ISSN 2277-3576

FRONTIERS IN EDUCATION AND RESEARCH

A Peer Reviewed Bi-Annual Journal

Vol. 13 Issue 1 Jan 2024

N.V.K.S.D. COLLEGE OF EDUCATION
(AUTONOMOUS)
[Re-accredited by NAAC with 'A' Grade]
ATTOOR, KANNIYAKUMARI DISTRICT, TAMIL NADU - 629 177.

ISSN 2277-3576

FRONTIERS IN EDUCATION AND RESEARCH

A Peer Reviewed Bi-Annual Journal of N.V.K.S.D. College of Education

Volume 13, Issue 1, Jan 2024

N.V.K.S.D. College of Education
(Autonomous)
(Re-accredited by NAAC with 'A' Grade)
Attoor, Kanniyakumari District, Tamil Nadu.
nvksdcollege@gmail.com

ISSN 2277-3576

Frontiers in Education and Research | N.V.K.S.D. College of Education, Attoor.

nvksdjournal@gmail.com

Editorial

A skill-based curriculum is necessary to live in an era of unprecedented transformation in job market to ensure that graduates are equipped with the real-world-based skills and knowledge needed to succeed in their careers. Skills are most valuable in getting people to work efficiently, rebuild, revamp economies, and contribute to the growth and development of the country. In higher education, a skill-based curriculum is important as it addresses the skill gap required for the workforce and improves the employability of graduates.

Critical thinking, problem-solving, self-reflection skills, time management, organization, goal-setting skills and communication skills, which are essential for success in any career can be fostered through a skill-based curriculum. Overall objectives include empowering students to be independent, self-directed learners and producers of new learning. For skills-based curriculum, the paradigm must be changed to process, content and product. Steps in delivering a skills-based curriculum include- establishing themes for each of the grades, choosing and researching skills to understand them, creating lessons to teach the concepts of each of the skills and providing opportunities for students to practice and apply the skills. Main areas for skills-based curriculum development are - creativity skills, communication skills, higher-level thinking skills, self-awareness skills, leadership skills, research, spirituality and innovation skills. Students are encouraged to think creatively, analyze complex information and approach problems from different angles, leading to more effective solutions in many fields. It can offer personalized learning opportunities that cater to different learning styles and abilities to excel in their chosen field. It also fosters lifelong learning and incorporates experiential learning opportunities, such as internships and apprenticeships that provide real-world experience in their chosen field.

The research papers and articles in this issue of our journal focus on certain current events and issues related to the field of education. Through these research papers and articles, it is hoped that the readers may get insightful learning to take a pro-active approach towards the problems in education.

With Regards
Editorial Board

CONTENTS

ISSN 2277-3576

Frontiers in Education and Research | N.V.K.S.D. College of Education, Attoor.

nvksdjournal@gmail.com

Technostress of Higher Secondary School Teachers

* K.V. Gopikrishnan

** Dr. K. Rajeswari

Abstract

Technology is always around us and can lead to feelings of stress, overburden, and irritation. Technostress, often known as technology stress, is an emerging psychological condition that affects people who utilize technology. The current study aims to determine the Technostress of Higher Secondary School Teachers. Survey method by using Techno stress scale has been adopted. The considered sample comprises of 300 higher Secondary School Teachers from Thrissur district, who are working in Government or Aided Higher Secondary School. A moderate level of Techno stress faced by Higher Secondary School Teachers and there exists no significant difference in Techno stress among Higher Secondary School Teachers with respect to the Gender, Age, Stream of Teaching Subject and Experience of Teaching. The present study highlights the need of a stress free environment by providing proper awareness on the usage of technological tools, platforms, techniques, Online resources and the development of a unified course to educate Higher Secondary School Teachers on the recent advances in technology.

Keywords: Techno stress; Higher Secondary School Teachers

Introduction

Education is a basic need of every society. It is a fundamental means of Human Development. Education aims at shaping the behaviour in a desirable way. The role of teacher is to presume new dimensions due to the technological progress and new perspectives of knowledge resulting from scientific innovations. The role and responsibilities of a teacher are infinite and limitless and the success of any educational system depends on the requisite qualities of a teacher.

A teacher will always be crucial to the effective learning process of any student, whether it is in a physical classroom or an online learning environment. In fact, in an online set-up, while the essence of Teaching remains intact, the teacher is empowered to create more engaging and interactive learning experiences for the students. The unplanned and unprecedented burst of demands on teachers due to the cancellation of nearly all face-to-face classes and the need for conducting all instructions through online channels and implementation of educational technology has

* *Assistant Professor, Hindi Prachara Kendra College of Teacher Education, Poyya, Kodungallur, Kerala, India.*

** *Former Principal, IASE Thrissur*

resulted in levels of stress and associated burn out in teachers in spite of the fact that many consider Teaching as a less stressful job compared to other professional careers.

The stress or anxiety experienced by technology is termed as Techno stress. It will affect the Teaching learning process negatively. Creating a positive Attitude towards the use of technology may reduce the Technostress level leading to the success of Online Teaching. However, in the post the pandemic era, it is most likely that a blended learning approach, with both offline and online methods, would be the preferred. To meet the demands of this evolving format, the role of the teacher will go much beyond "textbook Teaching". Teachers build the citizens of tomorrow in the classrooms of today. To help them equip their students for a digital world we need to first equip our teachers with the right technology.

Review of Literature

Thiyagu (2021) constructed a tool to measure the Technostress of Teacher Educators. The primary purpose of the research was to develop and standardize the scale of Technostress of Teacher Educator. The researcher had developed the draft statements to measure Teacher Educators' Technostress based on the psychological experts' interaction and some theoretical inputs. Chou and Chou (2021) made a multigroup analysis of factors underlying Teachers' Technostress and their continuance intention toward Online Teaching. The investigator used the person-environment fit theory to develop the survey for investigation and an open-ended question appended to the survey. The structural equation modeling revealed that teachers' Technostress is associated with their privacy concerns and self-efficacy in delivering effective instruction amid Online Teaching. The multi group analysis further demonstrated that Technostress, self-efficacy and school support are related to the continuance intention to teach online for teachers at distinct teaching levels to different extents. Varanasi, Vashistha, Kizilcec and Dell (2021) investigated the Technostress among teachers in low-income Indian schools. The study mainly analyzed the impact of smartphone use on teachers' work life in low-income Indian schools. It was noticed that the teachers relied heavily on smartphones for work-related activities including, teaching, preparation, administration, and interaction with parents and peer. PenadoAbilleira, Rodicio-García, Ríos-de Deus and Mosquera-González (2021) made a study on Technostress in Spanish University Teachers during the COVID-19 Pandemic. The sample consisted of 239 teachers from face-to-face and online Universities in Spain. Results showed that teachers who suffered the most from the negative consequences of technology have been female teachers from face-to-face Universities who are older, having more years of experience, and consequently, hold a higher position. Joshith (2021) conducted a study on Perception towards the use of Digital Technology and Factors generating Technostress among Teacher Educators. The investigator adopted a normative survey method and selected 150 Teacher Educators as the sample from Kasaragod and Kannur districts of Kerala using the random sampling techniques. The investigator performed the study utilizing a self-prepared tool that covers the rate of level skills of technology usage, measures the perception of using digital technology in the classroom, and assesses the factors generating Technostress. 33.3% of the sample not at all felt anxious, 34.7% of the samplewere a little anxious, 24% of the sample felt some what

anxious, and only 8% were very anxious while thinking about technology. Kumawat (2020) conducted a study on Perceived Stress and burnout in Online Teaching of Indian teachers during the COVID-19 pandemic. A survey research design was conducted on 194 teachers, across different cities in India, engaging in Online Teaching after the pandemic. Online data collection method was employed using Google Form with items of Perceived Stress Scale and Maslach Burnout Inventory. A descriptive statistical analysis was performed and it was noted that 13% had high levels and 66% had moderate levels of stress. Chandra (2020) conducted a study on the perception of academic Stress and emotional intelligence coping strategies among College students. The purpose of the study was to analyze the perception of academic Stress experienced by students during current online education and the coping strategies using emotional intelligence adopted by them. The survey was conducted using two online questionnaires; Perceptions of Academic Stress Scale and Emotional Intelligence Scale. The collected data was analyzed using descriptive statistics with chi-square test. The findings indicated a significant difference between the fear of academic failure and the environment (online and home) among male and female students. Yadav (2020) examined the Technostress Level of Teachers in Higher Education with reference to Socio-Demographic Variables. The research study aimed in finding the level of Technostress among teachers in higher education. A questionnaire was used to measure the Technostress Level. Teachers of Central Universities constituted the population of the study and a sample of 258 teachers was chosen by using multistage cluster sampling technique. The study found differences in the mean scores of Technostress inhibitors and Technostress creators among higher education teachers with respect to their age. Technostress has no impact on gender and designation with respect to Technostress creators, subject stream, and year of teaching experience of higher education teacher. Boyer and Davis (2020) conducted a study on Technostress in higher education before and during the COVID-19 pandemic to advance the understanding of Technostress in higher education and the consequences to faculty. A survey of 307 College and University professors predominantly teaching in various business related disciplines was conducted. The instrument consisted of a seven-point Likert-scale survey containing questions from the Technostress Creators scale. Results showed that a significant difference in the overall faculty perceived Technostress scores before the COVID-19 pandemic and during the health crisis. Coklar, Efilti and Sahin (2019) made a study on Technostress as a factor affecting the use of technology by beginner level teachers. The Technostress levels of these teachers were investigated through descriptive survey method. Data were collected from 83 teachers having a professional seniority of 0-5 years. It was concluded that the general levels of Technostress of the teachers were moderate, they had a moderate-level Technostress at the learning-teaching process-oriented, technical-issue-oriented, and social-oriented Technostress factors, and they had a low-level of Technostress at the profession-oriented and personal-oriented Technostress factors.

Need and Significance of the Study

Digital transformation is not a novel phenomenon. However, the outbreak of COVID 19 pandemic shook the entire world forcing a global shutdown of several activities including educational activities. This situation challenged the educational system across the world had no option but to change their traditional pedagogical approach to online Teaching and learning.Learning to teach using technology is not a simple task. Doing it overnight is even more commendable. Traditionally teachers have been comfortable with direct classroom interaction. However, to be able to teach comprehensively without the student in front of you is a whole new ball game. Teachers have picked this up beautifully with little formal training and are doing some incredible work out there. Perception towards technology integration in the Teaching learning process, as well as the technical knowledge and skills, also influences the persons' Technostress. It seems a lot of external and internal factors are generating the Technostress to the Teaching community. Most of the teachers are from the digital immigrants' generation, they could not use digital technological tools or devices in the classroom in a proper manner. These are the issues that create stress for the Teaching community. The current study makes an effort in finding the Technostress of Higher Secondary School Teachers based on gender, age, stream of teaching subject and experience of teaching.

Methodology in Brief

Method Adopted

The investigator used survey method involving printed and online (Google form) data response sheets.

Sample

The study group consists of 300 Higher Secondary School (HSS) Teachers from Government and Aided Higher Secondary School in Thrissur district which was selected by convenient sampling (see Table 1).

Tools used

In this study, the Technostress scale prepared and standardized by (Thiyagu, 2021) was selected, with appropriate adaptations, for measuring Technostress among Higher Secondary School Teachers.

Statistical technique used

The original scale was subjected to expert rating and certain items were replaced or modified based on the suggestions made by experts. The modified tool contains 30 statements with 3 alternates namely Agree, Neutral and Disagree with scores 3, 2 and 1, respectively.

Results and Discussion

The responses made by teachers to the Technostress scale were examined employing descriptive statistics. To find differences among Technostress based on subsamples, inferential statistics like independent samples t-test, one-way analysis of variance method were applied. The statistical significance level was set at 0.05.

Table 1

Demographic information for the study group

Variable	Group	Number of HSS Teachers	Percentage (%)
Gender	Male	250	83.33
	Female	50	16.67
Age	Below 40 years	100	33.33
	40-50 years	167	55.67
	Above 50 years	33	11.00
Stream of Subject	Science	127	42.33
	Commerce and Humanities	92	30.67
	Languages	81	27.00
Experience of Teaching	Below 10 years	92	30.67
	10-20 years	138	46.00
	Above 20 years	70	23.33

The Cronbach Alpha reliability coefficient of the Technostress scale was found to be 0.81 which indicates that the scale is reliable to assess the Technostress of Higher Secondary School Teachers.

Table 2

Data and Results of Technostress of theHigher Secondary School Teachers

Variable	Sample	Mean	Median	Mode	Standard Deviation	Skewness	Kurtosis
Technostress	300	55.5	55	53	12.6	0.168	-0.400

For the variable Technostress, the measures of central tendencies (mean and median) are almost equal and mode is slightly lesser. The extent of skewness is 0.168 and measure of Kurtosis is -0.400 implying that is the distribution curve is positively skewed and leptokurtic. Hence, it is inferred that the distribution does not approach in the normal form.

Level of Technostress of Higher Secondary School Teachers

The level of Technostress of Higher Secondary School Teachers has been depicted inTable3

Table 3

*Mean (M) and Standard Deviation (SD) of the Technostress*of *Higher Secondary School Teachers*

Variable	Sample	Mean	SD	M+SD	M-SD
Technostress	300	55.5	12.6	68.1	42.9

For this, the total sample has been classified into three groups: high, moderate and low with respect to the scores of Technostress. The quantities M + SD and M – SD were calculated and the obtained values are 68.1 and 42.9, respectively. Hence, those who scored above M + SD (68.1) were considered under high group, those who scored below M – SD (42.9) were considered under low group and those who scored between M + SD (68.1) and M – SD (42.9) were classified under moderate group.

Percentage Distribution of the Level of Technostress of Higher Secondary School Teachers

The percentage distribution of the level of Technostress of Higher Secondary School Teachers is given in Table 4

Table 4

Percentage Distribution of the Level of Technostress of Higher Secondary School Teachers

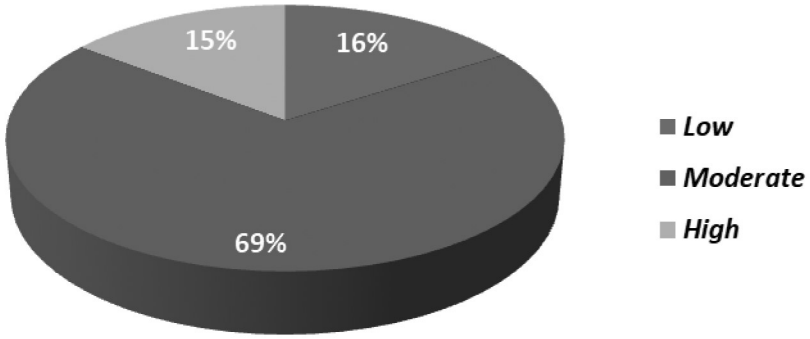
Level	Number of Teachers	Percentage (%)
High	44	14.77
Moderate	208	69.33
Low	48	16
Total	300	100

From Table 4, it is found that 16% of Higher Secondary School Teachers exhibit high level of Technostress while 69.33% exhibit moderate level and 14.77% exhibit low level of Technostress. This implies that the majority (69.33%) of Higher Secondary School Teachers exhibit moderate level of Technostress. The details are represented graphically in the Figure 1

Figure 1

Graphical Representation of Level of Technostress of Higher Secondary School Teachers

Test of Significance of Mean Difference in Score of Technostressof Higher Secondary School Teachers with respect to Gender



This section is intended to give the details about the significance of mean difference in score of Technostress of Higher Secondary School Teachers with respect to Gender. The data regarding the Technostress of Male and Female Higher Secondary School Teachers were collected and analysed. The details are given in Table 5

Table 5

Data and Result of t-Test of Technostress among Higher Secondary School Teachers with respect to Gender

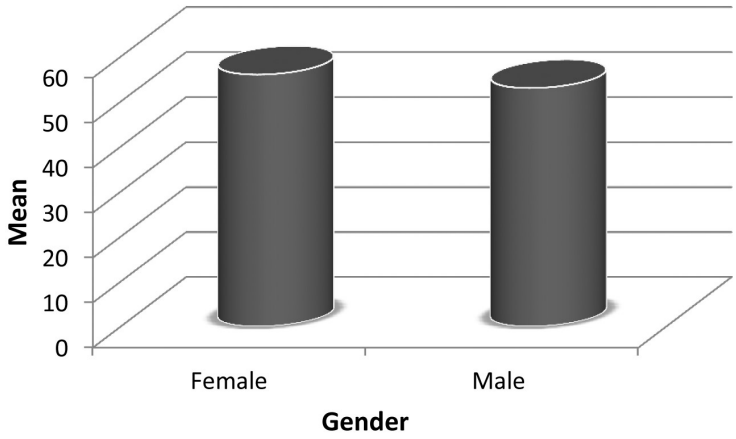
Variable	Gender	N	Mean	SD	t	p
Technostress	Female	250	56	55	1.51	0.131
	Male	50	53	54		

From Table 5, it is found that, the 't' value for Technostress is 1.51 which is less than Table value (t = 1.96) at 0.05 level of significance. This shows that there is no significant difference in Technostress with respect to Gender among Higher Secondary School Teachers.

