items related to four domains namely physical health, psychological health, social relationship and environment. A five point rating scale was used to seek responses on each item. In this scale, there were 2 items each, to assess overall quality of life and general health. Rest of the 24 items represents the 24 facets incorporated in large scale. The retest reliability of the scale was sought and found ($r = 0.79$) by Dubey (2003).

Procedure

The main purpose of this work was to find out the role of psychological resources on well-being of women. In order to fulfill the objective of the study, the researcher had made cordial atmosphere and explained the purpose of the research. The protocol has been given to women who had shown consent for the same and were requested to complete all 6 questionnaires. The data was collected individually and it took around 40-45 minutes with each of the participants. After completion of data collection the responses were analyzed with correlation and stepwise multiple regression analysis.

RESULTS

To find out the interplaying in variables under investigation i.e. psychological resources (Optimism and personal control) and different dimensions of well-being i.e. happiness, positive (PA) and negative affect (NA), quality of life (QWL) and satisfaction with life (SWL); correlation and stepwise multiple regression analysis was conducted, where optimism and personal control were used as independent (predictor) variables and happiness, positive and negative affect, quality of life and satisfaction with life were as dependent (criterion) variables.

Table 1: Coefficient of correlation between Psychological Resources and Well-being

Variables	Groups	PC	Optimism	Happiness	PA	NA	QOL	SWL
PC	IGFG	1	0.27**0.37**	0.23**0.51**	.22**-.39**	-0.10-0.33**	-0.010.33**	0.13*0.44**
Optimism	IGFG		1	0.53**0.51**	0.42**0.33**	-0.30**0.36	-0.080.10	-0.16*0.24*
Happiness	IGFG			1	0.42**0.23*	-0.60**0.72	-0.070.17	0.120.43**
PA	IGFG				1	-0.16*-0.02	-0.010.11	0.100.46**
NA	IGFG					1	0.02-0.00	0.02-0.25**
QOL	IGFG						1	0.100.07
SWL	IGFG							1

$p < .01$ **, $p < .05$ *

IG= Infertile group, FG= Fertile group

PC= Personal control, PA = Positive Affect, NA= Negative Affect, QOL=Quality of life,

SWL= Satisfaction with life

In Table 1 the coefficient of correlation between two psychological resources i.e. personal control and optimism and different dimensions of well-being is presented. In both infertile and fertile groups happiness was found to be positively correlated with personal control ($r=0.23, p<.01, r=0.51 p<.01$) and optimism ($r=0.53, p<.01, r=0.51, p<.01$) respectively.

Positive affect was also found to be positively correlated with personal control ($r =0.22, p<.01, r=0.39, p<.01$) as well as optimism ($r =0.42, p<.01, r=0.33, p<.01$) in both groups respectively. However, negative affect was negatively correlated only with personal control ($r =-0.33, p<.01$) in fertile group while in infertile group it was found negatively correlated with optimism ($r=-0.30, p<.01$).

In infertile group none of the psychological resources was found to be correlated with any aspect of quality of life. Nevertheless, in fertile group it was positively correlated with only personal control ($r=0.33, p<.01$).

In both groups personal control was positively correlated with satisfaction with life($r=0.13, p<.05, r=0.44, p<.01$) respectively. While optimism was negatively correlated with life satisfaction ($r=-0.16, p<.05$) in infertile group and in fertile group it was positively correlated with life satisfaction ($r=0.24, p<.01$).

Table 2: Psychological resources as predictor of Happiness

<i>Criterion – Happiness</i>						
<i>Infertile Group</i>						
Predictors	R	R ²	R ² Change	Beta	t	F
Optimism	0.52	0.27	0.279	0.52	8.74**	76.47**
<i>Fertile Group</i>						
Optimism	0.51	0.26	0.269	0.51	6.01**	37.2**
Personal Control	0.62	0.38	0.114	0.36	4.30**	25.87**

$p<.01$ **, $p<.05$ *

Table 2 showed that in infertile group optimism predicted happiness [F (df1, 199) =76.47, $P<.01$]. Optimism independently explained 27.9 % variance in the criterion variable. The beta value suggested that optimism has a positive contribution in the criterion variable. However, in fertile group both optimism and personal control together predicted 38.3% variance in the criterion variable, [F (df1, 102) = 37.20, $P <.01$] [F (df1, 49) = 25.87, $P < .01$]. Optimism independently predicted 26.9% variance followed by personal control which explained 11.4% variance in the criterion variable. The beta value showed that both of these variables have positive contribution in explaining happiness. It is clear from the table that optimism is significantly predicted happiness whether participants were fertile or infertile.

Table 3: Psychological resources as predictor of Positive Affect

<i>Criterion – Positive AffectInfertile Group</i>						
Predictors	R	R ²	R ² Change	Beta	t	F
Optimism	0.42	0.17	0.177	0.42	6.5**	42.67**
<i>Fertile Group</i>						
Personal Control	0.39	0.15	0.153	0.39	4.27**	18.26**
Optimism	0.44	0.19	0.04	0.21	2.23**	11.99**

p<.01 **, p<.05*

Table 3 revealed that in infertile group optimism predicted positive affect [F (df1, 199) =42.67 P<.01]. It contributed 17.7 % variance in the criterion variable. Beta value showed that optimism has positive contribution in criterion variable. In the same manner in fertile group personal control and optimism positively predicted positive affect [F (df1, 102) =18.26, P<.01], [F (df1, 102)=11.99, P<.01]. Personal control explained 15.3 % variance and optimism explained 4% variance in criterion variable. Beta value showed that both have positive contribution in explaining criterion variable.

Table 4: Psychological resources as a predictor of Negative Affect

<i>Criterion – Negative AffectInfertile Group</i>						
Predictors	R	R ²	R ² Change	Beta	t	F
Optimism	0.30	0.09	0.094	-0.30	-4.54**	20.63**
<i>Fertile Group</i>						
Optimism	0.51	0.26	0.226	-0.51	-4.12**	17.02**

p<.01 **, p<.05*

Table 4 clearly indicated that negative affect was negatively predicted by optimism in infertile group [F (df1, 199) =20.63, P<.01]. Optimism had shown 9 % variance in criterion variable. Similarly, in fertile Group also optimism negatively predicted negative affect [F (df1, 102) =17.02, P<.01]. Optimism accounted for 26.2 % variance in criterion variable. Both of these significant regression showed that participants with high degree of optimism reported less negative affect.

Table 5: Psychological resources as a predictor of Quality of life

<i>Criterion – Quality of life</i>						
<i>Fertile Group</i>						
Predictors	R	R ²	R ² Change	Beta	t	F
Personal Control	0.32	0.10	0.106	0.32	3.46**	11.99**

p<.01**, p<.05*

Looking at the table 5 it is clear that quality of life was significantly and positively predicted by personal control [F (df:1, 102) =11.99, P<.01] in fertile group. Personal control has predicted 10.6% variance in criterion variable. The Beta value suggested that Personal control had made positive contribution in quality of life. However in infertile group none of the psychological resource had emerged as significant predictor of quality of life.

Table 6: Psychological resources as a predictor of Satisfaction with life

<i>Criterion – Satisfaction with</i>						
<i>LifeInfertile Group</i>						
Predictors	R	R ²	R ² Change	Beta	t	F
Optimism	0.15	0.02	0.025	0.15	2.27**	5.13**
<i>Fertile Group</i>						
Personal Control	0.43	0.19	0.191	0.43	4.87**	23.73**

p<.01**, p<.05*

Table 6 presented that life satisfaction was predicted by optimism in infertile group [F (df1, 199) =5.13, P<.01] and in fertile group it was predicted by personal control [F (df1, 102) =23.73, P<.01]. Optimism contributed 2.5% variance in infertile group however personal control found to be best predictor which explained 19.1% variance in fertile group. The Beta value reported positive contribution of optimism and personal control in explaining criterion variable in both groups.

DISCUSSION

Infertility brought many changes in different aspects of life of women. Infertility can have a serious effect on both the psychological well-being and the social status of women in the developing world .Childlessness creates a lot of trouble which affect overall well-being (Jeffries & Konnert, 2002). Psychological resources like optimism and perceived control are the concepts of positive psychology and these concepts positively influence well being (Argyle, 2001; Diener, 2000; Dubey, 2012; Dubey & Agarwal, 2004). Therefore, the present study was conducted to examine the role of optimism and personal control on well being of infertile and fertile women.

Psychological Resources and Happiness

Happiness is a positive emotional state that is subjectively defined by individuals (Diener, Lucas, & Oishi, 2002). Findings suggested that happiness is positively predicted by optimism in infertile group. An optimistic woman deals with her problem positively and tries to overcome from it actively, which positively influences well being. Research showed that optimistic people were with plans and appraised stresses in terms of potential growth and tension reduction (Carver & Scheier, 1999) which enhance positive emotion in them. Scheier and Carver (1985) have conceptualized optimism as a person's positive expectations for the future. Their view point includes elements of the expectancy-value model of motivation (Carver & Scheier, 2001, 2002). The general idea is that people are affected by their beliefs about the probable outcomes of their actions (Scheier et al., 1989). Due to general expectancy people organize their behavior towards goals they see as valuable or desirable. Optimistic infertile women actively look for the treatment and tried to come out of it. In a study Carver & Scheier (2000) found that optimistic tend to use the approach oriented coping strategies of positive reforming and seeing the best in the situation. High level of optimism was related to lower level of distress. These findings confirmed that optimism increases happiness. Optimistic infertile women perceived no control on their childlessness, so they have a hope to gain pleasure of motherhood in future and this ' may increase their happiness (Abbey, Andrews & Halman, 1992). Optimism involved perception about being able to move towards desirable goals or to move away from undesirable goals (Carver & Scheier, 1999). So an optimistic woman with infertility perceived it positively and tried to overcome it.

In fertile group optimism and perceived control were the best predictors of happiness. The possible reason of their happiness may be their belief that things are under their control. They were enjoying motherhood which itself is a reason of happiness. Fertile women may be happy because they have an optimistic attitude and they believe that any illness or losses can be under control. Overall, perception of control is positively related with happiness. By definition *Perceived control* refers to people's interpretations of their control experiences. People can maintain high expectations of control in the face of low objective conditions and a history of failure, just as they can interpret hard won success on difficult tasks as due to luck or other factors outside their control. This perception of control increases happiness. The findings of Hagger and Orbell (2003) support it, which revealed that the perception of control in either illness or other aspects of life were controllable, significantly and positively associated with psychological well being (happiness) and negatively related to psychological distress. Perceived ability to change the situation and control influences both behavior and physical and mental well being.

