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From the Editorial Desk....

Dear Readers and Well Wishers,

Greetings from Edureach: VOC Journal of Educational Research!

It is with great pleasure and gratitude that we release this eighth issue with **ISSN No. : 2582-1806 and RNI Under Regd.No.: TNENG/2017/75214 of our EduReach : V O C Journal of Educational Research** with the blessings of our Hon. Founder Secretary Kulapathy A.P.C.Veerabahu. We express our sincere thanks to the faculties, research scholars and academicians who are committed to the core of education for extending their generous heart in encouraging and motivating our team in bringing out this issue of our journal.

This issue is a collection of articles in terms of Covid-19, Creative thinking ability, Mass media, Emotional intelligence, Teachers competencies and Students attitude. In fact, this compendium will draw the attention of teacher aspirants.

We are living in extremely unsettling times when the corona virus has shattered the world. Yes, Covid-19 has infected more than 5 million people and also caused about 1.3 Million causalities globally so far. The number of infected people and loss of precious lives continue every day. At the outset, the world faced unprecedented social and economic crisis. Covid-19 has affected education system extremely harsh. These undesirable developments threaten to undo growth and development achieved with several decades of hard work. Before corona, it was said that education liberates from mental biases and inhibitions and makes us humble, dynamic, enlightened and empowered.

Availability versus Accessibility is well accepted that there are massive inequalities in the provision of available higher education in the country. Leading intellectuals believe that online mode can be a great equalizer as far as equitable access to higher education is concerned. But in practice, many students from poor families living in rural villages and urban slums do not have access to basic devices such as smart phone and laptop computer. Students are not very enthusiastic about online education. .

Mass media network in today's life is one of the platforms of information dissemination and communication convenience to shape, reinforce and maintain social ties from the wholeworld. The mass media has strong influence onthe lives of people. Media has the power to transform and shape the pattern of human thought and behaviour. Mass media has its own social role and function in society.

Emotional Intelligence is the ability to know one's emotions, recognize feeling as they occur, manage moods, empathize with others and manage relationships. It is a set of abilities essential for the success of an individual. The purpose of imparting quality education is not possible without inculcation of emotional intelligence.

The competencies which are to be upheld by the teachers in the classroom are strategies, teacher's behaviours and positive attitudes, creative thinking, discipline and skills would promote a positive classroom environment. Teacher's attitudes and discipline have contributed a great to student's behaviour.

In this context, education is a prominent social agency which plays a decisive role in shaping the personality of the student. The teacher is the destiny maker of the student and he builds the nationThe teacher should know the existent of assessment of tools, instruction strategies, use of curriculum resources and technologies to face the times to come. Well-trained and skilled teachers are competent as well as committed professionals. A competent teacher is committed not only to learners but to the society at large. A teacher should be physically enduring, intellectually enlightened, aesthetically developed, morally oriented, emotionally balanced, technologically enabled and spiritually inclined. At the outset, every teacher should endow with certain personal qualities mental potentialities, positive attitudes, soft skills, creative thinking and technological skills.

With Regards,

Editorial Board

INFLUENCE OF THE MASS MEDIA ON THE BEHAVIOUR OF THE ADOLESCENTS

** Mr. K. Thangavel and ** Dr. S. Prakash*

Abstract

This study focuses on the impact of mass media on adolescents. Mass media is a means of conveying information simultaneously and accessible to the community all over the world. The objective of the study was to find out the significant difference in impact of mass media concerning their gender, medium of instruction, locality, and father's educational qualification of the adolescents. Survey method was used by the investigator. One hundred school going adolescent students from Madurai district were taken as a sample for the study. There was a significant difference in the impact of mass media on adolescents in the variable medium of instruction.

Keywords : *Adolescents, Mass media, Technology.*

Introduction

Mass media is a channel, medium, utility, device, or instrument used in the mass communica -tion process. The mass media also includes printed media, electronic media and cyber media. Printed media are newspapers, magazines, books, pamphlets, billboards and other technical tools that bring out the message by the sense of sight and tactile. Electronic media are radio and recorded programs that use the sense of hearing and television programs, motion picture and video recording covering both senses which are hearing and vision (Blake, 2009). Meanwhile the online media (online media, cyber media) is the internet-based mass media. Mass media happens to be the suggestions for cultural development, not just culture in the sense of art and symbol but also in the sense of the development of settings, fashion, lifestyle and norms (McQuail, Denis, 2000).Mass media refers to a diverse mode of media technologies that reach a huge audience via mass communication. This is the technology, through which the communication takes place among a variety of students.The effectiveness of a bunch of information depends upon the medium through which it is imparted. Thus, the mass media is not only conveying the messages, but also itself the massage. It massages the sensory organs and stimulates them to respond actively. Hence, the mass media is very important for classroom teaching as a part of the process of instruction.

Review of related literature

Joel D Klein and Jane D Brown (2009) conducted a study entitled "Adolescents' risky behavior and mass media use". It is the survey from 2760 randomly selected 14 to 16-year-old adolescents in 10 urban areas in the south-eastern United States. The main findings were: i) Male adolescents who reported engaging in five or more risky behaviors were most likely to name a heavy metal music group as their favorite, ii) Adolescents who had engaged in more risky behaviors listened to radio and watched music videos and movies on television more frequently than those who had engaged in fewer risky behaviors, regardless of race, gender or parents' education.

Maheshwar M, Narender K, Balakrishna N, and Rao DR (2018) conducted a study entitled "Teenagers' Understanding and Influence of Media Content on their Diet and HealthRelated Behaviour". The target audience of mass media ranges from children, to geriatric population. Cross-sectional method with stratified random

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sampling was used. Findings showed that majority teenagers tend to take one or other kind of physical fitness activity whenever they see a fit body of film actors/ actress and sports persons in media.

Significance of the study

Mass media network in today's life is one of the platforms of information dissemination and communication convenience to shape, reinforce and maintain social ties from the whole world. The mass media has a strong influence on the lives of people. Media has the power to transform and shape the pattern of human thought and behaviour. Mass media has its own social role and function in society, which serves as a function of social supervision, interpretation function, transitional function and entertainment function. Transformation in the 21st century education system is holistic that emphasizes the mastery of computer usage, and the internet is very encouraging. Despite the ease and sophisticationof the world today, it affects the performance of an individual, especially the teenager who is still a student. This effect can come in short term instantly or in the long term that happens slowly. Media and communication are capable of producing good and bad impact on human beings based on the message they are carrying and it is also capable of forming and characterizing personalities. Mass media is a very powerful tool to influence the minds of any one, let alone a teenager or adolescent. Adolescents are in that stage of growing up where everything around them influences them. The way they talk, dress and act depend a lot on what they are exposed to. Also Mass media is a good way to promote positive messages to adolescents. Since adolescents are immersed in media culture, it is wise to use that platform as a means to promote information and education about a variety of things that affect teenagers such as mental illnesses, sexually transmitted diseases, drug use or even suicide.

Mass media is important dimension of young peoples' lives that may take on special significance during adolescents. A recent survey found that average adolescents spend three to four hours per day using media for entertainment and education. In such a situation, the adolescents used to spend the mass media like newspaper, magazines and Internet for their academic purpose. The premise of this study is that how mass media influences adolescents' study behavior.Generally adolescents are affected by the mass media. It may influence either positively or negatively. Thus the investigator has chosen this area to find out the impact of mass media adolescents' academic behaviour with respect to gender, locality, medium of instruction and father's educational qualification.

From the end of the 19th century until the end of the 20th century, there was a marked change in the broadcasting technology world and turned the field into a major medium in distributing information. The change in sophistication is essential in facilitating the activities or processes of communication while information can be generated at a more efficient and effective rate (Caldwell, 2000). However, in the 21st century, communication activities began changing. Users prefer to use internet service to get informationonline. This method allows easy data transfer processand also efficient time saving. In addition, more information input can be achieved by using the internet. A variety of worldwide information available through the internet, such as news, sending and receiving electronic mail, commerce, entertainment including watching and more can be accessed (Mokhtar, 2000).

Objectives

1. To find out the significant difference, if any, in the impact of mass media on adolescents concerning gender.
2. To find out the significant difference, if any, in the impact of mass media on adolescents concerning the medium of instruction.
3. To find out the significant difference, if any, in the impact of mass media on adolescents concerning locality.
4. To find out the significant difference, if any, in the impact of mass media on adolescents concerning father's educational qualification.

Null Hypotheses

1. There is no significant difference in the impact of mass media on adolescents concerning gender.

2. There is no significant difference in the impact of mass media on adolescents concerning the medium of instruction.
3. There is no significant difference in the of mass media on adolescents concerning locality.
4. There is no significant difference in the impact of mass media on adolescents concerning father's educational qualification.

Methodology

The investigator has adopted the survey method. Simple random sampling technique was adopted. The sample of the study is 100 higher secondary school students who are studying in the Madurai district. A Mass Media Tool (2019) was developed and validated by the investigator. It comprises 20 items. There are five responses. They are : Completely agree, Agree, Undecided, Disagree and Completely Disagree. The content validity of the tool was established. For establishing the reliability of the tool, test-retest method was administered. The reliability was found as 0.78. For the analysis of data, the researchers have used Mean, Standard deviation and t-test.

Data Analysis

Hypothesis : 1

There is no significant difference in the Impact of Mass Media on Adolescents concerning gender.

Table 1 : Difference between boys and girls students in their impact of mass media

Variables	Sub variable	No.	Mean	SD	't' Value	Level of Significance
Gender	Boys	70	64.91	10.49	1.34	NS
	Girls	30	64.16	10.63		

(At 5% level of significance, the table value of 't' is 1.96)

It is inferred from the above table that the calculated t-value is 1.34 which is less than the table value. Hence the null hypothesis is accepted. So there is no significant difference in the impact of mass media on adolescents concerning gender.

Hypothesis : 2

There is no significant difference in the impact of Mass Media on the adolescents concerning medium of instruction.

Table 2 : Difference between Tamil and English medium students in their impact of mass media

Variables	Sub variable	No.	Mean	SD	't' Value	Level of Significance
Medium of Instruction	Tamil	40	63.45	9.99	5.28	S
	English	60	65.88	10.78		

(The table value of 't' is 1.96 at 5 % level of significance)

The above table showed that the calculated t-value is 5.28, which is higher than the table value 1.96 for the significance at 0.05 level. Hence the null hypothesis is rejected. There is a significant difference in the impact of mass media on adolescents concerning the medium of instruction. The mean value of English medium students (65.88) is higher than Tamil medium students (63.45). It may be due to the reason that the English medium students have more exposure to mass media, because they used to spend more valuable time in mass media.

Hypothesis : 3

There is no significant difference in the impact of Mass Media on adolescents concerning locality.

Table 3 : Difference between rural and urban students in their impact of mass media.

Variables	Sub variable	No.	Mean	SD	't' Value	Level of Significance
Locality	Rural	39	65.05	10.45	0.48	NS
	Urban	61	65.09	10.39		

(The table value of 't' is 1.96 at 5 % level of significance)

The above table showed that the calculated t-value is 0.48, which is lower than the table value.Hence the null hypothesis is accepted. There is no significant difference in the impact of mass media on adolescents concerning locality.

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Hypothesis : 4

There is no significant difference in the impact of Mass Media on adolescents concerning father's educational qualification.

Table 4 : Difference between the children of illiterate and literate father's in their impact of mass media.

Variables	Sub variable	No.	Mean	SD	't' Value	Level of Significance
Father's Educational Qualification	Illiterate	38	65.41	10.24	0.55	NS
	Literate	62	64.91	10.49		

(The table value of 't' is 1.96 at 5 % level of significance)

The above table showed that the calculated t-value is 0.55, which is lower than the table value. Hence the null hypothesis is accepted. So there is no significant difference in the impact of mass media on adolescents concerning father's educational qualification.