A graph showing the mean score of Technostress of Male and Female Higher Secondary School Teachers is given below.

Figure 2

Graphical Representation of Mean score of Technostress of Male and Female Higher Secondary School Teachers



Test of Significance of Mean Difference in Technostress of Higher Secondary School Teachers with respect to Age

This section is intended to give the details about the significance of mean difference in Technostressof Higher Secondary School Teachers with respect to Age. The data regarding the Technostress of Higher Secondary School Teachers based on their Age were collected and analyzed. The details are given in Table 6.

Table 6

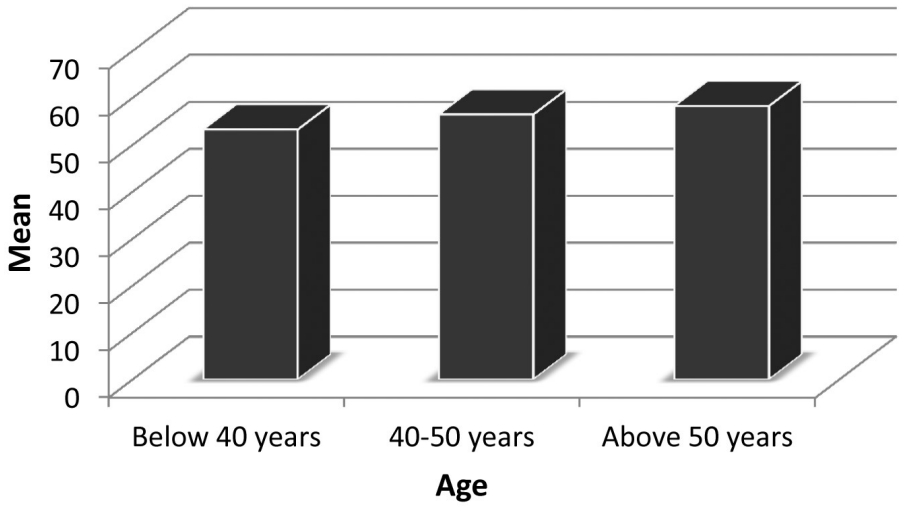
Data and Result of One way ANOVA of Technostress among Higher Secondary School Teachers with respect to Age

Variable	Age	N	Mean	SD	F	p
Technostress	Below 40 years	100	53.2	11.4	2.93	0.055
	40-50 years	167	56.4	13.2		
	Above 50 years	33	58.2	12.2		

From Table 6, it is found that, the 'F' value for Technostress is 2.93 which is less than Table value (F=3.0261) at 0.05 level of significance. This shows that there is no significant difference in Technostress with respect to Age among Higher Secondary School Teachers. A graph showing the mean score of Technostress of Higher Secondary School Teachers with respect to Age is given below.

Figure 3

Graphical Representation of Mean score of Technostress of Higher Secondary School Teachers with respect to Age



Test of Significance of Mean Difference in Technostress of Higher Secondary School Teachers with respect to Stream of Teaching Subject

This section is intended to give the details about the significance of mean difference in Technostress of Higher Secondary School Teachers with respect to Stream of Teaching Subject. The data regarding the Technostress of Higher Secondary School Teachers based on their Stream of Teaching Subject were collected and analyzed. The details are given in Table 7

Table 7

Data and Result of One way ANOVA of Technostress among Higher Secondary School Teachers with respect to Stream of Teaching Subject

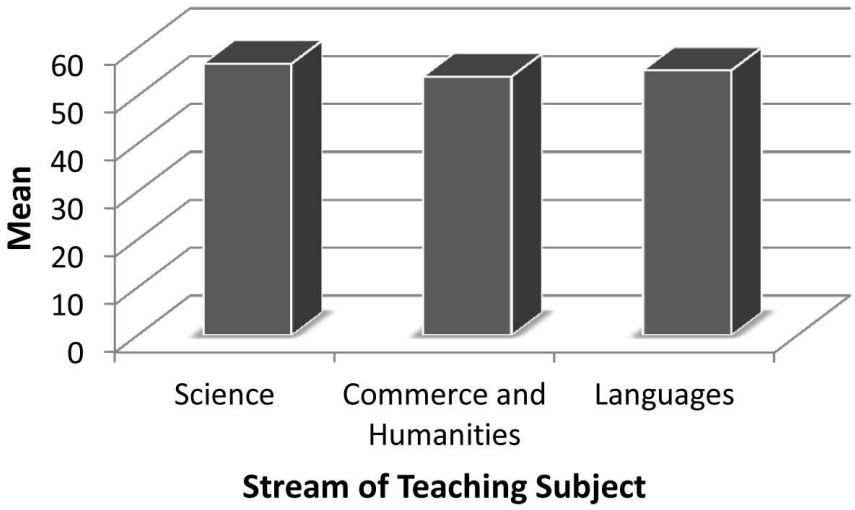
Variable	Stream of Teaching Subject	N	Mean	SD	F	p
Technostress	Science	127	56.7	13.6	1.29	0.276
	Commerce and Humanities	92	54	11.1		
	Languages	81	55.3	12.4		

From Table 7, it is found that, the 'F' value Technostress is 1.29 which is less than Table value (F = 3.0261) at 0.05 level of significance. This shows that there is no significant difference in Technostress with respect to Stream of Teaching Subject among Higher Secondary School Teachers.

A graph showing the mean score of Technostress of Higher Secondary School Teachers with respect to Stream of Teaching Subject is given below.

Figure 4

Graphical Representation of Mean Score of Technostress of Higher Secondary School Teachers with respect to Stream of Teaching Subject



Test of Significance of Mean Difference in Technostress of Higher Secondary School Teachers with respect to Experience of Teaching

This section is intended to give the details about the significance of mean difference in Technostressof Higher Secondary School Teachers with respect to Experience of Teaching. The data regarding the Technostress of Higher Secondary School Teachers based on their Experience of Teaching were collected and analyzed. The details are given in Table 8

Table 8

Data and Result of One way ANOVA of Technostress among Higher Secondary School Teachers with respect to Experience of Teaching

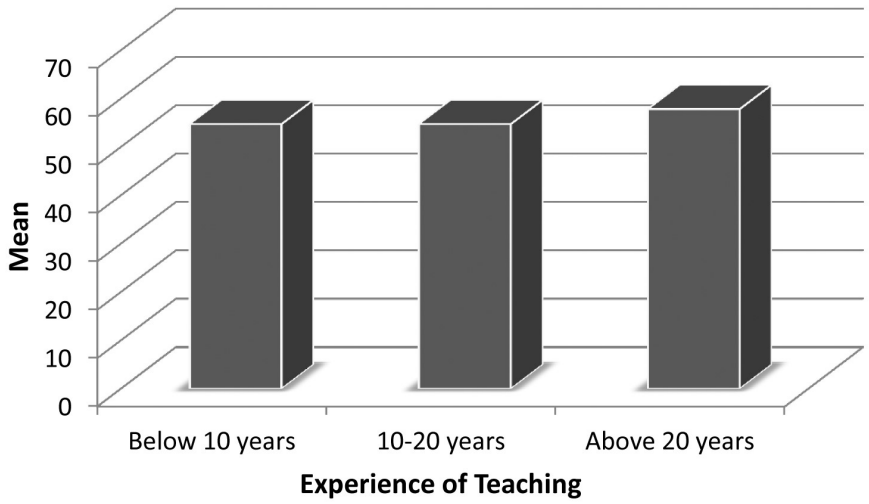
Variable	Experience of Teaching	N	Mean	SD	F	p
Technostress	Below 10 years	92	54.7	10.8	1.73	0.180
	10-20 years	138	54.7	12.6		
	Above 20 years	70	57.8	12.8		

From Table 8, it is found that, the 'F' value for Technostress is 1.73 which is less than Table value (F = 3.0261) at 0.05 level of significance. This shows that there is no significant difference in Technostress with respect to Experience of Teaching among Higher Secondary School Teachers.

A graph showing the mean score of Technostress of Higher Secondary School Teachers with respect to Experience of Teaching is given below.

Figure 5

Graphical Representation of Mean Score of Technostress of Higher Secondary School Teachers with respect to Experience of Teaching



Conclusion

The 21st century's driving force is the integration of advanced information technology into people's employment, education, daily lives, and leisure activities. Technology acceptance and adaptation is not an easy process. Every person has a different opinion about how adaptable technology integration into life and education is. Some people are hesitant to employ technology in their daily life and their educational pursuits. People experience some stress as a result of embracing cutting-edge technologies. Negative attitudes toward computers and newly developed technology are what constitute technostress.

This study aimed to find out the Technostress faced by the Higher Secondary School Teachers and found that Higher Secondary School Teachers possess moderate level of Technostress. It is also observed that there exists no significant difference in Technostressamong Higher Secondary School Teachers with respect to the Gender, Age, Stream of Teaching Subject and Experience of Teaching.

References

Antonovsky, A. (1987). *Unraveling the mystery of health: How people manage stress and say well*. San Francisco: Jossey Bass.

Ayyagari, R., Grover, V., & Purvis, R. (2011).Technostress: Technological Antecedents and Implications. *MIS Quarterly*, *35*(4), 831–858.

Bindu, C. N. (2017). Attitude towards, and Awareness of Using ICT in Classrooms: A Case of Expatriate Indian Teachers in UAE. *Journal of Education and Practice*, *8*(1), 10-17.

Boyer-Davis, S. (2020).Technostress in higher education: An examination of faculty perceptions before and during the COVID-19 pandemic. *Journal of Business and Accounting*, *13*(1), 42-58.

Brod, Ñ. (1984).*Technostress: The Human Cost of Computer Revolution*, Reading, Mass. : Addison-Wesley.

Chandra, Y. (2020). Online education during COVID-19: perception of academic stress and emotional intelligence coping strategies among college students. *Asian education and development studies*.

Chou, H. L., & Chou, C. (2021).A multigroup analysis of factors underlying teachers' technostress and their continuance intention toward online teaching. *Computers & Education*, *175*, 104335.

Çoklar, A. N., Efilti, E., &Şahin, Y. L. (2019).Technostress as a factor affecting the use of technology by beginning teachers. In: *Handbook of Research on Faculty Development for Digital Teaching and Learning,* 460-480.

Joshith, V. P. (2021). Perception Towards The Use Of Digital Technology And Factors Generating Techno-Stress Among Teacher Educators. *Review of International Geographical Education Online*, *11*(5), 4182-4192.

K., Thiyagu. (2021). Techno-Stress Scale of Teacher Educators: Construction of the Tool. *International Journal of Recent Technology and Engineering*. 9. 114-117.

Kumawat, K. (2020). Perceived stress and burnout in online teaching in teachers in India during pandemic COVID-19. *Indian Journal of Health & Wellbeing*, *11*.Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York, NY: McGraw-Hill.

.Mahajan, Gourav.(2016). "Attitude of teachers towards the use of Technology in Teaching." *Educational Quest-An International Journal of Education and Applied Social Sciences 7(2),* 141-146.

PenadoAbilleira, M., Rodicio-García, M. L., Ríos-de Deus, M. P., &Mosquera-González, M. J. (2021).Technostress in Spanish University Teachers During the COVID-19 Pandemic. *Frontiers in Psychology*, *12*, 496.

Rana, N. (2012). A STUDY TO ASSESS TEACHER EDUCATORS'ATTITUDES TOWARDS TECHNOLOGY INTEGRATION IN CLASSROOMS. *MIER Journal of Educational Studies Trends & Practices*, 190-205.

Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health – Assessment and implications of generalized outcome expectancies. *Health Psychology, 4*(3), 219–247.

Selye, H. (1983). The concept of stress: Past, present and future. In: C.L. Cooper (Ed.). *Stress research: Issues for the eighties.* New York: John Wiley.

Tarafdar, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. S. (2007). The impact of technostress on role stress and productivity. *Journal of management information systems*, *24*(1), 301-328.

Varanasi, R. A., Vashistha, A., Kizilcec, R. F., & Dell, N. (2021).Investigating technostress among teachers in low-income Indian schools. *Proceedings of the ACM on Human-Computer Interaction*, *5*, 1-29.

Yadav, A.(2020). Technostress Level of Teachers in Higher Education with Reference to Socio-Demographic Variables.

ISSN 2277-3576

Frontiers in Education and Research | N.V.K.S.D. College of Education, Attoor.

nvksdjournal@gmail.com

Effectiveness of Blended Learning on Achievement in Computer Science Among Higher Secondary School Students

* Dr. Lathabalaaji
** Dr. N. Ramakrishnan

Abstract

In recent trends teaching and learning has become very interesting due to the innovative methods of teaching using many technologies and practical tools. This study deals with new trends in education that can help one to become an innovative teacher. Students prefer the modern teaching techniques as they can actively participate in the learning process. E-content, Video Lessons and Online teaching and many other tools are used to present the subject innovatively and productively. Blended learning classroom is the latest educational technique that is being adapted in modern classrooms to enhance the learning experience of the students. The researcher is a Computer Science educator and has prepared a video lesson on "Working with Linux - Ubuntu" which is in Volume-I, Unit-I, Chapter 5 of XI Standard Computer Science text book in Tamil Nadu State Board Samacheer Kalvi new syllabus. The findings of the study reveals that blended learning classroom has a positive impact on XI Std pupils' academic achievement in Computer Science.

Keywords: Effectiveness, Blended Learning Classroom, Computer Science Teaching and Learning.

Introduction

Technology plays an important role in everyday life. Most of the individuals interact with and depend on digital technology on a regular basis. Surfing from internet, checking text messages, updating social media, online tutorials, registering for college courses, sending and receiving e-mails, online audio and video chatting with other people., can all be done on the latest hand device by simply touching the screen to get whichever we need. Computer technology is very useful to students to increase their academic performance and critical thinking skills.

Blended Learning refers to a learning that is facilitated by an effective combination of different modes traditional learning and online learning in an interactively meaningful learning environment.

* *Assistant Professor, MEASI College of Education, Chennai – 600 007,*
** *Professor and Head, Department of Educational Technology, TamilNadu Teachers Education University, Chennai - 600 097.*

A mix of live e-learning face to face elements, self-paced learning, computer mediated and mobile learning along with classroom learning are the examples in this regards.

Need and Significance of the Study

Blended Learning is an educational model where some lessons are delivered in a regular classroom strategies and some lessons are delivered in a digital format. In blended learning the traditional classroom is still in effect, however some of the lessons are replaced with Video Lesson learning. Blended learning classroom is also called as hybrid, mixed, or Integrative Learning because it has a combination of the traditional classroom and educational technology. Blended learning uses technology to expand the classroom learning environment and allow students to learn at their own pace.

Blended Learning Classroom will be most suitable for computer science teaching and learning. Hence conducting an experiment study on Blended Learning in Computer Science teaching for XI standard students in Tamil Nadu State Board Samacheer Kalvi New Syllabus is found to be significant one . Today teaching and learning has undergone a significant transformation with the widespread adoption of digital technology and easy access to internet. As such schools need to integrate technologies into the learning model. One such learning model which make learning simple, easier and effective is blended learning. This is defined as a combination of digital learning tools with traditional technology and digital media with traditional led classroom practices. This type of learning is more important for students because it combine the best of traditional and digital learning methods. Therefore, it enhances the effectiveness of their learning and promote a positive attitude towards the blended learning approach.

