

EFFECT OF PERSONAL WELL-BEING ON SECONDARY SCHOOL STUDENT'S ACHIEVEMENT IN SCIENCE

Sujatha¹ & HaseenTaj²

¹Research Scholar, Department of Education, Bangalore University, Bangalore, Karnataka, India

²Professor, Department of Education, Bangalore University, Bangalore, Karnataka, India

ABSTRACT

In the present study an attempt has been made to find out effect of personal well-being on secondary school students achievement in science. In order to ensure wider applicability of findings, the total sample of 831 students (408boys and 423 girls) of IX class was drawn from government, private as well as private unaided managed 39 secondary schools of Tumakur district. Personal wellbeing scale and Achievement test in science were the tools developed by researcher and Dr. Haseen Taj for the study. The findings shows that there is significant positive correlation between personal wellbeing and achievement in science of secondary school students. There is significant main effect of Personal well-being with sex, Type of the family, Type of School Management, Medium of instruction and Locality of secondary school students. There was no significant interaction effect of Personal well-being and other moderator variables sex, Type of the family, Type of School Management, Medium of instruction and Locality of secondary school students.

KEYWORDS: Secondary School Students Achievement in Science, Applicability of Findings

Article History

Received: 18 Dec 2018 | Revised: 29 Dec 2018 | Accepted: 08 Jan 2019

INTRODUCTION

Mental health is very important for an individual to lead a harmonious and congenial life in the society. Mental health is a state of well-being in which an individual is able to use his cognitive and emotional capabilities, functions in society, and meet the needs and demands of life.

Well being, wellness is a general term used in the mental health of an individual or group. It integrates mental health and physical health. Personal well being is the latest development well-being which is very important in human life to lead a harmonious life. Researchers from different disciplines have examined different aspects of well-being that include the following.

- Physical well-being.
- Personal well-being
- Economic well-being.
- Social well-being.

- Emotional well-being.
- Psychological well-being.
- Mental well-being
- Spiritual well-being
- Intellectual well-being
- Occupational well-being
- Environmental well-being

TYPES OF WELL-BEING

Social Well-Being

Is the ability to relate to and connect with other people in our world. Our ability to establish and maintain positive relationships with family, friends, and co-workers contributes to our Social Well-being.

Emotional Well-Being

Is the ability to understand ourselves and cope with the challenges life can bring. The ability to acknowledge and share feelings of anger, fear, sadness or stress; hope, love, joy, and happiness in a productive manner contributes to our Emotional Well-being.

Spiritual Well-Being

Is the ability to establish peace and harmony in our lives. The ability to develop congruency between values and actions and to realize a common purpose that binds creation together contributes to our Spiritual Well-being.

Environmental Well-Being

Is the ability to recognize our own responsibility for the quality of the air, the water and the land that surrounds us. The ability to make a positive impact on the quality of our environment is it our homes, our communities or our planet contributes to our Environmental Well-being.

Occupational Well-Being

Is the ability to get personal fulfilment from our jobs or our chosen career fields while still maintaining balance in our lives? Our desire to contribute to our careers to make a positive impact on the organizations we work in and to society as a whole leads to Occupational Well-being.

Intellectual Well-Being

Is the ability to open our minds to new ideas and experiences that can be applied to personal decisions, group interaction and community betterment? The desire to learn new concepts, improve skills and seek challenges in pursuit of lifelong learning contributes to our Intellectual Well-being.

Physical Well-Being

Is the ability to maintain a healthy quality of life that allows us to get through our daily activities without undue fatigue or physical stress. The ability to recognize that our behaviors have a significant impact on our well-being and adopting healthful habits (routine checkups, a balanced diet, exercise, etc.) while avoiding destructive habits (tobacco, drugs, alcohol, etc.) will lead to optimal Physical Well-being.

Personal Well-Being

Is also known as 'subjective well-being' is about people evaluating their own lives it explains how satisfied people in their life.

Wellbeing, Well-being, and Wellness is a general term for the condition of an individual or group. A high level of well-being means in some sense the individual or group's condition is positive. Personal wellbeing creates the foundations for healthy behaviours and educational attainment. It also helps prevent behavioral problems (including substance misuse) and mental health problems. That's why it is important to focus on the Personal wellbeing of children and young people.

The personal well-being headline indicator measures people's sense of how they are feeling within themselves and experiencing their lives. In the present study, it is a combination of five components indicators which measure: Emotional well-being, Vitality, Resilience, Positive functioning and self-esteem.

Components of Personal Well-Being

Emotional Competency: It measures the overall balance between how frequently people experience positive and negative emotions. Higher scores indicate that positive emotions are felt more often than negative ones. It is comprised of the subcomponents: positive feelings and absence of negative feelings.