Findings

- There is no significant difference in the impact of mass media on adolescents concerning gender.
- There is a significant difference in the impact of mass media on adolescents concerning medium of instruction. English medium students are found better.
- There is no significant difference in the impact of mass media on adolescents concerning locality.
- There is no significant difference in the impact of mass media on adolescents concerning father's educational qualification.

Conclusion

There is a significant difference between Tamil medium and English medium students in their impact of mass media. English medium students have more impact on mass media than Tamil medium students. We may include drama, awareness program and take remedial measures to improve the exposure of the Tamil medium students. It is important to be aware of mass media and the impact it has on teenagers, especially for parents, because they need to be aware of how it is affecting their child. If parents are more aware, they can be more understanding and helpful towards their children.

References

Biagi, S. (2015). Media Impact: An Introduc tion to Mass Media. 11th ed. USA: Cengage Learning.

Blake, R. H. (2009). A Taxonomy of Concept in Communication, diterjemahkan dalam Taksonomi Konsep Komunikasi. Surabaya: Papyrus.

Caldwell, J.T., (2000). Theories of the New Media: A Historical Perspective Edited and with an Introduction. London: The Athlone Press.

Joel D Klein & Jane D Brown (2009). Adolescents' risky behavior and mass media use.Pediatrics,92(1). https://www.researchgate. net/publication 14683401_Adolescents'_ risky_ behavior_and_mass_media_use

Maheshwar, M., Narender K., Bala krishna N.,, & Rao D.R. (2018). Teenagers' Understanding and Influence of Media Content on their Diet and Health-Related Behaviour. Journal of Clinical Nutrition & Dietics. 4(3).

McQuail, Denis, (2000). Mass Communica -tion Theories. Fourth edition. Sage Publication, London.

Millwood Hargrave, A. & Livingstone, S. (2007). Harm and Offence in Media Content: Updating the 2005 Review.London: Ofcom.

Mokhtar, (2000). Wiley Online Library. https://bjui-journals.onlinelibrary.wiley.com/doi/ abs/10.1046/j.1464-410x.2000.00899.x

Ray, M. and Jat, K.R. (2010). Effect of electronic media on children. J. Indian Pediatrics, 47 :561-568.

Roberts DF, Foehr U, Rideout V. (2004) Kids and Media in America. New York, NY : Cambridge University Press.

Sharma, S. (2015). Effect of electronic media on youngsters life. Internat. J. Adv. Res. & Innovative Ideas Edu., 3:314-316.

EMOTIONAL INTELLIGENCE OF PROSPECTIVE TEACHERS

** Mr. M. Antonysamy, ** Dr. T. Kanakaraj*

Abstract

Emotional Intelligence is the ability to know one's emotions, recognize feelings as they occur, manage moods, empathize with others and manage relationships. It is a set of abilities essential for the success of an individual. The purpose of imparting quality education is not possible without inculcation of emotional intelligence. This research paper, in this context is an attempt to find out the emotional intelligence of prospective teachers in Thoothukudi district in terms of gender and educational qualification. A representative sample comprised of 763 prospective teachers in various colleges of education. The survey method of research was adopted by the investigators. The Emotional Intelligence Scale (EIS) was used by the researcher and it indicated high reliability and validity. This scale was used for measuring emotional intelligence of prospective teachers in colleges of education. Statistical analysis namely percentage analysis, 't' test and F-test were calculated. The present study shows that the level of emotional intelligence of prospective teachers in Thoothukudi district is moderate. This study also found that there is no significant difference in the emotional intelligence and its dimensions namely physical skill, intellectual skill, moral skill, and social skill except personal skill with respect to gender. There is no significant difference in the emotional intelligence-moral skill of the prospective teachers with respect to educational qualification.

Keywords : *Emotional Intelligence, Prospective Teachers, Skills.*

Introduction

The concept of emotional intelligence has aroused great interest among researchers and professionals working in the field of mental health. Mayer and Salovey (1997) define emotional intelligence as the ability to recognize the meaning of emotions, reason and solve the problems based on them, thus pursuing a cognitive character. Emotional intelligence offered a new perspective in the study of emotions, which has gone from being considered distractions in human cognitive processes being received as vital factors that provide useful information for solving everyday problems. According to the model developed by Mayer and Salovey (1997), emotional intelligence can be conceived as a pyramid with four basic skills namely ability to i) perceive, appraise, and express emotions accurately, ii) access and generate feelings that facilitate thought, iii) understand emotions and emotional knowledge, iv) regulate emotions to promote emotional and intellectual growth. According to Daniel Goleman (1995) "Emotional Intelligence is a set of skills,attitudes, abilities and competencies that determine the individual's behavior, reaction, state of mind coping style and communication style. These factors directly affect the level of success, satisfaction, ability to connect other people as well as the individual ability to cope with stress, level of self- esteem, perception of control and overall level of mental and emotional well-being". He also theorized that intelligence accounts for only about 20 per cent of a person's success in one's professional and personal life. The balance 80 per cent can be attributed to emotional intelligence. Research findings have proved that teachers with high emotional intelligence are better equipped to keep their students engaged in learning activities. They are able to spend more time with the students and monitoring students work. On the other hand, teachers with low emotional intelligence lack in perseverance and give negative feedback to students (Gibson., & Dembo, (1984).

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Rationale for the Study

Teachers' goal is to provide an atmosphere where flow occurs easily and the students are totally engaged in learning. Here, teaching plays a vital role in developing emotional intelligence among students. It requires interacting with students' colleagues. The emotional competence of a person knows how much of his/her potential is tapped for the job capabilities in a teaching profession. The prospective teachers must be trained in adopting better instructional strategies and providing extra educational treatment like guidance and counseling for the betterment of teaching. Prospective teachers can make learning very interesting and exciting by changing the attitude of the students.

The investigators find a conspicuous gap to conduct a study among B.Ed., students. The present study is conducted with a view to assess the emotional intelligence of B. Ed, students from different colleges of education to find out whether gender and educational qualification of respondents make any significant differences in their level of emotional intelligence. This study was carried out on the prospective teachers undergoing B.Ed. training in Thoothukudi District. Thus, studies dealing with how the prospective teachers in this region connected themselves emotionally to others and take other's perspectives are important. This study is an attempt to assess the level of emotional intelligence of the B.Ed., students in Thoothukudi district.

Objectives

1. To find out the level of emotional intelligence of prospective teachers undergoing B.Ed., in Thoothukudi District.
2. To find out the significant difference, if any, in the emotional intelligence and its dimensions of prospective teachers in terms of background variable gender.
3. To find out the significant difference, if any, in the emotional intelligence of prospective teachers undergoing B.Ed., in Thoothukudi District in terms of the back ground variable educational qualification.

Hypotheses

In order to realize the objectives of the study, the investigator formulated the following hypotheses for testing.

1. The level of emotional intelligence of prospective teachers undergoing B.Ed., in Thoothukudi District is moderate.
2. There is no significant difference in the level of influence of emotional intelligence and its dimensions with respect to gender.
3. There is no significant difference in the emotional intelligence of prospective teachers with respect to educational qualification.

Methodology

The study was conducted through descrip -tive survey method of research and it is most suitable for the present study. The investigators have adopted the survey method of research to study the emotional intelligence of prospective teachers in Thoothukudi District. The population for the present study consisted of the prospective teachers undergoing B.Ed., programme in colleges of education in Thoothukudi District.

The investigator used simple random sampling technique for this research. The sample was randomly selected from the students studying in colleges of education in Thoothukudi District. The sample consisted of 763 prospective teachers undergoing B.Ed., training in Thoothukudi District.

In this study the following tools were used for data collection.1. Students Profile developed by the investigator and 2. Emotional Intelligence Scale (EIS) constructed and standardized by Anukool Hyde, Saniyotpethe and Upindhar (2002). This tool consists of 62 statements to evaluate the emotional intelligence of prospective teachers. The tool is considered as reliable and valid. It is a five-point scale. The weight is ranging from 5, 4, 3, 2, 1 (strongly agree to strongly disagree) for favorable positive items. In the case of unfavorable negative items range of weights are reversed.ie., is from 1 (Strongly Agree) to 5 (Strongly Disagree). The individual with high score is considered to have high level of emotional intelligence and is likely to be high performer.

The data were analyzed by using the statistical techniques namely i) Percentage Analysis, ii) 't'-test and iii) F-test.

Data Analysis

Hypothesis : 1

The level of emotional intelligence of prospective teachers undergoing B.Ed.,in Thoothukudi District is average.

Table 1 : Level of emotional intelligence of prospective teachers.

Variable	No.	Low		Medium		High	
		No.	%	No.	%	No.	%
Emotional Intelligence	763	111	14.55	528	69.2	124	16.25

The above table-1 shows that 14.55 per cent of prospective teachers have low level of emotional intelligence, 69.20 per cent of prospective teachers have medium level of emotional intelligence and 16.25 per cent of prospective teachers have high level of emotional intelligence. The level of emotional intelligence of prospective teachers in Thoothukudi District is moderate.

Hypothesis : 2

There is no significant difference in emotional intelligence and its dimensions with respect to gender.

Table 2 : Significant difference in the level of influence of emotional intelligence with respect to gender.

Dimensions	Category	No.	Mean	S.D	Calculated t-value	Remarks
Physical Skill	Male	79	20.759	4.792	1.862	NS
	Female	684	21.826	5.046		
Intellectual Skill	Male	79	23.835	7.182	1.432	NS
	Female	684	22.633	5.96		
Moral Skill	Male	79	19.259	5.849	0.462	NS
	Female	684	18.937	4.86		
Social Skill	Male	79	20.405	5.588	0.618	NS
	Female	684	20.822	6.376		
Personal Skill	Male	79	41.772	11.99	1.971	S
	Female	684	38.965	11.93		

(The table value of 't' is 1.96 at 5 % level of significance)

The above table-2 shows that there is no significant difference between the male and female prospective teachers in the dimensions of their Physical, Intellectual, Moral and Social skills, since the calculated 't'-value for above dimensions are less than the table value. But, there is significant difference between male and female prospective teachers in terms of personal skill.

Hypothesis : 3

There is no significant difference among the prospective teachers in emotional intelligence and its dimensions with respect to educational qualification.

Table 3 : Difference among the prospective teachers in emotional intelligence and its dimensions with respect to educational qualification.

Category	Mean Value	Mean Difference	C.I.	Remarks
B.A.	18.593	0.902	1.108	NS
B.Sc.	19.495			
B.A.	18.593	0.843	2.084	NS
M.A.	17.75			
B.A.	18.593	0.419	1.729	NS
M.Sc.	19.012			
B.Sc.	19.495	0.745	2.07	NS
M.A.	17.75			
B.Sc.	19.495	0.483	1.712	NS
M.Sc.	19.012			
M.A.	17.75	1.262	2.459	NS
M.Sc.	19.012			

The above table-3 shows that there is no significant difference in emotional intelligence among the prospective teachers with respect to educational qualification.

Discussion and Educational Implications of Findings

The research findings can be usually employed in educational situations. The present study shows that more prospective teachers in Thoothukudi district have moderate and average emotional intelligence. This may be due to the fact that the educational institutions might be providing adequate instructional and infrastruc tural facilities and organizing several programmes namely curricular, co-curricular activities, symposium, group discussion, workshop, puzzle test, brain storming, quiz and yoga programs, sports events and so on. The present study may alsobe useful to understand the concept of emotional intelligence and its various dimensions. This study also found

that there was no significant difference in the emotional intelligence and its dimensions namely physical skill, intellectual skill, moral skill, and social skill except personal skill with respect to gender. There is no significant difference among the emotional intelligence-moral skill of the pros pective teachers with respect to educational qualification. In terms of moral skill, the male prospective teachers are slightly better than their counter parts. This may be due to the fact that the male prospective teachers have more exposure than the female prospective teachers. Because, the male prospective teachers have more chance to interact with their friends, colleagues and peer members and are free from their home burden and responsibilities.The analysis of this study will help the prospective teachers to solve the problem related to educational field.