Objectives of the Study:

The objectives of the present study are as follow:

1. To develop and validate a video lesson on teaching Working with Linux in XI Standard Computer Science.
2. To construct and validate a criterion test on Working with Linux - Ubuntu of XI Standard Computer Science
3. To find out the effectiveness of Blended Learning on Achievement in Computer Science of XI Standard students.

Hypothesis for this present Study

The following hypothesis is framed by the researcher for the present study.

1. There is no significant difference between the pre test and post-test scores of experimental group XI Standard students in their achievement in Computer Science.

Methodology in Brief

Method Adopted

The researcher has adopted a Pre-test and Post- test experimental group design.

Sample

The experimental study is conducted on a sample of 30 IX standard students of DRBCC Government Aided Higher Secondary School and TELC Government Aided Higher Secondary School, Chennai.

Tool used

The present study is a pre test - post test Experimental Group design .The data are collected from the students using a Criterion test on the selected topic for XI Std Computer Science before and after the treatment. A video

lesson package as Blended Learning Module on 'Linux-Ubuntu Operating System' in Computer Science of XI Std students is used for conducting the experiment.

Statistical technique used

The statistical technique used for the study is't'test .

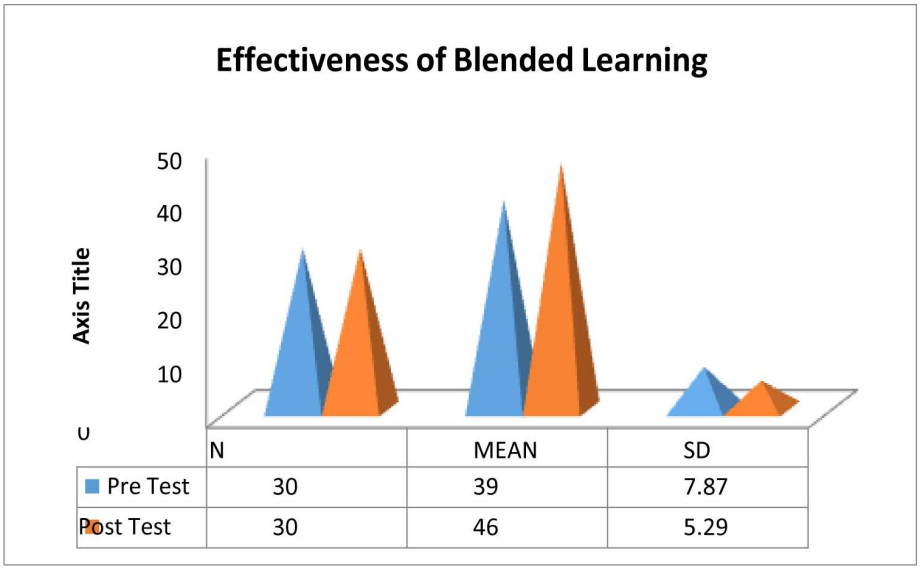
Result and Discussion

Table 1

Difference between the pre and post-test scores of experimental group XI Standard students, in their achievement in Computer Science

Experimental group	Total No. of students N	Mean Score	SD	't'	df	Level of Significance
Pre test	30	39	7.87	4.049	58	0.01
Post test	30	46	5.29			

From the above table it is inferred that the 't' value 4.049 is significant at 0.01 level of significance. The mean score of Post test of Experimental group (46) is higher than the mean score of Pre test of Experimental group (39). Therefore the null hypothesis is rejected. This could be inferred that the Blended Learning Classroom has positively impacted the XI Std students' academic fulfillment in Computer Science Subject.



The above figure shows the significant difference between the pre and post-test scores of experimental group XI Standard students, in their achievement in Computer Science.

Findings

The achievement of XI Standard students in Computer Science belonging to the experimental group after the treatment is high. Hence, it may be interpreted that the blended learning approach has given a positive impact on the XI standard students' achievement in Computer Science.

Conclusion

The blended Learning is in fact very compatible with most of our commonly accepted practices of learning theory, the present experimental study concluded that the blended learning is effective to learn Computer Science for XI Std students based on their scores before and after blended instruction. It is concluded that the XI Std students' academic achievement was positively impacted due to the blended instruction in Computer Science.

Educational Implications

The present study indicated that the blended learning has impacted positively the students' academic achievement in Computer Science subject. Therefore all the computer science teachers may use this instructional strategy for their subject. The students can learn the concepts easily from the video lessons also. All the schools and other educational institutions may implement technology based learning along with traditional class activities to enhance teaching and learning.

References

Chauhan, S. S. (1992). Innovations in Teaching and Learning process. New Delhi: Vikas Publication House Pvt. Ltd.

D. Randy Garrison and Norman D. Vaughn. (2007). Blended Learning in Higher Education: Framework.

Dash, K. M. (2009). ICT in Teacher Development, New Delhi, Neelkamal Publication Pvt. Ltd. Educational Publishers.

Josh Bersin (2004). The Blended Learning Book: Best Practices, Proven Methodologies, and Lessons Learned.

UNESCO (2002). Information and Communication Technologies in Teacher Education, A Planning Guide. Paris: UNESCO.

ISSN 2277-3576

Frontiers in Education and Research | N.V.K.S.D. College of Education, Attoor.

nvksdjournal@gmail.com

Professional Ethics and Obligations: The Need of the Hour for Quality Teacher Education

* Dr. Niharika Panda

Abstract

The person in society who is most accountable and responsible is a teacher. He / She should be aware of the importance of his/her profession. A deficient doctor is a threat to the public's physical health, but a bad teacher poses a much greater threat to the country. Thus the success or failure of an educational system is determined by the quality of its teaching-learning process. Quality has emerged as a distinguishing component of education in the 21st century. The fundamental challenge for emerging countries is how to provide affordable high quality education to a large population. Every higher education institution should strive for quality and excellence, especially those that provide teacher education programmes. Since change is unavoidable, educational goals and objectives are evolving to meet the needs, interests, and demands of students, society, and the country as a whole. Currently, the role of a teacher and teaching itself is evolving daily. Today's teachers have a variety of roles and obligations to fulfil. They should possess the knowledge of professional ethics in addition to having strong academic and professional credentials. Professional ethics are the moral principles, rules or standards that teachers must uphold in their interactions with pupils, parents, community and higher authorities, which, are posed by the society. And the word "ethics" is added to the professional obligation that a professional upholds. An obligation is a responsibility that one places on oneself. The teacher must set an example for his students and the society, and the values he upholds should be transparent, accurate, and ethical. Despite how taxing the situation may be, he must exemplify the dignity of labour and professional commitment. A teacher can truly become a professional if he or she complies with all these requirements, keeping in mind that a profession comes before the professional and never allows their human inclinations or feelings to interfere with their work. Manners and professional ethics should co-exist in order for the teacher to progress as a true professional in this changing society.

Keywords: Professional ethics, obligations, Quality, Teacher education.

* *Assistant Professor, School of Teacher Education, Cluster University of Jammu, Jammu-180002*

Introduction

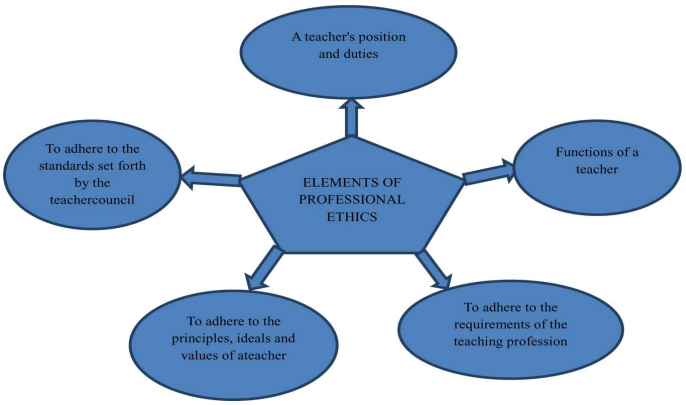
The success of any educational institution mostly rests on the calibre of its teachers, despite the fact that education is an essential tool for optimising human potential. The person in society who is most accountable and responsible is a teacher. He /she should be aware of the importance of his profession. He /she needs to have sincerity, commitment, and enthusiasm for his profession. He/she must possess the essential ardour required for a profession in teaching. He must possess the capacity and effectiveness to carry out his countless obligations towards various groups of society. Students' personalities, behaviours, and character are all built by him. This implies that the teachers bear a great deal of responsibility. Consequently, a nation's citizens are an enlarged version of its teachers. A second-rate doctor is a threat to the public's health, but a low quality teacher poses a much greater threat to the society. Thus the success or failure of an educational system is decided by the quality of its teaching-learning process. Quality has emerged as an important component of education in the present century. Varied people have varied perceptions regarding the term quality. of quality. It is not something that is bestowed by others. A product's quality could be excellent for one person but not for another since it does not fulfil the intended purpose. The society is significantly influenced by the information and communication revolution, the knowledge economy and globalisation. The fundamental challenge for emerging countries is how to provide affordable high quality education to all. Every higher education institution should strive for quality and excellence in this regard, especially those who provide teacher education programmes. Quality in the context of teacher education refers to all of the traits and qualities that a student teacher has gained as a result of teacher education system. If the demands placed on schools, students, parents, and society are met, it means that the teacher education programmes have produced excellent educators who are responsible for imparting a knowledge skills and capabilities to students which are essential to the wholesome development of the nation.

Since change is unavoidable, educational goals and objectives are evolving to meet the needs, interests, and demands of students, society, and the country as a whole. Currently, the idea of a teacher and teaching learning process is evolving day by day. Today's teachers have a variety of roles and obligations to fulfil. They should also possess the knowledge of professional ethics in addition to having strong academic and professional credentials. Professional ethics acts as a road map which helps teachers to deliver high-quality instruction with moral principles in their students.

Professional Ethics

Every profession is expected to develop a set of ethical principles that will serve as a guide for the conduct and behaviours. of its professional members. The ethical principle serves as the foundation for differentiating between desirable and undesirable behaviour. In this way, established and sustained ethical patterns have developed over time. They are time tested and socially used as. It deals with moral ideals that are voluntarily embraced by a person or a group. A collection of self-imposed professional standards and principles required for the achievement of self-satisfaction and professional excellence may be referred to as the code of professional ethics.

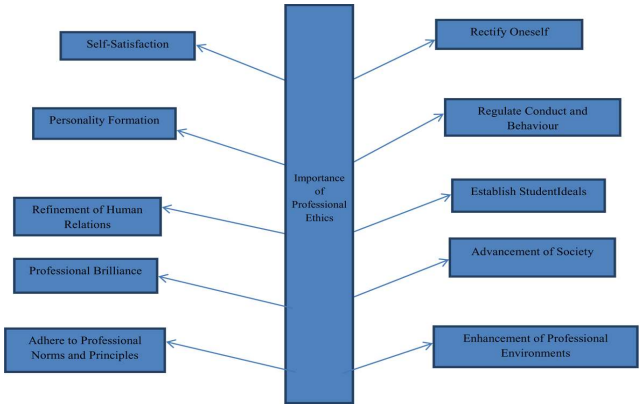
Professional ethics are the moral principles, rules or standards that teachers must uphold in their interactions with pupils, parents, community and higher authorities. Every profession has a unique work environment, and the code of conduct is established in accordance with certain norms. Professional ethics are determined by society and hence include the input of outstanding practioners of the same profession. Its major purposes are to serve as a general framework and to assess the professional standards of individual. Professional ethics' parameters and definition vary from society to society and are occasionally dynamic in character. The social structure, societal dimensions, and patterns all change throughout time, affects one's ethics. Therefore, ethics are governed by societal benefits, moral property, truth, value and human growth. The elements of Professional Ethics are:



3

Importance of Professional Ethics

The professional ethics will help the teachers realise how crucial they are in bringing about desired changes in the behaviour of the students. It also aids in the instructors' understanding of their line of work as educators. They have more to do than just project an air of dominance and authority in front of their students and co-workers. Teachers who have a strong sense of professional ethics will demonstrate to their students their commitment and care for them. Additionally, they always made care to contribute specifically from their perspective. The importance of the professional ethics are highlighted here diagrammatically.



Rectify Oneself

Man and his thinking are ever evolving. Human being in general, has a tendency to value comfort, selfishness, idleness and wealth. It is challenging to adhere to ideals such as honesty, integrity and simplicity. As a result, people tend to gravitate towards the simpler life styles without considering how doing so will affect them, their families, their careers, or society as a whole. Unaware of it, man slowly but surely becomes selfish and unethical. To varied degrees, these factors and feelings have an impact on every one. The professional ethics try to modify behaviours if we are doing any wrong.

Self-Satisfaction

Self-satisfaction is more strongly correlated with our inner selves, our feelings, and our way of thinking. We are viewed as hard workers who are also honourable, responsible and moral when we uphold the moral norms of our profession and society. All of these elevate us above others in terms of prominence and esteem. Anytime someone is recognised for doing a good job, they begin to govern respect and liking, which all leads to self-satisfaction. Professional ethics allow a person to make his own judgements and decisions, rather than accepting those made for him by others.

Regulate Conduct and Behaviour

Teacher shape pupils' behaviour, and teachers' behaviour is governed by professional ethics. The philosophy and psychology are in favour of promoting professional ethics in education. The teachers' conduct and behaviour becomes respectable and socially acceptable by adhering to professional ethics.

Personality Formation

The teacher continues to develop his personality by expanding his knowledge and honing his behaviours. The professional ethics of the profession place a strong emphasis on the instructors adhering to pre-established standards in both his thoughts and actions, including dress code, manners, and mannerisms. A person's personality is modified and he/ she actually become a teacher by upholding ethical principles.

Establish Student Ideals

Students attend school to learn how to behave and develop their personalities, in addition to the courses, and books they are studying. Students interact with and are influenced by several teachers on a daily basis. Students will follow and aspire to be like a teacher who acts as a role model to them. Therefore, by acting morally, teachers become a super star for their students.

Refinement of Human Relations

Professional ethics act as a catelist to promote collaboration, tolerance, fraternity, and other socially advantageous ideas. People who adhere to professional ethics make an effort to assist others in the greatest manner possible because doing so fosters positive emotions. Human relations are improved by feeling well. When relationships grow, the school becomes an ideal setting for teachers, students, and parents to collaborate. Finally all of these results in better performance and raises all benchmarks.

Advancement of Society

Education is a societal requirement that leads to the establishment of schools as well as the advancement of society. It is a vicious cycle that only gets worse over time. If professional ethics are disregarded, society as a whole and the

individuals start doing wrong actions. By following professional ethics, teachers guide students in the right path and make it a better place to live in.

Professional Brilliance

Each profession has its own distinct work environment and work culture. When professional act and communicate in an ethical manner, the workplace culture is enhanced. All of these fosters seamless coordination and efficient operation, bringing about excellence in the workplace.

Enhancement of Professional Environments

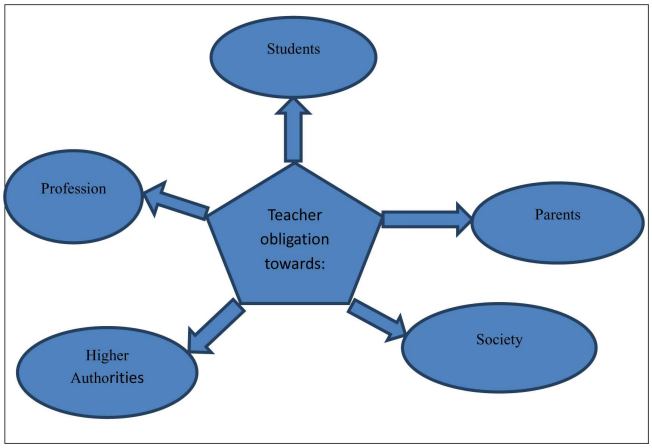
The professional environment consists of the people, facilities, working environments, and hours of operation. Professional ethics make guarantee that elders, higher authority, responsible in their work and receive and respect they deserve. When we adhere to such professional ethics, a calm, friendly, and comfortable work environment is created.