Psychological Resources and Positive and Negative Affect

Positive and negative affect represent spontaneous, ongoing emotional reactions to everyday experiences. It was reported that optimistic females have felt positive emotions in infertile group. Optimism makes people to think positively. In present finding optimistic females perceived their infertility as a disease and tried to triumph over it. Their optimistic view was helping them to reduce psychological distress generated from infertility. Optimism buffered psychological stress and enhances positivity and it also has diminishing stress effect of susceptible health outcomes (Cohen et al., 1999, Cruess et al., 2000; Creswell et al., 2005).

Analysis showed that in infertile group optimism negatively predicted negative affect, which supports that infertile optimistic woman have positive emotions. Litt and associates (1992) found that the optimistic infertile who have gone through IVF (in vitro fertilization) felt least psychological distress and showed positive emotions. In the present findings also infertile females showed more positive and less negative emotions. It suggests that while having a social and psychological burden of infertility, optimism helped the women to buffer the stress and generate positive emotions in their life. It can be understood through neurobiology of optimistic goal directed behavior (Snyder, 2000). Goal directed behavior is governed by two antagonistic control centers within the central nervous system (One is behavioral activation system (BAS) and other is behavioral inhibition system (BIS)). BAS system is responsive to reward or reinforcement. It is a 'go' system and is responsible for optimistic behavior and sub served by mesolimbic and mesocortical dopamine pathways (Pickering & Gray, 1999). It is clear that optimistic people deals with BAS and that is why they reappraised the loss in positive terms (Nolen- Hoeksema, 2000)

Fertile group also showed positive affect and absence of negative effect. Positive affect was predicted by personal control and optimism while negative affect was predicted by only optimism. The women who have perceived control on situations felt joy and happiness may be because of the sense that they can control their surroundings and situations. Previous studies also support that individual who maintained a higher perception of control, tend to have fewer health problems, better memories, higher intellectual functioning and good well being (Rodin, Timko & Harris, 1985). Findings also report that optimistic women have less negative emotions. They appraised their situations with the feeling that everything will be alright. Optimistic expect good outcomes even when things are hard. This yields a positive feeling and reduced negative emotions. (Carver & Scheier, 2001, 2002; Scheier & Carver, 1989).

Psychological Resources and Quality of Life

At the individual level QOL focuses on the perceptions of their living conditions. These perceptions such as satisfaction with health and satisfaction

with material well-being constitute the subjective dimension of QOL (Cummins, 1997a). It came in to light in analysis that women with children have better quality of life in comparison to childless women. A woman who perceives control over their health and other aspects of life feels better quality of life. In present study fertile women were happy with their life because they were showing control over it and this perception was enhancing their quality of life. Some studies reported that perception of control plays motivational role in maintaining well-being (quality of life) (Heckhausen & Schulz, 1995). Personal control strategies enhance people's self-esteem and emotional well-being, and enhance their commitment to a chosen goal (Heckhausen & Lang, 1996).

Psychological Resources and Satisfaction with Life

Life satisfaction is the cognitive dimension of subjective well-being (Lucas, Diener, & Suh, 1996). It was found in present study that both groups have satisfaction with their life. Infertile group expressed life satisfaction which was predicted by perceived control. The reason of their satisfaction may be their positive attitude towards life and personal control over infertility which supports them to be hopeful for the future. They think that they will be able to have child in their future because they have control on treatment process. They reported that they were under treatment of infertility which gives them the feeling of control on childlessness situation. Lazarus and Folkman's (1984) theory of stress and coping posits that adjustment to stressful experiences (e.g. infertility) is determined by the interaction of situational variables, cognitions (e.g. controllability) and the selection of effective coping. This approach gives them satisfaction with life.

Studies comparing non-infertile to fertile women have found that generally infertility has a negative effect on subjective well being and global life satisfaction (Abbey et al., 1991, 1992, Bromham, Bryce & Balmer, 1989) but infertility also has different implication for life satisfaction. Abbey et al., (1991) found that perceived control over infertility improved life satisfaction. They also found that those with greater internal locus of control enjoy higher levels of well-being

Festinger's (1954) social comparison theory also supported this finding in which individual compare them to other when objective standard are lacking. In a downward comparison an individual compare themselves to people known to the inferior to self downward comparison are utilized when an individual's well being is threatened, such as when experiencing severe health problem like infertility. These types of comparison provide motivational resources required for subjective well being.

Infertile women were satisfied may be because of hedonic treadmill. In this process individual who experience diminished subjective well being (life satisfaction) due to stressful life event gradually return to their base line (Kahneman, 1999).

In fertile group life satisfaction was predicted by personal control. They were satisfied with their present because they were enjoying happiness in life specially the birth of a baby. Having satisfaction with their present and past they were positive and hopeful for future. They showed this satisfaction due to locus of control. Abbey et. al. (1991) found that person with greater internal locus of control enjoy high level of well being. Subjective feeling of internal locus of control is related to happiness and life satisfaction. Achieving parental status enhances global life quality among women (Abbey et al.,1994a).

CONCLUSION

It can be concluded that optimism was an important psychological resource which came out as a significant predictor of happiness, positive and negative affect in infertile group while personal control emerged as best predictor of well-being in fertile group. Optimism is a construct which boosted emotional well-being. It is not affected by fertility or infertility status. If a woman is optimistic they would be happy even in adverse situation of infertility. Empirical evidences also showed that optimism predicts better performance, adjustments and family life (Gillham, 2000; Dubey 2003). In present study infertile women perceiving control only for treatment level but they still believe that outcome is in hand of destiny, however fertile group is perceiving control on different domains of life. So, infertile group did not perceive so much control on their lives. Researchers showed that personal control works as key psychological resources which positively influence well-being (Dubey, 2003).

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EMOTIONAL INTELLIGENCE AND PSYCHOLOGICAL WELL BEING AMONG THE HIGHER SECONDARY SCHOOL STUDENTS

Vigneshvaran. K* and Dr. Krishna. K.V**

ABSTRACT

Aim: To examine the association of Emotional Intelligence (EI) and Psychological Well Being (PWB) among school students. **Objectives:** To assess the level of Emotional Intelligence and Psychological Well Being of the school students, to find out the association between EI and PWB among the school students. **Method:** A sample of 110 students (both male and female) who are studying 11th and 12th standard from a selected Government Higher Secondary School, who hails from Madurai rural area (Allanganallur Panchayat) have been selected randomly by using simple random sampling technique for the study. Descriptive Research Design was used in this study. **Tools:** A semi-structured interview schedule was prepared to profile the socio-demographic factors of the H.Sc students. The 30 items Emotional intelligence scale by Petrides, K.V & Furnham A (2006) with four dimensions namely Well-being, Self-control, Emotionality and Sociability along with the Total EI score was administered to the students and Psychological wellbeing scale by Ryff which consisted of 42 items distributed in 6 dimensions namely Autonomy, Environmental Mastery, Personal Growth, Positive Relation with Others, Purposive Life, Self Acceptance and Total Psychological Well Being. **Results:** There is a positive and significant association between the sub-dimensions of EI and PWB ('r' = 0.72 p<.05). Further Female H.Sc students have more EI and PWB when compared to Male students ('t' value = 7.92 p<.01). Other Sociodemographic variables were associated with EI & PWB and the results are presented in the study. The authors have suggested various Psycho-Social methods to improve the level of EI and PWB for the students and the Role of Teachers & Parents at length in this paper.

Keywords: Emotional Intelligence, Psychological Well Being, and Higher Secondary School students.

* Research Scholar, Department of Psychology, Bharathiar University

** Assistant Professor, Department of Psychology, Bharathiar University

EMOTIONAL INTELLIGENCE

Emotional intelligence (EI) is believed to have more importance than intelligence quotient (Goleman, 1998). Many researchers have tried to explain positive relationship between EI and competency (Cherniss, 2000). Few common and meaningful definitions of EI are: Goleman (1995) defines the Emotional Intelligence (EI) as the ability to identify, regulate, and manage emotions in the self and in others. Further, Salovey and Mayer (1990) has indicated EI as a type of social intelligence and is said to be important in observing and comprehending one's own emotions as well as of others'. Thus EI can be used to direct our thinking and behaviour. It is the capacity of an individual to evaluate verbal and nonverbal aspects of emotions, to regulate emotion in self and others and to utilize the emotional content in problem-solving (Mayer & Salovey, 1993). EI is essential in adolescence age period, especially as it plays a significant role in school achievement and social functioning, similarly, adolescents with high EI were found to have a low level of internal and external behavioural problems (Verðekienė & Pukinskaitė 2009). Moreover, students with high level of EI are proved to have less amount of perceived stress, higher levels of life satisfaction, happiness and wellbeing (RuizAranda, Extremera& Pineda-Galán, 2014).

Psychological Wellbeing

Wellbeing is another important factor in predicting the quality of life of students (Malkoc, 2011). The term wellbeing is equated with the subjective feeling of contentment, happiness, satisfaction with life's experience sense of achievement, utility belongingness and no distress, dissatisfaction or worry etc. (Pavot & Diener, 2003) and is classified into physical, social and psychological well-being. All the three are equally important and among them, psychological wellbeing is important in better functioning (Carmeli, Halvey& Weisberg, 2009). According to Salami (2010), psychological well-being is an outcome of satisfaction with one's physical health and oneself as a person and with one's close interpersonal relationships.

Mehmood and Gulzar (2014) have studied the link between EI and psychological well-being among adolescents and concluded that emotionally intelligent people have less amount of depression and EI is positively related to improved self-esteem and wellbeing. Thus, emotional intelligence is found to play an important role in the psychological well-being of an individual (Salovey and Mayer 1990; Rathnakara, 2014).

In India, there are very few studies to analyse the significance of EI and psychological well-being among students and to see how their relationship is important in better achievement (Shaheen&Shanheen, 2016). Thus it was felt that it would be fruitful to assess the level of Emotional Intelligence and Psychological Well Being of the school students and to study the association between Emotional Intelligence and Psychological Well Being among the school students.

Objectives

- To study the selected socio-economic Conditions of Higher secondary students.
- To assess the level of Emotional Intelligence and Psychological Well Being of the school students and,
- To study the association between EI and PWB among the school students.

METHOD**Design**

A descriptive Research Design was adopted as the authors made an attempt to measure and compare the level of Emotional Intelligence and Psychological Well Being among Higher Secondary Students.

Hypotheses

After carefully reviewing the relevant literature in this area the following research hypotheses have been formulated.

