



# EFFECTIVENESS OF YOGA ON RESILIENCE AMONG ADOLESCENTS AT SELECTED SCHOOLS

**Author:** Patel Mahesh Kumar Ganpat bhai, Assistant Professor, Swaminarayan University

## ABSTRACT

**Effectiveness of yoga on resilience among adolescents in selected schools.** To assess the level of resilience among adolescents at selected schools both in experimental and control group; to evaluate the effectiveness of yoga on resilience among adolescents in selected schools at Gujrat and to associate the level of resilience among adolescents with their selected socio demographic variables. **Hypotheses:** There is a significant difference between the pretest and posttest score among adolescents in experimental group; there is a significant association between the level of resilience among adolescents with their selected socio demographic variables. **Conceptual framework:** Modified Imogene Kings Goal attainment theory. **Methodology:** Quasi experimental non equivalent control group pretest- posttest design was used. The study was conducted at selected schools in Gujrat. 60 subjects were selected by purposive sampling. The 14- items Resilience Scale was administered for pretest. Yoga was performed by the experimental group about 60 minutes daily for 6 weeks. Post test was conducted with same scale a day after 6 weeks. **Results:** The findings revealed that there was a significant increase in resilience level after intervention by dependent 't' test ( $t=9.608$ ;  $p< 0.001$ ); independent 't' test ( $t=10.599$ ;  $p< 0.001$ ). Association between post test score of resilience with educational status of mother was Significant at  $p< 0.05$  level. Also educational status of father, birth order and parental support were significantly associated at 0.01level. **Conclusion:** Yoga was effective on increasing the resilience level among adolescents studying in a school.

Keywords: Hypothesis, School, Yoga

## INTRODUCTION

Adolescence is a period of transition between childhood and adulthood- a time of rapid physical, cognitive, social, and emotional maturing as the boy prepares for manhood and girl prepares for womanhood. Except for the newborn and early infancy, no period of the human life- span encompasses more dramatic changes than does adolescence.

Adolescents are described as the young people between the age of 10 and 19 years and are considered as the transitional stage from childhood to adulthood. Adolescents are vulnerable by virtue of the normal development process. Biological changes that take place during puberty to include other major changes that occur at varying rates. These include changes in sexual characteristics, body image, sexual interest, career development, intellectual development and self-concept. Role changes increasing the vulnerability.

## NEED FOR THE STUDY

Drawing on a wealth of published evidence and consultations with 10 to 19- year old surround the world, there portal so brings together, for the first time, all World Health Organization guidance on the full spectrum of health issues affecting adolescents. These include tobacco, alcohol and drug use, Human Immuno deficiency Virus infection, injuries, mental health, nutrition, sexual and reproductive health, and violence. The report recommends key actions to strengthen the ways countries respond to adolescents' physical and mental health needs.

Now a day, the school going adolescents develops more coping difficulties due to parental pressures and social expectations. So the investigator decided for the intervention which fosters resilience among adolescents studying in school. The investigator found that Yoga was effective in fostering resiliency among adolescent school going children. For developing positive adaptation among adolescents the investigator interested to do the research on evaluating the effectiveness of yoga on resilience.

## STATEMENT OF THE PROBLEM

A study to evaluate the effectiveness of Yoga on Resilience among adolescents at selected schools in Gujrat.

## OBJECTIVES

- To assess the level of resilience among adolescents in experimental group at Government Higher Secondary school, Gujrat.
- To assess the level of resilience among adolescents in control group at Government Higher Secondary School, Gujrat.
- To evaluate the effectiveness of yoga on resilience among adolescents in experimental group at Government Higher Secondary school, Gujrat.
- To associate the level of resilience among adolescents with their selected socio demographic variables.

## RESEARCH HYPOTHESES

- H<sub>1</sub>: There is a significant difference between the pretest and post test score of resilience after yoga intervention among adolescents in experimental group.
- H<sub>2</sub>: There is a significant association between the level of resilience among adolescents with their selected socio demographic variables

## ASSUMPTION

- There is a low resilience groups among adolescents.
- Yoga can be performed by the adolescents safely.
- Yoga may be one of the interventions which develop positive adaptation among adolescents.