Vitality: It measures how far people have energy, feels well-rested and healthy and is physically active. It means lively, energetic, full of vim, vigor, and vitality. It also exuberant physical strength or mental vigor, capacity for survival or for the continuation of a meaningful or purposeful existence vital force.

Resilience: It measures the extent to which people are able to deal with life's difficulties. The resilience is the ability to recover quickly from illness, change, or misfortune. It is the successful adaptation of an individual despite facing risk and adversity.

Positive Functioning: It measures how far people are 'doing well' in terms of functioning well in the world. It comprised of four subcomponents: autonomy, competence, engagement and meaning and purpose.

Self Esteem: It measures the extent to which people feel good about themselves. Self-esteem is the confidence and satisfaction in oneself. It is often seen as a personality trait, which means that it tends to be stable and enduring. It reflects a person's overall subjective emotional evaluation of his or her own worth.

Personal Well-Being and Achievement in Science

The primary goal of education should be the intellectual development of the individual. With its accelerating important in our society science has become an increasingly important part of general knowledge. Scientific education is best fostered as a general emphasis on intellectual activity.

According to Kothari commission (1964-66), 'we lay great emphasis on making science an important element in the school curriculum. We, therefore, recommended, that science and mathematics should be taught on a compulsory basis to all pupils as a part of general education during the first ten years of schooling. In addition, there should be the provision of special courses in these subjects at the secondary stage for students of more than average ability'

Science has now become a compulsory subject in the school curriculum because of its multifarious values to the individual well as the society. 'Science for all' has become a slogan all over the world. It has been realized that there is a need for scientifically literate citizens who understand the science technology-oriented environment and can make decisions on science-based issues.

The present age is the age of science. Science has influenced every walk of life. Today a man cannot live even for a while without the use of one or the other way of science. Achievement in science measures knowledge and skills in the area of science. It determines the amount a student has learned through instruction. It focuses upon examinee's attainment at a given point in time.

Achievement in science also reflects the acquisition of all the behavioral changes belong to cognitive, affective and psychomotor domains. Mental health stands for the behavioral and perceptual aspects with feelings which determine an individual's overall measures to boost personal instrumental tendencies, enlightenment, achievement and excellence of contribution (Kornhauser, 1965). Amit Ahuja conducted a study of mental health among secondary school students in relation to academic achievement motivation and academic achievement shows that boys and girls did not differ significantly on mental health but girls outperformed the boys on academic achievement. This evident that mental health and academic achievement are related to each other Personal well-being as one of the aspects of mental health plays a vital role in the academic achievement of a child. There is a relationship between personal well-being and achievement of the child. Personal well-being helps to accept our emotions, take daily risks, live in the present, be introspective, feel happy, determine and live our personal values, identify and use our individual strengths, keeps tabs on their own thought, discover and rediscover a passion of study, get rid of rotten eggs, prepare for future life, lead o successful life, behave happily with members of school etc, in turn leading to higher achievement.

Need for the Study

The years of adolescence and young adulthood are stages of upheaval, change, and growth. How we meet the challenges of these years will to some extent determine our future life. Learning the skills needed to handle emotional problems will give us a foundation of mental, physical and emotional health.

Personal well being is an ability of satisfaction in one's life. It is the combination of 5 components like Emotional well being, Vitality, Resilience, Self-esteem and positive functioning.

Science is one of those human activities that man has created to gratify certain human need and desires. Disinterested curiosity has been the greatest motive power of scientific research. The search of truth becomes the dominant motive in the prosecution of science. It has been pursued for so many centuries and attracted ever wider extent of attention of a very persisted group of people. The primary goal of education should be the intellectual development of the individual with its accelerating importance increasingly in our society. Science has become an increasingly important part of general knowledge. Science education is best fostered as a part of the general emphasis on intellectual activity and also a quality of life. This can be developed within the organism as a result of well being in general and personal well being in particular.

Therefore personal well being is a prior condition.

Many researches done on the components of personal well being shows the relation with achievement in the science of students of secondary school. A study conducted by Mayurakshee Gangopadhyay and DebomitaSkandar;(2015): on the impact of values on the psychological well-being of youth of 60 colleges and university going youth shows values play a significant role in creating difference and also it is one of the main components of any society and culture. R.AntoPioEzhil and Dr.Thangadurai (2017) found the significant influence of health status and self-esteem on the academic achievement of high school students.

Several researches have been done to study the influence and effect of well being and the components like emotional well being, self-esteem, resilience, vitality and positive functioning on other variables, but No research was conducted to the study personal well being and its effect on achievement in science. So the researcher felt the need to select this research.