- H₁: Higher the level of Emotional Intelligence higher will be the level of Psychological Well Being for Higher Secondary Students.
- H₂: Female Higher Secondary Students have a higher level of Emotional Intelligence and Psychological Well Being than Male Higher Secondary Students.
- H₃: Higher Secondary Students from Science Group have a higher level of Emotional Intelligence and Psychological Well Being than the Higher Secondary Students from Commerce group.

Population

All the Male and Female Higher Secondary Students studying in 11th and 12th standards, who are hailing from Allanganallur Panchayat, in Madurai District constituted the population.

Motivational Programme

The authors provided two days motivational programme to the Higher Secondary School students, on various topics like, Understanding Personality, Study habits, Common Psychological Problems of Higher Secondary School students, Exam fear, memory, problems in Sleep, type of Food to be consumed at the time of Examinations etc., There were eight sessions and in each session more relevant details were provided. Apart from these eight sessions, one session was allotted for collecting the information from them.

Sample

Out of Three Government Higher Secondary Students available at Allanganallur Panchayat, a rural area from Madurai District, only one school has

given permission to conduct the Motivational Programme. Simple random sampling technique was used for the study as the authors did not know who would provide all the information for the tools and who would participate with full enthusiasm. A total of 118 Higher Secondary Students (Male: 57, Female: 61) who have satisfied the Inclusion and Exclusion conditions were attending the programme. At the End of the sessions, only 110 Higher Secondary Students (Male: 51 Female 59) have given data for all the tools and this constitutes the Samples.

Inclusion Criteria

- Both Male & Female students.
- Who has participated in the Motivational Programme
- The school which has given permission to conduct a Motivational Programme for the students.

Exclusion Criteria

- Those who are not willing to cooperate for the study.
- Students from Vocational Group.

Tools

A *semi-structured interview schedule* was prepared to profile the socio-demographic details of Higher Secondary Students.

Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF) – Petrides and Furnhan (2006) was administered to understand and measure the level of Emotional Intelligence. This is a standard scale which has 30 items with Four dimensions namely Well-being, Self-control, Emotionality and Sociability. This scale has High reliability (0.87) and validity (0.933). The author has recommended that higher the score higher will be the Emotional Intelligence.

Psychological well Being the Ryff's Psychological Well-Being Scale (PWB). This scale has different versions and for the present study, the 42 items version selected. This scale has 6 dimensions namely Autonomy, Environmental Mastery, Personal Growth, Positive Relation with Others, Purposive Life, Self Acceptance and Total Psychological Well Being. This scale has also had high reliability (0.811) and validity (0.901). The author suggested that higher the score higher will be the Psychological Well Being.

RESULTS

On the basis os the semi structured schedule the demographic profile of the sample was obtained which was as follows:

- Majority of the students are from Hindu Religion.
- From Nuclear Families.
- The education level of Fathers is High School.
- Mothers are not educated and have gone to schools.

- Living in tiled houses.
- The average size of the family is 6.
- Average monthly income is Rs 4000/-
- From Lower Social status (Most Back Ward)

For analysis of data, initially correlations were computed between factors of emotional intelligence and psychological wellbeing

Table 1: Association between dimensions of Emotional intelligence and total score on Psychological wellbeing

<i>S.No</i>	<i>Dimensions of EI</i>	<i>Total PWB</i>	<i>Significance</i>
1	Well-being	0.689	p<0.05
2	Self-control	0.701	p<0.05
3	Emotionality	0.619	p<0.05
4	Sociability	0.671	p<0.05
	Total E. I Score	0.723	p<0.05

Pearson's Correlation clearly indicate that there exists a positive and significant association between the level of EI and the level of PWB ($r= 0.723$ p<.05 Significant). This means when the scores on EI increases then the scores for the PWB will also significantly increase. The same trend has been observed for the sub-dimensions of EI and the P W B. Thus the formulated Hypothesis have been verified.

Table 2: Association between the sub-dimensions of Emotional intelligence and Psychological wellbeing

	Dimensions of E I		Dimensions of Psychological Well Being (PWB)					TOTAL PWB
	PWB1	PWB2	PWB3	PWB4	PWB5	PWB6		
Well-being	0.67	0.61	0.58	0.60	0.71	0.72	0.689	
Self-control	0.59	0.64	0.63	0.64	0.64	0.65	0.701	
Emotionality	0.61	0.63	0.37	0.68	0.68	0.61	0.619	
Sociability	0.68	0.70	0.68	0.70	0.63	0.64	0.671	
Total EI Score	0.66	0.69	0.71	0.74	0.65	0.67	0.723	

All the correlation values are significant at 0.05 level (p<.05)

An attempt has been made to find out the association between the level of all the sub-dimensions of Emotional Intelligence and the level of all the sub-dimensions of Psychological Well Being by using Pearson's r test. It has been found that there exists a positive and statistically significant association between all the sub-dimensions of both the constructs. Which indicate that when the level of Emotional Intelligence increases the level of Psychological Well Being will also increase for the Higher Secondary School students.

Table 3: Mean differences for demographic groups on the two constructs

S.No	Construct	Demographic Groups Factor	N	Mean	S.D	.t' Values	Stat. Result	
1	Emotional Intelligence	Sex	Male	51	60.27	6.5	11.91	p<0.05
			Female	59	75.94	7.3		
		Group	Science	60	78.21	9.1	9.61	p<0.05
			Commerce	50	62.35	8.2		
2	Psychological wellbeing	Sex	Male	51	61.05	5.7	13.66	p<0.05
			Female	59	76.81	6.4		
		Group	Science	60	79.73	7.3	12.40	p<0.05
			Commerce	50	61.34	8.1		

Further, an attempt has been made to verify whether or not the selected socio-demographic variables like Gender and the Group of Study have any influence over the constructs namely Emotional Intelligence and Psychological Well Being. To find out the significant mean differences the Independent sample 't' tests were employed and the results are presented.

While comparing the level of Emotional Intelligence for Male & Female students, it has been found that Female students have more level of E I (75.94) when compared to Male students (60.27). This observed difference was statistically significant as the 't' value is significant at 0.05 level ('t' value = 11.91, p<.05). Thus the formulated hypothesis was verified.

Further while comparing the mean level of EI for the students from the different study group, it has been found that Science students have more level of E I (78.21) when compared to Commerce (62.35). This observed difference was statistically significant as the 't' value is significant at 0.05 level ('t' value = 9.61, p<.05). Thus the formulated hypothesis was verified.

While comparing the level of Psychological Well Being for Male and Female students, it has been found that Male students have less level of Psychological Well Being (61.05 %) when compared to Female students (76.81). This observed difference was statistically significant as the 't' value is significant at 0.05 level ('t' value = 13.66, p<.05). Thus the formulated hypothesis was verified.

Further while comparing the mean level of Psychological Well Being for the students from the different study group, it has been found that Commerce students have less level of Psychological Well Being (61.34) when compared to Science students (79.73). This observed difference was statistically significant as the 't' value is significant at 0.05 level ('t' value = 12.40, p<.05). Thus the formulated hypothesis was verified.

Table 4: Mean differences for Education of the Fathers and Subject Variables

Group	Education of Father	n	Emotional Intelligence (EI)		Psychological well-being (PWB)	
			Mean %	S.D	Mean %	S.D
Gp. 1	Illiterate	39	42.66	6.7	44.32	5.4
Gp. 2	Up to High School	47	54.84	8.1	57.65	7.6
Gp. 3	Above High School	24	67.58	7.4	69.99	8.1
	Total	110	68.28	6.7	70.54	7.2
	Statistical Result F- Ratios & Level of Significance		9.14 p<.001 Sig		12.21 p<.001 Sig	
	Post – Hoc Results		Gp 1 Vs 2 3 Gp 2 Vs 3		Gp 1 Vs 2 3 Gp 2 Vs 3	

The table explains the mean differences between the different education level of the father' and their wards Emotional Intelligence and Psychological Well Being. It has been found that the wards of the Illiterate fathers have scored less in Emotional Intelligence as well as in Psychological Well Being. It could be concluded that the Emotional Intelligence and Psychological Well Being is low for the wards who have Illiterate fathers. These observed differences are statistically significant as the F- Ratios are significant at 0.001 levels. Further, the Post-Hoc tests show the differences between the various sub groups of education of the Fathers.

Table 5: Mean differences for Monthly Income of the Family and Subject Variables

Group	Education of Father	n	Emotional Intelligence (EI)		Psychological well-being (PWB)	
			Mean %	S.D	Mean %	S.D
Gp. 1	Below 2500	29	40.01	7.6	42.21	6.5
Gp. 2	2501 to 5000	62	56.48	9.2	60.57	8.7
Gp. 3	Above 5001	19	69.42	8.5	68.42	9.2
	Total	110	68.28	6.7	70.54	7.2
	Statistical Result F- Ratios & Level of Significance		8.99 p<.001 Sig		10.87 p<.001 Sig	
	Post – Hoc Results		Gp 1 Vs 2 3Gp 2 Vs 3		Gp 1 Vs 2 3Gp 2 Vs 3	

The table 5 explains the mean differences between the different monthly income of the families and wards' Emotional Intelligence and Psychological Well Being. It has been found that the wards whose family monthly income is below Rs 2500/- have scored less in Emotional Intelligence as well as in Psychological Well Being. It could be concluded that the Emotional Intelligence and Psychological Well Being is low for the wards' whose family monthly income is below Rs 2500/

-. These observed differences are statistically significant as the F- Ratios are significant at 0.001 levels. Further, the post-hoc tests show the differences between the various subgroups of the monthly income of the families.

Findings

Results based on the demographic profile it was observed that majority of the students are from Hindu Religion, were from Nuclear Families. The education level of Fathers is High School while mothers are not educated and have not gone to schools. Majority of them lived in tiled houses, the average size of the family is 6, average monthly income is Rs 4000/ and they were from Lower Social status (Most Back Ward).

Pearson's Correlation clearly indicate that there exists a Positive and Significant association between the level of E I and the level of P W B ($r= 0.723$ $p<.05$ Significant). A positive and statistically significant association was observed between all the sub-dimensions of Emotional Intelligence as well as the Psychological well Being. Female students had significantly more level of E I (75.94) when compared to Male students (60.27). Further, Science students have significantly more level of E I (78.21) when compared to Commerce (62.35). Male students have significantly less level of Psychological Well Being (61.05 %) when compared to Female students (76.81). Further, Commerce students have significantly less level of Psychological Well Being (61.34) when compared to Science students (79.73). The Emotional Intelligence and Psychological Well Being was significantly low for the wards' who have Illiterate fathers and scores on both the variables were significantly low for the wards whose family monthly income is below Rs 2500/-.