## DELIMITATION

- The study is limited to the adolescents with the age group of 13-15 years.
- The study period is limited to 6 weeks
- The study is limited to school Settings

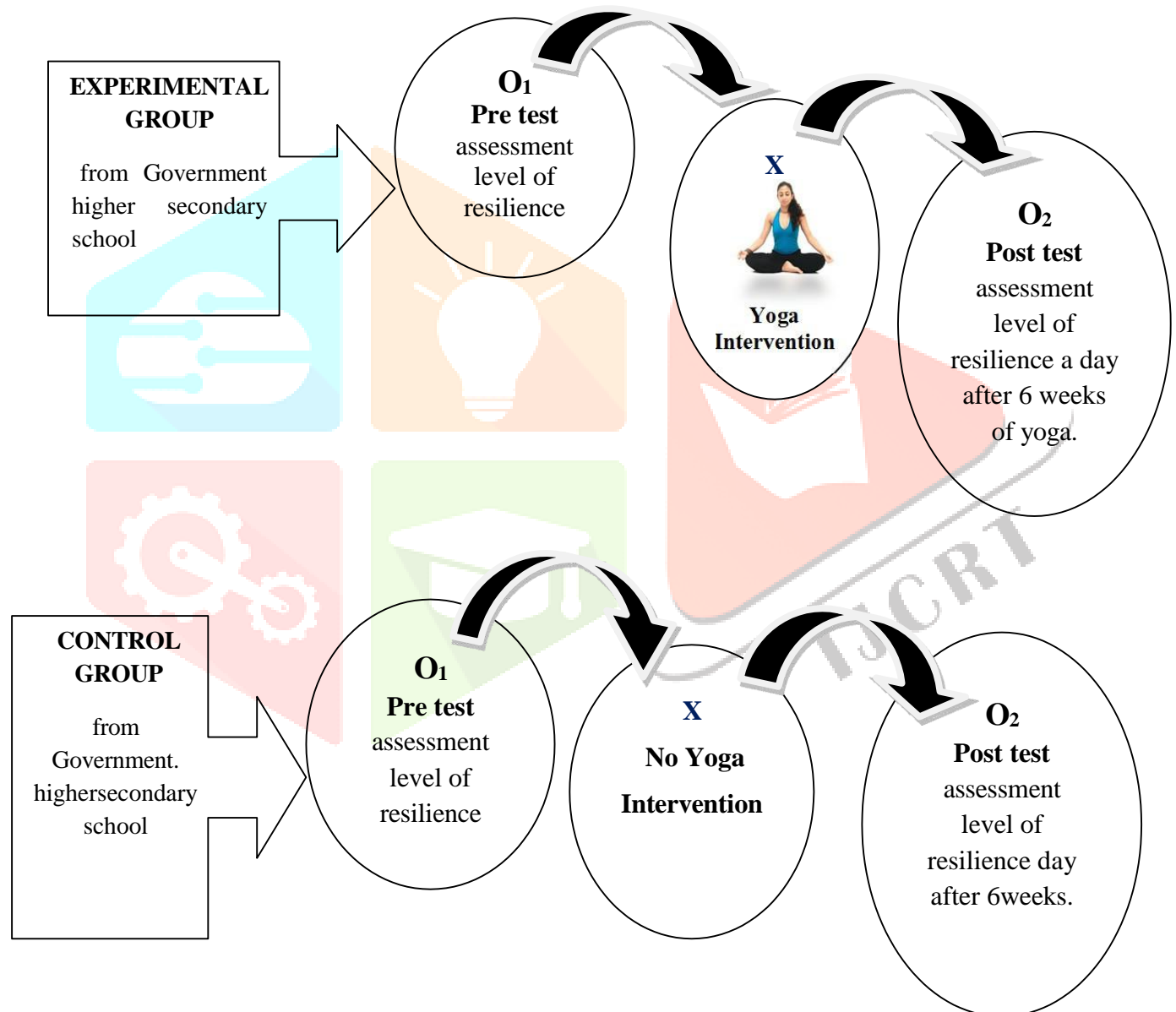
## METHODOLOGY

### RESEARCH APPROACH

Quantitative research approach was used in this study.

### RESEARCH DESIGN

The research design used in this study was Quasi experimental non equivalent control group pretest-posttest design.



## RESEARCH VARIABLES

Independent variable	: Yoga
Dependent variable	: Resilience level among Adolescents.
Demographic Variables	: Age, sex, religion, education status of father, education status of mother, father's occupation, mother's occupation, family income per month, type of family, ordinal position of child birth, parental support and experienced stress.