Conclusion

From the result it is evident that emotional intelligence is very important and essential for the prospective teachers, so it should be developed among teachers through our educational system. Finding of research shows that the atmosphere of institutions should be developed in such a manner, which helps in the development of emotional intelligence of prospective teachers. A prospective teacher should be intelligent in emotion and satisfied with profession because a teacher is the hope for an individual and the nation. Since teacher's emotional intelligence affect the children behavioral pattern, a teacher should understand his/her own emotion and attribute of pupil in the teaching learning process. So, the researchers have found that the quality of education being delivered should develop emotional intelligence of prospective teachers.

References

Anukool Hyde, Saniyotpethe and Upindhar (2002). Comparision of Emotional Intelligence in Cricketers of Madhya Pradesh. International Journal of Recent Scientific Research Vol. 9, Issue, 1(E), pp. 23234-23237, January, 2018.

Best. J.W.(1982), Research in education (4thed), New Delhi:Precentice hall of India pvt Ltd.

Daniel Goleman (1995). *Emotional intelligence.* Bantam Books, Inc. https://psycnet.apa.org/record/1995-98387-000

Extremera, N. & Fernandez Berocal, P. (2006), Emotional Intelligence as Predictor of Mental, Social and Physical Health in University Students, *The Spanish journal of psychology*, 9(1), 45-51.

Furnham, A, & Petrides , K. V (2003), Traits Emotional Intelligence and Happiness, *Social Behavior and Personality: An International Journal* , 31 (8), 815-824.

Gakhar, S.C. (2003), "Effect of Emotional Intelligence and Socio-Demographic Concept", Praachi *Journal of Psyco-logical Dimensions*, 19(2) pp 161-164.

Garret, H.E. 91967), Statistics in psychology and education (4thedn.), Bombay : VakilFeffer and Simond Pvt. Ltd.

Garrett H.E. (1981), Statistics in Psychology and Education, VakilsFeffer and Simons, Bombay. Indian Reprint.

Gibson., & **Dembo,** (1984). Teacher efficacy : A construct validation. *Journal of Educational Psychology, 76*(4), 569–582. https : //doi.org/10.1037/0022-0663.76.4.569.

Guhan, S.S (2000), Advanced Educa tional Psychology,Vikas Publishing House Pvt Ltd. New Delhi Retrieved http//:w.w.w. emotional intelligence. org. com

Mayer,J.D. & Salovey, P. (1997), What is emotional intelligence? In P. Salovery & Sluyter (Eds) Emotional development and emotional intelligence : *Implication* for educators (PP 3-31), New York.

Singh, Dalip (20 01), Emotional Intelligence at work – A Professional Guid.NewDelhi:Response Publishing.

Wolman, B.B. (1973), Dictionary of Behavoural Science, Van Nostrant Remhold Pulblication Company, New York.

A STUDY OF CREATIVE THINKING ABILITY AND ACADEMIC ACHIEVEMENT OF STD XI STUDENTS

*Dr. J. Ramani

Abstract

This present study examined the Creative thinking ability and its impact on academic achievement of STD XI students. The investigator used Stratified Random Sampling technique for selecting the sample. The data were collected from 300 XI standard students in Kovilpatti educational district of Thoothukudi. Data for the study were collected using the self made tool for Creative thinking ability and also the researcher has developed academic achievement tool in 2019 with the help of the Textbook. Findings showed that there was significant difference in the Creative thinking ability and Academic achievement of STD XI students due to the gender, locality and type of school. The results of the present study reported the importance of creativity in predicting the student's academic success and achievement-orientation.

Keywords : Creative thinking ability, Academic achievement.

Introduction

Kothari commission (1964-66) stated that yesterday's education system cannot satisfy the present need so focus on the tomorrow's need also. To meet the present need, education of youth should be changed from the world of school to the world of work and life.

Creative thinking ability

Creative thinking ability to make something new generates new ideas, new concepts, new designs and new opportunities while innovation helps to add values to new products. Creativity, different images come in our mind. According to Hennessy and Amabile (2010), creativity is a concept of individual differences that attempt to explain why some people have higher potential compared to others to present new solutions to problems. The importance of creative thinking ability in the Higher secondary school revealed by knowing that acquiring correct learning habits are formed in childhood and early years of education are enhanced during human life. Identification of possible solutions is the first step in the development of creative thinking ability. After that, it is emphasized on the extraction of hypotheses, tests and evaluations.

Academic Achievement

Achievement at school level is known as Academic achievement. It is very vast concept underlying the learning outcomes of students. Learning is a process because it requires a series of planned and organized experiences. Not all students react at the same level to these experiences in the same way. The term academic achievement refers to how the student deals with their studies and how they cope with or accomplish different tasks given to them by their teachers. Academic achievement is the outcome of education and it explores at which extent a student or a teacher, an institutions has achieved the educational goals. A research on academic achievement revealed that various variables had been identified as correlates of academic achievement.

Need and significance of the study

The basis of creative thinking ability may include all of the lesson, all aspects of life, all fields of education and even various ages although its effects on students, college students and younger ages is more important. Hence, the aim of this study is to determine the relationship between the creative thinking ability and the academic achievement of Std XI Students in History group. The findings will also act as a linkage of creative

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thinking ability and academic achieve- ment which in turn imparts a significant role in the development and achievements of adolescents.

Objectives

The present investigation is undertaken with the following major objectives.

1. To find out significant differences, if any, in the creative thinking ability of Std XI students in relation to their background variables such as gender, locality and type of school.
2. To find out significant differences, if any, in the academic achievement of Std XI students in relation to their background variables such as gender, locality and type of school.
3. To find out significant relationship between creative thinking ability and the academic achievement among Standard XI students.

Methodology

The investigator has adopted the survey method. 300 XI Standard students in History group were randomly selected from government and aided higher secondary schools in Kovilpatti educational district of Thoothukudi.

Creative thinking ability scale was developed and validated by the investigator and Selvaraju (2015). Academic Achievement tool was developed by the researcher in the year 2019, with the help of text book.

The statistical techniques Mean, Standard deviation, 't' test and Pearson Product Moment Correlation were used.

Data Analysis

To find out the meaningful interpretation of the raw scores the data were analyzed. The results of the study are presented in the following tables.

Table 1 : Differences among the Creative Thinking Ability of Standard XI Students in terms of Demographic variables.

Creative Thinking Ability		N	Mean	SD	df	Calculated 't' value	'p' value	Remarks
Gender	Male	146	33.74	4.543	298	4.504	0.000	S
	Female	154	36.05	4.349				
Locality	Urban	101	34.54	5.074	298	1.028	0.305	NS
	Rural	199	35.12	4.316				

It is inferred from the table 1, that the calculated *p* value for the Creative thinking ability is less than 0.01 and so it is significant at 1% level. It means that there is significant difference in the Creative thinking ability between male and female students of Standard XI. Hence the formulated null hypothesis, "there is no significant difference in the creative thinking ability between male and female students of Standard XI" is rejected.

It is inferred from the table 1, that the calculated p value for Creative thinking ability is more than 0.01. So, it is not significant at 1% level. It means that there is no significant difference in the Creative thinking ability between Urban and Rural students of Standard XI. Hence, the formulated null hypothesis, "there is no significant difference in the creative thinking ability between Urban and Rural students of Standard XI" is accepted.

Table 2 : Difference in the Creative Thinking Ability between Government and Aided School Students of Standard XI.

Creative Thinking Ability		N	Mean	SD	df	Calculated 't' value	'p' value	Remarks
Type of School	Govt.	185	34.22	4.473	298	3.439	0.001	S
	Aided	115	36.06	4.554				

It is inferred from the table 2, that the calculated p value for the Creative thinking ability is less than 0.01 and so it is significant at 1% level. It means that there is significant difference in the Creative thinking ability between Government and Aided School students of Standard XI. Hence the formulated null hypothesis, "there is no significant difference in the creative thinking ability between Government and Aided School students of Standard XI" is rejected.

Table 3: Differences among the Academic Achievement of Standard XI Students in terms of Demographic Variables.

Creative Thinking Ability		N	Mean	SD	df	Calculated 't' value	'p' value	Remarks
Gender	Male	146	26.35	4.543	298	3.138	0.002	S
	Female	154	28.08	4.349				
Locality	Urban	101	27.35	5.074	298	0.270	0.787	NS
	Rural	199	27.19	4.316				

It is inferred from the table 3, that the calculated p value, in tender, is less than 0.01 at 1% level of significance. It means that, there is significant difference in the academic achievement between male and female Standard XI students. Hence the null hypothesis, "there is no significant

difference in the academic achievement between male and female Standard XI students" is rejected.

It is also inferred from the table 3, that the calculated p value in locality is greater than 0.05 at 5% level of significance. It means that, there is no significant difference in the academic achievement between Urban and Rural Standard XI students. Hence the null hypothesis, "there is no significant difference in the academic achievement between Urban and Rural Standard XI students" is accepted.

Table 4 : Difference in the Academic Achievement between Government and Aided school Standard XI Students.

Academic Achievement		N	Mean	SD	df	Calculated 't' value	'p' value	Remarks
Type of School	Govt.	185	26.28	4.372	298	4.500	.000	S
	Aided	115	28.79	5.204				

It is inferred from the table 4, that the calculated p value is less than 0.01 at 1% level of significance. It means that, there is significant difference in the academic achievement between Government and Aided school Standard XI students. Hence the null hypothesis, "there is no significant difference in the academic achievement between Government and Aided school Standard XI students" is rejected.

Table 5 : Relationship between the Creative Thinking Ability and the Academic Achievement of Standard XI Students.

Variables	Pearson correlation (r value)	P Value	Remarks
Creative thinking ability	0.423	0.000	g**
Academic Achievement			

The table 5, reveals that the calculated p value for the creative thinking ability and academic achievement are less than 0.01 and is significant at 1% level. It means that Creative thinking ability and is positively correlated with the academic achievement of Standard XI students. Hence the formulated null hypothesis, "there is no significant relationship between the creative thinking ability and the academic achievement of Standard XI students" is rejected**.**

FINDINGS AND INTERPRETATIONS

After making an analysis and inter pretation of data, the following findings have been drawn from the present study. Major findings of the study are discussed here in relation to the objectives of the study.

1. There is significant difference in the Creative thinking ability between male and female students of Standard XI. The mean scores of male (mean = 33.74) and female (mean = 36.05) XI Standard students differ in their Creative thinking ability. Female students are better than the male students in their Creative thinking ability. Female students who are having high level of creativity possess good memory and knowledge background. They are able to utilize their abilities to perform well in every field of life. They can express their ideas more frequently compared to those students who are having low creativity.
2. There is no significant difference in Creative thinking ability of Standard XI students with reference to their locality.
3. There is significant difference in the Creative thinking ability between Government and Aided School students of Standard XI with reference to their type of school. The mean scores of Government (mean = 34.22) and Aided (mean = 36.06) School students of Standard XI in their Creative thinking ability biffer. Aided School students are better than the Government School students in their Creative thinking ability that is supported by the findings of Meenu Yadav, (2014) and Goswami and Phukon (2014).
4. There is significant difference in the academic achievement between male and female Standard XI students. Further it is observed that the female Std XI students are better than the male Standard XI students in their academic achievement. While comparing the mean scoresof male (26.35) and female (28.08) students of Standard XI in their academic achievement, female students are found better than the male students. It shows that female students have a higher academic achievement than their male counter parts. It may be due to the fact that female students are more sincere and hard working in their studies as compared to male. Male students are diverted from academic side thus spending less time in their studies and scoring low in academics.