Adhere to Professional Norms and Principles

Professional norms and principles are the rules and regulations that are established to advance efficient operation. These guidelines are dynamic and subject to change. Our commitment to our work is strengthened by professional ethics, which also enables us to distinguish between self-interest and professional growth. It also prepares one for the additional responsibilities to provide superior professional growth.

Professional Obligations

In the term professional ethics, the word "ethics" is added to the professional obligation that a professional upholds. An obligation is a responsibility that one places on oneself. It is moral and proper to do so. A professional is someone who upholds the law and correctly applies it to benefit humanity. Because of the brotherhood it promotes, others will value that individual and his career. Nothing is forced or restrained, it is all done voluntarily. Teacher has obligation towards:



Students

Students and teachers are essential components of the educational process. Students learn while teachers teach. The entire educational process cannot be successful unless there is commitment on the part of the teacher and sincerity on the side of the students. Today's teachers are expected to go beyond certain limits limit for the betterment of the students. The duties a teacher owes to the students are as follows:

- With the aid of the available resources, it is the teacher's responsibility to transfer knowledge as fully and efficiently as possible within the allocated time. The teacher also makes sure the students are making the necessary progress.
- The teacher should inspire the students to study their subjects and to live fulfilling lives. Achievement substantially declines in the absence of motivation. Since motivation works best in trying circumstances, teachers should support their pupils in whatever manner they can.
- Teachers guide and inspire their students to succeed more in life. All of this is strongly related to the choices and judgements that children make on a daily basis. When making decisions, students should have a clear goal in mind and a solid rationale. The educator supports the student in making these decisions.
- Every student is expected to take the initiative in a variety of settings once they are prepared for life. Teachers provide their students with this opportunity by mandating that they take part in morning assemblies, stage events, and other activities. Additionally, by doing so, the teacher demonstrates leadership qualities.
- Students may exhibit extremely bizarre behaviours or routines during daily activity. In order to give the student's behaviour a good direction, the teacher should try to understand the motivations and emotions behind the activities.

Parents

Parents have a duty to take their children to school so that they can acquire the essential knowledge and courses and improve intellectually. The teacher is the one who helps the pupil achieve the goals of their parents and of society. Therefore, it is crucial for the teacher to stay in touch with the parents in order to ensure the child's welfare and academic growth.The following are the obligations a teacher must have.

- Parents are unaware of how their children act or perform in these classes on a daily basis. The teacher should inform the parents of their child's general characteristic and performances, such as their concentration on their academics and respect for senior teachers. The teacher should highlight all of these during parent-teacher conferences and address them on time.
- Usually, parents have a limited amount of knowledge of a few occupations or professions, which they have gained on their own, or friends or family. Parents frequently base their children's choice on their own limited personal experience and education. Therefore, a teacher should advise parents about the career and educational possibilities open to a child for a brighter future by considering their interest attitude and capacities expressed by them.
- Parents often treat their children in accordance with their own expectations or the way they were treated as children. Without considering how times and

circumstances have changed, they force their views on their children which in turn distance themselves from parents. A teacher who offers to parents counselling discusses all of these with their parents and make them aware of the changing conditions and attitudes of the new generation students.

- The teacher has a responsibility to convey the parents of how the school functions, with its accomplishments and any brand-new curricular activities which are introduced in recent time.All these leads to an improvement in the relationships between the parents and the teacher.

Society

Schools were created in response to societal demands. The school is also believed to be a society in miniature. The future of the society and the nation are indeed by the quality of its teacher. So the duties a teacher owes to the Society are as follows:

- When a child sent to school, he or she in transformed into a citizen with several characteristics and life lesson life lessons. He learns how to be a helpful member of society during his time in school by performing his duties honestly. Through education, the teacher must instil in the children all the desired traits that make them good citizen.
- The people of India are living in diversity and unity. Therefore teachers must perform their role to bring all the communities and religion together for their harmonious living.
- For a nation to advance, the inhabitants must be integrated. Teachers can promote a feeling of national integration among their students by appreciating languages and religions by celebrating various national and state festivals.
- Every person is a member of a particular society and part of biological system and natural environment. Therefore, it is one's responsibility to safeguard and preserve the environment. Teachers have to educate their students about the need for protecting nature and its value in our life through environmental education and initiatives like social forestery.

The Profession

One of the noblest professions all is teaching. Hence duty of a teacher is multy dimensional in nature. to the profession. Since society views teaching as a very significant profession, the teacher's obligations and many and there are:

- Being the representative of a noble profession, a teacher must act with great honour both within and outside of the classroom. He should always present himself with simplicity and humility. In his interactions with students and public, he show that he cares for the advancement of education and the welfare of all..

  A teacher learns continuous and provide precise information to students and others to promote knowledge. He is also a decision-makers and a promote of new and in motive ideas and submit them for publications.

- ❖ Each teacher therefore should be an active member of his/her professional bodies. Additionally, he or she should actively engage in all professional gatherings and activities scheduled for the development of policies and programmes and offer his/her scholarly contributions.. Also he should be dedicated to the development unity and coherence of the professional organisation.

The Higher Authorities

The department or group of persons who are in authority has entrusted the given the responsibility of creating and overseeing the rules, guidelines, and policies that will guide the development of the organisation. Teachers are greatly the executives who carryout or implement the programmes formed by the higher authorities for its full success.As such teachers must coordinate these actions with the higher authorities in accordance with the rules and regulations for it effective functioning.The duties formulated by owes to the Higher Authorities are as follows:

- ❖ Only teachers will be able to enforce discipline among the pupils if they comply by the norms and regulations of an institution that are periodically framed by higher authorities to ensure uniformity, even growth and development throughout, and staff discipline. It is impossible to advance these without discipline.
- ❖ Higher authorities aren't directly participating in what's going on or interacting with the students. They heavily rely on the teachers to be adequately informed of the facts and information so that they may correctly design policies. The teacher should provide and present a realistic image when asked for.
- ❖ Higher authorities occasionally adopt educational and non-educational plans for the overall development of students and institutions. These policies must be successfully conveyed and implemented before they can produce results. A teacher's duty as a professional is to comprehend these regulations in their entirety and effectively spread them to pupils in order to produce the intended outcome. To do this, the teacher must serve as a strong bridge between higher authorities and students.

In addition to these a teacher has innumerable other obligations. With the passage of time and circumstances, these obligations take on a variety of shapes. But the elements that affect professional ethics are represented in the figure.

Conclusion

The teacher must set an example for his students and the society and the values he upholds should be transparent, accurate, and ethical. He should practise being honest in all situations, including those where he has nothing to gain. Despite how taxing the situation may be, he must exemplify the dignity of labour and professional commitment. A teacher can truly become a professional only if he or she complies with all the requirements, keeps in mind that a profession comes before the professional and never allows their human inclinations or feelings to interfere with their work. Thus a teacher of today has many duties and responsibilities to perform well. Manners and professional ethics should coexist in order for the teacher to progress as a true professional in this changing society.

References

Burke Jacqueline (2017) *The journey to 21st century Learning for all students*. https://www.battelleforkids.org.Concept of Teacher Education.https:// archive.mu.ac.in.

Gaur, H.R. (2022). Professional Ethics in Teacher Education, *Scholarly Research Journal for Humanity Science and English Language*, Vol- 10, No 50, pp.12382-12386.

James D. Trifone (2017) Fostering Meaningful learning in the 21st century classroom. www.researchgate.net.

Meaningful learning and its implications in the classroom (2019) November 12. https://www.learningbp.com.

Panda, N. (2020). Essence of Values in the Education: A Pre-Requisite for Indianizing the System of Education, *Education India*, Vol- 9, No.4, pp.133-147.

Panda, N. (2015). A Study of Secondary Level Teachers Effectiveness In Relation to Demographic Variables, *Journal of Community Guidance and Research*, Vol- 32, No 01, pp.130-138.

Pathania, A. (2011). Teacher's role in Quality Enhancement and Value Education, *Academe*, Vol 24, No. 1, PP.19-25.

Sherpa and Karma (March, 2018). *Importance of Professional Ethics for Teachers*. https:// kerd.ku.ac.ke.

ISSN 2277-3576

Frontiers in Education and Research | N.V.K.S.D. College of Education, Attoor.

nvksdjournal@gmail.com

Social Competence as a Correlate of Subjective Well Being of Secondary School Students

* Gayathridevi Kunjamma
** Dr. Lakshmi A.

Abstract

Subjective wellbeing means how an individual, thinks about their state of happiness, fulfillment, and satisfaction. This state of wellbeing goes far deeper than merely being happy, it embraces health, career, emotional and spiritual development, family life, relationship with friends, income, and more.Social competence is assisting children to understand themselves so that they can better work with the people around them and better understand the world around them. They get along great with others, have friends, and appreciate new experiences. We need kids to have skilled adults in their world to help them develop social competence. It is probably clear to just about anybody who has worked with young children for any length of time, we can't guarantee that children are always getting this type of experience within their homes. Hopefully, children have good quality early childhood experiences so that they can develop this social competence. This study aims to find the relationship between Social Competence and the Subjective wellbeing of secondary school students. The study revealed that there is a marked and substantial correlation between the two variables.

Keywords : Social Competence, Subjective wellbeing

Introduction

Subjective well-being is important at every stage of life, from childhood and adolescence through adulthood. It affect show we thin,feeland act. It also helps determine how we handlestress, relatetoothers and make healthy choices. Mental well-being is important at every stage of life, from childhood and adolescence through adulthood. Being socially connected to others can ease stress, anxiety, and depression, boost self-worth, provide comfort and joy, preventloneliness and even add years to your life. On the flip side, lacking strong social connectionscanposeaserious risk toyourmental and emotional health. Subjective well-being(SWB)

* *M.Ed Student, N.S.S Traning College, Pandalam.*
** *Assistant Professor. N.S.S. Training College, Pandalam.*

and academic achievement are both Central indicators of positive psychological functioning and both are variables of interest in identifying the Characteristics of high-performing education systems (OECD, 2017). According to the OECD(2017), successful stu dents not only perform well academically but a real so satisfied at school. Schools as well as Higher educational environments are not just places where young people acquire a cademicskills, they are also places where people Connect with others, develop their personality and experience all facets of society, all of which might influence their SWB. Subjective well-being plays a central role in an individual's overall happiness, mental and physical health, relationships, and personal development. By nurturing our well-being and striving for a positive outlook on life, we can enhance our overall satisfaction and make meaningful contributions to the well-being of those around us.Subjective well being refers to how people evaluate their lives and is defined as an individual's over all state of subjective wellness. To gain more insight into the relationship between SWBand academic achievement and to integrate the available empirical evidence, we conducted ameta-analysis on the association between SWB and academic achievement. We aimed at estim ating the over all effectsize, its statisticals ignificance and them oderator variable soft herelation. The remainder of the introduction is divided into three sections. First, we present conceptual definitions of SWB and academic achievement. Second, we state the oretical arguments suggesting an over all positive relationship between these two constructs. Third, we discuss potential moderators that might influence the association between SWB and academic achievement.

Social competencer equires more than just social skills; it is a complex and inter connected set of skills that enables us to navigate social interactions and initiate and maintain relationships with others. (Sticher et al, 2012). In the present study, Social competence means a set of aconstruct like communication skills, interpersonal skills, and conflict management skills that promote effective interaction with one's environment. In the present study, Subjective well being means, it's not a state of absence of problems, negative thoughts, and feelings, it is a comprehensive term that includes areas like accepting one self, thriving in the face of adversity, cultivating positive relationships, having a sense of purpose and ability to handle day-to-day lifestresses.

Need and Significance of the study

Social competence is an umbrella term for social, emotional, cognitive, and behavioral skills as well as motivational and expectancy sets needed for successful social adaptation. Social competence is also seen as an ability to accept another's perspectives about a situation, learn from previous experiences, and apply those to the changes in social interactions. Social competence also denotes additional constructs such as social skills, social communication, and interpersonal communication. Social Competence is a broad area of skill development that impacts students' social effectiveness; in their ability to establish and maintain high-quality and maturity-satisfying relationships and to avoid negative Treatment or victimization from others. Social Competence

promotes successful adjustment to school, Academic Achievement, and eventual School completion. Conversely, a lack of social competence is responsible for juvenile delinquency, unemployment, adult criminal behavior, and mental health problems. Unfortunately, children with learning and developmental disabilities often demonstrate a lack of social competence and, therefore are vulnerable to such outcomes.Devi and Rajkumari (2022) conducted a Study on the Social Competency of Secondary School Students'' Social skills. The study showed no significant difference or relation found in the Social Competence and social skills of boys and girls in secondary schools. Alzahrani et al.(2019) study The Effect of Social-Emotional Competence on Children's Academic Achievement and Behavioral Development. To develop children's social-emotional competence, an interaction between adults and children is critically needed. Teachers have the responsibility to enhance children's development in many aspects, including social, emotional, cognitive, academic, and behavioral skills. A positive relationship between teachers and young students helps those students to have better school achievement and behavioral skills.

Subjective well-being (SWB) refers to how people experience and evaluate their lives andspecific domains and activities in their lives. Over the past decade, interest in informationabout SWB (also called "self-reported wellbeing") has increased markedly amongresearchers, politicians, national statistical offices, the media, and the public. The value ofthis information lies in its potential contribution to monitoring the economic, social, andhealth conditions of populations and in potentially informing policy decisions across thesedomains. Ozdogan(2021) conducted a study on Subjective well-being and social-emotional lonelinessof university students: The mediating effect of the meaning of life. The study reveals that theresults of the correlation analyses showed that there were significant relationships betweenthe variables of subjective well-being, social and emotional loneliness, and the meaning andpurpose of life. Likewise, the findings of path analyses revealed that social and emotional loneliness significantly predicted subjective well-being through the meaning and purpose oflife.Li et al.(2020) conducted the study Subjective well-being is the cognitive evaluation of individuals regarding themselves and their lives. The study revealed that the perception of a meaningful life is an important predictor of subjective wellbeing. A wide variety of phenomena including satisfaction and emotional reactions regarding people's lives within the framework that they are personally Responsible for play an active role in the construct. Hence the investigator feels that it is necessary to conduct a study on the relationship between Social Competence and Subjective wellbeing of secondary school students.

Hypothesesof the study

The present study has been designed with the following hypotheses.

i. The level of Social Competence of Secondary School Students is moderate
ii. The level of Subjective wellbeing of Secondary School Students is moderate
iii. There exists significant difference in the Social Competence of Secondary School Students with regard to Gender

iv. There exists significant difference in the Subjective wellbeing of Secondary School Students with regard to Gender

v. There exists significant relationship between Social Competence and Subjective wellbeing of Secondary School Students.

Objectives of the study

The present study has been designed with the following objectives.

i. To find out the level of Social Competence of Secondary School Students

ii. To find out the level of Subjective Well being of Secondary School Students.

iii. To compare the Social Competence of Secondary School Students with regard to Gender

iv. To compare the Subjective wellbeing of Secondary School Students with regard to Gender

v. To find out the relationship between Social Competence and Subjective wellbeing of Secondary School Students.

Methodology in brief

The methodology followed in the present study is detailed below:

Method adopted

The purpose of the present study is to find out the relationship between Social Competence of Secondary School Students. After going through the different methods and approaches and considering the nature of the study, the investigator adopted the Normative surveymethod for the present study.

Sample

The population of the study is Secondary School Students of Kerala to which the investigator would generalize the result of the present study. 300 Secondary School Students from Kollam, Pathanamthitta, and Alappuzha were selected by stratified sampling technique; the strata being the Gender of the subjects.