## SETTINGS OF THE STUDY

The study was conducted for the adolescents studying 9<sup>th</sup> standard at Government Higher secondary school, and Government Higher secondary school, Gujrat.

Experimental group subjects were selected from Government Higher secondary school at Gujrat. Similarly the control group subjects were taken from Government Higher secondary school at Gujrat.

### POPULATION

Population is the entire set of individuals or objects having some common characteristics.

#### Target population

Target population was adolescents who are studying 9<sup>th</sup> standard.

#### Accessible Population

In this study accessible Population were adolescents studying 9<sup>th</sup> standard at Government higher secondary school, and Government Higher secondary school, Gujrat.

## SAMPLE

The sample for the present study was comprised of the adolescents studying 9<sup>th</sup> standard who met the inclusion criteria at Government higher secondary school, and Government Higher secondary school at Gujrat.

## SAMPLE SIZE

The sample size consists of 60 adolescents. Among 60 subjects, 30 subjects were respectively assigned to each experimental group and control group.

## SAMPLING TECHNIQUE

Subjects for this study were selected through purposive sampling technique.

### SAMPLING CRITERIA

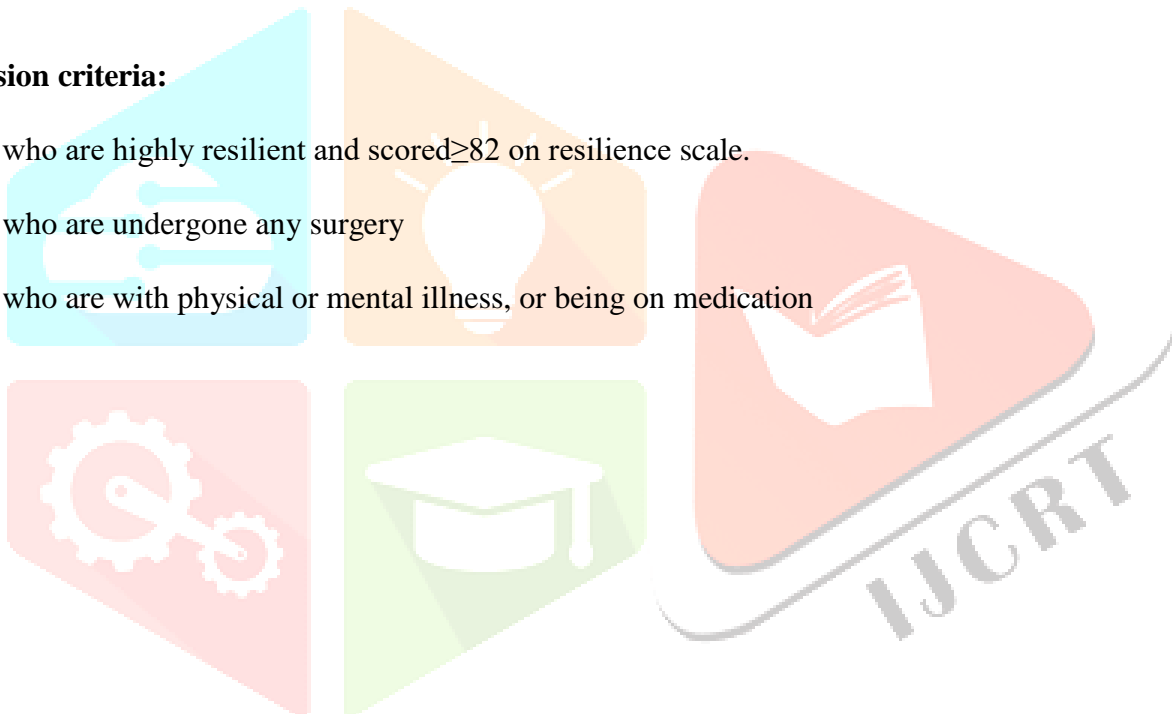
The subjects were selected based on the following inclusion and exclusion criteria.

#### Inclusion criteria:

- Study includes both boys and girls.
- Age group of 13 to 15 years.
- Studying 9<sup>th</sup> standard.
- Those who are scored <82 on resilience scale
- Those who are willing to participate.