5. There is no significant difference in the academic achievement between urban and rural Standard XI students. This research finding is agreed with the findings of Vincent (2014) which reported that there exists no significant differences between the relationships of achievement in chemistry with respect to locality.
6. There is significant difference in the academic achievement between government and aided school Standard XI students with regards to the type of school. While comparing the mean scores of government (26.28) and aided (28.79) school students of Standard XI in their academic achievement, aided school students are found better than the government school students. This may be due to the fact that in aided school all the subjects are taught by well equipped specific subject teacher.
7. There is significant relationship between the Creative thinking ability and the academic achievement of Standard XI students. The correlation co-efficient between creative thinking ability and academic achievement is r = 0.423, P = 0.000. All these are having positive correlation and are significant at 1% level creative thinking ability and academic achievement. The possible reason for this finding may be that creative thinking ability people have belief in their abilities and so have high academic achievement. Teachers should have to be trained to know and adopt methods which foster creativity. Equipped with this knowledge, they will be in a better position to boost their students' academic level.

CONCLUSION

In sum, it can be suggested that creativity can be a good predictor of academic achievement and students if taught properly which can enhance their abilities. It could positively affect their achievement in school. The findings of the present study are in line with the earlier researches which also pointed out that creativity helps the students in achieving higher. Creative students should be encouraged through our educational system and they should not be simply neglected. A lot of exposure to the students should be provided. It is the duty of the educational institutions to find out the creative children in their respective schools and accordingly build up their interest. The teacher's place in the educational sphere is the most prominent. The techniques of teaching should be so emphasized that the creative students will be able to get more chance to express their ideas and views to acquire more knowledge. The result of the study will be helpful to teachers, principals and administrators to work for the enhancement of academic proficiencies in higher secondary school students.

REFERENCES

Anwar et.al (2012). Relationship of Creative Thinking with the Academic Achievement of Secondary School Students. International Inter disciplinary Journal of education, vol.13, pp.44-47

Candrasekaran, S (2013). Creativity and academic achievement of higher secondary school students in Tamil Nadu, International Journal of Humanities and Social Science Invention,vol. 3, no.8, pp. 32-36.

Chauhan and Sharma (2017). A Study of Relationship between Creativity and Academic Achievement among public and private school students in both the Gender, International Journal of Science Technology and Management, Vol. 6, no.01, pp. 39-45.

Hennessy and Amabile (2010). Psycho -logical Study of Creativity. Annual Review of Psychology.61(1).569-98.

Naderi, H., Abdullah, H.T., Sharir, J. and & Kumar., V. (2010). Relationship between Creativity and Academic Achievement: A study of Gender Differences journal of American Science, vol. 6, no. 1, pp. 181-190.

Ramani & Selvaraju (2017) Impact of Creative Thinking ability on the Academic achievement of D.El.Ed Students Paripex - Indian Journal of Research vol. 6, no.8,pp. 587-589.

EFFECT OF PROCESSING ON MACRO-NUTRIENT COMPOSITION OF QUINOA BASED CREAM FILLED COOKIES

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Abstract

Cereals play an important role in human nutrition, contributing approximately to half the energy and protein intake of the world's population. Quinoa (Chenopodium quinoa Willd.) is a plant belonging to the family Amaranthaceae. It has a significant source of proteins, unsaturated fats, dietary fiber, vitamins and minerals, with an extra ordinary balance of essential amino acids, It is also characterized by being a gluten-free grain. Fruit seeds are bliss of many vital nutrients and functional components usually have poor culinary importance. The present study was carried out to formulate a healthy snack from Quinoa, fruits seeds and nuts and oilseeds and to perform various analysis.

***Keywords**: Quinoa, fruits seeds, nuts, oilseeds.*

Introduction

The development of quinoa based flour mixed cookies and cream filled cookies are aimed to provide healthy snacks to all the age group with more affordable prize and without toxins. Quinoa can be a substitute for the animal protein and consists most of all the essential amino acids than in any other cereals. Popularization of a new variety of cereal in the form of cookies without affecting nutritional quality is also aimed.

Cookies are small, flat dessert treats, commonly formed into a circular shape. They constitute an important component of the diet (Mishra V., Puranik V., Akhtar N., Rai GK.,2012) Cookies are convenient snacks product dried to a very low moisture content taken among young people and adult to provide energy (Okaka, J. C., 1997). Cookies have gained importance as a preferred way to use composite flours as they are ready to eat, provide a good source of energy, and are consumed widely throughout the world (Arshad, M. U., Anjum, F. M., & Zahoor, T.,2007).

According to Jacobsen (2003)quinoa is one of the oldest crops in the Andean Region, with approximately 7000 years of cultivation, and great cultures such as the Incas and Tiahuanacu have participated in its domestication and conser vation. Quinoa is not a true cereal grain, but rather is a pseudocereal, which is dicotyledonous. In contrast cereals are monocoty ledonous (Valencia -Chamorro S.A., 2003).

Nuts and dried fruits are a matrix of important bioactive compounds such as Vitamins (Vitamin E, niacin, choline and/or folic acid), minerals (magnesium, potassium, calcium and/or phosphorus), phenolic compounds, carotenoids and/or phyto sterols (USDA,2011). Importantly, some nuts and dried fruits are among the 50 foods with the highest antioxidant capacity (Halvorsen, B.L. et al., 2006) and are also a known source of bio active compounds, including plant sterols (Phillips, K.M. et al.,2005)

The ablity of Grape Seed Proantho cyanidin extract to act as a potent antioxidant is at the heart of its cardioprotective benefits. Free radicals are highly reactive species that are normally produced in our bodies. They damage lipids, proteins, and DNA, and are thought to contribute to the aging process. Proantho cyani -dins have been found to have potent anti oxidant activities, particularly against oxidation of lipids and low density lipoproteins. Post prandial (after meal) hyperlipidemia increases risk for atherosc lerosis, and it has been suggested that oxidation of LDLs (low density lipoproteins) may play a pivotal role in increasing the risk of developing atherosclerosis (Frei B., 1995).

Watermelon seeds are known to be highly nutritional; they are rich sources of protein, vitamins B, minerals (such as magnesium, potassium, phosphorous, sodium, iron, zinc, manganese and copper) and fat among others as well as phyto chemicals (Braide W., et al., 2012).Previous and

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recent results showed that watermelon seed would indeed constitute a valuable source of the major elements of Iron (Fe), Zinc (Zn), Manganese (Mn), and Cobalt (Co), particularly in diet of the humans, since no special provision is made for the supply of these vital nutrients (Hassan, H. A. G., 1998).

Methodology

The ingredients used for the development of quinoa based cookies were selected based on their nutrient composition. Among the food groups, 38% from cereals, 5.4% from nuts, 1.8% from seeds, 30% from fats and oils, 3% from dry fruits and 1.8% from sweeteners. Two samples were developed. Sample I served as experimental group I which was prepared of mixing the nuts and seeds paste along with cookie dough. Sample II served as experimental group which was developed as a centre filled nuts and seeds cream cookies. The present study was carried out to develop quinoa based cookies and to analyze the effect of processing on nutrient composition.

Preliminary treatment of food includes cleaning, peeling and stringing, cutting and grating, sieving, soaking, processing, coating, blanching, marinating, sprouting, fermenting, grinding, drying and filtering have done [Srilakshmi.B, 2015]. Macro nutrients such as energy, carbohydrate, protein, fat, fibre, micro nutrients such as sodium, potassium, calcium, and iron profile were analyzed in lab after processing. Nutritive value was calculated manually before the processing.

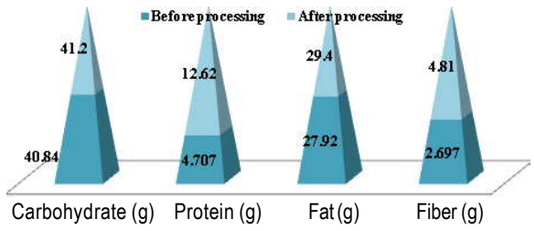
Results

Table1 : Effect of processing on macro nutrient composition on cream filled quinoa cookies

(100g) Variables	Cream filled quinoa cookies		Mean ± S.D.	t-test	Level of Significance
	Before Processing	Before Processing			
Carbohydrate (g)	40.84	41.2	41.02±0.14	8.772	S
Protein(g)	4.707	12.62	8.66±3.94		
Fat(g)	27.92	29.4	28.66±1.21		
Fiber(g)	2.697	4.81	3.75±1.05		

Figure 1

Effect of processing on macronutrient composition on cream filled quinoa cookies (100g)



The calculated nutritive value of macro nutrients for cream filled quinoa cookies before processing and proximate macronutrient values after processing were given in the above table1 it has been observed that before processing the amount of macronutrients were 433.56kcal, 40.84g, 4.70g, 27.92g and 2.67g for energy, carbohydrates, protein, fat and fiber respectively. The macronutrient values of after processing were 482.2kcal, 41.2g, 12.62g, 29.4g and 4.81g for energy, carbohydrates, protein, fat and fiber respectively. From this result, there was a considerable increase in the nutritive value for protein and fiber.The result shows the estimated value of mean and standard deviation for macronutrients were 41.02±0.14, 8.66±3.94,28.66±1.21, 3.75±1.05 energy, carbohydrates, protein, fat and fiber respectively. There is a significant difference in the macronutrient composition of cream filled quinoa cookies before and after processing with 5% level of significance.

Conclusion

Methods obtained for the preliminary preparation and processing were influenced the total macronutrient composition of the developed quinoa based cookies. Carbohydrate content has no significant difference before and after processing. At the same time, it can be noted that protein, fat and fiber content have a significant difference.

Reference

Arshad, M. U., Anjum, F. M., & Zahoor, T. (2007). Nutritional assessment of cookies supplemented with defattedwheat germ. *Food Chemistry, 102*, 123–128.

Braide W., Odiong, I. J. and Oranusi S. (2012) Phytochemical and Antibacterial properties of the seed of watermelon (*Citrulluslanatus*). *Prime Journal of Microbiology Research*, 2(3), 99-104.

Frei, B (1995). Cardiovascular disease and nutrient antioxidants: role of low-density lipoprotein oxidation. Crit Rev Food SciNutr. 35:83-98.

Halvorsen, B.L.; Carlsen, M.H.; Phillips, K.M.; Bøhn, S.K.; Holte, K.; Jacobs, D.R.; Blomhoff, R (2006). Content of redox-active compounds (ie, antioxidants) in foods consumed in the United States. Am. J. Clin. Nutr. 84, 95–135.

Hassan, H. A. G. (1998). Biochemical and Technological Studies onWatermelon Seed Oil. M.Sc. Thesis, University of Khartoum.Jacobsen, E. 1993. Quinoa Chenopodium quinoa Willd. A novel crop for European agriculture. Department of Agricultural Science. The Royal Veterinary and Agricultural University, Denmark.145 p.