Tools used

The following tools were used for measuring the variables of the study,

i. Social CompetencyScale – The scale was prepared by the investigator. A five-point scale was constructed and standardized for the study. The investigator decided to select 5 constructs for constructing the Social Competence Scale. They are 1) Social skills: 2) Conflict management skills 3) Interpersonal skills: 4)Communication skills and 5)Personal skills. Thus the final form of Social Competence Scale consisted of 33 statements

ii. Student Subject Wellbeing Questionnaire: The Student Subjective Wellbeing Questionnaire was developed by Renshaw, T. L., Long, A. C. J., & Cook, C. R. (2015). And later modified by Renshaw, T. L. (2022). The Student Subjective Wellbeing Questionnaire taps into five aspects of student subjective wellbeing that are centered around positive emotions, positive relationships, positive values or meaning, and positive performance: The five aspects are 1) Joy of Learning (JL) : 2) School Connectedness (SC) : 3) Educational Purpose (EP) 4) Academic

Efficacy (AE) and 5) Student Wellbeing (SW) is a composite of JL, SC, EP, and AE and refers to youths' overall perception of their wellbeing at school.

Statistical techniques used

i. Descriptivestatistics
ii. Percentage analysis
iii. Test of Significance of Difference between Means for Large Independent Samples
iv. Karl Pearson Product Moment Coefficient of correlation

Analysis and Interpretation

Statistical analysis was done based on the objectives of the study and after ensuring whether the distribution of scores satisfies the assumptions underlying the use of each statistical technique.

Analysis of the level of Social Competence of Secondary School Students

The percentage analysis of Social Competence of Secondary School Students for the total sample is found by using the formula $M \pm \sigma$.

Result and Discussion

Table1

Level of Social Competence of Secondary School Students for Total Sample (N=300)
Analysis of the level of Subjective wellbeing of Secondary School Students

Level	Number of students	Percentage
High	64	21.83
Average	179	59.67
Low	57	19
Total	300	100

From Table 1, the mean and standard deviation of level of Social competence of Secondary School Students for the total sample is found to be 23.3 and 4.64. The value of $M + \sigma$ is 179.166 and the value of $M - \sigma$ is 134.174. The frequency of the scores above and equal to 179 is 64, 21.33% of Secondary School Students are having a high level of Social Competence. The frequency of scores below and equal to 134 is 57, 19% of Secondary School Students are having a low level of Social Competence. The frequency of the scores between the values 179 and 134 is 179, 59.67% of Secondary School Students are having an average level of Social Competence. This shows that the level of Social Competence of Secondary School Students is average.

Table 2

Level of Subjective wellbeing of Secondary School Students for Total Sample (N=300)

Level	Number of Teachers	Percentage
High	60	20
Average	160	53.33
Low	80	26.67
Total	300	100

From Table 2, the mean and standard deviation of Subjective wellbeing of Secondary School Students for the total sample is found to be 42.72 and 9.93. The value of M+ σ is 32.79 and the value of M – σ is 32.79. The frequency of scores above and equal to 53 is 60, 20 % of Secondary School Students have a high level of Subjective wellbeing. The frequency of scores below and equal to 33 is 80, and 26.67% of Secondary School Students have a low level of Subjective wellbeing. The frequency of the scores between the values 53 and 33 is 160, 53.33% of Secondary School Students are having an average level of Subjective wellbeing. This shows that the level of Subjective wellbeing of Secondary School Students is average.

Comparison of Mean Scores

For finding out whether there exists any significant difference in the mean scores of Social Competence of male and female Secondary School Students, the critical ratio was calculated.

Comparison of mean scores of Social Competence of Secondary School Students with regard to gender

Table 3

Data and Result of the Test of Significance of Difference between Means of Social Competence of Male and Female Secondary School Students.

Gender of Students	N	Mean	SD	t	Level of Significance
Male		161.14	22.795		
Female		152.38	21.413	3.433	p<0.05

From Table 3, The mean scores of male and female Secondary School Students were found to be 161.14 and 152.38 respectively. The standard deviation of male and female Secondary School Students was found to be 22.795 and 21.413 respectively. The calculated t-value is found to be 3.433 which is greater than the value 1.96 at 0.05 level. It indicates that there is a

significant difference between male and female Secondary School Students in Social Competence (t=2.78, p<0.01).

Comparison of mean scores of Subjective wellbeing of Secondary School Students with regard to gender

Table 4

Data and Result of the Test of Significance of Difference between Means of Subjective wellbeing of Male and Female Secondary School Students

Gender of Students	N	Mean	SD	t	Level of Significance
Male	147	44.47	9.85		
Female	153	41.05	9.75	3.02	p<0.05

From Table 4, the mean scores of male and female students were found to be 44.47 and 41.05 respectively. The standard deviation of male and female students based on Subjective wellbeing is found to be 9.85 and 9.75 respectively. The higher mean of male students indicates that they have more Subjective wellbeing than female students. The calculated t-value is found to be 3.02 which is higher than the value 1.96 at 0.05 level. That means it is significant at 0.05 level. It indicates that there exists a significant difference between means of Subjective well being of male and female Secondary School Students. The higher mean of male students indicates that they have more Subjective wellbeing than female students.

Relationship between Social Competence and Subjective wellbeing of g Secondary School Students. To find the relationship between Social Competence and Subjective well being of Secondary School Students the details of Pearson Correlation Coefficient 'r' and the level of significance for the total sample are given in the following table.

Table 5

Coefficient of Correlation 'r' and Results of Test of Significance of 'r' between Social Competence and Subjective wellbeing of Secondary School Students

Sample Category	Sample Size N	Coefficients of correlation	SE	Confidence interval CI (95%)		Shared variance
				Lower limit	Upper Limit	
Total Sample	300	0.646	0.058	-0.064	0.158	41.73

** indicates 'r' significant at 0.01 level

The relationship between Social Competence and Subjective wellbeing of Secondary School Students was calculated using Karl Pearson's Product Moment method. The coefficient of correlation between Social Competence and Subjective wellbeing for the total sample is 0.646. The value of the coefficient of correlation "r" denotes a moderate positive relationship. Hence the correlation between Social Competence and Subjective wellbeing of Secondary School Students is moderate at 0.01 level. That is there exists a substantial correlation between Social Competence and Subjective wellbeing of Secondary School Students.

Findings

i. The level of Social Competence of Secondary School Students is average.

ii. The level of Subjective wellbeing of Secondary School Students is average.

iii. The Social Competence of male Secondary School Students is greater and more significant than the female students

iv. The Subjective well being of female Secondary School Students is greater and more significant than the male studentsv. The value of the coefficient of correlation r denotes that there is a substantial positive relationship between Social Competence and Subjective wellbeing of Secondary School Students.

Educational implications

i. The present study points out the importance of Social Competence and Subjectwellbeing which is important for students, parents, and teachers.

ii. Parents have a leading role in inculcating many good habits in their children to makethem socially competent and expectable personalities in society. Care should be takenby them to give proper attention to all kinds of needs of the children. Family helps in shaping the personality of the children.

iii. Teachers also have to create situations in the classroom so that students cancommunicate with others and share their experiences with others. Which will in turninfluence students' physical, mental, and spiritual development.

iv. Social competence is a term covering a variety of diverse internal factors and externalbehaviors that influence the likelihood and quality of social interaction.v. Social competence is experienced by the child but often judged by others: peers,teachers, and parents. The relationship between social competence and a variety ofpositive outcomes, such as success in school, has been well-documented.

vi. Social competence enables children to interact with peers in a variety of ways andcontexts and to maintain positive relationships with peers and adults, both of which arecritical for success in school and beyond.

vii. Classrooms must be intentionally set up in such a way that supportive behaviors arecultivated to develop the well beingof students.

viii. Using mindfulness practice that involves learning how to focus on and appreciate thepresent. Instead of worrying about the past or future, people learn how to live in themoment and pay attention to the things that bring them joy and peace in the here and now.

References

Alzahrani,M., Alharbi, M., &Alodwani,A.(2019). The Effect of Social-Emotional Competence on Children Academic Achievement and Behavioral Development. *International Education Studies*; Vol. 12, No. 12; 2019 ISSN 1913-9020. E-ISSN 1913-9039.Retrieved from https://doi.org/10.5539/ies.v12n12p141

Devi,S.,Rajkumari& Jyoti. A Study of Social Competency of Secondary School Student inRelation to Social Skill. *The International Journal of Indian Psychology* ISSN 2348-5396(Online) | ISSN: 2349-3429 (Print) Volume 10, Issue 3, July- September, 2022

Diener, E., Diener, C., Choi, H., & Oishi, S. (2018). Most people are happy revisited – Anddiscovering when they are not. Perspectives on Psychological Science, in press. DOI: Retrieved from https://doi.org/10.1177/1745691618765111

Hogg, M. & Vaughan, G. (2005). *Social Psychology (4th edition)*. London: Prentice-Hall.

Kaul, L (2009). *Methodology of educational research*. New Delhi Vikas Publication house Pvt.Ltd.

Kendall PC, &Settipani CA(2012). Social functioning in youth with Anxiety Disorder. ChildPsychology & Human Developments. New Delhi. McGraw

Sarriera, J. C, Bedin, L., Abs, D., Calza, T., & Casas, F. (2015). Relationship between socialsupport, life satisfaction and subjective well-being in Brazilian adolescents. Universitas Psychologica, 14(2), 459-474. http://dx.doi.org. 10.11144/Javeriana.upsy14-2.rbss

Singh, G. 2013. Social competence of adolescents in relation to emotional intelligence and homeenvironment. International Journal of Science and Research, 4(1): 84-89.

Stichter, Janine & O'Connor, Karen & Herzog, Melissa &Lierheimer, Kristin &Mcghee, Stephanie. (2012). Social Competence Intervention for Elementary Students with Aspergers Syndrome and High Functioning Autism.*Journal of Autism and Developmental Disorders.* 42. 354-366. 10.1007/s10803-011-1249-2.

OECD (2017), Education at a Glance 2017: OECD Indicators, OECD Publishing, Paris Retrieved from https://doi.org/10.1787/eag-2017-en.

Ozdogan, A. Ç. (2021). Subjective well-being and social-emotional loneliness of universitystudents: The mediating effect of the meaning of life. *Journal of Pedagogical Research*, 5(1),18–30.

ISSN 2277-3576

Frontiers in Education and Research | N.V.K.S.D. College of Education, Attoor.

nvksdjournal@gmail.com

Self -Efficacy and Psychological well being of Prospective Teachers

* S. Vijayalaxmi
** Dr. Y. Daniel

Abstract

The present study aims at investigating the self-efficacy and psychological well-being of prospective teachers. The sample consists of 500 prospective teachers from Tirunelveli District. The self-efficacy scale, psychological well-being scale, and personal information form were used for collecting the data. The survey method was used for the study. The data was analysed using percentage analysis, the t' test, and correlation. The results revealed that there is a significant difference between male and female prospective teachers in the dimension of using ICT, but there is no significant difference between male and female prospective teachers in their self-efficacy in total and its dimensions of teaching, class management, guidance, organising extra-curricular activities, preparing lesson plans, preparing learning material, creating a positive classroom atmosphere, and pedagogic analysis. There is a significant difference between male and female prospective teachers in psychological well-being. There is a significant relationship between self-efficacy in total and its dimensions: teaching, class management, guidance, organising extracurricular activities, preparing lesson plans, preparing learning material, using ICT, creating a positive classroom atmosphere, pedagogic analysis, and the psychological well-being of prospective teachers.

Introduction

The term **self-efficacy** refers to an individual's confidence in their ability to complete a task or achieve a goal. The concept was originally developed by Albert Bandura. Today, psychologists contend that our sense of self-efficacy can influence whether we *actually* succeed at a task. (Elizabeth Hopper). Self-efficacy refers to the set of beliefs we hold about our ability to complete a particular task. It is informed by several main sources of information: personal experience, observation, persuasion, and emotion. The meaning of psychological well-being is about lives going well. It has six dimensions: autonomy, environment mastery, personal growth, positive relationships with others, purpose in life, and self-acceptance of individuals (Ryff, 1986).

* *M.Ed. Scholar, St. Xavier's College of Education (Autonomous), Palayamkottai*
** *Assistant Professor (S.G), St. Xavier's College of Education (Autonomous), Palayamkottai.*

Psychological well-being is a core aspect of overall well-being and is linked to physical health, longer lives, and greater happiness for individual employees. A positive approach to psychological well-being involves the pro-active development of positive well-being, not just controlling risk.

Significance of the study

Teachers are critical assets and play a crucial role in every society, as they are the backbone for national development. The Report of the Commonwealth Conference on Teacher Education (1974) has clearly stated that 'the teachers have a major role in educational progress, whether active or passive, and contribute to work. Education development can be influenced by ignoring innovative practices or merely remaining quiet in the face of a growing need for reform'. The important characteristic of a prospective and efficient teacher is self-efficacy, which enables him or her to become a successful teacher to meet the challenges in education, achieve the goals and aims of teaching, and effectively help the student community. The National Policy on Education (1968) stated, 'of all factors that determine the quality of education and its contribution to national development, the teacher is undoubtedly the most important. It is on his personal qualities and character, his educational qualification, and his professional competence that the success of all educational endeavours. Shengji (2021) describes the psychological well-being of teachers as the judgement and satisfaction of an individual with their happiness, physical and mental health, and profession (Huppert, 2009). The well-being of teachers goes beyond the simple absence of setbacks and stressors at work and concerns healthy and functional teachers. In simple terms, well-being refers to the capability of teachers to strike a positive and dynamic balance between their resources and professional challenges (Benevene et al., 2010). Teachers with a strong sense of self-efficacy tend to be better planners, more resilient, open-minded, and supportive of students. Hence, the researcher decided to analyse the relationship between self-efficacy and the psychological well-being of prospective teachers.

Statement of the Problem

The problem selected for the present study is entailed as "Self-Efficacy and Psychological Well Being of Prospective Teachers"

Objectives of the Study

1. To find out the level of Self-efficacy of Prospective teachers.
2. To find out the level of Psychological well being of Prospective Teachers.
3. To find out the significant difference between Self-efficacy and Psychological Well being of Prospective Teachers with reference to gender.
4. To find out the relationship between Self-efficacy and Psychological Well being of Prospective Teachers.

Hypothesis of the Study

1. There is no significant difference between male and female prospective teachers in their self-efficacy and its dimensions.
2. There is no significant difference between male and female prospective teachers in psychological well being.
3. There is no significant relationship between self-efficacy and psychological well being of prospective teachers.

Methodology in Brief

Method

The investigator adopted survey method to investigate self-efficacy and psychological wellbeing of prospective teacher.

The population for the present study includes all the prospective teachers, who are studying in Colleges of Education in Tirunelveli District affiliated to Tamil Nadu Teachers Education University, Chennai.

Sample

Five hundred prospective teachers from ten colleges of education in Tirunelveli district are selected by simple random sampling technique.

Tools used

The investigator used the following tools for data collection:

(i) Personal Data sheet

(ii) Self-efficacy scale developed by Anisha and Annaraja (2007)

(iii) Psychological well being inventory developed by Jeyanthi and Antony Raj (2015).

Statistical techniques used

The investigator used percentage analysis, 't' test and Pearson's product moment correlation.

Table 1

Level of self-efficacy and its dimensions of prospective teachers

Dimensions	Low		Moderate		High	
	N	%	N	%	N	%
Teaching	110	22.0	299	59.8	91	18.2
Class management	124	24.8	266	53.2	110	22.0
Guidance	114	22.8	261	52.2	125	25.0
Organizing extra-curricular activity	86	17.2	311	62.2	103	20.6
Preparing lesson plan	119	23.8	264	52.8	117	23.4
Preparing learning material	119	23.8	263	52.6	118	23.6
Using ICT	116	23.2	276	55.2	108	21.6
Creating positive classroom atmosphere	79	15.8	341	66.2	80	16.0
Pedagogic analysis	153	30.6	247	49.4	100	20.0
Self efficacy in total	125	25.0	252	50.4	123	24.6

It is inferred from the table1 that 22.0%, 59.8% and 18.2% of prospective teachers have low, moderate and high level in the dimension teaching respectively.

It is observed that 24.8%, 53.2% and 22.0% of prospective teachers have low, moderate and high level in the dimension class management respectively.