Thus, it can be concluded that Female students have more Emotional Intelligence as well as Psychological Well Being when compared to Male students. Further Commerce students have less Emotional Intelligence as well as Psychological Well Being when compared to Science students.

Implications

- This study about Emotional Intelligence and Psychological Well Being among Higher Secondary School Students is more helpful in the field of Psychology, to help such students to overcome their Psycho Social and Emotional Problems.
- The findings from this research can be used as a preventive measure to educate the Teachers & Parents to focus more on the Overall General Well Being among Higher Secondary School Students.
- This study is also supportive and useful in the field of Psychology, to enable them to develop various soft skills.

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THE STUDY OF DEPRESSION AND MENTAL HEALTH AMONG OLD AGE PEOPLE

Akshaya, I.* and K.V. Krishna**

ABSTRACT

Old age refers to ages nearing or surpassing the life expectancy of human beings, and is thus the end of the human life cycle. Old people often have limited regenerative abilities and are more prone to physical and mental diseases than younger adults. Depression is the commonest geriatric disorder. The WHO also emphasizes that depression, which is the fourth most common illness, can lead to physical, emotional, social and economic problems. Mental health is a state of emotional and psychological well-being in which an individual is able to use his or her cognitive and emotional capabilities, function in society and meet the ordinary demands of everyday life. The present study examines depression and mental health among old age people in Kozhikode District, Kerala. The Beck Depression Inventory - 21 developed by Beck and Mental Health Questionnaire developed by Daniel in was used in the present study. Based on the statistical analysis the results are discussed and conclusions are arrived at.

Keywords: Depression, Mental Health, Old age people, Kerala

Old age, also called senescence, in human beings, is the final stage of the normal life span. For statistical and public administrative purposes, however, old age is frequently defined as 60 or 65 years of age or older. Old age is often portrayed as a time of rest, reflection and opportunities to do things that were put off while raising families and pursuing careers. Unfortunately, the aging process is not always so idyllic. Late-life events such as chronic and debilitating medical disorders, loss of friends and loved ones and the inability to take part in

* Research Scholar, Department of Psychology, Bharathiar University, Coimbatore, 641 046, email: akshayakumar304@gmail.com

** Asst. Professor, Department of Psychology, Bharathiar University, Coimbatore, 641 046, email :kvkrishna007@gmail.com

once-cherished activities can take a heavy toll on an aging person's emotional well-being. An older adult may also sense a loss of control over his or her life due to failing eyesight, hearing loss and other physical changes, as well as external pressures such as limited financial resources. These and other issues often give rise to negative emotions such as sadness, anxiety, loneliness and lowered self-esteem, which in turn lead to social withdrawal and apathy.

Depression is the most common geriatric disorder. The WHO also emphasizes that depression, which is the fourth most common illness can lead to physical, emotional, social and economic problems. Chronic depression has both physical and mental consequences that may complicate an older adult's existing health condition and trigger new concerns.

Mental health is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community. Mental health is an expression of emotions and signifies a successful adaptation to a range of demands. The importance of maintaining a good mental health is crucial to living a long and healthy life. Mental health refers to a person's health of the mind.

A study was conducted by Hom Nath Chalise in Asian College for Advance Studies, Purbanchal University, Satdobato, Lalitpur, Nepal on Depression among elderly living in Briddashram (old age home). The purpose of this study was to assess the prevalence of depression and its correlates among the elderly living in Briddashram. This was a cross-sectional study carried out in Devghat, which is one of the holiest places in the Nepal for Hindus. Data were collected by face-to-face interview using short version of Geriatric Depression Scale. The subjects (N=185) were elderly aged 60 years and above. The mean age of the subjects was 73.67 years old. This study shows mean functional disability score was 2.53. Finding showed that the prevalence of depression was 57.8%. Among them 46.7% had mild, 8.9% had moderate and 2.2% had severe depression. A statistically significant correlation was found between feelings of depression and age, sex, previous family type, ethnicity, feeling of loneliness and instrumental activities of daily living. The study indicates that many elderly living in the Briddashram are suffering from depression.

In 2009, Singh and Misra conducted a study on the relationship among depression, loneliness and sociability in elderly people. The study attempted to investigate the relationships among depression, loneliness and sociability in elderly persons in the age group of 60-80 years. This study was carried out on 55 elderly people (both men and women) of a Delhi-based region residing in the housing societies. The tools use was Beck Depression Inventory, UCLA Loneliness Scale and Sociability Scale by Eysenck. Results revealed a significant relationship between depression and loneliness. Most of the elderly people were found to be average

on the dimension of sociability and preferred remaining engaged in social interactions.

A study was conducted by Dhara and Yogesh (2013) on Depression and Psychological Well-being in Old Age. The main purpose of this research was to find out the mean difference between adult and aged in depression and psychological well-being. The total 60 sample were taken out which 30 were adult (20 to 59 years) male and female and 30 were aged (60 years and above) male and female. The research tool for depression, Beck depression inventory was used. Here Gujarati adaption used. For psychological well-being, Sudha Bhogle's Psychological well-being scale was used, translated in Gujarati and the t-test was applied to check the difference of depression and psychological well-being and Pearson 'r' method used to check the correlation. Result reveals that significant difference in depression and psychological well-being with respect to both adult and aged while co-relation between depression and psychological well-being reveals -0.70 negative correlation.

In 2012, Tiwari, Pandey and Singh conducted a study on Mental health problems among inhabitants of Old age homes. The aim of the research to study mental health and associated morbidities among inhabitants of old age homes. It was an exploratory study in which information about available old age homes at Lucknow were obtained and three of them were randomly selected. All the heads of these institutions were contacted and permission to carry out the study was obtained. Consent from the participants was obtained. Survey Psychiatric Assessment Schedule (SPAS), Mini Mental State Examination (MMSE), Mood Disorder Questionnaire (MDQ), and SCAN-based clinical interviews were applied for assessment by a trained research staff. Results revealed that Forty five elderly inhabitants who had given their consent to participate in the study were interviewed. Depression (37.7%) was found to be the most common mental health problem followed by anxiety disorders (13.3%) and dementia (11.1%).

The above reviewed studies clearly show that the elderly population is vulnerable and suffer from various mental health problems.

Hypotheses

- There is a significant difference between the old age male and female on their depression levels
- There is significant difference between the mental health status of old age male and female
- There is relationship between depression and mental health among old age people

METHOD

Sample

The sample for the study was selected on the purposive sampling. Old age people from rural background were taken for study. The sample consisted of 50 old age people with 25 males and females .

Tools

Mental Health Questionnaire: A 29item MHQ is developed by Daniel in 1997 was used. Among the 29 items, 11 items were positively loaded items and 18 negatively loaded. Total score rangd from 0-29. A higher score indicates higher mental health.

The Beck Depression Inventory (BDI) is a 21-item self-report scale measuring supposed manifestations of depression. The internal consistency for the BDI ranges from 0.73 to 0.92, with a mean of 0.86. The BDI demonstrates high internal consistency, with alpha coefficients of 0.86 and 0.81 for psychiatric and nonpsychiatric populations, respectively. The scale has a split-half reliability coefficient of 0.93

RESULTS AND DISCUSSION

The data was analyzed by applyind t- test and Pearson correlation to assess the difference in the mental health and depression between the males and females and to find out the relationship between the variables. Table 1 show the results of descriptive statistics of old age male and female in mental health and level of depression.

Table 1: Significance of difference between elderly male and female respondents on depression and mental health scores

	<i>Gender</i>	<i>N</i>	<i>Mean</i>	<i>S.D</i>	<i>t</i>	<i>df</i>	<i>Sig. (2-tailed)</i>
Depression	Male	25	14.92	7.994	1.227	48	.226
	Female	25	12.32	6.951			
Mental Health	Male	25	14.80	8.052	2.208	48	.032
	Female	25	19.80	7.963			

The t value indicates that there is no significant difference between mental health and depression between male and female old age people. The t value (1.227) of depression indicates no significant differences exist between males and females of old group. The data shows a high level of depression is found in old age male person with a mean value of 14.92 and the lower value of depression is found in old age females with a mean value of 12.32.

The t value (2.208) of mental health indicates a significant difference exists between male and female of old age group. The high level of mental health found in old age female person with mean value of 19.80 and a lower value of mental health found in old male person with a mean value of 14.80.

While analyzing the table, it is evident that old aged females tend to have higher mental health than the old age male. The reason could be that they are more adjusted with the joint family system, interested to playing with grandchildren and involving other activities in home. They try to enjoy with their family too. The data shows depression level is high in old age males. Many people experience social isolation and loneliness in old age, either as a result of living alone, they may feel stress upon retirement-loss of an important role in family, reduced connections with their culture of origin, or an inability (often through lack of transport) to actively participate in the local community.

Table 2 : Correlation between mental health score and level of depression(N=50)

		<i>Depression</i>	<i>Mental Health</i>
Depression	Pearson Correlation	1	-.895**

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2 shows the relationship between mental health and depression. The analysis shows that a significantly high negative correlation was obtained between depression and mental health. Since a high score on depression indicates high depression and high score on mental health is indicative of good mental health, these results show that increase in depression leads to decrements in mental health.

CONCLUSION

Mental health is important as it influences the ways individuals look at themselves, their lives and others in their lives. Like physical health, mental health is important at every stage of life. Depression is the most common mental health problem of later life, affecting 10-20 percent of older people. From the study it is observed that the old age female tend to have high mental health than the old age males. In the case of depression, the high level of depression found in old age male than the old age female. The data describes that depression and mental health is negatively correlated.

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A STUDY ON THE EFFECT OF NITYAPRARTHANA WITH SHLOKOCHARANA ON MEMORY AND SUSTAINED ATTENTION AMONG CHILDREN

Seethalakshmy. A * and Krishna. K.V,

ABSTRACT

In India, with a supreme culture, NityaPrarthana is a common behaviour. Having a great ancient tradition, Indians offer NityaPrarthana generally follows ShlokoCharana. Shlokas are part of Stotras which are offered as prayers to deities in India. The effect of ShlokoCharana with NityaPrarthana on the two cognitive abilities of children, i.e., Memory and Sustained Attention is the core of the Present Study. Though multiple studies are available on the effect of Bhagavat Gita Shlokas on Cognitive abilities, there is no specific study of Shlokas along with NityaPrarthana. The Study compared the Effect of Shloko Charana in NityaPrarthana among children who implements in their daily chores with that of non ShlokoCharana group. The Effect on Memory and Sustained Attention was noted and data was analyzed. Shloko Charana group showed significant difference in both the memory tests and sustained attention when compared to non- ShlokoCharana group. The present study suggests that Shloko Charana influences both the hemispheres of the brain resulting in good memory and attention. Increasing westernisation and the advent of the Internet is producing 'cultural orphans' or people who are unable to relate to their own culture, and face an identity crisis. Indians gifted with spiritual values can enhance the cognitive development of the future generation with ShlokoCharana in NityaPrarthana .