#### Exclusion criteria:

- Those who are highly resilient and scored  $\geq 82$  on resilience scale.
- Those who are undergone any surgery
- Those who are with physical or mental illness, or being on medication



### SECTION-I

## DISTRIBUTION OF SOCIO DEMOGRAPHIC VARIABLES

**Table - 1**

**Frequency and percentage distribution of socio demographic variables of adolescents**

**n=60**

S. NO	DEMOGRAPHIC VARIABLES		GROUP			
			EXPERIMENTAL		CONTROL	
			f	%	f	%
1.	AGE	13 Years	05	16.7%	05	16.7%
		14 Years	25	83.3%	25	83.3%
		15 Years	0	0%	0	0%
2.	GENDER	Male	18	60%	18	60%
		Female	12	40%	12	40%
3.	RELIGION	Hindu	29	96.7%	28	93.3%
		Christian	01	3.3%	02	6.7%
		Muslim	0	0%	0	0%
4.	EDUCATION STATUS OF FATHER	Non formal education	04	13.3%	02	6.7%
		Primary education	02	6.7%	08	26.7%
		Secondary education	16	53.3%	16	53.3%
		Higher secondary education	07	23.3%	03	10%
		Degree / above	01	3.3%	01	3.3%
5.	EDUCATION STATUS OF MOTHER	Non formal education	10	33.3%	03	10%
		Primary education	05	16.7%	05	16.7%
		Secondary education	07	23.3%	16	53.3%
		Higher secondary education	08	26.7%	04	13.3%
		Degree / above	0	0%	02	6.7%
S. NO	DEMOGRAPHIC VARIABLES		GROUP			
			EXPERIMENTAL		CONTROL	
			f	%	f	%
6.	FATHER'S OCCUPATION	Unemployed	0	0%	0	0%
		Coolie work	15	50%	06	20%
		Self employed	09	30%	18	60%
		Private employee	0	0%	06	20%
		Government employee	05	16.7%	0	0%
		Farmer	01	3.3%	0	0%
7.	MOTHER'S OCCUPATION	Housewife	13	43.3%	15	50%
		Coolie work	14	46.7%	06	20%

		Self employed	0	0%	02	6.7%
		Private employee	02	6.7%	04	23.3%
		Government employee	0	0%	0	0%
		Farmer	01	3.3%	0	0%
		Housewife	13	43.3%	15	50%
8.	FAMILY INCOME	< Rs. 2000	0	0%	0	0%
		Rs.2001- Rs.5000	05	16.7%	03	10%
		Rs. 5001- Rs. 10000	14	46.7%	19	63.3%
		> Rs. 10000	11	36.7%	08	26.7%
9.	FAMILY TYPE	Nuclear	21	70%	20	66.7%
		Joint	09	30%	10	33.3%
10	BIRTH ORDER	First child	12	40%	17	56.7%
		Middle child	03	10%	02	6.7%
		Last child	15	50%	01	36.7%
11	PARENTAL SUPPORT	Father	06	20%	07	23.3%
		Mother	10	33.3%	18	60%
		Both	14	46.7%	05	16.7%
12	EXPERIENCED STRESS	Yes	04	13.3%	04	13.3%
		No	26	86.7%	26	86.7%

## SECTION- II



**EXPERIMENTAL AND CONTROL GROUP****Table-2**

Frequency and percentage distribution of pretest level of resilience among adolescents in experimental and control group.

**n=60**

S.NO	RANGE	EXPERIMENTAL GROUP		CONTROL GROUP	
		f	%	f	%
1.	Very low (<56)	14	46.7%	12	40%
	Low(57-64)	4	13.3%	6	20%
	Moderately low (65- 73)	7	23.3%	9	30%
	Moderately high (74- 81)	5	16.7%	3	10%
	High (82- 90)	0	0%	0	0%
	Very high (91- 98)	0	0%	0	0%
<b>TOTAL</b>		<b>30</b>	<b>100%</b>	<b>30</b>	<b>100%</b>

**SECTION-III****DISTRIBUTION OF POSTTEST LEVEL OF RESILIENCE AMONG ADOLESCENTS IN EXPERIMENTAL AND CONTROL GROUP****Table-3**

Frequency and percentage distribution of posttest level of resilience among adolescents in experimental and control group.