ATTITUDE OF IX AND X STANDARD STUDENTS IN THOOTHUKUDI TOWARDS SCIENCE SUBJECT

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Abstract

Science subject proves to be a backbone in scholastic and non-scholastic achievement. This paper in this context, tries to find out the attitude of IX and X standard students in Thoothukudi District towards Science Subject. The investigator in this study adopted the survey method of research. The population of the present study was identified as IX and X standard students in Thoothukudi. Among the population, 300 students of IX and X standard were selected as sample. Simple random sampling technique was adopted by the investigator. The statistical techniques used were percentage analysis, 't' test and 'F' test. It was found out from this study that the level of attitude of IX and X standard students towards Science is moderate.There is significant difference between rural and urban school students in IX and X standard in their attitude towards Science. There is significant difference between English and Tamil medium students in IX and X standard in their attitude towards Science. There is significant difference among government, government-aided and private school students of IX and X standard in their attitude towards science subject.

Keywords : *Attitude towards Science, IX and X standard student.*

Introduction

According to Nelson Mandela (2011), "Education is the most powerful weapon which one can use to change the world". The whole world is highly dependent on scientific and technological innovations. It is highly observable that one's common domestic needs and commercial needs are solved with Science and Technology. A type of discipline and appreciation of technology can only be achieved as students develop a positive attitude towards Science. Science is a subject of development as it enhances the skills; induces rationality in thought process and action in their approach. Science is one subject that builds a relationship of students to their environment. It induces self-confidence and self-reliance in students for their future.

Significance of the study

Nowadays, learning Science becomes very important and learning Science in a more interactive way through the usage of communication technology is highly encouraged. Under such circumstances, it becomes important to investigate the learning of Science by students, who are the potent citizens of tomorrow. High school level is an important stage for all the students because if there is any lacuna in understanding the concept of Science at this stage, it will not only affect the student's choice of career but also affect their performance in higher classes continuously. It is therefore in the interests of society, and the responsibility of the educators, to improve student's attitude towards Science, and to prepare students to live in a highly scientific and technological society, this research entitled "Attitude of IX And X Standard Students in Thoothukudi towards Science Subject" had been carried out.

Objectives

1. To find out the level of attitude of IX and X standard students towards Science.
2. To find out whether there is any the significant difference in the attitude of IX and X standard students towards Science with respect to locality of institution, medium of instruction and type of management.

Hypotheses

1. The level of attitude of IX and X standard students towards Science is moderate.
2. There is no significant difference between rural and urban IX and X standard students in their attitude towards Science.

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3. There is no significant difference between Tamil and English medium IX and X standard students in their attitude towards Science.
4. There is no significant difference among government, government-aided and private schools IX and X standard students in their attitude towards Science with respect to type of management.

Methodology

The researcher adopted survey method for the present study.

The population for the present study was identified as the IX and X standard students in Thoothukudi. 300 students of IX and X standard were selected by using simple random sampling technique.

Science Attitude Scale (2019) was developed and validated by investigators. Percentage analysis, t-test and 'F' test were used.

Data Analysis

Hypothesis 1 : The level of attitude of IX and X standard students towards Science is moderate.

Table 1 : Table showing level of attitude of IX and X standard students towards Science.

Variable	No.	Low		Medium		High	
		No.	%	No.	%	No.	%
Attitude towards Science	300	43	14.3	195	65	62	20.7

From the above table, it is inferred that 14.3%, 65% and 20.7%of IX and X standard students have low, medium and high level of attitude towards Science.

Hypothesis 2 : There is no significant difference between rural and urban IX and X standard students in their attitude towards Science.

Table 2 : t-test showing the mean difference between rural and urban IX and X standard students in their attitude towards Science.

Variable	Category	No.	Mean	SD	C.R. Value	Table Value	Remarks
Locality of instituion	Rural	155	105.35	11.83	4.80	1.96	S
	Urban	145	111.34	9.71			

(At 5% level of significance)

It is inferred from the above table that the calculated value is greater than the table value. Hence null hypothesis is rejected. There is significant difference between rural school students and urban school students of IX and X standard in their attitude towards Science. The mean scores show that the attitude towards Science of urban school students is better than the rural school students.

Hypothesis 3 : There is no significant difference between English and Tamil medium of IX and X standard students in their attitude towards Science.

Table 3:t-test showing the mean difference in attitude towards Science with respect to medium of instruction.

Variable	Category	No.	Mean	Standard deviation	C.R. Value	Table Value	Remarks
Medium of instruction	English	172	111.94	10.292	7.081	1.96	S
	Tamil	128	103.29	10.585			

(At 5% level of significance)

It is inferred from the above table that the calculated value is greater than the table value. Hence null hypothesis is rejected. There is significant difference between English and Tamil medium students of IX and X standard in their attitude towards Science. The mean scores show that the attitude towards Science of English medium students is better than the Tamil medium students.

Hypothesis 4 : There is no significant difference among IX and X standard students of government, government-aided and private schools in their attitude towards Science.

Table 4 : F-test showing the mean difference among IX and X standard students in their attitude towards Science with respect to type of management.

Variable	Source of Variation	Sum of Squares	df	Mean Square	'F' Value	Table Value	Remarks
Type of Management	Between Groups	1447.57	2	723.98	0.910	2.99	S
	Within Groups	36381.77	297	122.49			

(At 5% level of significance)

It is inferred from the above table that the calculated value is greater than the table value. Hence null hypothesis is rejected. There is significant difference among government, government-aided and private school students of IX and X standard in their attitude towards Science.

Table 4.1 : Post Hoc Test (Duncan)

Type of management	N	Subset for alpha = 0.05
Government	141	106.4
Government-aided	95	109.39
Private	64	111.41

While comparing the type of management of IX and X standard students, government (106.4), government aided (109.39) and private (111.41), private school students' attitude towards Science is better than the others.

Discussion on findings

With respect to locality of the institution the attitude towards Science of urban school students is better than the rural school students of IX and X standard. This may be due to the fact that the urban school students have adequate academic facilities such as availability of private tuition, study material and also pedagogical techniques, internet, computer etc., than rural school students.

With respect to medium of instruction the attitude towards Science of English medium students is better than the Tamil medium IX and X standard students. This may be due to the fact that more material related to Science subject are in English and the parents of students in English medium students are educated and rich enough. They always care for the holistic personality of their children. Moreover, they are exposed to the latest development in science and technology and in various fields.

With respect to type of management the private school students' attitude towards Science is better than the students in government and government aided schools. This may be due to the fact that the private schools prevail an open and supportive organizational climate in which the teachers and administrative authorities look forward to the welfare of the students. This would certainly contribute a lot in developing positive attitude towards Science among students.

Recommendations

1. It is found from the study that the attitude towards Science of urban school students is better than the rural school students of IX and X standard. It is therefore recommended that awareness programs related to Science could be organized and also rural students should be encouraged to participate in extra curricular and co-curricular activities which help to increase the attitude towards Science of rural school IX and X standard students.
2. It is found from the study that the attitude towards Science of English medium students is better than the Tamil medium IX and X standard students. It is therefore recommended that the Tamil medium students should be offered a strong and sufficient English foundation programme to equip students with good English skills that enable them to keep pace with scientific concepts and developments.
3. It is found from the study that the private school students' attitude towards Science is better than the students in government and government aided schools. It is, therefore, recommended that efforts should be made by the educational authorities and the management to create awareness in Science and to encourage the students in learning Science. The schools and education authority should provide every school with good learning environment.

Conclusion

Modern society is being influenced by the scientific environment and Science has become an integral part of the daily life. The present study also revealed that locality of the institution, type of management and the medium of instruction has significant bearing on attitude to learning of Science. A positive attitude towards learning of Science would enhance the achieve-ment in Science. Therefore, it becomes very important for schools and families in particular and society at large to foster good attitude toward learning, among students and provide good socio-economic conditions for their effective learning and performance in Science.

References

Aggarwal, J.C. (2005). *Development of education system in India*. New Delhi: Shirra Publications.

Das, B.N. (2008). *Teaching of Science*. New Delhi: Dominant Publications and distributors.

Leena Jacqueline, S. (2013).*Influence of emotional intelligence and self acceptance on achievement in Science of teacher trainees* Un published Doctoral dissertation.TamilNadu Teacher Education University.Chennai.

Mahalakshmi, J. (2015).*Influence of family environment on academic achievement of high school students in Science subject.* Un published M.Ed. Thesis. Tamil Nadu Teacher Education University.Chennai.

Nelson Mandela (2011).Long Walk to Freedom, (rev. ed), London: Abacus.

EFFECTIVENESS OF VIDEO CLIPS – FUSED TEACHING OF LANDFORMS IN GEOGRAPHY AMONG STANDARD IX STUDENTS OF THOOTHUKUDI DISTRICT

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Abstract

This study examined the Effectiveness of Video clips – Fused teaching of landforms in Geography among standard IX students of Thoothukudi district. The investigator used Random sampling technique for selecting the sample. Experimental method was selected for this study. The data were collected from 60 standard IX students of GHSS, Vembar, Thoothukud District. Data for the study were collected using the self made achievement test. The statistical techniques used were Mean, Gain score, Standard Deviation, 't' – test, 'F' – test (ANOVA), Chi – square analysis and Product Moment Correlation Coefficient. Findings show that teaching of Geography Education using video clips promotes geographical concepts better than teaching through traditional method. It brings new experiences for the students of standard IX. They learn the geographical concepts by visualizing the facts. Students are very enthusiastic and eager while learning the geographical concepts using video clips.

Keywords : *Effectiveness, video clips – fused teaching, landforms in geography.*

Introduction

Video-Clips are recent developments which promotes the teaching learning process. It is quite a jump from the traditional method of teaching which gives importance to the usage of books rather than the use of video clips. The video-clips serve the dual purpose of under standing the concept very clearly and by viewing the Video-Clips. The main focus of Geography education is to expose students to the actual world they live in. So it is necessary to start geography education from the school level. If the Video clips are used to teach geography in the classroom, it will be more powerful and meaningful than the traditional method of teaching concepts like earth erosional landforms.

Need and significance of the study

Using Video clips in teaching is not new. They date back to prehistoric times when cave instructors used 16mm projectors to show cave students examples of insurance company marketing commercials in business courses. There are charges in four areas: a) the variety of video formats, b) the ease with which the technology can facilitate their application in the classroom, c) the number of Video techniques an instructor can use, and d) the research on multimedia learning that provides the theoretical and empirical support for their use as an effective teaching tool. A Personel Computer and LCD projector with speakers can easily embed Video clips for a Power point presentation on virtually any topic.

Title of the study

Effectiveness of Video clips – Fused Teaching of landforms in Geography among standard IX students of Thoothukudi district.

Objectives

1. To study the development of concepts in geography among IX standard students through the conventional method. (Control Group)
2. To study the development of concepts in geography among IX standard students through Video Clips. (Experimental Group -Treatment).
3. To find out the significant difference between Pre–test and Post–test scores of the Control and Experimental group students in Landforms.

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4. To find out the significant difference in the gain scores, if any in Land forms of the control and Experimental group students with respect to background variables.

Methodology

Experimental method was selected for this study. Control Group -Traditional Method. Experimental Group - Video Clips using Multi media Resource Package (MRP in the form of DVD video) in teaching Geography for IX standard students developed by the investigatorMohamed Rabeek S. Parallel group design was adopted.

The Sample consisted of 60 Students of Standard IX in GHSS, Vembar, Thoothukudi district. (Control group – 30 students, Experimental group – 30 students).

Multimedia Resource Package (MRP in the form of DVD video) in teaching Geo graphy for IX standard students and a mastery test in IX standard Geography were the tools developed and used by the investigator.

The statistical techniques Mean, Gain score, Standard Deviation and 't' – test were used.

Data analysis

Table 1 : Level of Performance of the Control Group Students in their Gain Score.