Keywords: Cognitive abilities, Psychological well-being, Role of religious and Indian Psychological tradition

* Ph.D Scholar, Dept. of Psychology, Bharathiar University, Coimbatore-46. email: seethagenuine@gmail.com

** Assistant Professor, Department of Psychology, Bharathiar University, Coimbatore-46. email:kvkrishna007@gmail.com

India, the secular country with different religion and spiritual beliefs, where holds *NityaPrarthana* is considered as the Key instrument that tunes mind to the Divine. In Sanskrit and in most vernacular languages of India, the word *Prarthana* means a prayer or seeking. In India every man practices one religion. Every religion has its own beliefs and customs. *Prarthana* is the instrument that tunes our mind to the Divine. In our culture, each *Prarthana* has its role and purpose. In the Vedic parlance, *Prarthana* was synonymous with *Shloka* or *Mantra*, a religious chant or incantation, used to communicate with gods and seek some kind of material benefit or favour from them. According to Spiritual Science Research Foundation (2012) the word *Prarthana* is derived from two words 'pra' and 'artha' meaning pleading fervently. In other words, it is asking God for something with intense yearning. *Shloka* is the name of a poetic metre used in India. *Shloka* is a Sanskrit word referring to a verse, proverb, hymn or poem that uses a specific meter. Most Indian Scriptures, *Mahabharatha*, *Ramayana*, *Upanishads* are written in the form of *Shloka*. *Ucharana* is a Sanskrit word meaning Pronounce, Utterance, Recite something. The *NityaPrarthana*, daily prayer along with *ShlokoCharana*, recitation of *Sholka* is a daily practice followed from the Vedic Period of India.

Psychologists have long been interested in studying the role of religious practices such as *Prarthana* (Prayer) in the Cognitive and non Cognitive abilities and psychological well-being. A prayer can be general or specific for oneself, for others or for all; to a specific deity or may be offered more generally (Sharma & Sharma, 2006). Richards and Bergin (1997) have cited preliminary evidence suggesting that different forms of prayer may have differential associations with effective coping with over all well-being and life satisfaction. In a study, Poloma and Pendleton (1991) suggested that colloquial prayers were associated with higher levels of wellbeing and life satisfaction. There are various types of religious practices, such as prayer, yoga and meditation, which have a significant effect on psychological well-being and over all functioning of the body.

Religious practices can provide support through different ways e.g., enhancing acceptance, endurance and resilience (Argyle & Beit-Hallahmi, 1975). They generate peace and self-confidence, purpose, forgiveness to the individual's own failures, self-giving and positive self-image. Chanting is a meditative practice from the rich tradition of Indian spiritual practices. Chanting expects good memory and attention. The whole of Vedic lore was passed on from generations in an oral tradition without the aid of writing until recent times. Memory capacities were utilized to maximum extent and the entire lot of *Shlokas* and *Mantras* was kept by rote. As it is known by experience and observation that chanting improves memory and attention, there are numerous studies on the Chanting of the *Gayathri Mantra*, 'OM' Chanting, Meditation and various Yoga Practices . Attention is one of the components to enhance academic excellence.

Traditional techniques were included in Indian schools to develop mental faculties with a view to add value to the latter. There are even studies related to the psychological effect of prayers in accordance to both Eastern and Western culture (Luhrmanna, Nusbaum & Thisted, 2013)

There is no specific study been done on *Shlokas* along with *NityaPrarthana*. Therefore, an attempt is made to study the effect of *NityaPrarthana* with *ShlokoCharana* on memory and sustained attention among children

Memory is the process by which we store, activate and retain knowledge and skills, to be recalled and put to use later. Remembering and retaining what has been learned is vital if we are to use it again in the future. Memory is the process by which this is achieved. Memory, the cognitive skill is of two types, Working Memory and Long Term Memory. Children often are required to hold information in mind whilst engaged in other activities. The capacity to store this information is vital to many learning activities in the classroom. Children with poor working memory often struggle to meet the heavy demands of many everyday classroom activities, simply because they are unable to hold sufficient information in mind to allow them to complete the task.

Sustained Attention is the ability to direct and focus cognitive activity on specific stimuli. In order to complete any cognitively planned activity, any sequenced action, or any thought one must use sustained attention The capacity to sustain attention plays a key role in children's school performance, determining the child's capacity to maintain concentration over long periods in order to understand and integrate large amounts of information (Catroppa & Anderson, 1999).

In India, the ancient tradition *NityaPrarthana*, is a Common Human Behaviour. Indians perform *NityaPrarthana* generally followed by *ShlokoCharana*, which influence the Cognitive abilities of Children and thus form the core of the Study. In the Spiritual core of Indian Psychological tradition, there is amongst profession psychologists a similar tendency to focus on formal practices and specialized techniques.

Hypotheses

The following hypotheses were proposed for the present study:

- H₁:** Children who do *NityaPrarthana* with *ShlokoCharana* will show significant difference in their Virtual Memory ability when compared to non- *ShlokoCharana* Children.
- H₂:** There will be a Significant difference in Spatial Memory between Children who do *NityaPrarthana* with *ShlokoCharana* in comparison with non- *ShlokoCharana* Children.
- H₃:** There will be a Significant difference in Sustained Attention between Children who do *NityaPrarthana* with *ShlokoCharana* in comparison with non- *ShlokoCharana* Children.

Sampling

Participants in this study consisted of 60 Children in Grade III to Grade VIII. The sample was drawn from Children of Hindu Community. More than half of the Children belonged to Brahmin Society of Noorani Village of Palakkad district, Kerala, India. Remaining were from the Coimbatore city of Tamil Nadu. Both Male and Female students were included in the sample.

Tools

The following instruments were used to collect data from the sample.

Assessment of Memory

RIAS Verbal Memory Test: Subtests of both Sentences and Stories were used. Depending on the age of the individual being evaluated, the verbal memory subtest consists of a series of sentences, age-appropriate stories, or both, read aloud to the Children. The Child was then asked to recall these sentences or stories as precisely as possible.

Delayed recall test was used with standard nonsense syllables of three letters, e.g. CYB were selected from a prepared list.

Delayed Recognition Word Task was also used. Here the subject was presented with the original 10 words along with 10 new words; the task was to differentiate the old words from the new ones. The words were presented orally to the subject, in a predetermined order, at the same steady pace of 1 word every 2 seconds. The subject was asked whether they recognized the word as one previously read from the Green paper. Give 1 point for each correctly recognized "old" and "new" word. Misclassified words get 0 points.

Spatial Memory: For spatial memory also Delayed Recall Test was used. The test for spatial memory consisted of 10 simple line drawings. The drawings were simple and easy to reproduce but could not be described verbally. For both verbal and spatial memory tests a correct answer was scored as "1", and a wrong answer was scored "0". All children were told that the tests were for their self-assessment of memory.

Sustained attention was assessed using six-letter cancellation task. These paper and pencil tests require visual selectivity at fast speed on a motor response task. They assess many functions, not least of which is the capacity of sustained attention. Visual scanning and activation, and inhibition of rapid responses are also necessary to the successful performance of cancellation tasks. Lower scores on these tasks can reflect the general response slowing and inattentiveness of diffuse damage or acute brain condition or the more specific defects of response shifting and motor smoothness or of unilateral inattention. With the addition of a motor component, these tasks call upon a set of functions similar to those relevant to other complex tests of attention. The six-letter cancellation

task (SLCT) consists of a sheet of 22 rows \times 14 columns of randomly arranged letters of the alphabet. The top of each sheet names six target letters. Subjects are given the choice of two possible strategies to cancel target letters (i) all six letters at once or (ii) selecting a single target letter at a time. It is also suggested that, according to their own choice, they follow horizontal, vertical, or random paths on the test sheet. They are told to cancel as many target letters as possible in the test time of 90 secs. Scoring for tests counts total substitutions/cancellations attempted, and number of wrong substitutions/cancellations. Net Score was obtained by deducting the wrongly attempted score from total attempted score.

RESULTS AND DISCUSSION

The obtained data was analysed by computing the group wise mean scores and differences between the group means were analysed by computing t-test

Table 1: Significance of difference between the mean scores on the memory and attention scores of the two group

S.N.	Dimension	Group	N	Mean	SD	t value	sig
1	Virtual Memory	NityaPrarthana With Shloka	30	67.47	18.137		
		NityaPrarthana Without Shloka	30	50.5	13.266	4.103	.000*
2	Spatial Memory	NityaPrarthana With Shloka	30	4.93	1.964	1.623	0.11
		NityaPrarthana Without Shloka	30	4.13	1.852		
		NityaPrarthana With Shloka	30	41.53	9.857		
3	Sustained Attention	NityaPrarthana Without Shloka	30	10.7	2.292	16.689	.000*

Table 1 shows that children who did *NityaPrarthana* with *ShlokoCharana* showed good virtual memory than those who did *NityaPrarthana* without *ShlokoCharana*. Mean value for virtual memory dimension is 67.47 & 50.50 while S.D. is 18.137 & 13.266 respectively which shows significant difference in virtual memory of both the groups. The obtained 't' value is 4.103 which is significant beyond the .01 level which confirms that children who do *NityaPrarthana* with *ShlokoCharana* have better virtual memory than children who do *NityaPrarthana* without *ShlokoCharana*.

The Spatial Memory scores were also compared between the children who did *NityaPrarthana* with *ShlokoCharana* and without *ShlokoCharana*. Mean value for Spatial Memory dimension is 4.93 & 4.13, while S.D. is 1.964 & 1.852

respectively which shows very little difference in spatial memory of both the groups. The obtained 't' value is 1.623, which is not significant even at the .05 level of significance which confirms that there is no difference in the spatial memory between the children who do *NityaPrarthana* with *ShlokoCharana* and without *ShlokoCharana*.