Table also shown that 22.8%, 52.2% and 25.0% of prospective teachers have low, moderate and high level in the dimension guidance respectively.

Also noted that 17.2%, 62.2% and 20.6% of prospective teachers have low moderate and high level in the dimension organizing extra-curricular activity respectively.

Found that 23.8%, 52.8% and 23.4% of prospective teachers have low, moderate and high level in the dimension preparing lesson plan respectively.

Also found that 23.8%, 52.8% and 23.4% of prospective teachers have low, moderate and high level performance in the dimension preparing learning material respectively.

23.2%, 55.2% and 21.6% of prospective teachers have low, moderate and high level capacity in the dimension of using ICT respectively.

It is observed that 15.8%, 68.2% and 16.0% of prospective teachers have low, moderate and high level in the dimension creating positive classroom atmosphere respectively.

Found that 30.6%, 49.4% and 20.0% of prospective teachers have low, moderate and high level in the dimension namely pedagogic analysis respectively.

Finally it is evident that 25.0%, 50.4% and 24.6% of the prospective teachers have low, moderate and high level in self efficacy in total respectively.

Table 2

Level of psychological well being of prospective teachers

Variable	Low		Moderate		High	
	N	%	N	%	N	%
Psychological well-being	122	24.4	261	52.2	117	23.4

It is inferred from the above table2that 24.4%, 52.2% and 23.4% of prospective teachers have low, moderate and high level in psychological well being respectively.

Null Hypothesis 1

There is no significant difference between male and female prospective teachers in their self-efficacy and its dimensions.

Table 3

Difference between male and female prospective teachers in their self - efficacy and its dimensions

Dimensions	Male (N=132)		Female (N=368)		Calculated 't' value	Remarks
	Mean	S.D	Mean	S.D		
Teaching	25.08	2.910	28.89	3.250	1.91	NS
Class management	28.89	3.800	28.40	3.775	1.25	NS
Guidance	20.79	2.577	20.89	2.437	0.412	NS
Organizing extra-curricular activity	20.14	2.788	19.97	3.065	0.598	NS
Preparing lesson plan	24.48	3.326	24.76	3.454	0.794	NS
Preparing learning material	20.92	3.092	21.21	2.688	0.973	NS
Using ICT	20.37	3.421	19.44	3.599	2.64	S
Creating positive classroom atmosphere	21.72	2.938	21.63	2.709	0.296	NS
Pedagogic analysis	25.06	3.457	24.61	2.969	1.32	NS
Self - efficacy in total	207.45	19.903	204.07	21.694	1.63	NS

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

It is inferred from the above table 3 that there is significant difference between male and female prospective teachers in the dimension using ICT, but there is no significant difference between male and female prospective teachers in their self-efficacy in total and its dimensions teaching, class management, guidance, organizing extra-curricular activity, preparing lesson plan, preparing learning material, creating positive classroom atmosphere and pedagogic analysis.

While comparing the mean scores of male and female prospective teachers, the male prospective teachers (m=20.37) are found better than female prospective teachers (m=19.44) in the dimension of using ICT.

Null Hypothesis 2

There is no significant difference between male and female prospective teachers in the psychological well being.

Table 4

Difference between male and female prospective teachers in psychological well being

Variable	Male (N=132)		Female (N=368)		Calculated 't' value	Remarks
	Mean	S.D	Mean	S.D		
Psychological well being	306.64	42.667	293.81	28.376	3.21	S

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

It is inferred from the table 4 that there is significant difference between male and female prospective teachers in psychological well being. While comparing the mean scores of male and female prospective teachers the male prospective teachers (m=306.64) are better than female prospective teachers (m=293.81) in psychological well being.

Null Hypothesis 3

There is no significant relationship between self-efficacy and psychological well being of prospective teachers.

Table 5

Relationship between self-efficacy and psychological well being of prospective teachers

Self-efficacy and its dimensions	Calculated value of 'γ'	Remarks
Teaching	0.424	S
Class management	0.455	S
Guidance	0.434	S
Organizing extra-curricular activity	0.461	S
Preparing lesson plan	0.492	S
Preparing learning material	0.422	S
Using ICT	0.265	S
Creating positive classroom atmosphere	0.408	S
Pedagogic analysis	0.114	S
Self efficacy in total	0.544	S

(For 500 degrees of freedom at 5% level the table value of 'γ' is 0.088)

It is inferred from the table 5that there is significant relationship between self-efficacy total and its dimensions teaching, class management, guidance, organizing extra-curricular activity, preparing lesson plan, preparing learning material, using ICT, creating positive classroom atmosphere, pedagogic analysis with Psychological Well-being of prospective teachers.

Findings

1. There is significant difference between male and female prospective teachers in the dimension using ICT, but there is no significant difference between male and female prospective teachers in their self-efficacy total and its dimensions teaching, class management, guidance, organizing extra-curricular activity, preparing lesson plan, preparing learning material, creating positive classroom atmosphere and pedagogic analysis. While comparing the mean scores of male and female prospective teachers, the male prospective teachers (m=20.37) are better than female (m=19.44) prospective teachers in their efficacy in using ICT.
2. There is significant difference between male and female prospective teachers in psychological well being. While comparing the mean scores of male and female prospective teachers the male prospective teachers (m=306.64) are better than female prospective teachers (m=293.81) in psychological well being.
3. There is significant relationship between self-efficacy total and its dimensions teaching, class management, guidance, organizing extra-curricular activity, preparing lesson plan, preparing learning material, using ICT, creating positive classroom atmosphere, pedagogic analysis and psychological well being of prospective teachers.

References

Aruna Mohan, G. (2007). "Psychological Foundations of Education". New Delhi: Neelkamal Publications Pvt. Ltd, Educational Publishers.

Kothari, C.K. (1990). "Research Methodology Methods and Techniques". New Delhi: Willy Eastern Ltd.

Madhumathi and Kurimetidayakar (2021). Well-being among Secondary school Teachers with respect to Category and Monthly income. Research and Reflections on Education Vol.19.No.4 Oct-Dec-2021.

Mangal, S.K. (2008). "Advanced Educational Psychology". New Delhi: Second edition, Prentice-Hall of Indian Pvt. Ltd.

Metilda Jasmine Shanthi and Antony Raj (2022). Psychological well being and Professional Self-efficacy of Prospective Mathematics Teachers. Research and Reflections on Education Vol.20.No.1 Jan-March 2022.

Namesh Kumar Kharwal and Pardeep Kaur (2021). "Self-Efficacy in Relation to Parental Support of Adolescents in Private Schools". Miracle of Teaching. Vol.XXXIII. No.1. January-April 2021.

ISSN 2277-3576

Frontiers in Education and Research | N.V.K.S.D. College of Education, Attoor.

nvksdjournal@gmail.com

Problems of Secondary Teacher Education Students and their Academic Achievement

* Dr. P. Vel Murugan

Abstract

The main objectives of the study were (i) to find out the level of problems of secondary teacher education students and their academic achievement, (ii) to find out the significant difference between arts group and science group, under graduate and post graduate, rural and urban secondary teacher education students in their problems and academic achievement, and (iii) to find out the significant relationship between problems of secondary teacher education students and their academic achievement. The sample consisted of 80 secondary teacher education students. Youth Problem Inventory (1986) constructed and standardised by Sandhya Sharma was used for collecting the data. The investigator established content validity of the tool. Marks obtained in the university examination of secondary teacher education students have been taken for estimating their academic achievement. Percentage analysis, 't' test and Karl Pearson's product moment correlation were used to analyse the data. The results of the study indicated that there is no significant relationship between problems of secondary teacher education students and their academic achievement.

Keywords: Problems, personal, family, social, educational, secondary teacher education students, academic achievement.

Introduction

Youth is the period of increased social relationships and contacts. The social circle of an adolescent is very wide. He believes in making intimate friendships and attaches himself closely to a group. It is a period of preparation for adulthood during which time several key developmental experiences occur. While adolescence is a time of tremendous growth and potential, it is also a time of considerable risk during which social contexts exert powerful influences. Specifically, youth are not fully capable of understanding complex concepts, or the relationship between behaviour and consequences. This inability may make them vulnerable to high-risk behaviours. Parents, members of the community and social institutions have the responsibility to both promote adolescent development and adjustment and to intervene effectively when problems arise (WHO, 2001).

* *Assistant Professor in History, Sri Ramakrishna Mission Vidyalaya College of Education (Autonomous) Periyanaickenpalayam, Coimbatore.*

Significance of the study

The youth of today are citizens of tomorrow. They are treasures of human resources of nation having a lot of talent hidden in them and if tapped in right direction would bear very good results and desired fruits. The are store houses of energy and knowledge and when given a right direction can work wonders. Our youth, in spite of all their energy, enthusiasm and courage, have continuously been losing a balanced perspective of orientation towards social reality and for this , both the characteristic feature of this period of personality development and striking imbalance in the modern social order are to be held responsible . Social problems which have a root in the relationship between the adolescent and his parents arise because the two do not understand each other sympathetically. The parents believe in the efficacy of greater control and direction, but they want more independence.

Education, on the one hand develops the full personality of an individual by making him intelligent, learned, bold, courageous and strong in good character, on the other hand, it contributes to the growth and development of the society in particular and nation at large. Moreover, during this stage, the youth need to face the conflict of the selection for future career field. And in India, the problems like insufficient facilities for education and unemployment increases anxiety in the adolescents. The morality development in the adolescents occurs according to the society and culture in which they live. The social norms expect controlled behaviour from the adolescents, so due to fear of freedom control, they feel more problems in the life. If they cannot find proper solution in their life, they feel frustration. Thus, this stage which is full of problems from all the sides, called the stage of stress and strain, storm and strike.

Review of Literature

Hafiz Mudasir and Shazia Majeed (2014) conducted a study on problems of the youth - a study of pre-service B.Ed. teacher trainees of Government College of Education. The result seems to be justified on the grounds that the youth have more personal and over-sensitive problems because they are more concerned with the job. Srishti Singh (2016) conducted a study on problems of youth: a study of college students in context to their gender. The findings revealed that there exists no gender difference in family problems, college problems, social problems and personal problems of college students. Ravina Vekariya and Jigar Parikh (2019) conducted a study on youth problems and aggression among adolescents. The study concluded that rural adolescent has higher level of youth problem as compared to the adolescent of urban habitat. Varsha Valjibhai Dholariya (2020) conducted a study on youth problem among adolescents: a study with reference to educational level, gender and residential area. The result shows that the level of youth problem was lower among college student than the secondary and higher secondary school students. Moreover, the level of youth problem found in boys was comparatively more than girls. Kanika Das (2022) conducted a study on problems among the youth and their self-concept: an investigation into the relationship. The findings revealed that the mean score of problems of males and females studying in colleges of Tura

did not differ significantly. From the studies reviewed, it is inferred that problems among secondary teacher education students and their academic achievement have not been studied so far so deeply. So, the investigator selected the topic entitled "Problems of Secondary Teacher Education Students and their Academic Achievement".

Objectives of the study

1. To find out the level of problems of secondary teacher education students and their academic achievement.
2. To find out whether there is any remarkable difference between arts group and science group, under graduate and post graduate, rural and urban secondary teacher education students in their problems.
3. To find out whether there is any significant difference between arts group and science group, under graduate and post graduate, rural and urban secondary teacher education students in their academic achievement.
4. To find out whether there is any relationship between problems of secondary teacher education students and their academic achievement.

Null Hypothesis

1. There is no significant difference between arts group and science group secondary teacher education students with respect to their problems.
2. There is no significant difference between under graduate and post graduate secondary teacher education students with respect to their problems.
3. There is no significant difference between secondary teacher education students from rural and urban area in respect to their problems.
4. There is no significant difference between arts group and science group secondary teacher education students in their academic achievement.
5. There is no significant difference between under graduate and post graduate secondary teacher education students in their academic achievement.
6. There is no significant difference between secondary teacher education students from rural and urban area in their academic achievement.
7. There is no significant relationship between problems of secondary teacher education students and their academic achievement.

Methodology in Breif

Method

The investigator adopted survey method. The population for the study is secondary teacher education students in Kanyakumari district, Tamil Nadu.

Sample

The investigator has used simple random sampling technique for collecting the data. The sample consists of 80 secondary teacher education students.

Tools used

Youth Problem Inventory (1986) constructed and standardised by Sandhya Sharma was used for collecting the data. The investigator established content validity of the tool.

Statistical technique used

Marks obtained in the university examination of secondary teacher education students have been taken for estimating their academic achievement. Percentage analysis, 't' test and Karl Pearson's product moment correlation were used to analyse the data.

Analysis of Data

Problems of Secondary Teacher Education Students.

Table 1

Level of Problems of Secondary Teacher Education Students

Dimensions of Youth Problem	Low		Moderate		High	
	No.	%	No.	%	No.	%
Personal Problem	15	18.8	53	66.3	12	15.0
Family Problem	14	17.5	59	73.8	07	08.8
Social Problem	09	11.3	54	67.5	17	21.3
Educational Problem	08	10.0	59	73.8	13	16.3
Youth Problem	11	13.8	53	66.3	16	20.0

It is inferred from the above table (1) that 18.8 percent of secondary teacher education students have low, 66.3 percent of them have moderate and 15.0 percent of them have high level in personal problem. It is understood from the table that 17.5 percent of secondary teacher education students have low, 73.8 percent of them have moderate and 08.8percent of them have high level of family problem. The table shows that 11.3 percent of secondary teacher education students have low, 67.5 percent of them have moderate and 21.3 percent of them have high level of social problem. It is also known from the table that 10.0 percent of secondary teacher education students have low, 73.8 percent of them have moderate and 16.3percent of them have high level of educational problem. The table reveals that 13.8percent of secondary teacher education students have low, 66.3percent of them have moderate and 20.0percent of them have high level of problems in general.

Null Hypothesis 1: There is no significant difference between Arts group and Science group secondary teacher education students with respect to their problems.

Table 2

Difference between Arts Group and Science Group Secondary Teacher Education Students in their Problems

Dimensions of Youth Problem	Arts (N=38)		Science (N=42)		Calculated 't' Value	Remarks at 5% Level
	Mean	SD	Mean	SD		
Personal Problem	32.79	2.642	30.93	2.579	3.181	Significant
Family Problem	30.03	4.277	29.69	3.272	0.391	Not Significant
Social Problem	33.26	2.177	31.71	2.616	2.888	Significant
Educational Problem	17.05	2.053	16.36	1.462	1.729	Not Significant
Youth Problem	113.13	6.540	108.69	5.787	3.203	Significant

(At 5% level of significance, the table value of 't' is 1.99)

It is inferred from the above table (2) that there is no significant difference between arts group and science group secondary teacher education students in their family problem and educational problem. But there is significant difference between arts group and science group

secondary teacher education students in their personal problem and social problem. While comparing the means scores of Arts group and Science group secondary teacher education students, arts group secondary teacher education students have more personal and social problems.

In general, there is significant difference between arts group and science group secondary teacher education students in their problems. While comparing the mean scores of arts group and science group secondary teacher education students, arts group secondary teacher education students have more problems. Hence, the null hypothesis is not accepted .

Null Hypothesis 2: There is no significant difference between under graduate and post graduate secondary teacher education students in their problems.

Table 3

Difference between Under Graduate and Post Graduate Secondary Teacher Education Students in their Problems

Dimensions of Youth Problem	UG (N=74)		PG (N=06)		Calculated 't' Value	Remarks at 5% Level
	Mean	SD	Mean	SD		
Personal Problem	31.81	2.763	31.83	2.927	0.018	Not Significant
Family Problem	29.78	3.879	30.67	1.751	1.045	Not Significant
Social Problem	32.51	2.539	31.67	2.422	0.821	Not Significant
Educational Problem	16.76	1.804	15.83	1.472	1.451	Not Significant
Youth Problem	110.86	6.685	110.00	4.050	0.473	Not Significant

(At 5% level of significance, the table value of 't' is 1.99)

It is inferred from the above table (3) that there is no significant difference between under graduate and post graduate secondary teacher education students in their problems. Hence, the null hypothesis is accepted.