OBJECTIVES OF THE STUDY

- To find out the relationship between personal well-being and achievement in the science of secondary school students.
- To find out, whether the differences in moderate variables like Sex, Type of the school, Locality, Medium of instruction, and type of family of secondary school students would account for significant differences in their achievement in science.
- To find out the main and interaction effect of personal well-beingand moderator variables of secondary school student on achievement in science.

Sample

The sample of the study consisted of 831 secondary school students of Tumakuru District. Out of which a sample size of 423 girls and 408 boys were drawn giving representation to government, private aided and private unaided schools, using stratified random sampling technique.

Tools used in the Study

- Personal well-being scale (by Sujatha and Dr.HaseenTaj, 2015)
- Achievement test in science. (By Sujatha and Dr.HaseenTaj, 2015)

Statistical Techniques used:

The statistical techniques such as Mean, Standard Deviation, t-test, Two-way ANOVA and Pearson's product moment correlation were computed.

Analysis and Interpretation:

In order to present the result systematically, the hypothesis wise interpretation has been given in tables

Table 1: Shows the Coefficient of Correlation between Personal Well-Being and Achievement in the Science of Secondary School Students

SI No	Variables	No of	df (N-2)	'r'	Level of Significance
1	Achievement in science	831	829	0.51	0.01
2	Personal Well-being	831	829		

The above table -1 shows that the obtained 'r' value 0.51 between Achievement in science and Personal Well-being of secondary school is found to be higher than the table value at 0.01 level of confidence and hence the null hypothesis is rejected. The rejection of the null hypothesis reveals that there is significant positive correlation between personal well being and achievement in the science of secondary school students.

Table 2: Results of 't'-Test for Moderator Variables with Achievement in Science of Secondary School Students

SI No	Variables	Type	No	Mean	S D	S E M	't'	Level of Significance
1	Sex	Boys	411	22.81	6.542	.323	6.076	0.01
		Girls	420	26.16	9.158	.447		
2	Medium	English	507	26.04	8.987	.399	7.851	0.01
		Kannada	324	22.10	5.856	.325		
3	Family	Joint	180	22.39	6.934	.517	4.417	0.01
		Nuclear	651	25.09	8.350	.327		
5	School	Private Aided	283	23.48	5.301	.315	14.902	
		Private Unaided	224	32.69	8.524	.570		
6	School	Private Aided	283	23.48	5.301	.315	8.897	0.01
		Govt	324	19.78	5.046	.280		

The above table-2 shows the obtained 't' values are significant at 0.01 level for all the variables namely sex, type of school management medium of instruction, locality and type of family therefore the null hypotheses are rejected and alternative hypotheses are accepted that there is a significant difference in achievement in science of secondary school students belonging to different categories of Moderator variables.

Table 3: Results of 2-Way ANOVA for Personal Wellbeing with Other Main Independent Variables

Category	Sum of Squares	df	Mean Square	F-value	Level of Significance
Personal well being	11678.447	150	77.856	.484	0.05
Sex	1909.304	1	1909.304	36.396	0.01
2-way interaction	7273.835	102	71.312	1.359	NS
Error	30269.047	577	52.459		
Total	51851.598	830			
Personal well being	11735.447	150	78.236	1.324	.01
Type of family	566.799	1	566.799	9.625	.01
2-way interaction	3171.856	80	39.648	.673	NS
Error	35273.516	599	58.887		
Total	51851.598	830			
Personal well being	10092.670	150	67.284	1.29	.01
Locality	2945.848	1	2945.848	56.762	.01
2-way interaction	5401.379	106	50.95	.982	NS
Error	29737.755	573	51.898		
Total	51851.598	830			

Personal well being	10473.928	150	69.82	1.30	.01
Medium of instruction	1278.679	1	1278.679	23.929	.01
2-way interaction	6122.499	98	62.47	1.16	NS
Error	31047.166	581	53.437		
Total	51851.598	830			
Personal well being	6863.26	150	45.755	1.37	.01
Type of school	1275.53	2	6375.26	191.44	.01
2-way interaction	7260.49	179	40.56	1.21	NS
Error	16616.71	499	33.300		
Total	51851.598	830			

It can be observed from the table-3 Personal well-being has significant main effect when paired with sex ($F=1.48$ and 36.39), Type of the family ($F=1.32$ and 9.625), Locality ($F=1.29$ and 56.762), Medium of instruction ($F=1.30$ and 23.929), Type of School Management ($F=1.37$ and 191.449). But sex (1.359), Type of the family ($.673$), Locality ($.982$), Medium of instruction (1.16), Type of School Management and personal; well-being do not have any significant interaction effect on Achievement in science of secondary school students