Sustained Attention is another dimension of current study, where Table 1 shows that that children who do *NityaPrarthana* with *ShlokoCharana* show good sustained attention as compared to those who do *NityaPrarthana* without *ShlokoCharana*. Mean value for sustained attention is 41.53 & 10.70 and S.D. is 9.857 & 2. respectively which shows significant difference in sustained attention of both the groups. The obtained 't' value is 4.103 which is significant beyond the .01 level of significance which confirms that children who do *NityaPrarthana* with *ShlokoCharana* are having better sustained attention than children who do *NityaPrarthana* without *ShlokoCharana*.

MANOVA (multivariate analysis of variance) is a type of multivariate analysis used to analyze data that involves more than one dependent variable at a time. MANOVA allows test of hypotheses regarding the effect of one or more independent variables on two or more dependent variables.

In the present study multivariate analysis was used to analyze data that involves 3 dependent variable –Virtual Memory, Spatial Memory, Sustained Attention at a time. MANOVA allowed the test of hypothesis regarding the effect of one independent variable – *NityaPrarthana* with or without Shloka on the 3 dependent variables.

Between Subject Factors

Table 2 gives the overview about the independent variables included in the model. For example in *NityaPrarthana*. Without *ShlokoCharana* the numbers of respondents in 30.

Table 2: Between-Subjects Factors

	<i>Value</i>	<i>N</i>	
<i>NityaPrarthana</i>	Without Shloka	0	30
	With Shloka	1	30

Interpreting the descriptive statistics

The Table no:3 is for the descriptive statistics of all the variables in the model. In this case the dependent variables are shown in row whereas the independent variables are in column.

Table 3: Descriptive Statistics

	<i>NityaPrarthana</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>N</i>
Virtual Memory	0	50.50	13.266	30
	1	67.47	18.137	30
	Total	58.98	17.927	60
Spatial Memory	0	4.13	1.852	30
	1	4.93	1.964	30
	Total	4.53	1.935	60
Sustained Attention	0	10.70	2.292	30
	1	41.53	9.857	30
	Total	26.12	17.089	60

Hence Deviation is 17.927, 1.935 & 17.089

Box's test of equality of covariance matrices

Table 4 is of Box's Test of Equality of Covariance Matrices. This tests the null hypothesis that the observed covariance matrices of dependent variables are equal across groups.

Table 4: Box's Test of Equality of Covariance Matrices^a

<i>Box's M</i>	<i>68.990</i>
F	10.851
df1	6
df2	24373.132
Sig.	.000

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

The observed covariance matrix of the dependent variable is equal. That we do not have covariance of the dependent variable, So in this case the significance value is less than 0.05, so can reject the null hypothesis and MANOVA can be performed and since N=30, Pillai's trace criterion is used.

MANOVA F value

Table no: 5 is for the MANOVA F values as shown in the table below:

Table 5: Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	.979	850.418 ^b	3.000	56.000	.000	.979
Pillai's Trace	.021	850.418 ^b	3.000	56.000	.000	.979
Wilks' Lambda	45.558	850.418 ^b	3.000	56.000	.000	.979
Hotelling's Trace	45.558	850.418 ^b	3.000	56.000	.000	.979
Roy's Largest Root	.862	116.881 ^b	3.000	56.000	.000	.862
Nithya Prarthana	.138	116.881 ^b	3.000	56.000	.000	.862
Pillai's Trace	6.261	116.881 ^b	3.000	56.000	.000	.862
Wilks' Lambda	6.261	116.881 ^b	3.000	56.000	.000	.862
Hotelling's Trace	6.261	116.881 ^b	3.000	56.000	.000	.862
Roy's Largest Root	6.261	116.881 ^b	3.000	56.000	.000	.862

a. Design: Intercept + PrayWS

b. Exact statistic

The Pillai's trace is the most preferred approach for the F value as this is the least sensitive to the violation of the assumption of the covariance of matrices. In this case, where the sample Size is 30-30, for the independent variable Nitya Prarthana the Pillai's Trace value is 0.862 with F value of 116.881. This is significant at 5% level as the p value is 0.000. So we reject the null hypothesis that the Nitya Prarthana are at same level for all the dependent variables. This is concluded on the basis of the MANOVA derived by combined dependent variable.

Partial eta Squared

This is similar to the R squared in the simple ANOVA analysis. The partial eta squared of Pillai's Trace for Nitya Prarthana is 0.862

Test of Homogeneity

After the testing of hypothesis the next results is of homogeneity and one can use the Levene's Test for that purpose. Since there are more than one dependent variable, it is important to check whether the covariance or the interconnections among the dependent variable is same or not. If the covariance is different, then it would not be appropriate to use the dependent variable together.

So the Levene's test is used here to test the homogeneity. It tests the null hypothesis that the error variance of the dependent variables is equal across the independent variables. Even though MANOVA is relatively robust to the violation of homogeneity, the test result is shown as :

Table 6: Levene's Test of Equality of Error Variances

	<i>F</i>	<i>df1</i>	<i>df2</i>	<i>Sig.</i>
VirtualMemory	8.874	1	58	.004
SpatialMemory	.097	1	58	.757
Sustained Attention	23.054	1	58	.000

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + PrayWS

Testing of between Subject Effects

This shows the separate ANOVA for each dependent variable. This shows the results similar to normal ANOVA if separate regression tests were to run for each dependent variable instead of combining both of them.

Table 7: Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
VirtualMemory	VirtualMemory	4318.017a	1	4318.017	17.103	0	0.228
Corrected SpatialMemory	Corrected SpatialMemory	9.600b	1	9.6	2.635	0.11	0.043
Model Sustained Attention	Model Sustained Attention	14260.417c	1	14260.42	278.5	0	0.828
VirtualMemory	VirtualMemory	208742.017	1	208742	826.81	0	0.934
Intercept	SpatialMemory	1233.067	1	1233.067	338.41	0	0.854
Sustained Attention	Sustained Attention	40924.817	1	40924.82	799.26	0	0.932
VirtualMemory	VirtualMemory	4318.017	1	4318.017	17.103	0	0.228
Nithya SpatialMemory	Nithya SpatialMemory	9.6	1	9.6	2.635	0.11	0.043
Prarthana Sustained Attention	Prarthana Sustained Attention	14260.417	1	14260.42	278.5	0	0.828
VirtualMemory	VirtualMemory	14642.967	58	252.465			
Error SpatialMemory	Error SpatialMemory	211.333	58	3.644			
Sustained Attention	Sustained Attention	2969.767	58	51.203			
VirtualMemory	VirtualMemory	227703	60				
Total SpatialMemory	Total SpatialMemory	1454	60				
Sustained Attention	Sustained Attention	58155	60				
VirtualMemory	VirtualMemory	18960.983	59				
Corrected SpatialMemory	Corrected SpatialMemory	220.933	59				
Total Sustained Attention	Total Sustained Attention	17230.183	59				

a. R Squared = .228 (Adjusted R Squared = .214)

b. R Squared = .043 (Adjusted R Squared = .027)

c. R Squared = .828 (Adjusted R Squared = .825)

In case of *NityaPrarthana* the independent variable with respect to the first dependent variable –Virtual Memory, the F value is 17.103 as shown in Table no:7. This is also significant at 5% significance level. So the null hypothesis can be rejected. In other words there is at least one difference in different groups of *NityaPrarthana* with respect to the first dependent variable –Virtual Memory.

In case of *NityaPrarthana* the independent variable with respect to the Second dependent variable –Spatial Memory, the F value is 2.635 as shown in Table no:7. This is not significant at 5% significance level. So the null hypothesis can't be rejected. In other words there is no difference in different groups of *NityaPrarthana* with respect to the Second dependent variable –Spatial Memory.

In case of *NityaPrarthana* the independent variable with respect to the third dependent variable –Sustained Attention, the F value is 278.508 as shown in Table no:7. This is also significant at 5% significance level. So the null hypothesis can be rejected. In other words there is at least one difference in different groups of *NityaPrarthana* with respect to the first dependent variable –Sustained Attention.

Impact of Independent Variable on the Dependent Variable

Since the Pillai's trace shows significant results. It can be said that the impact of *NityaPrarthana* on super dependent variable (combination of all the dependent variables i.e. Virtual Memory, spatial Memory and Sustained Attention) is significant.

Further, test between subject effects also show significant results so the impact of independent variable, *NityaPrarthana* on first dependent variable, Virtual Memory is significant. Similarly the impact of independent variable, *NityaPrarthana* on second dependent variable (Spatial Memory) is not significant. This is because the p value is greater than 0.05. The impact of independent variable, *NityaPrarthana* on first dependent variable and third dependent variable (Virtual Memory and Sustained Attention) is significant as shown by the results in between subject effects.

So, on the basis of the analysis it can be said that the Virtual Memory and Sustained Attention are significantly affected by *NityaPrarthana* with *ShlokoCharana*. In other words, if students do *NityaPrarthana* with *ShlokoCharana*, then their score will improve for these Cognitive abilities.

CONCLUSIONS

Although many studies have demonstrated positive effects of religious beliefs and practices on psychological well-being, a small number has demonstrated either negative or neutral effect. Earlier studies have shown that Attention, Memory are some of the components to enhance academic excellence. The traditional, secular India is following the *NityaPrarthana* as part of their Daily chore right from the Vedic Period. *NityaPrarthana* followed by *ShlokoCharana* was a system followed in Ancient Indian. Shlokas used to be recited and was transferred across

generation. The Current study which concentrated on the impact of *NityaPrarthana* with *ShlokoCharana* on Virtual Memory, Spatial Memory and Attention have shown a Positive effect. *NityaPrarthana* with *ShlokoCharana* has a positive impact on the Cognitive abilities of Children. In the generation of modernized technology, where both adults and children likes to spend their time with Gadgets, *ShlokoCharana* is getting reduced. *NityaPrarthana* with *ShlokoCharana* practice is disappearing slowly in the busy life. There is a positive impact of *NityaPrarthana* with *ShlokoCharana* on Cognitive abilities of children is the conclusion of the Current Study.

Limitations and Future Research

The Sample was drawn from Children of Hindu Community . The other Community doesn't use Shloka in their *NityaPrarthana*, hence not included in the sample data, which forms a major limitation of the study. Another limitation is that, the children is taken from Brahmin Society of a small Village who practice Shloka. Though some of the sample are taken from Coimbatore City, the study doesn't cover the City Children.

The study is to be extended on Children who though live between modern gadgets in cities, but also have a knowledge of Shloka and do practice in their *NityaPrarthana* . The study also to be included with the religious practices used in Daily Prayers by other Communities of India.

India, the secular nation having different religion beliefs and practices do trust in *NityaPrarthana* in One way or Other. The study would like to extend on its impact on the Cognitive abilities of Children and their improvement in Academics.