Sample	Dimension	Low		Medium		High	
		No.	%	No.	%	No.	%
Total	Weathering	7	23.30	15	50.00	8	26.70
	Underground water	8	26.70	7	23.30	15	50.00
	Glacier	12	40.00	9	30.00	9	30.00
	Wind	7	23.30	13	43.30	10	33.30
	Waves	10	33.30	10	33.30	10	33.30
	Total - Landforms	7	23.30	16	53.30	7	23.30

It is inferred from the table – 1, that 23.30 % of the control group students have low level, 53.30 % of them have average level, and 23.30 % of them have high level of performance in their gain score in the concept of landforms. The table also shows that the percentage of the sample having different levels of gain score with reference to the dimensions namely Weathering, Under ground water, Glacier, Wind, and Waves.

Table 2 : Level of Performance of the Experimental Group Students in their Gain Score.

Sample	Dimension	Low		Average		High	
		No.	%	No.	%	No.	%
Total	Weathering	11	36.70	12	40.00	7	23.30
	Underground water	11	36.70	9	30.00	10	33.30
	Glacier	7	23.30	15	50.00	8	26.70
	Wind	9	30.00	14	46.70	7	23.30
	Waves	11	36.70	12	40.30	7	23.30
	Total - Landforms	8	26.70	15	50.00	7	23.30

It is inferred from the table -2, that 26.70 % of the experimental group students have low, 50.00 % of them have average, and 23.30 % of them have high level of performance in their gain score in the concept of Landforms. The table also shows the percentage of the sample having different levels of gain score with reference to dimensions namely Weathering, Underground water, Glacier, Wind, and Waves.

Table 3: Difference between Pre – Test and Post – Test Scores of the Experimental Group Students.

Dimension	Test	Mean	N	SD	Calculated 't' value	'p' value	Remarks
Weathering	Pre-test	4.67	30	2.202	15.258	.000	S*
	Post-test	10.27	30	.907			
Underground Water	Pre-test	2.03	30	1.273	11.619	.000	S*
	Post-test	5.03	30	.809			
Glacier	Pre-test	2.80	30	2.203	20.460	.000	S*
	Post-test	11.63	30	1.245			
Wind	Pre-test	3.03	30	1.790	17.809	.000	S*
	Post-test	9.97	30	1.189			
Waves	Pre-test	3.47	30	1.634	27.341	.000	S*
	Post-test	12.50	30	.777			
Total – Landforms	Pre-test	16.00	30	5.031	34.212	.000	S*
	Post-test	49.40	30	3.255			

It is inferred from the above table – 3, that the 'p' value is less than 0.001 for the concept of Landforms and its dimensions. Hence, the null hypothesis is rejected. That is, there is significant difference between pre – test and post – test scores of the experimental group students in the concept of Landforms and its dimensions. While comparing the mean score values, Post-test scores are better than the Pre-test scores of

the concept of Landforms and its dimensions of the experimental group students.

Table 4 : Difference between the Control Group and Experimental Group Students in their Gain Score

Landforms and its Dimensions	Test	Mean	N	SD	Calculated 't' value	'p' value	Remarks
Weathering	Control Group	5.77	30	1.633	.330	.744	NS
	Experimental Group	5.60	30	2.010			
Underground Water	Control Group	3.40	30	1.380	1.222	.232	NS
	Experimental Group	3.00	30	1.414			
Glacier	Control Group	7.20	30	2.024	3.198	0.003	S*
	Experimental Group	8.83	30	2.365			
Wind	Control Group	2.90	30	2.820	5.826	0.000	S*
	Experimental Group	6.93	30	2.132			
Waves	Control Group	6.27	30	2.164	5.342	0.000	S*
	Experimental Group	9.03	30	1.810			
Total–Landforms	Control Group	25.53	30	2.956	7.156	0.000	S*
	Experimental Group	33.40	30	5.347			

NS : Not Significant. S : Significant I. S* : Significant at 1% level.

It is inferred from the above table-4, that the 'p' value is greater than 0.05 for the dimensions Weathering and Underground Water. Hence, the null hypothesis is accepted. That is, there is no significant difference between the experimental and the control group students in their gain score for the dimension Weathering and Underground Water. Whereas, the 'p'value is less than 0.05 for the dimensions like Glacier, Wind, Waves, and Land forms (Total). Hence, the null hypothesis is accepted for the dimensions like Glacier, Wind, Waves and Landforms (Total). That is, there is significant difference between the experimental and the control group students in their gain score in the dimensions like Glacier, Wind, Waves and Landforms (Total). While comparing the mean scores, the experimental group students are better than control group students in their gain score in thedimensions like Glacier, Wind, Waves and Land forms (Total).

Educational implications

The 't' test result reveals that, there is significant difference between experimental and control group students in their gain score. That is, the experimental group students are better than the control group students in their gain score. This may be due to the fact that the Teaching – Learning video – clips package is more effective than the traditional method of teaching Geo graphical landforms. Further, the learning package in Geographical landforms using video – clips with multimedia effects, impresses the students to keep watch. Also it induces the students learning Geography with interest.

The 't" – test result reveals that there is significant difference between pre – test and post – test scores of the experimental group students. This may be due to the fact that the teaching learning with video – clips package has influenced the experimental group students in learning Geography. The findings of the study shows that the teaching learning video – clips fused method is useful aid as well as a tool to the teacher to attain all the aims and objectives of teaching Geography.

Conclusion

The present study has investigated the " Effectiveness of Video clips-fused teaching on Enhancement of the concepts of Geography among the standard IX students of Thoothukudi District". It is found that teaching of Geography Education using video clips promotes geo graphical concepts better than the teaching through traditional method. It brings new experiences for the students of standard IX. They learn the geographical concepts by visualizing the facts. Students are very enthusiastic and eager while learning the geographical concepts using video clips. Therefore the investigator desires that more number of educational Institution should teach Geography by using video clips and make the process of teaching and learning more effective.

Reference

Babu, R. And Vimala, T.S. (2008). Impact of Multi Media method in Accountancy learning at Higher secondary level, Educational Research and Extension, vol 45 (4)

David, T. (2012). Non science Major's perceptions on the use of you Tube video to support Learning in an Integrated Science Lecture, Journal of collage Science Teaching, vol.42,no.1, P 26-30.

Emily C. (2011). Video Modeling and Prompting A comparison of Two strategies for Teaching Cooking skills of students with mild Intellectual Disabilities, Education and Training in Autisms and Development Disabilities, vol.46, no.4, P 499-513.

Florez – Morris, (2010). Using video production in political Science courses as an Instructional Strategy for Engaging Students in Active learning, Journal of Political Science Education, vol.6, no.3, P 315 – 319.

PROSPECTIVE TEACHERS' COMPETENCIES AND THEIR STUDENTS' ACHIEVEMENT

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Abstract

Education is considered as construction of Knowledge, Competency and Potential Development. An important issue in education is to provide opportunities for students to think while they are solving problems, analyzing, and synthesis their knowledge at every level of their studies. The Teachers should manage effective teaching and learning process. The students know how to learn and utilize their knowledge appropriately. The teachers need to develop their competencies in accordance with educational transformation as well as professional activities effectively. The competency of an individual can be detected through the work behavior and that will be a success indicator rather than educational level or intelligence. This paper illustrates the level of competencies required for the prospective teachers for the better achievement of the students.

Keywords : *Competence, Teacher Competence, Teacher characteristics, Teacher education, Teacher attitude.*

Introduction

Teachers need to improve their knowledge and skills to enhance, improve and explore their teaching practices. Teachers need strong and efficient professional competencies. Teachers' competencies must be reviewed and should be redefined. The teachers' competencies affect their values, behaviors, communication, aims and practices. Competencies are the requirements of a competency-based teacher education which includes the knowledge, skills and values. Pros pective Teacher's competency factors were measured by curriculum and learning management, ethics, integrity, educational measurement, evaluation, self-development, building relation ship and collaborative with community for learning management.

What is Competence?

Competence is an outcome. It describes what someone can do. It does not describe the learning process in which the individual has undergone. Competence is a measure of capabilities of what someone can do at a particular point in time.

Definition of Competency and what are Competencies ?

Competence has been long understood as a person's ability or capacity to do a job. It also includes motivation and self-knowledge, a desire and willingness to demonstrate effective perfor mance. It is a set of individual performance behaviors which are observable, measurable and critical to successful individual. It is a unique characteristics of a person which result in an effective and superior performance in a job.

Importance of Prospective Teacher's Competency

The competencies which is to be upheld by the teachers in the classroom are strategies, teacher's behaviors and attitudes, and discipline skills. The teacher should provide an activity which would arouse the attention of students to partici-pate in class. Teacher's attitudes and discipline have contributed a great to student's behavior. Positive attitudes and discipline of teachers would promote a positive classroom environment.The teaching strategies is always more effective through inter active activities. Traditional way of teaching is a teacher-centered approach in which students are given less attention because the strategies are not focused on them. Traditional teachers mostly apply traditional teaching strategies in the classroom.

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Competence Prospective teacher

Competency is defined as the set of knowledge, skills, and experience necessary for future.Each competency is acquired through learning packs comprising an explanation of the competency and its purpose, a behavioural objective, a pretest of proficiency, concepts to be learned, questions to be answered, required learning activities, optional learning activities and a description of the evaluation.Difficulties arise when attempting to define, precisely, a teacher's role. Generally it is reckoned to comprise three components; Knowledge, Technique, and Style. Knowledge will include subject matter and education theory; Technique implies mastery and application of teaching skills; Style embraces attitudes and traits. The competent teacher combines these three components to produce maximum learning. The competencies are variously categorised :

1. **Cognitive** - required knowledge, intellec -tual skills and abilities to be demonstrated.
2. **Performance** - required instructional Strategies, technical and vocational skills to be used.
3. **Consequence** - required the performance of students taught by the teacher.
4. **Affective** - required attitudes and values to be demonstrated.
5. **Exploratory** - required experience or activity in which the teacher is to participate.

The teachers' competencies is divided into three main areas as field competencies, peda - gogical competencies and cultural competencies.

Field Competencies

It is the main areas of teacher competencies that include academic studies about the content. Field competencies are the most important competency field based on the concept that teachers were only responsible in transmitting the content.

Pedagogical Competencies

It refers to educational and teaching qualifications. While assessing the pedagogical competence, the quality of teaching should be the primary consideration. Also, it is the ability to manage learning, which includes planning, implementation and evaluation of learning outcomes of learners. It should be owned by every teacher in order to achieve success in learning and teaching.

Cultural Competencies

It is the ability to successfully teach students who come from a culture or cultures other than our own. It is creating an awareness of one's own cultural identity and views about differences, ability to learn and build on the varying cultural and community norms.

Characteristics of a Competency

- It consists of one or more skills whose mastery would enable the attainment of the competency.
- A competency is linked to three of the domains knowledge, skills and attitude under which performance can be assessed.
- Competencies are observable and demonstrable.
- Competencies are observable and also measurable. It is possible to assess a competency through a teacher performance.

Teaching competencies may require equal amounts of knowledge, skill and attitude. Some competencies are more knowledge than skill or attitude and certain competencies may be more skill or performance based.

Significance of Teacher Competencies

Competencies are to be developed among prospective teachers to make them professionally competent.

Contextual Competencies

The foremost obligations of teacher are to ensure that whether the parents and the community are accepting the importance and usefulness of their efforts. For this, teacher should have the ability to understand various context such as historical background, present status of socio- economic, cultural, linguistic and religious context of the family milieu and the community profile. They should be able to conduct surveys for finding out reason for poor enrolment, poor performance and causes of certain problems like wastage and stagnation etc. which hinder the

process of education.

Conceptual Competencies

The teacher should have competencies identified under it. They are, Clarity of thought, deep understanding of educational theories and thorough knowledge of various educational trends, pedagogical methods, techniques etc. They should know significant characteristics of student development at different stages to enable them to transact curriculum effectively. They should have knowledge of classroom organization and management too which would help them in organizing curricular and co-curricular activities quite effectively in and outside classroom. Concepts and educational implications of globalization, modernization, liberalization and privatization have to be understood by teachers.