Null Hypothesis 3: There is no significant difference between secondary teacher education students from rural and urban area in respect to their problems.

Table 4

Difference between Secondary Teacher Education Students from Rural and Urban Area in their Problems

Dimensions of Youth Problem	UG (N=74)		PG (N=06)		Calculated 't' Value	Remarks at 5% Level
	Mean	SD	Mean	SD		
Personal Problem	31.81	2.763	31.83	2.927	0.018	Not Significant
Family Problem	29.78	3.879	30.67	1.751	1.045	Not Significant
Social Problem	32.51	2.539	31.67	2.422	0.821	Not Significant
Educational Problem	16.76	1.804	15.83	1.472	1.451	Not Significant
Youth Problem	110.86	6.685	110.00	4.050	0.473	Not Significant

(At 5% level of significance, the table value of 't' is 1.99)

It is inferred from the table (4) that there is no significant difference between secondary teacher education students from rural and urban area in respect their problems. Hence the null hypothesis is accepted.

Academic Achievement of Secondary Teacher Education Students

Table 5

Level of Academic Achievement of Secondary Teacher Education Students

Variable	Low		Moderate		High	
	No.	%	No.	%	No.	%
Academic Achievement	09	11.3	61	76.3	10	12.5

It is inferred from the table (5) that 11.3% of secondary teacher education students have low, 76.3% of them have moderate and 12.5% of them have high level in academic performance.

Null Hypothesis 4: There is no significant difference between Arts group and Science group secondary teacher education students in their academic achievement.

Table 6

Difference between Arts Group and Science Group Secondary Teacher Education Students in their Academic Achievement

Variable	Arts (N=38)		Science (N=42)		Calculated 't' Value	Remarks at 5% Level
	Mean	SD	Mean	SD		
Academic Achievement	382.55	24.882	400.19	10.721	4.043	Significant

(At 5% level of significance, the table value of 't' is 1.99)

It is inferred from the table (6) that there is significant difference between arts group and science group secondary teacher education students in their academic achievement. While comparing the mean scores of arts group and science group secondary teacher education students, science group secondary teacher education students are better in respect of their academic achievement. Hence, the null hypothesis is not accepted.

Null Hypothesis 5: There is no significant difference between under graduate and post graduate secondary teacher education students in their academic achievement.

Table 7

Difference between Under Graduate and Post Graduate Secondary Teacher Education Students in their Academic Achievement

Variable	UG (N=74)		PG (N=06)		Calculated 't' Value	Remarks at 5% Level
	Mean	SD	Mean	SD		
Academic Achievement	391.11	21.334	400.50	4.722	2.990	Significant

(At 5% level of significance, the table value of 't' is 1.99)

It is inferred from the above table (6) that there is significant difference between under graduate and post graduate secondary teacher education students in their academic achievement. While comparing the mean scores of under graduate and post graduate secondary teacher education students, post graduate secondary teacher education students are better in their academic achievement. Hence, the null hypothesis is not accepted.

Null Hypothesis 6: There is no significant difference between secondary teacher education students from rural and urban area in their academic achievement.

Table 8

Difference between Secondary Teacher Education Students from Rural and Urban Area in their Academic Achievement

Variable	Rural (N=57)		Urban (N=23)		Calculated 't' Value	Remarks at 5% Level
	Mean	SD	Mean	SD		
Academic Achievement	390.09	21.760	396.09	17.477	1.291	Not Significant

(At 5% level of significance, the table value of 't' is 1.99)

It is inferred from the above table (8) that there is no significant difference between secondary teacher education students from rural and urban area in their academic achievement. Hence, the null hypothesis is accepted.

Null Hypothesis 7: There is no significant relationship between problems of secondary teacher education students and their academic achievement.

Table 9

Relationship between Problems of Secondary Teacher Education Students and their Academic Achievement

Youth Problems and Academic Achievement	Calculated 'r' Value	Remarks at 5% Level
Personal Problem	0.112	Not Significant
Family Problem	0.117	Not Significant
Social Problem	0.136	Not Significant
Educational Problem	0.013	Not Significant
Youth Problem	0.164	Not Significant

(At 5% level of significance, the table value of 't' is 0.217)

It is inferred from the above table (9) that there is no significant relationship between problems of secondary teacher education students and their academic achievement. Hence, the null hypothesis is not accepted.

Findings

1. The study revealed that 3.8% of secondary teacher education students have low, 66.3% of them have moderate and 20.0% of them have higher levels of problems.
2. There is significant difference between arts group and science group secondary teacher education students in their personal and social problems. In general, there is significant difference between arts group and science group secondary teacher education students in their problems.
3. There is no significant difference between under graduate and post graduate secondary teacher education students with respect to their problems.
4. There is no significant difference between secondary teacher education students from rural and urban area in respect to their problems.
5. It was found that 11.3% of secondary teacher education students have low, 76.3% of them have moderate and 12.5% of them have high performance level in academic achievement.
6. There is significant difference between arts group and science group secondary teacher education students in their academic achievement.
7. There is significant difference between under graduate and post graduate secondary teacher education students in their academic achievement.
8. There is no significant difference between secondary teacher education students from rural and urban area in their academic achievement.
9. There is no significant relationship between problems of secondary teacher education students and their academic achievement.

Interpreatation

The 't' test result shows that there is significant difference between arts group and science group secondary teacher education students in their personal and social problems. While comparing the means scores of arts group and science group secondary teacher education students, arts group secondary teacher education students have more personal and social problems. This may be due to the fact that the arts group secondary teacher education students have more opportunities to interact themselves in the society. Thus, it leads them to face so many societal and personal problems.

Conclusion

It is revealed from the study that the secondary teacher education students have the moderate level of personal, family, social and educational problems. However, there is no significant relationship between the problems of secondary teacher education students with respect to their academic achievement. Though, the secondary teacher education students have

moderate level of problems that can be reduced by the teachers, administrators and family members by providing appropriate remedial measures and guidance services. The colleges of education may organise awareness programmes to overcome the different kinds of challenges found among the student-teachers.

References

Hafiz Mudasir & Shazin Majeed (2014). Problems of the youth - a study of pre-service B.Ed. teacher trainees of government college of education. *Journal of American Science, 10*(1s), 28-31.

Kanika Das (2022). Problems among the youth and their self-concept: an investigation into the relationship. *International Journal of Creative Research Thoughts, 10*(3), 367-376.

Ravina J Vekariya & Jigar Parikh (2013). Youth problems and aggression among adolescents. The *International Journal of Indian Psychology, 7*(4), 1099-1105.

Srishti Singh (2016). Problems of youth: a study of college students in context to their gender. *International Journal of Home Science, 2*(1), 18-21.

Varsha Valjibhai Dholariya (2020). Youth problem among adolescents: a study with reference to educational level, gender and residential area. *Journal of Emerging Technologies and Innovative Research*, *7*(12), 893-897.

World Health Organization (2001). *The World Health Report: Mental Health: New Understanding, New Hope.* Geneva: WHO.

ISSN 2277-3576

Frontiers in Education and Research | N.V.K.S.D. College of Education, Attoor.

nvksdjournal@gmail.com

Sustainability in Education : Quality Enhancement Programmes at School Level by SCERT Kerala

* Dr. Sobha Jacob

Abstract

Kerala is one among the highly literate States in India. Educational innovations and experimentations taken up by the State are highly appreciated globally and all around the country . The educational attainment of the State is at par with those of the developed countries. It is a fact that the educational system in Kerala is enriched with trained teachers, resources, infrastructure facilities and innovative types of evaluation. In spite of the silver linings, several lacunae are being observed as dark spots in the existing system especially in the areas of school education. Kerala Government has been taken several measures taken to improve the education system in Kerala in general and to enhance the capacity of students and teachers in particular. "General Education Protection Mission is one of the project by the state of Kerala Government to raise the standard of public schools under its jurisdiction as "Centre of Excellence. In this juncture SCERT Kerala implements various innovative programmes for the realization of this project and this article is an attempt to describe some of those programmes.

Key words: SCERT, Sustainability, Best practices, samagra portal,

Introduction

Kerala was the first state in the country to attain 100 percent literacy more than two and a half decades ago. Since then the State has not rested on its laurels. It has moved forward in leaps and bounds conquering targets that no other State could achieve. Now the government of Kerala is taking off towards new goal of comprehensive educational reforms.

Government of Kerala introduced a new project called"General Education Protection Mission" (Pothuvidyabhyasa Samrakshana Yajnam) with an aim to improve the quality of education in all the schools under General Education department. "General Education Protection Mission is a project by the state of Kerala Government to raise the standard of public schools under its jurisdiction as "Centre of Excellence".

General Education Protection Mission project aims to make Kerala a fully digitalised

* *Assist. Professor, State Council of Educational Research and Training (SCERT), Kerala*

state in education sector. The state government would facilitate necessary physical, academic and digital contents which are required for implementing this programme. This programme would be closely monitored by the government itself.

The state is known for its accomplishments in universal education and enrolments. Through this mission, the Government proposes comprehensive educational reforms including 1000 Government schools into international standards during the first phase. The idea is not only to improve the infrastructural facilities, but also to reform the teaching and learning process to the present day needs by introducing ICT enabled learning and providing smart classrooms. There will be focus on creating educational programmes which are useful for differently abled students. It is also meant to reinforce the teaching –learning process by providing ample opportunities to each student to construct their own knowledge using modern technology tools. The mission will redefine the existing classroom learning process, coordinate resource mobilization efforts and develop 'JanakeeyaVidyabhyasaMathruka'. Special packages to support schools which are in existence for over 100 years will also be attempted. The implementation will enlist full involvement and partnership of the Parent Teacher Association and it focuses on:

- Betterment of educational surroundings
- Use of technology in education
- Renewal of learning method
- 1000 schools will be uplifted as Smart Schools

In order to acquire the above said objectives and maintain a sustainable development in the field of general education, certain activities are being done by different agencies of the general education department. SCERT Kerala implements various innovative programmes for the realization of the project.

The activities which are being conducted by SCERT are;

1. Providing Academic Support to Schools

With the help of local self government, SCERT identifies one school in each district which shows low academic performance. SCERT provides support not only in academic area of the students, but provides support in the development of talents, physical fitness as well. Thus identified 14 schools and support has been given to these schools during the past three consecutive years. The programmes concentrates the following areas of school education

1. Activities for language enhancement
2. Activities foe enhancing mathematical skills through cards, puzzles etc.
3. Science enrichment programmes by providing hands on experience in experimentation, observation, field trips etc.
4. Social science enrichment programmes by providing experience in sky watching,making working models, conducting field trips etc.
5. Programmes for nurturing talents in learners by interacting with eminent personalities in the field in local and state level.
6. Activities for uplifting the physical fitness of the learners by providing health cards for learners.

Documentation and Dissemination of Best Practices in Schools

Identification and dissemination of innovative and best practices, which are being implemented in the schools of Kerala is a novel attempt on the part of SCERT Kerala. Several academic activities are planned and implemented in schools of Kerala and they are being unnoticed by the authority. In this context SCERT decides to document and disseminate best practices in schools and schedule a project for identifying such schools. As part of this, SCERT invites applications and various schools responded to it. In the first round, evaluation of the activities in schools in each district will be carried out with the help of DIET faculty. These activities will properly documented by an expert team with the help of modern technology. The documented activities will be disseminated to other schools as well.

Objectives of the studies

- To find out the innovative academic activities at primary, secondary, and higher secondary level
- To test the feasibility of the collected activities
- To document and disseminate excellent academic activities of schools
- To motivate the schools and teachers to undertake such academic activities for their excellence

Every year 30-36 innovative academic activities from primary, secondary, and higher secondary level will be identified and documented for dissemination.

3. A Project to Enhance Research Aptitude among School Teachers.

In order to develop research skill among teachers, SCERT decided to provide opportunity to the teachers of Government and Aided school of the State to submit proposals for research projects related to problems that they are facing inactual classroom situations.

As part of this, SCERT invites proposals from teachers frompre-primary to higher secondary level. Teachers from DIETs ,TTIs, colleges and even universities can carry out the project. After short listing, the received proposals will be selected by a panel of experts in this field. Later these teachers will be given opportunity for presenting the topic before experts and the faculty members of SCERT. After presentation 12-15 projects in each year will be selected and the experts and faculty of SCERT guide these teachers to execute the project in a proper way. In addition to the academic support, a small amount is being given for conducting workshops, experts classes, awareness programmes etc. The financial support may vary from Rs 50,000 - 1.25 lakhs depending on the cost and importance of the project.

Research projects are selected as per the directions listed below:

1. The project should be in tune with the approach of the curriculum of General Education sector.
2. The proposal should be novel and innovative for implementation in their own school or neighboring ones.
3. The project should be in tune with the transactional principles and Right to Education Act.
4. The project should be completed in the stipulated time frame.

For the effective implementation of the project, SCERT provides opportunity for the researchers to make face to face interim discussion with experts and faculty concerned of the SCERT along with technological guidance.

This work is being continued for the past three years and every year 12-15 items will be selected for implementation.

Some important and relevant projects conducted during the past years are:

1. The Solar System Concepts: Innovative Pedagogical Paradigms ;
2. "Bhavanam ,Ganitham, Kauthukam": A High tech Mathematics Learning Approach;
3. Magic Slate: An Innovative Strategy for Enhancing Writing Skills among Upper Primary School Students;.
4. Pre-Readiness Skill Development in Cerebral PalsyDiplegic Children-Case Study
5. Kaleidoscope: A Project to Enhance Science Learning At UP Level
6. Flipped Classroom: A Talent Lab project through Blended learning
7. Continuous Evaluation: Application and Reporting;
8. Mazhavillu: A project for enhancing the academic performance of the learners of Migrant workers
9. Development of an Active Learning Package in Physics at Higher Secondary Level
10. Padanolsavam: A Comprehensive Educational plan for a Government School in Ernakulum District
11. Snehasparsam :An Intervention Programme among Children with Special needs
12. Beyond the Textbook: A Project for Enhancing Skill of High Achievers at Higher Secondary School Level
13. LittleRamanujan: A study for Enhancing Problem Solving Skill through Mathematical Games

Introduction of "Samagra Portal"

It is an online learning platform completely developed by KITE, under the Public Education Rejuvenation Mission of the State Govt. In order to supplement the Hi-Tech school project, it is essential for the schools to have right content in addition to adequate ICT equipments and trained teachers. It is in this context that KITE, with the academic support of SCERT, developed a comprehensive resource portal viz SAMAGRA, which is a repository of digital resources of all subjects from Class 1 to 12. As its name implies the software act as a resource which cover syllabus based teaching resources for schools all over Kerala. Teachers contribute various learning resources such as a videos, images, interactive like pdb, ggb, swf, gif and the students are able to access these contents without any restriction. The resources are arranged in such a way that which can be accessed by subject-chapter-topic filtering.

The scope of SAMAGRA is not limited to being a resource portal, instead as a complete online learning management system beneficial for students, teachers, public and academicians. Understanding the need of the hour, SAMAGRA is positioned as a one-stop permanent source for digital contents for all students which ease the learning process in classrooms.

SAMAGRA has the digital resources for all subjects from Std 1 to 12, in the form of videos,

animations, audios, stimulations, interactive contents, pictures etc. It also enables the unit plan of every chapter in addition to micro planning. Multiple levels of log-ins are integrated in SAMAGRA for the Teachers, Public and Administrators. All e-Resources available in SAMAGRA can be downloaded from anywhere. The portal also features specific Forums for discussions, in which teachers can clarify the doubts irrespective of location constraints. SAMAGRA also has eTextbooks of all subjects in four medium viz Malayalam, English, Tamil and Kannada. This enables the students to study the subjects even in the absence of physical textbooks.

Districtwise Project to Enhance Academic Sustainability

SCERT with the support of District Institute of Education and Training (DIETs) implements research based academic activities in order to enhance and maintain quality education in respective districts. District wise research team will be identified and with the support of these teachers academic activities will be implemented effectively. Each activities will be evaluated and documented properly.