Implications

The major implication of the Present Study is on the Indian Educational and Schooling System, The future generation running on modern technological, are getting more and more dependent on gadgets instead of their Cognitive abilities. *ShlokoCharana* is a meditative practice from the rich tradition of Indian spiritual practices. Indian Schools which follows a *NityaPrarthana* as a daily chore, the current study would recommend Traditional techniques are to be included in Indian schools to develop mental faculties with a view to add value to the latter.

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SELF-REGULATION STRATEGIES FOR HEALTHY FUNCTIONING AMONG ADOLESCENTS

Surjeet Singh* and Nov Rattan Sharma**

ABSTRACT

The employment of self-regulation strategies can help adolescents to successfully adopt a healthier life. Although many adolescents are aware of the benefits of a health promoting strategies but due to lack of proper self-regulation strategies or ability they do not attained their proper functioning and health motives. Many of the capacities involved in self-regulation are acquired and developed in adolescence and it becomes more focused, efficient and intentional as it evolves to encompass more elaborate long-term planning and goal setting. Previous researches show that better self-regulation ability is positively related to positive outcomes and healthy functioning. Self-regulation is defined as a sequence of actions and/or steering processes intended to attain a personal goal. Present research paper tries to investigate the influence of self-regulation and promote effective self-regulation strategies among adolescents as self-regulation is fundamental to successful accomplishment of adaptive developmental tasks at all stages of life. Conclusively this research paper states or explains that self-regulated learning is how people regulate their own emotions, cognition, behaviour and aspects of the context during a learning experience. Examples of good self-regulation skills include good time management; select the most efficient problem-solving strategies and the ability to actively monitor emotional states such as frustration and anger. Good self-regulation skills are also important for overall development. The purpose of this research paper is to highlight the role of self-regulation in healthy functioning and promoting healthy behaviour through self-regulation strategies.

Keywords: Self-regulation strategies, Healthy functioning, Adolescents.

Human strengths and positive self-care strategies as well as skills are considered as a buffering agent against the negative effects of stressors. Not

* Resource Person, Department of Psychology, Maharshi Dayanand University, Rohtak.

** Professor, Department of Psychology, Maharshi Dayanand University, Rohtak.

only this but they also make individuals to be able to flourish and optimize their health and well-being in all stages of life. In human life, the second decade of life; Adolescence is a period of ontogeny characterized by extraordinary biological, social, and ecological changes (Lerner & Steinberg, 2009). As it is the emerging stage of energy and excitement, one can develop and nurture his or her abilities and strengths. These Positive skills, values and strengths enable adolescents to make better interpretations, choices, and decisions about how to interact with their environment, especially in accordance with long-term goals (Larson 2011; Steinberg 2010). Self-regulation is the one of the important ability which can be refined and developed in better way to for healthy living.

Self-regulation is the fundamental to successful accomplishment of adaptive developmental tasks at all stages of life. Generally every individual has the ability to resist impulses at personal level, adapt own behaviour to a range of standards and modify prevailing behaviour in the service of achieving distal goals (Baumeister, 1999). In this regard Baumeister and Heatherton (1996) noted that modifying a “bad health habit seems even more difficult than maintaining a good one.” The key issue is, “why is it so difficult to act upon intentions or maintain attempts for changing health behaviour, even for people who seen to be motivated?” In this respect, the only psychological construct that could suggest a best solution to this question is *self-regulation*.

The term self-regulation is often used to refer broadly to efforts by humans to alter their thoughts, feelings, desires, and actions in the perspective of their personally valued long-term goals (Baumeister, 2005).

Baumeister and Heatherton (1996) defined, “*self-regulation is an individual’s ability to alter a response or override a thought, feeling, or impulse*”

Brown (1998) defined “*self-regulation*” as “*the capacity to plan, guide, and monitor one’s behavior flexibly in the face of changing circumstances*”.

In adolescence period, a major developmental task in front of adolescents is the adaptive identity formulation, provides a base for the construction of a personal future that makes easy the directions of long-term decision-making and goal pursuit (Brandtstädter, 2006; McClelland, Cameron Ponitz, Messersmith & Tominey, 2010). After all, it is not so much easy to formulate a plan to reach a long-term goal that has not yet been determined. Finally, during adolescence, young people may, for the first time, face decreased probabilities of achieving major life goals (e.g., graduating from high school) that have long-term consequences. In this situation self-regulation can be considered one of the supporting positive construct to achieve desired goals.

SELF-REGULATION AND HEALTHY FUNCTIONING

In every stage of life self-regulation ability appears to be an essential psychological characteristic of the individual across a number of domains

(behavioural, emotional, attentional, and social) that is evident in children, adolescents and adults. Self-regulation ability postulates an influence on the acquisition and maintenance of health behaviours, trajectories and well-being across the life span. Self-regulated learning involves many goal-related skills, such as the ability to set proximal learning goals, use appropriate strategies for attaining the goal, self-evaluate the method one has chosen to achieve a goal, and monitor one's performance toward that goal. The use of self-regulated learning skills has repeatedly been related to school achievement (Miller & Byrnes, 2001; Zimmerman & Schunk, 2001).

Simon and Durand-Bush (2009) studied how self-regulation skills developed and in what way it affect perceived performance and well-being of medical students over the course of a 17-week intervention. Research showed that “the students were able to learn how to effectively regulate their thoughts, emotions and behaviours in order to optimize performance and well-being in the medical context. They were able to identify how they wanted to feel based on different dimensions of well-being, observe how these mediated each other, and learn how to regulate their felt experiences to optimize performance and well-being”.

There are various common terms which have been frequently used to represent the notion of self-regulation including “self-control, self-management, anger control and impulse control.” However, a few authors tend to consider self-control as synonymous with self-regulation (Muraven & Slessareva, 2003; Vohs & Baumeister, 2004). The very term self-control itself refers to a “dispositional capacity leading to *the optimization of the regulation of goal-directed processes, thereby promoting task completion*” (De Ridder & Gillebaart, 2016). Self-control is associated to a broad array of behaviours.

Empirical researches have revealed that individuals' with large self-control are greater ready to regulate their feelings, manage their feelings, and prevent their urges than people who have decrease self-control (Baumeister, Bratslavsky, Muraven, & Tice, 1998). In comparison to that, lower self-control has been believed to be in the middle of numerous societal issues such as for instance obesity, material punishment, criminality, impulsive getting, and procrastination (Baumeister & Heatherton, 1996; Vohs & Baumeister, 2004).

Hagger (2013) investigated that a good self-control (a form of self-regulation) is significantly correlated with higher academic achievements, better health, cordial relationships and career growth. On the other hand, chronic physical conditions (cardiovascular disease and obesity), behavioural problems (eating disorders and alcoholism) and personal problems (monetary debts and unplanned pregnancy) were significantly associated with poor self-control.

Cheung, Gillebaart, Kroese and De Ridder (2014) conducted an empirical investigation on a sample of 545 adolescents to explore the correlations among trait self-control (TSC), life satisfaction and happiness; mediating role of regulatory

focus and to identify the predictors of happiness. They have concluded that individuals who reported higher trait self-control (TSC) found to be having greater life satisfaction and happiness. Further, trait self-control found to be positive correlate of more prevention focus which is positively associated with happiness. While, trait self-control reported as a negative significant correlate of prevention focus and less prevention focus is correlated positively with more happiness. Additionally, trait self-control significantly predicted the level of happiness.

Hofmann, Luhmann, Fisher, Vohs and Baumeister (2014) carried out three studies on different samples. The first study was conducted on a sample of 414 individuals, results of which highlighted that significant effect of trait self-control on affective well-being and life satisfaction. The second study was on 208 individuals and results of which confirmed that individuals with high trait self-control reported higher levels of momentary affect which partially mediated through experiencing lower conflict and emotional distress. In the third study which comprises 234 participants, revealed that trait self-control may enhance well-being by helping people evade recurrent conflict and equilibrium vice-virtue conflicts by favoring virtues. They further concluded from the overall results that trait self-control is a positive correlate of affective well-being and life satisfaction, and affect at least partially mediate the effect of trait self-control on life satisfaction.

Briki, Aloui, Bragazzi, Chaouachi, Patrick and Chamari (2015) conducted a study on 190 French speaking Muslim participants and revealed that trait self-control mediated the connection between identified religiosity and positive health-related-feelings (HRF). Additionally, they also confirmed the significant mediating role of trait self-control between identified religiosity and positive health-related-feelings.

Self-regulation often involves the process of emotion regulation. Chen, Zhou, Main and Lee (2015) reported significant relationship of emotional regulation strategies with children's emotional health. For the purpose two key elements of the emotional well-being which were taken into account were mood and self-esteem. Participants who were found high on emotional regulation reported that they have more optimistic outlook on life and experience better emotional health. Owing to their capacity to handle persistent threats on their self-esteem prevailing in the environment and sustain a more optimistic mood in unpleasant situations.

Verzeletti, Zammuner, Galli and Agnoli (2016) on the basis of finding of a research on 633 Italian adolescents concluded that cognitive reappraisal (as an emotional regulation strategy) has been found positively correlated with various indicators of better well-being particularly with life satisfaction, perception of social support, and positive affect. Cognitive reappraisal has also been found as the major predictor of life satisfaction, perception of social support and positive emotions. In contrast, expressive suppression (another emotion regulation strategy) has been found positively correlated with emotional loneliness and negative emotions.

Additionally, findings of the research highlighted that adolescents who use cognitive reappraisal as a strategy of emotion regulation in comparison to expressive suppression, found high on psychosocial well-being. Further, findings have not revealed any gender and age differences with regard to use of both the emotion regulation strategies.

Soto, Lee, and Roberts (2016) reported that Asian Americans do significantly differ from European Americans with regard to their reactivity, with latter group shows lower reactivity as compared to the second one. According to the authors the reason behind such a trend is cultural moderation i.e., collectivistic culture of Asian Americans. Finally, they concluded that culture influences the physiological consequences of expressive suppression.

Singh, Sharma and Yadava (2016) noted that self-regulation ability is positively correlated to psychological wellbeing and its dimension; personal growth, positive relations with others, purpose in life and self-acceptance. On the other hand self-regulation is negatively correlated with autonomy and environmental mastery. They also discussed key implications of self-regulation to enhance better health and psychological well-being.

Gagnon, Durand-Bush and Young (2016) carried out a study to examine the association between self-regulation capacity, psychological wellbeing, and burnout in 37 Canadian medical students and 25 physicians. In results it was observed that in both groups self-regulation capacity have positive relation with psychological wellbeing and negative with burnout. Environmental mastery and purpose in life were positively correlated with self-regulation ability. The study also suggested that self-regulation competence should be developed to maintain optimal psychological functioning.