Content Related Competencies

It includes, full mastery over the content of the subject that they have to teach.They should find out the gaps in curriculum which require explanation and elaboration. They should identify such areas from the curriculum where there is enough scope for undertaking joyful activities, individual and group learning etc.

Transactional Competencies

Educational transactional competency refers to the skill of day to day teaching to achieve educational objectives effectively through meaning ful interaction between teachers and student and the environment by using different methods, activities and technology in an integ- rated and effective manner. It determines

- To organize varity of activities such as story telling, singing, games, field visits, celebration of national, social and cultural events to make teaching learning process joyful, participatory and relevant.
- To prepare appropriate teaching aids and other teaching learning material to support and enhance the effectiveness of teaching-learning process.
- To integrate continuous evaluation of teacher while transacting subject content.
- To use continuous evaluation approaches to diagnose weakness and strengths of the teaching learning strategy.
- To identify the weaker and brighter student in order to adopt remedial measures and undertake enrichment programmers.

Educational Activities Related Competency

The curricular activities are expected to promote cognitive development of student as well as non-cognitive development. So, the competencies required by a teacher are:

- Ability to organize curricular and co-curricular activities for achieving educational objectives.
- Ability to organize social and cultural activities like morning assembly, days celebration etc.

According to Tope, (2012, p.5), the school environment has a strong positive relationship with students' ratings of their overall school satisfaction, students' self-esteem, and academic performance. Teacher's competency enhances a teacher's ability to create an environment that is fair, understanding, and accepting of diverse students, ideas, experiences, and backgrounds. Teachers have been found to be the single most important factor influencing student achievement.

Competencies to Develop Teaching Learning Material

It includes :

- Ability to develop interesting teaching aids for making teaching learning process easy, interesting and activity based.
- Ability to develop textual and self-learning material for students as per their age and nature.
- Ability to adopt the teaching learning materials to meet the educational needs of students.
- Knowledge to develop work-books and activity books.
- Knowledge to use electronic gadgets like Computers, CD's etc. to promote teaching and learning process more effective and interesting.

Evaluation Competencies

It involves the ability of a teacher to continuously judge and verify the level of

achievement of prescribed competencies and objective laid down in the curriculum on the part of students is generally referred to as Evaluation Competency. Prospective Teachers should be able to carry out continuous evaluation in a systematic and formal manner. Ability to maintain observation records to evaluate likes and dislikes habits, value and attitudes of the student. Ability to diagnose the problem that student face in comprehending what is taught. Ability to undertake action research.

Management Competencies

It involves the skill of the teacher to achieve high quality educational objectives in minimum time, energy and money through appropriate and effective use of educational aids and active participation of available human resources. A teacher is a manager of a particular class or group of students. Teacher should have the skill of classroom management including total teaching as well as subject teaching in the class.

Competencies Related to Working with Parents

It is the ability of a teacher to get the co-operation of parents and their involvement for achieving the objective. It implies the ability to discuss various problems that student with their parents face and suggest some workable solution.

Competencies to Work with Community and other Agencies

Teacher must have the ability to work towards bringing school and the community closer. Teacher must be able to understand the role of the community in the development of the school and community at large can contribute to regular and effective functioning of the school and its continuous growth.

Teacher's competency towards students achievement

Teaching competency means the right way of conveying units of knowledge, application and skills to the students. Competent teachers have the most critical role in improving students' achievement and closing the achievement gap. Pamela (2005,p.6), states that research on teacher quality supports the fact that effective teachers not only make students feel good about school and learning, but also that their work actually results in increased student achievement. Studies have shown that a whole range of personal and professional qualities are associated with higher levels of student achievement. The most important influence on student's learning is the quality of teaching. Teacher competencies for promoting affective - motivational processes in students learning. Processes in the classroom are not only related to the cognitive level, they are always embedded in an affective context. The effects of student-teacher relationship with achievement is to be studied with direct obser vation and with evaluations of the relationships by teachers, students and parents. K.N.Kishwar Naz's study shows that "there is significant relationship between teachers professional competence scores and students achievement scores at public secondary schools". It implied that the achievement of students was associated with professional competence of teachers. There are so many other factors which may affect the achievement of students e.g. family background, student health (physical & mental), parents education, family structure, financial status, peer role, school environment, etc. but the study only focus on just one factor that is teacher competence. It implies that achievement of students probably was associated with teacher competence. Teachers are the most direct, sustained contact with students. Having considerable control over what is taught and the climate for learning, improving teacher's knowledge, skills and dispositions through professional development is a critical step in improving students achievement.

Conclusion

Education is a prominent social agency which plays a decisive role in shaping the personality of the student and the teacher is the shaper of the destiny of the student and the nation. Well-trained and skilled teachers are competent as well as committed professionals. A competent teacher is committed not only to learners but to the society at large. If the

prospective teacher is competent and has high levels of self-efficacy, his/her students' academic achievement also is significant. Such teachers are a great asset since they mould generations of students who will work towards establishing a vibrant and prosperous students and also a better world based on equality and justice.

References

Dakshinamoorthy, K. (2010). Effect of teachers personality, attitude towards profession and teaching effectiveness on academic achieve ment of students. Edutracks, 9, 9, 17-18.

Kinnely, Lucin B. (1960) Teacher competency its nature and scope. In encyclopedia of educational research (p. 1469). New York: Macmillan

Kishwar Naz, (2016) Effects of teachers **Neururer, J.** (2003)Teacher, characteristics of prospective. In TorstenHusen., & T.Neville Pasilethwaite (Eds.) The International encyclo pedia of education (2nd ed). Vol.10. UK: Pergamon, 6103-6106. professional competence on students' academic achievements at secondary school level in Muzaffarabad District, Munich, GRIN Verlag, https://www.grin.com/document/ 352095.

Mishra, K.S. (1993). Teachers and their education. Amabala: The Associate Publishers.

Neururer, J. (2003)Teacher, characteris-tics of prospective. In TorstenHusen., & T.Neville Pasilethwaite (Eds.) The International encyclo pedia of education (2nd ed). Vol.10. UK: Pergamon, 6103-6106.

Pamela D. Tucker (2005). Teacher quality and student achievement: A Review of state policy evidence.Education policy Analysis Archives, 8(1) Olam.

Richard Buddin and Gema Zamarro (2010). What Teacher Characteristics Affect Student Achievement? retrived from https://doi.org/ 10.7249/RB9526 RB 9526 (2010)

Tope, Ometere (2012) Effects of Teachers' Competence on Students' academic Perfor mance : A case study of Ikeja Local Government area of Lagos state Published online by:Ego Booster Books *ego booster books. files. word press.*

Haseen Taj, (2004). Enhancing The performance and Self-Confidence of slow learners through activities and use of Multi media Package, The Primary Teacher, vol. XXIX, no.1.

John W. Best (1992) Research in Education, New Delhi: Prentic – Hall of India Pvt. Ltd.,

Salim Basha, S.A. & Digumarti Bhaskara Rao (2004) Methods of Teaching Geography, NewDelhi : Discovery Publishing House.

Saraswathi, R. and Chandra, R.(2009). Effectiveness of Multimedia Teaching Material in Environmental education, International Educator, vol.21, no.2.

Surender Singh, (2011) Geography, New Delhi, Tata McGraw Hill Education, Private Limited.

Wittich & Schuller, (1953) Audio – Visual materials – Their nature and use, New York : Harper & Brothers Publishers.

COVID-19 AND ITS IMPACT ON HUMAN SOCIETY

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Abstract

The COVID-19 pandemic has led to a dramatic loss of human life worldwide and presents an unprecedented challenge to public health, food systems and the world of work. Common signs and symptoms can include fever, cough, tiredness and early symptoms of covid-19 may include a loss of taste or smell. The pandemic has been affecting the entire food system and has laid bare its fragility. Border closures, trade restrictions and confinement measures have been preventing farmers from accessing markets, including for buying inputs and selling their produce, and agricultural workers from harvesting crops, thus disrupting domestic and international food supply chains and reducing access to healthy, safe and diverse diets. The pandemic has decimated jobs and placed millions of livelihoods at risk. As breadwinners lose jobs, fall ill and die, the food security and nutrition of millions of women and men are under threat, with those in low-income countries, particularly the most marginalized populations, which include small-scale farmers and indigenous peoples, being hardest hit. This is the need of the hour and this study deals with facing challenges and to overcome it with suitable possible measures.

Keywords : *COVID-19, pandemic, human society and healthy life.*

Introduction

Most part of the entire world is infected and is quarantined by the new pandemic virus known as COVID-19 which is Corona Virus Disease originated in China at Wuhan in 2019; which is also known as novel corona; hence the new pandemic is commonly known as COVID-19 (COVID-19) (Atosta, A.M. et.al, 2020). According to U.S. Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO) the symptoms of COVID-19 may appear between 2 and 14 days after exposure. Common signs and symptoms can include fever, cough, tiredness and early symptoms of covid-19 may include a loss of taste or smell(Udhaya Kumar S., Thirumal Kumar D., Prabhu Christopher B., George Priya C., 2020). It sounds like any other viral fever yet the consequences of COVID-19 proved to be dreadful where the WHO has revealed in its report that the death toll of the victims of the virus is almost 40 (40 251 950) million people and of which around 10 (10 116 131) million people have lost their lives and the remaining 30 million people have recovered from the virus after receiving treatment.

COVID-19 is highly contagious virus that spreads to people immediately once they come in contact with the COVID-19 affected person. According to Bell (2020) the pathological report states the symptoms of COVID-19 appears 2 - 14 days once the person is exposed to the virus. People who have sufficient immune system may show symptoms after 14 days of being exposed to the virus while others who have lack of immune system may develop all the symptoms of COVID-19 such as fever, cough, headache, diarrhea and lack of taste after 2 days etc. A demographic study in late December of 2019 showed that the percentages of the symptoms were 98% for fever, 76% for dry cough, 55% for dyspnea, and 3% for diarrhea; 8% of the patients required ventilation support(Huang C, Wang Y, Li X. et al., 2019). There is a severe underlying danger faced by the people due to the virus. Since the symptoms occurs only between 2 to 14 days meanwhile the person who is exposed to the virus may spread it to a number of people such as to close family members, friends circle, people in the working place, community members and the people those who come in contact with,

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before he or she is diagnosed. This is where the unexpected and hidden danger of reality lies. "Behold, I am coming like a thief!"(Revelation 16:15). This is exactly how the COVID-19 infects the people when they are not aware of the existing pandemic, it affects them without any warning and the consequences are horrifying realities. The only way to protect oneself is to take precautions and adhered to it constantly. In severe cases, the coronavirus can cause pneumo nia, severe acute respiratory syndrome, kidney failure and death(WHO, 2020).

Pandemic COVID-19

According to the report of Centre for Disease Control and Prevention (MMWR, 2020), COVID-19 results in severe disease, including hospitalization, admission to an intensive care unit, and death, especially among older adults. In India by 18th May 2020 100,340 confirmed cases and 3155 confirmed deaths due to COVID-19 were reported. There is no specific treatment for COVID-19. Although vaccines can be developed to treat viruses, owing to the novel nature of this infection, no vaccine has currently been developed and the process to develop one may take 12 to 18 months (WHO, 2020). COVID -19 brought the hectic lifestyle of Indians to stand still with nationwide lockdown on 24th March 2020. The public was asked to stay indoors, wear mask while venturing out. The first lockdown witnessed complete shutdown of commercial centers, industries, education institutions comprising of school and university studies, IT fields and business centers. The roadways, airways, railways and waterways were closed down. The Indian cities which thrived with heavy tariff were isolated with police petrol vehicles. The only professionals allowed to continue were doctors and nurse with diligent precautions. People had permission only to visit the hospitals. The grocery shops, vegetables vendors and milk man were allowed to keep the shops open for a specified and stipulated duration by the government. People were asked to buy the required commodities within the range of 2 kilometers. Travel was a forbidden phenomenon. Close relatives could travel to attend the funeral service by obtaining e-pass from the government.