**n=60**

S.NO	RANGE	EXPERIMENTAL GROUP		CONTROL GROUP	
		f	%	f	%
1.	Very low (<56)	0	0%	12	40%
	Low(57-64)	2	6.7%	6	20%
	Moderately low (65- 73)	10	33.3%	7	23.3%
	Moderately high (74- 81)	3	10%	5	16.7%
	High (82- 90)	12	40%	0	0%
	Very high (91- 98)	3	10%	0	0%
<b>TOTAL</b>		<b>30</b>	<b>100%</b>	<b>30</b>	<b>100%</b>

## SECTION-IV

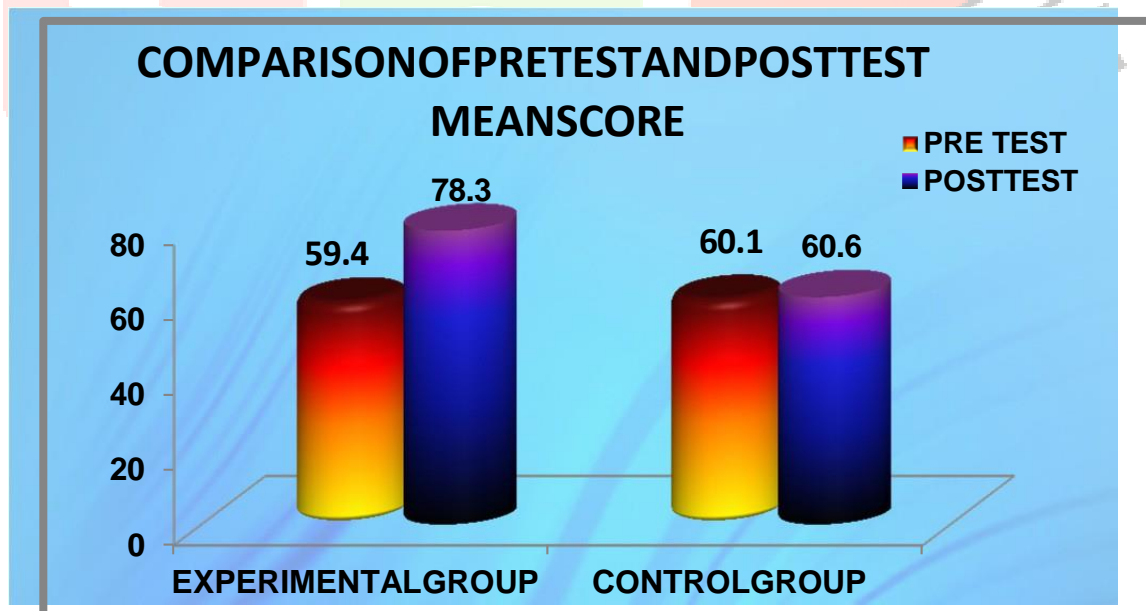
**COMPARISON OF PRETEST AND POSTTEST LEVEL OF RESILIENCE AMONG ADOLESCENTS IN EXPERIMENTAL AND CONTROL GROUP**

Table-4

Pretest and posttest mean score comparison to evaluate the effectiveness of yoga intervention on resilience

S.NO	GROUP	PRETEST MEANSORE	POST TEST MEANSORE	Mean Difference
1.	Experimental Group	59.4	78.3	18.9
2.	Control Group	60.1	60.6	0.5

The above table shows that in experimental group mean score was increased from 59.4 to 78.3 and it shown that 18.9 increased in level of resilience after intervention. This indicates that yoga intervention was increased the resilience score among experimental group. In control group mean difference was only 0.5.



**Figure15: Frequency distribution of pretest and posttest mean score on resilience among adolescents both in experimental and control group**

## SECTION-V

**EFFECTIVENESS OF YOGA ON LEVEL OF RESILIENCE AMONG ADOLESCENTS IN EXPERIMENTAL GROUP**

Table-5

**‘t’ Test to assess the effectiveness of yoga on level of Resilience among adolescents in experimental and control group**

GROUP	EXPERIMENTALGROUP			CONTROLGROUP			Student's Independent t-test
	Mean	SD	Student's Dependent t-test value	Mean	SD	Student's Dependent t-test value	
<b>PRE TEST</b>	59.4	12.6	9.608*** Significant at P < 0.001	60.1	11.31	1.000 Not significant at P > 0.05	0.223 Not significant at P > 0.05
<b>POST TEST</b>	78.3	9.48		60.6	11.59		10.599*** Significant at P < 0.001

The above table reveals that significant increase of resilience at 0.001 level ( $t=10.599$ ) among experimental group after yoga intervention. Also within the experimental group a significant improvement were found at 0.001 level ( $t= 9.608$ ). Control group had no significant changes in the level of resilience.