Chervonsky and Hunt (2017) on the basis of meta-analysis of forty-three research papers and concluded that greater suppression of emotion has been reported as significant correlate of poor social well-being including more negative first impression, low social support and social satisfaction as well as their quality, and poor quality of interpersonal relationships. Contrary to that expression of positive and general affects has been found associated with better social consequences, whereas the expression of anger has been reported as a correlate of poor social well-being. However, expression of negative emotions has been found as weak but significant correlate of poor social consequences.

De Ridder and Gillebaart (2017) highlighted the important role of self-control to enhance well-being. Further, individuals with high self-control experience more positive momentary affect, life satisfaction, and happiness.

Briki (2017) selected 509 volunteers (326 females and 183 males) to establish the association of passion with trait self-control and wellbeing. The results of the study highlighted that harmonious passion is positively and obsessive passion is negatively associated with trait self-control and wellbeing. Additionally, trait

self-control has been found significant mediator between harmonious passion and wellbeing with a positive effect. Further, study also confirmed that key deterrents of wellbeing are TSC and harmonious passion.

Singh and Sharma (2018) examined the relationship between self-regulation ability and psychological well-being among 100 young adults. Study demonstrated that self-regulation ability is significantly positively correlated with personal growth, purpose in life, positive relations and self-acceptance and negatively associated with autonomy and environmental mastery. Study also confirmed that higher the self-management competencies one has the more one would maintain a purposeful and meaningful life, and effectively manage the extensive personal and professional responsibilities in daily life. The potential power of self-regulation capacity can be used to enhance psychological wellbeing. As a positive construct implication of self-regulation to maintain optimal mental health was also discussed in this study.

Singh and Sharma (2018b) found that successful emotion regulation always enhance one's health and well-being in positive manner. Two types of emotion regulation strategies Cognitive reappraisal positively correlated with health and well-being but expressive suppressive inversely correlated with health and well-being.

In this way we can say that growing body of research has confirmed the relation between adolescents' self-regulation skills and positive and problematic behaviors and makes self-regulation particularly pertinent during the adolescent period. In the last decade, a body of research has advanced our understanding of how adolescents regulate their own learning (McClelland et al. 2010; Zimmerman, 2002).

Bettering the Self-regulation

Does self-regulation capacity could associate or significantly predict psychological wellbeing? To answer this problem, Simon and Durand-Bush (2014) conducted a study on 132 Canadian physicians and found that self-regulation positively associated with all six dimensions of psychological wellbeing. Environmental mastery and purpose in life dimensions of psychological well-being had a strong positive relationship with self-regulation capacity. The study also recommended that self-regulation strategies may helpful to maintain a sense of direction in their work. Physicians can fulfill/balance tasks by effective self-management skills.

Webster and Hadwin, (2015) observed emotion regulation of 111 university students during their self-regulated learning (SRL) program. Researchers stated that "positive emotions were positive predictors and negative emotions were negative predictors of self-evaluations of goal attainment, although positive emotions were associated with larger changes in self-evaluations". Finally, different strategies to regulate emotions and using a different strategy more often than the

same strategy from one study session to the next were reported by the students. When people want to change, alter or regulate their cognitions, actions, thoughts and behaviours, what are the steps they should adapt or follow? To answer this question, Kanfer's three steps theory makes it very clear how to regulate behaviour by steps to steps.

Three-step theory of self-regulation (Kanfer, 1970): According to Kanfer (1970) self-regulation is an individual's capacity to involve into goal specific behaviour as these skills or capacities allow an individual to delay gratification in the short term so that one could accomplish the desired outcomes. Based on this concept, Kanfer (1970) proposed a three step theory of self-regulation that could be depicted in the following manner:

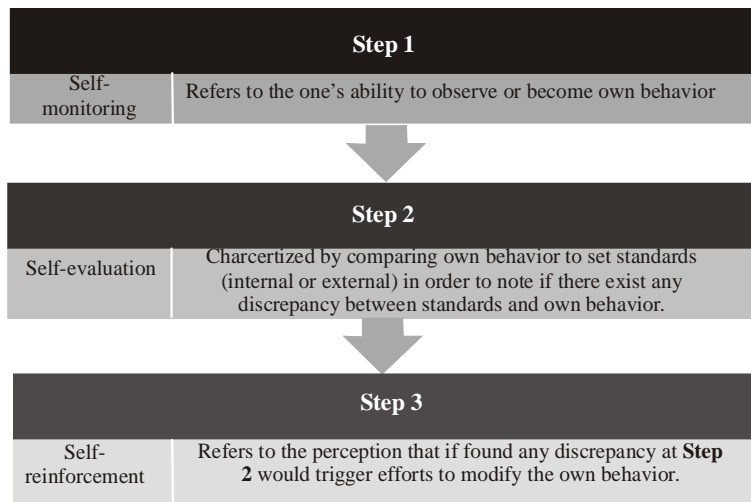


Figure 1: Three-step theory of Self-regulation (Kanfer, 1970)

With the help of Kanfer's model, people can easily regulate their behaviour in a step by step manner. They can also modify their activities in a sequence e. g. First of all they should observe or analyze their actions. Secondly they should evaluate upcoming consequences (positive and negative) and at the last step people should reinforce or encourage their behaviour for desired outcomes. In present time, it could be more effective to implicate these types of healthy module.

In addition, self-regulatory skills may have particular significance for youth living in high-risk environments. For instance, Buckner Mezzacappa and Beardslee (2009) found that youth from very low income families fared better on a wide range of developmental outcomes, ranging from academic achievement to anxiety, if they had adaptive self-regulation skills. Quinn and Fromme (2010) emphasized that such skills help youth to cope with stressful life events, making them less likely to be overwhelmed by the difficulties that they are faced with, and as such, high levels of self-regulation are considered a key factor in supporting youth's resiliency.

Previous researches point to relations between schooling (adolescents) and self-regulation as a developmental turning point for effective learning. Evidence points to bidirectional relations between the biological, cognitive and behavioural factors predicting development of self-regulation as well as the influence of context such as the schooling and social environment (Carlson, Zelazo & Faja, 2013; Morrison, Ponitz & McClelland, 2010). Generally self-regulation strategies used by individuals can be divided into three main categories or level. These are Personal, Behavioural and Environmental strategies. These strategies work according to situation and efforts by an individual.

- A. Personal or individual self-regulation strategy:** These approaches usually involve how a person organizes and interprets information and include (i) Organizing and transforming information (outlining, summarizing, rearrangement of materials, highlighting, flashcards/index cards, specially students can draw pictures, diagrams, charts and webs/mapping); (ii) Goal setting and planning/standard setting (sequencing, timing, completing and time management and pacing); (iii) Keeping records and monitoring (note-taking, lists of errors made, record of marks and portfolio, keeping all drafts of assignments) and (iv) Rehearsing and memorizing (mnemonic devices, teaching someone else the material, making sample questions, using mental imagery and using repetition) and (v) Regulation of emotions & attentions and (vi) Inhibition inappropriate response, impulsivity.
- B. Behavioral self-regulation strategy:** These strategies involve actions that the someone takes such as (i) Self-evaluating (task analysis, self-instructions, enactive feedback and attentiveness) and (ii) Self-consequating (treats to motivate, self-reinforcement and arrangement or imagination of punishments and delay of gratification) and (iii) Mindfulness and cognitive reappraisal
- C. Social/Environmental self-regulation strategy:** These strategies involve seeking assistance and structuring of the physical study environment. Three of the major environmental strategies are (i) Searching and gaining information from various resources (library, internet, reviewing cards, rereading records, tests, and textbooks); (ii) Social/Environmental forming (selecting or arranging the physical setting, isolating/ eliminating or minimizing distractions and break up study periods and spread them over time) and (iii) Searching social support (from peers, from teachers or other adults and emulate exemplary models).

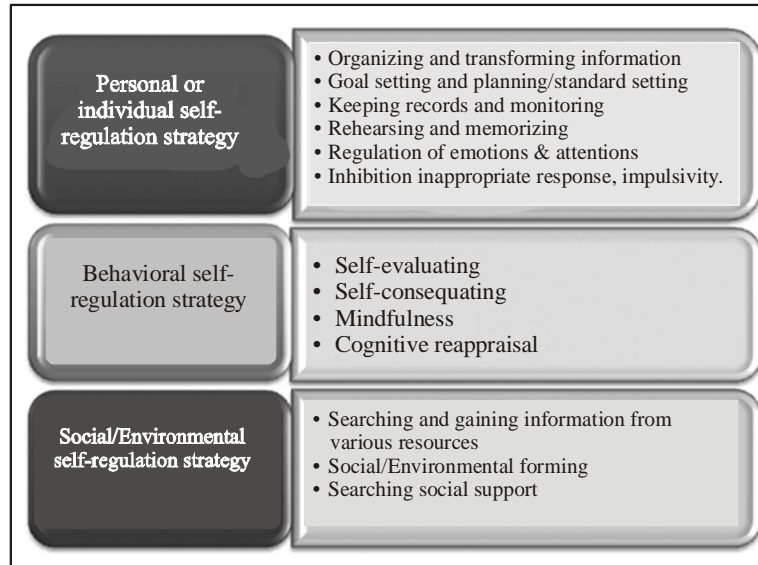


Figure: 2 showing three types of self-regulation strategy

CONCLUSION

As rising evidence points out that self-regulation has important implications for doing healthy work in adolescence. Similarly, the use of self-regulatory behaviors of youth is related positively to other desired results, such as measures of social ability and mental well-being. It is negatively related to indicators of problematic development such as negative risk behavior, misuse of substances, depression and anxiety. In essence, although the understanding about the nature and development of self-regulatory processes has not been fulfilled, recent research has confirmed the contribution of adaptive self-regulation for the healthy development of children, adolescents and adults.

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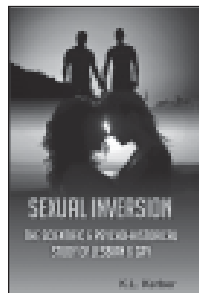
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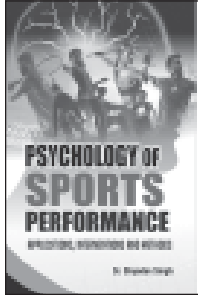
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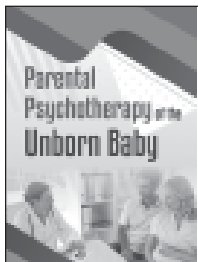
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