Temples, churches and mosques became a desolated place as the government asked them to close down to keep away from spreading of COVID-19. The celebration of marriages which are usually organized with big pomp and show were organized with a handful of people without any celebration wearing mask. In every village, town and city people were and are spotted with mask, failing to do so were fined by the police. Everyone was and is asked to maintain social distancing, follow meticulously the hygienic mantra of washing hands constantly avoid touching nose, eyes and mouth to help keep away and slow down the spread of COVID-19 in order to protect adults, children and elders from severe attack of the pandemic

It's a strange phenomenon and experience for the people born in post independent era. The existing scenario and milieu changed the life style of people overnight not only for Indians but also for the entire world. Recreation, socializing, gets together, parties, outing and sports were not allowed during the lockdown Both the so called rich and poor countries were infected by the pandemic. The indomitable super power countries which have strong economic conditions and the developed countries were not spared by the virus. Countries such as USA, UK, Italy, Spain, France and so on experienced heavy loss of lives due to pandemic COVID-19, and India was not spared either.

The Mind Set and Life of People

The COVID-19 pandemic has likely brought many changes to how you live your life, and with it uncertainty, altered daily routines, financial pressures and social isolation (Mayo, 2020). In the existing environment it is important to realize the mind set and life style of people. The observation reveals that most of the people have developed fear of infected by the virus and have phobia that has left them with negative approach towards people who are infected by the COVID-19 virus. For instance people who travelled from Chennai to their native place in an unavoidable situation, who were tested negative for COVID-19 were /are looked down and in some places were not allowed to enter their homes. The reasons given by people in such

areas are that the people coming from Chennai may infect others with the virus. Such experiences have left the people with a lot of stress and rift in their amicable social relationship. Both the print and digital media have reported that a number of people committed suicide because they were humiliated in public and there was an incident in a restaurant when a lady seated at the table requested the other person to move and sit little far away was stabled. These incidents depict the psychological well being of people; it clearly shows that people on the whole are highly stressed (World Health Organization, 2020).

Staying indoors, jobless, unable to meet the needs of the basic requirement, the necessary commodities such as milk, meat and vegetable prices hiking and in most of the places the essential food items were not available, on the other hand the farmers were powerless to sell their goods with no means of transport had to abandon the vegetables and a number of milk containers were emptied on the road, so there is kind of chaos privileged during the first spell of COVID-19 and its lockdown. Most of the Indian cities faced such conditions which left unrest in the lives of the people. Yet again India witnessed a number of distressing confrontations of rural migrant who flocked the main capital cities of various northern states had to make their way home with family members consisting of children hundreds and thousands of kilometer on foot having lost their jobs due to shut down. It was the most traumatic and excruciating scene where the migrants had to make their way without food and water. The entire world watched how a group of 16 migrants ran over by a train in Maharashtra when they slept on the rail tracks media reports on 8th May 2020. And yet again on 27th May "A 23-year-old woman on the platform of Muzaffarpur railway station in Bihar state died. Her young son can be seen repeatedly tugging at a piece of cloth placed on her body". No one on earth ever imaged that towards the end of year 2019 and the year 2020 would display the untold misery, death, pain, suffering and a desperate condition as a result of COVID-19. Students from Tamil Nadu, who were pursuing university studies in other states during the lockdown, had to reach home on foot for miles. For instance two of the students lost their lives as exhaustion set in while they sauntered on foot to reach home. The scenario reflected the people's destiny during the partition of Indian history.

The entire working mass of various profession, the teaching and students community which kept themselves on rigorous and constant move performing the responsibility for years faced a sudden halt that left them with redundancy. As a consequence there was unrest in the family life where a number of grievances lodged at the police station and seeking legal advice for divorce. The legal department found that men were harassing women and beating them brutally. Such incidents were reported both by print and digital media (COVID -19) (Atosta, A.M. et.al, 2020).

COVID -19 did expose the disgusting reality of the society. During the complete lock down both the government owned and the private liquor shops were closed down. They were not able to overcome their thirst towards liquor. Especially people who were addicted to hard drinks found an alternate of consuming varnish to intoxicate themselves, however they did not realize the repercussion, as a consequence a number of people who began consumption of varnish and other products had to pay a heavy price of losing their own precious lives leaving behind the shattered family and children. Once again such incidents were reported by mass media.

A number of investigations confirm that a major increase among adults of symptoms of pressure, stress, nervousness, anxiety and depres sion throughout the pandemic era, compared with studies before the pandemic. Some people have sought after alcohol or drugs, thinking that it could help them deal with their uncertainties and worries about the pandemic. Actually, using these substances could worsen anxiety and depres sion. If such people get infected by COVID-19 they may face worse situation with respect to wellbeing, because constant addiction could damage lung's function and may weaken immune

system which may result in failure of heart, lungs and may lead to serious complications with COVID-19.

COVID-19 apparently has affected not only the people of India but also of people of the world with respect to health, security and well-being of every individual causing confusion, emotional setback, economic loss, insufficient resources of essential requirements and medical response and deficient distribution of basic necessities. The prevalence of COVID-19 showed a positive association with the life expectancy and literacy rate, and a negative trend-level associa tion with the percentage of people living below the poverty line (Ravi Philip Rajkumar, MD, 2020).

Pandemic has Changed the Learning Mode Forever

The COVID-19 has resulted in schools and higher institutions shutdown across the world. According to Cathy and Farah (2020) their research study shows that globally, over 1.2 billion children are out of the classroom. Conse quently the teaching and learning method has changed dramatically with the distinctive rise of online learning whereby teaching and learning process take pace remotely on digital platforms. Although research have shown that online learning has been shown to increase retention of infor mation nevertheless the complexity of online learning has been a big challenge to the learners those hailing from rural and remotes parts of the cities and country. In India Google classroom, Byju's, Zoom etc. have become effective platform in enhancing the transaction of content and knowledge. Dr Amjad, a Professor at The University of Jordan who has been using Lark to teach his students says, "It has changed the way of teaching.

The Impact of Online Learning: The Good and the Bad

Michael (2020) states, "Higher education's current move to online learning may be leaving a sour taste in the mouths of students and faculty across the country, but there is a silver lining". It's clear evidence that online learning has emerged as boon during COVID-19 yet it has both positive and negative elements.

To begin with the schools, colleges and universities' faculty hurriedly shifted the courses online without much support of e-gadgets and with a little or no knowledge on how to handle online class and what platform to choose which would be amicable for the learning community. Media reports repeatedly a number of cases where online learners of schools have to sacrifice their lives on account of not able to comprehend the content and the inaccessibility of e-gadgets. On the other hand the teaching community, those teachers who do not have knowledge and lack aptitude towards online learning, as a consequence the students' learning ability becomes very poor in many parts of the state, country and in the western world too. As a result education institutions get bad reputation and in USA students are voicing their dissatisfaction in a variety of ways, including asking for reimburse ment of the fees paid. Some students have even gone as far as filing lawsuit seeking money back. However education institutions and the teaching faculty are compelled to develop and utilize the various required skills demanded to make the online teaching learning meaningful, effective and enhancing.

Measures for Wellbeing

It's inevitable during the pandemic situation that everyone needs to follow certain discipline in order to increase the immune system which would guarantee the required energy to withstand COVID-19. The following measures could be adhered to build the needed stamina.

- **Have Regular Good Sleep.** As the saying goes, early to bed and early to rise would boost the physical system. Maintaining same times of going to bed and getting up each day would enhance physical wellbeing. Following typical schedule would ensure holistic well being.
- **Have Regular Physical Activity.** Following a regular physical activity and exercise would decrease anxiety and develop cheerful mood. Ensure those activities which include running, jogging and stretching such as dance, aerobics, yoga and meditation. Yet all along guarding social distance.
- **Have Healthy Food.** Having a well-balanced diet which consists of a lot of vegetables and fruits with adequate clean drinking water and avoiding junk food will definitely guarantee to boost the immune system. The so called street

and junk food would result in lack of immune system as they aggravate stress and anxiety

- **Avoid Tobacco, Alcohol And Drugs.** If you are used to smoking tobacco you're already at higher risk of lung disease. Because COVID-19 affects the lungs, hence smoking and using alcohol to try to cope could worsen and reduce your coping skills. Therefore shunning away from tobacco would warrant good health.
- **Relax And Recharge.** Plan a time for your self every day, even a few minutes of quiet time could rejuvenate and enhance your mind and reduce anxiety. Deep breathing, yoga, meditation, taking a stroll, listening to soft music and reading a book would enable you to relax. Choose a method that works for you and practice it regularly.
- **Focus On Positive Thinking.** Choose to focus on the positive things in your life, instead of dwelling on how bad you feel. Begin each day by listing things that you are thankful for. Maintain a sense of hope, accept changes as they occur and try to look at problems with positive mind.
- **Extend Support to Your Family And Friends.** If a family member or friend needs to be isolated for safety reasons or gets sick and needs to be quarantined at home or in the hospital, come up with ways to stay in contact. This could be through electronic devices or the telephone or by sending a note to brighten the day.
- **Have Strong Faith.** Whichever faith one may profess have strong faith and conviction that the unseen omnipotent presence will protect and lead help to overcome and face the COVID -19 with courage and confidence.

Conclusion

The 21st century which began with a lot of promise to the humanity with regards to job oppor tunity, physical, intellectual, academic, economic and social well being in the midst of achievements of spending space craft such as Chandrayan 1 and 2 to moon. However towards the end of the second decade of this century the world witnesses the development of a deadly virus COVID-19 which has left the entire world infected. Yet with the positive thinking, following regular physical exer cises, intake of good healthy food, taking time to relax and avoiding alcohol would definitely enhance immune system to cope with the situation and overcome effectively with courage and confidence. COVID-19 certainly has taught a big lesson with respect to life style that every human being has to adhere to lead a meaningful and hygienic life.

References

Acosta AM, Mathis AL, Budnitz DS, et al.(2020). COVID-19 investigational treatments in use among hospitalized patients identified through the U.S. Coronavirus Disease 2019 -Associated Hospitalization Surveillance Network, *Open Forum Infectious Disease, 7(11).* https://doi.org/10.1093/ofid/ofaa528

Bell, A. (2020). Stay on Track with High Potassium. Medical Review by Meredith Goodwin. Retrieved from: https://www.healthline.com/health/high-potassium/signs-and-symptoms.

Corona Virus Disease 2019 (COVID-2019). Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/index.html. Accessed Oct. 7, 2020.

Huang C, Wang Y, Li X. et al(2019). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet. 2020;6736: 1–10.

Thirumalaisamy, P. Velavan & Christian G. Meyer, (2020). The COVID 19 epidemic. Trop Med Int Health, 25(3), 278–280. doi: 10.1111/tmi.13383

Pfefferbaum, B., & Carol, S. N. (2020). Mental Health and the Covid-19 Pandemic**.** The New England Journal of Medicine. P. 510-512. DOI: 10.1056/NEJMp2008017

Sarkas, K., Subhas, K., & Juan, J.N. (2020). Modeling and forecasting the COVID-19 pandemic in India. Chaos, Solitons & Fractals, Volume 139**.** https://doi.org/10.1016/j.chaos.2020.110049