## SECTION-VI

### ASSOCIATIONBETWEENTHELEVELOFRESILIENCewithSOCIO DEMOGRAPHIC VARIABLES

Table-6

Chisquare test to associate the posttest level of resilience among adolescents with their socio demographic variables

S. NO	SOCIODEMOGRAPHIC VARIABLES	EXPERIMENTAL GROUP		
		$\chi^2$	Df	'P' value
1	Age 13 years 14 years 15 years	4.200	4	0.380 Non significant
2	Gender Male Female	7.847	4	0.097 Not significant
3	Religion Hindu Christian Muslim	7.310	4	0.074 Not significant
4	Education status of father Illiterate Primary education Secondary education Higher Secondary education Degree and above	33.982	16	0.005** <b>Significant at 0.01</b>

S. NO	DEMOGRAPHIC VARIABLES	EXPERIMENTAL GROUP		
		$\chi^2$	Df	'P' value
5	Education status of mother Illiterate Primary education Secondary education Higher Secondary education Degree and above	25.907	16	0.011* <b>Significant at 0.05</b>
6	Father's occupation Unemployed Coolie work Self employed Private employee Government employee Farmer	16.156	12	0.184 Not significant
7	Mother's occupation Unemployed Coolie work Self employed Private employee Government employee Farmer	11.448	12	0.491 Not significant
8	Family income <Rs.2000 Rs. 2001- Rs.5000 Rs. 5001- 10000 >Rs.10,000	10.33	8	0.111 Not significant
S. NO	SOCIODEMOGRAPHIC VARIABLES	EXPERIMENTAL GROUP		
		$\chi^2$	Df	'P' value

9	Family type Nuclear family Joint family	8.492	4	0.075 Not significant
10	Birth order First Child Middle child Last child	24.3	8	0.002** <b>Significant at 0.01</b>
11	Parental support Father Mother Both	22.157	8	0.005** <b>Significant at 0.01</b>
12	Experienced stress Yes No	1.731	4	0.785 Not significant

## CONCLUSION

Community health nurse plays an important role in health promotion among adolescents. Although the focus of nurses often includes health promotion and health protection, early detection and prompt treatment, and care of adolescents, the primary focus is on education. Registered Nurses must be cognizant of developmental tasks, level of stress and effective coping strategies, health risk behaviors, and levels of resilience when caring for adolescents.

Ultimately the nurse has the opportunity to enhance resilience and minimize high risk behaviors through assessment, education, and referral, if needed. Identifying high risk behaviors is essential to achieving positive health outcomes. Thus, screening for such behaviors and resiliency in the adolescent is critical. For adolescents with low levels of resilience, the nurse would provide appropriate follow-up care and referral as indicated. In inferential statistics of this study showed that there is an increase in level of resilience after yoga intervention when compared with pre test.

## REFERENCES

1. Ali, A., & Zilli, A. S. (2011). Perceived mental health among students of private and government schools. *Indian Journal of Health and Wellbeing*, 2(3), 529-532.
2. Annalakshmi, N., & Abeer, M. (2011). Islamic worldview, religious personality and resilience among Muslim adolescent students in India. *Europe's Journal of Psychology*, 7(4), 716-738.
3. Aronowitz, T. (2005). The Role of Envisioning the Future in the Development of Resilience Among At-Risk Youth. *Public Health Nursing*, 22(3), 200-208.
4. Bailey, L. (2012). Yoga. *Encyclopedia of Immigrant Health*, 1509-1510.
5. Beets, M. W., & Mitchell, E. (2010). Effects of yoga on stress, depression, and health-related quality of life in a nonclinical, bi-ethnic sample of adolescents: A pilot study. *Hispanic Health Care International*, 8(1), 47-53.
6. Benavides, S., & Caballero, J. (2009). Ashtanga yoga for children and adolescents for weight management and psychological well being: an uncontrolled open pilot study. *Complementary therapies in clinical practice*, 15(2), 110-114.
7. Birdee, G. S., Yeh, G. Y., Wayne, P. M., Phillips, R. S., Davis, R. B., & Gardiner, P. (2009). Clinical applications of yoga for the pediatric population: A systematic review. *Academic Pediatrics*, 9(4), 212-220.
8. Cappella, E., & Weinstein, R. S. (2001). Turning around reading achievement: Predictors of high school students' academic resilience. *Journal of Educational Psychology*, 93(4), 758.