Major Findings and Discussion of Results

- There is significant positive correlation between personal well being and achievement in the science of secondary school students.
- . All the Moderator variables such as sex, Type of the family, Locality, Medium of instruction and Type of School Management were found to have a significant effect on Achievement in the science of secondary school students ($t=6.076, 4.417, \dots$). Girls English Medium, Nuclear family rural Private Unaided followed by Private aided students were found to have higher achievement in science as compared to their counterparts (Mean= respectively).
- 3. There is the significant main effect of Personal well-being with sex, Type of the family, Locality, Medium of instruction, Type of School Management of secondary school students
- 4. There was no significant interaction effect of Personal well-being and other moderate variables sex, Type of the family, Locality, Medium of instruction and Type of School Management of secondary school students.
- The present study reveals that personal well being does not significantly affect achievement in the science of secondary schools students of English medium, rural students, girls, and private aided school students have higher achievement in science. AaliyaAktar and Shailabal research reveals that there are gender differences in self esteem in adolescents. It was found that students who belong to the joint family have significantly lower achievement in science as compared to the students of the nuclear family. Researches also evident that subjective home environment variables have a pertinent role in the mental health of adolescent. (JenyRampheal and Varghese Paul.K). There is a also significant difference between rural and urban students achievement in science. Research shows that ere is no significant difference between perceived parenting style and self-esteem of urban and rural adolescents and there is a significant relationship between perceived parenting style and self-esteem of adolescents. (Mrs.Amandeep and Mrs. Kanchan Bansai.2015). At the Same time, there is a significant difference in achievement in science was found among the English and kannada medium. The result of the study reveals that there are a sex difference and English and kannada medium difference in achievement in science. There is also a

significant difference among private aided, private unaided and government secondary school student's achievement in science.

Educational Implication

To establish good relation between personal well being and achievement in science school should play a significant role as follows:

Train students to develop good balance in their life between leisure time, activity and work, Students should feel proud about themselves and don't suffer from low self-esteem should helps students to see purpose of their lives, learn to accept changes, have less stress and equip better to deal with stress, have better relationship with others, develop a passion, mediate or practice yoga, learn to manage, identify areas of authentic strength or competency, provide situation to demonstrate ability, self-affirm.

Teachers should help students to pursue goals that have personal meaning relate to their self-esteem. Physical Situation created for learning helps to grab the individual's attention (sensory curiosity) and stimulate want to learn more (cognitive curiosity) personal well-being. An environment created by the institution helps the students to perceive the importance of science learning by the students which in turn enhances their achievement in science.

Teachers must be encouraged to maintain good development of students physically, mentally, socially, morally which leads to good personal wellbeing.

Unhealthy competitions, rivalry, the punishment should be avoided in school.

Parent-teacher meetings may be arranged periodically to realize their mutual responsibility in fostering good personal well being and avoid factors that affects that.

If necessary guidance and counselling sessions should be arranged in schools for fostering good personal well being

The potentialities and capabilities of students should be recognized and must be channelized and utilized for their development.

CONCLUSIONS

The findings of the study show there is a significant relationship between personal well being and achievement in the science of secondary school students. Also, there is a significant difference in achievement in the science of secondary school students in terms of locality, sex, medium of instruction, type of the family and type of the school. So proper interest and care should be taken to minimize the difference.

REFERENCES

1. Charles, E. Skinner(1992), *Educational Psychology, Prentice-hall of India, (p)Ltd, New Delhi.*
2. Kundu, c.L and Tuto, D. N. (1991), *Educational Psychology, Strling Publishers Private Ltd, New Delhi.*
3. Dr, S.S. Mathur, *Educational Psychology, VinodPustakMandir, Agra*
4. Prof, B.c.Rai, *Educational Psychology,Prakashan Kendra, Lucknow*
5. S.S, Chouhan, *Advanced Educational Psychology, Vikas Publishing House Pvt, Ltd, New Delhi.*

6. S.K, Mangal, *Advanced Educational Psychology*, Prakash brothers, Jalandhar city-16,
7. Rambai,N, Patel, *Educational Evaluation-Theory and Practice*, Himalaya Publishing House, Bombay,
8. Ranjinj Devi, (2011) *Healthy self-esteem child's Armour against the challenges of the world*, EDUTRACKS, Vol. 10-No.5, Jan
9. Shailbala, (2014), *Gender differences in self esteem*, *Indian Journal of Psychology and education*, Vol. 45(1) Jan.. 42,
10. NeethiDutta,(2016), *Self esteem in relation to parental behavior among adolescent girls: An exploratory study*, *MIER Journal of Educational Studies Trends and Practices*, Vol.6. No.2, 225
11. [WWW.en.Wikipedia.org/wiki/Personal](http://www.en.Wikipedia.org/wiki/Personal) well being WWW. Shodhaganga.inflibnet.ac. wellbeing