Programmes for Nurturing the of Talents among Children

'NuMATS' (Nurturing Mathematical Talents in Schools) and 'STEPS' (Students' Talent Enrichment programme in Social Science) are the two new innovative programmes to improve the talents in Mathematics and Social science respectively. NuMATHS is aimed at nurturing the young talents in Mathematics of both Government and aided schools in Kerala and moulding them through a period of seven years. Every academic year, a total of 74 students are selected for the NuMATHS programme and they are giving special training.

STEPS is aimed to nurture the students' social talents and social observation skills by making them interact with their neighbouring scientists. Every year, 84 students will be identified through a selection criteria. The SCERT Kerala provides the required academic support to all these dream projects and closely monitors their implementation.

Conclusion

In addition to the above said programmes SCERT Kerala organised as many as programmes in the area of Curriculum, Teacher Education , Guidance and Counselling, Special Education etc. Many innovative programmes are on the anvil of SCERT that are aiming at quality enhancement in school education, as the focus of school education now in Kerala is on quality enhancement. It is a fact that high quality transaction of curriculum, competent and committed teachers, quality infrastructure etc. contributes quality in education. Safeguard of constitutional values and principles like democracy, equality, fraternity, liberty etc. on a secular platform and their sustainment is the challenge in view of the prevailing situation.

References

Anil Kumar, Biswas. (2011).Universalization of Education,.6-15.

Hillway, T. (1969).Research Design Hand Book of Educational Research. Boston: Honghton, Mifflin Company.

Koul, Lokesh (1997). Methodology of Educational Research, New Delhi; Vikas Publishing House Pvt. Ltd.

SCERT Kerala(2019) Annual Report. SCERT, Thiruvananthapuram.

The National Curriculum Framework (NCF 2005). New Delhi: NCERT.

The National Curriculum Framework (NCF 2007). New Delhi: NCERT.

ISSN 2277-3576

Frontiers in Education and Research | N.V.K.S.D. College of Education, Attoor.

nvksdjournal@gmail.com

Awareness of school students on Value Education

* Umadevi.I

Abstract

Education in ancient India was centred on values. Teachers are expected to deal with moral and ethical issues as part of their responsibilities. Education has a critical part in the world's social, intellectual and political evolution. Value orientation is behavioural inclination that predictably dictates the direction of behaviour when there is a choice or preference among numerous options. The development of values and a value system is an important aspect of human development. The well being of a free community is founded on each individual's commitment to value. People are motivated to go from the undesired to the desirable by their values. Values are at the heart of human behaviour influencing our actions and attitudes. The purpose of the study was to find out the awareness on value education among school students. The percentage level of awareness was found to be 30, which was low. Value education should be strictly implemented in the curriculum in all educational institutions from the primary level onwards. School teachers need to impart good values as children get influenced by teachers at a tender age.

Introduction

Education is the methodical acquisition of knowledge, abilities and experience and sound attitude by a child or an adult. It refines educates and civilizes a person. Its purpose is to make a person perfect. Education is the only way to develop a civilized and social society. Education is regarded as a remedy for all ills in every civilization. It is the secret to resolving all of life's issues. A person's principal concern is the search of truth. The study of values focuses on the altruistic side of love. Every person's social attitude becomes unselfish, and it is tightly linked to religious value. Education in ancient India was centred on values. Teachers are expected to deal with moral and ethical issues as part of their responsibilities. Education has a critical part in the world's social, intellectual and political evolution. Every human being is born with no baggage and a blank state. The growth of human intelligence requires a value based educational system. Values improve the quality of life. Human ideals are inextricably linked to human life. Values are long term criteria or principles that are used to assess

* *Research Scholar, NSS Training College, Pandalam.*

the worth of a concept or action. Values are desirable ideals that people use as a guiding principle in their lives. As a result numerous beliefs, attitudes, norms and behaviour can be influenced at the same time by values. Values emerge from a specific social system's socio cultural milieu and are impacted by a complex network of environmental and social elements. Value orientation is behavioral inclination that predictably dictates the direction of behaviour when there is a choice or preference among numerous options. The development of values and a value system is an important aspect of human development. The well being of a free community is founded on each individuals commitment to value. People are motivated to go from the undesired to the desirable by their values. Values are at the heart of human behaviour influencing our actions and attitudes.

All of today's societal ills can be traced back to a lack of value education. Teachers should endeavour to instil in their students awareness, interest and responsibility. To become a good citizen, the most important thing is to become a good person. We must provide a thorough and high quality education to our pupils. So that they can carry out their responsibilities fully and seriously .Value education for the sake of becoming .Value education is a critical need to encourage current education that instills life values in children in order to develop excellent human beings. The National Education Policy recognizes the importance of making education a primary tool for instilling social and moral values in society. In order to overcome all the behavioral problems of each and every student, modern generation should know the relevance of value education and ready to practice it in life. Thus the present study aims to explore how far school students are aware on value education.

Significance of the study

Children learn many things in school, like knowledge, different beliefs, attitudes and values. Education is not just about acquiring knowledge but also about instilling values that shape individuals into responsible, compassionate, and ethical members of society. An educated person should know what it means to be a part of society and should be prepared to be an active citizen of a democratic country. Value-based education is instrumental in character building. It helps students develop a strong sense of right and wrong, promoting qualities such as honesty, integrity, and empathy, important for personal growth and for building a harmonious society. Value education equips students with the skills to make ethical decisions, even in challenging situations. It encourages critical thinking and a deep understanding of the consequences of one's actions. It also promotes tolerance and acceptance, teaching students to appreciate diversity and work collaboratively with others. It teaches students to be compassionate and empathetic towards others for building strong interpersonal relationships and addressing social issues effectively. Leaders with strong moral values are the need of the hour. Value-based education nurtures leadership qualities grounded in ethics and responsibility and equips students with conflict resolution skills, patience and resilience which can significantly reduce stress levels leading to better mental health and improved

academic performance. Value education must be part of the education system. Value education cannot be imparted as a separate domain of education. Education in its entirety has to be value education (NCERT 2006). Children should be encouraged to cultivate a scientific temper that helps them to follow their own reason beyond the dictates of culture, tradition and community (NCERT 2005). It helps to think deep and understand the importance of scientific temper in following one's own reason, without being influenced by any other factor. Values are a set of beliefs and ideals, which are commitments made by an individual person. These are things that are worthy by themselves, are not influenced by external factors and cannot be compromised. Rapid scientific progress and technological developments have resulted in materialism, putting our long held moral ideals in jeopardy. The present paper focuses to examine the awareness of value education among school students.

Objectives of the study

The objective of the study was to study the awareness of value education among school students.

Methodology in Brief

Method

This study was carried out on a representative sample of 100 high school students. Normative Survey method was adopted and prepared a questionnaire for students to collect the data.

Statistical technique used

Percentage analysis was used to analyse the data.

Results and Discussion

Analysis of awareness on value education among school students was established by means of percentage analysis. The percentage analysis of awareness of value education among school students in the total sample is given in table 1.

Table 1

Data and result of percentage analysis of awareness on value education among school students

Sl.No	Dimensions	Percentage analysis
1.	Value education	30%
2.	Social benefits of value education	40%
3.	Moral benefits of value education	50%
4.	Cultural benefits of value education	40%
5.	Personal benefits of value education	70%

This table reveals that 30% of students are aware of the importance of value based education. The societal benefits of value based education are known by 40% of students. Students are aware of the moral benefits of value education in 50% of cases. The cultural benefits of value education are known by 40% of students. Students are aware of the personal benefits of

value education in 70% of cases. According to the percentage analysis on value education, more than 30% of school students are aware of the benefits of value education.

Conclusion

According to the percentage analysis of value education awareness, more than 30% of school students are aware of the benefits of value education. To raise inculcation of values, child-centered methodologies should be promoted. Value education should be embedded with the school curriculum. School teachers need to impart good values as children get influenced by teachers at a tender age. Workshops and seminars should be organized on value education for prospective teachers in teachers training institutes. The inclusion of value education as a separate subject in the curriculum is critical. In the contemporary world, the importance of value education is multifold. It becomes crucial that is included in a child's schooling journey and even after that to ensure that they imbibe moral values as well as ethics. Students need to be trained to own the responsibility for doing good or bad work. Strategies like discussions based on spiritual texts, experiential learning, reflective sessions, and conducting seminars and discourses on values will promote value development among students.

Educational Implication

1. Conduct value education awareness classes
2. Try to avail special teachers to teach value education
3. Incorporate various activities that promote values into the curriculum
4. Value education should be strictly implemented in the curriculum in all educational institutions from the primary level onwards.
5. Provide sufficient materials for implementing value education.

References

Bhatia,K.K.and Narang, C.L.(2002). Values:Meaning and classification. Philosophical and sociological basis of education,332.Tandon Publication, Ludhiana.

NCERT (National Council of Educational Research and Training) (2005): National Focus Group on Education for Peace (New Delhi: NCERT).

NCERT (National Council of Educational Research and Training)2006): National Focus Group on Aims of Education (New Delhi: NCERT).

Ramji.N.T.(2003) Value education, Philosophical and sociological Basis of Education,257.Ahim Paul publisher,Jalandhar.

De Joy.M.(2006)Integrated value education for global citizenship, Journal of Value Education,1(2)23-26.

Vikas.(2008).Value oriented education a Global Need,New Frontiers in Education, 4(2),130-135.

David .K(1992)A comprehensive mode for value Education and moral education.ERIC Record.

Samantray,&Jayasree(2008). Inculcation of Values through Education. Edutracks, 7(12),11-13

ISSN 2277-3576

Frontiers in Education and Research | N.V.K.S.D. College of Education, Attoor.

nvksdjournal@gmail.com

Predictors of Emotional Regualtion : a Study among the College Students of Kanniyakumari, Tirunelveli and Thoothukudi District

* Dr. Raghi.P.Nair

Abstract

Emotional regulation, the ability to monitor, evaluate, and modify one's emotional responses, plays a fundamental role in psychological well-being and adaptive functioning. Some studies and observations suggest that modern youth might face unique challenges in managing their emotions due to factors like increased screen time, social media use, academic pressure, and rapidly changing societal norm. Advancements in mental health awareness and resources have made it easier for youth to learn about and practice emotional regulation techniques. On the other hand, there are concerns about the impact of technology and social media on young people's mental well-being, potentially leading to issues like cyber bullying, comparison anxiety, and decreased resilience. When youth can manage their emotions well, they are better able to focus on their studies, cope with academic challenges, and perform better in colleges. Learning emotional regulation early in life sets a foundation for lifelong emotional health and resilience, equipping young people with the tools they need to navigate the complexities of adulthood. This study is an attempt to study the dimensions of emotional regulation among the college students of Kanyakumari, Tirunelveli and Thootukudi Districts. It was observed that there existed significant difference in the dimensions of emotional regulation such as Acceptance, Goals and Impulse of male and female students. No significant difference was found between Government aided college students and Private college students in their emotional regulation. Rural and urban college students also did not differ significantly in their emotional regulation.

Key words : Emotional Regulations, emotions, youth.

Introduction

In the era of digitilization, learners are seeking knowledge and skill development to navigate the competitive landscape and ensure their sustainability. This necessitates the regulation of emotions in the realm of learning. Emotions play a structured role in the learning process, exerting a direct influence on how learning unfolds.

* *Dean, N.V.K.S.D. College of Education, Attoor*

For example, emotions such as happiness, enthusiasm, and passion invigorate learners, enabling them to grasp new or challenging concepts flawlessly. Conversely, emotions like fear, stress, aggression, and anxiety bring about unease in learners, disrupting both their mental and physical equilibrium.

Around two millennia ago, Plato asserted that "all learning has an emotional base," and contemporary evidence underscores the fact that emotions fundamentally reshape our neural pathways (OECD 2007). Both neurobiologists and education experts recognize learning as a fusion of psychological, emotional, and cognitive processes. These three facets are interconnected and interwoven within every learning experience, collectively influencing brain function during the learning journey

Emotional regulation is a relatively new domain of psychological investigation, having recently gathered considerable momentum with widespread, international media attention. Emotional Regulation has become widely popular, due to the increasing personal importance of emotion management for people in modern society. Instead, it is commonly claimed Emotional Regulation predicts important educational and occupational criteria beyond that predicted by general intellectual ability.

In the education, based model, emotional regulation is defined as a confluence of developed activities to accurately know and value self, establish and **maintain** healthy and productive relationships, get along and work well with others in achieving positive results, and effectively manage the demands and pressures of daily life and work.

Youth, living in a world of competitions and complexes are able to find opportunity to channelize their emotions properly. If there are particular emotions they rarely or never feel, or only feel very weakly, this may point to coping mechanism involving the exiting of certain psychological parts. Therefore, the investigators made an attempt to find out the predictors of emotional regulation among the college students of Kanniyakumari, Tirunelveli and Thoothukudi districts, Tamilnadu.

Objectives of the Study

- To study the emotional regulation of the college students in kanniyakumari Tirunelveli and Thoothukudi districts.
- To study whether there is any significant difference in the emotional regulation with respect to gender, type of college and locality of college.

Hypotheses of the study

- There is no significant difference between the mean scores of male and female college students in their emotional regulation.
- There is no significant difference between the mean scores of government aided and Private college students in their emotional regulation.
- There is no significant difference between the mean scores of urban and rural college students in their emotional regulation.

Methodology in Brief

Method

Normative Survey Method was adopted in the study. This method of research has attempts to describe and interpret what exists at present in the form of conditions or relations, processes,

trends, beliefs and attitudes. The sample for the study was 900 students from 30 colleges of kanniyakumari, Tirunelveli and Thoothukudi District. The sample of the study had been selected by simple random technique. The investigator used Emotional Regulation scale prepared by Dr.Amalraj, Dr.Mohan and the present investigator. The scale contains 72 items to measure the dimensions of emotional regulation such as Acceptance, Goals, Impulse, Awareness and Purposive Behaviour. The validity of the tool was 0.72 and the reliability of the tool was 0.74 . By applying necessary statistical techniques, the analysis and interpretation of the data were made.

Results and Discussion

Table 1

Difference between Male and Female college students in their emotional regulation

Dimensions of Emotional regulation	Male (N=424)		Female (N=476)		Calculated 't' value	Remarks
	Mean	S.D	Mean	S.D		
Acceptance	49.37	9.58	51.03	10.36	2.48	S
Goals	49.51	9.74	51.13	10.29	2.41	S
Impulse	49.54	10.25	50.41	9.77	1.29	N.S
Awareness	49.25	10.65	50.67	9.34	2.12	S
Clarity	49.68	10.07	56.29	9.94	0.92	N.S
Purposive Behaviours	49.99	9.99	50.01	10.02	0.03	N.S

Table 1 shows that significant difference is found in the mean scores of male and female college students in the dimensions of emotional regulation such as Acceptance, Goals and Awareness. While comparing the mean scores female students were found to be better than male students.

Table 2

Difference between Government aided and private college students in their emotional regulation

Dimensions of Emotional regulation	Government aided (N=459)		private (N=441)		Calculated 't' value	Remarks
	Mean	S.D	Mean	S.D		
Acceptance	50.29	10.31	49.56	9.58	0.79	N.S
Goals	51.37	11.21	48.98	9.48	3.49	N.S
Impulsive	51.42	10.29	50.19	9.57	1.85	N.S
Awareness	50.18	10.71	49.79	9.97	0.56	N.S
Clarity	50.37	10.01	49.97	9.93	0.60	N.S
Purposive Behaviours	47.92	10.12	48.29	10.89	1.38	N.S

Table 2 shows that no significant difference is found in the mean scores of government aided and private school students.

Table 3

Difference between Rural and Urban college students in their emotional regulation

Dimensions of Emotional regulation	Rural (N=556)		Urban (N=344)		Calculated 't' value	Remarks
	Mean	S.D	Mean	S.D		
Acceptance	50.55	9.88	49.87	10.11	0.99	N.S
Goals	49.95	10.26	50.09	9.58	0.20	N.S
Impulse	49.93	10.00	50.12	10.02	0.27	N.S
Awareness	50.24	9.49	49.69	10.78	1.00	N.S
Clarity	49.93	9.65	50.11	10.55	0.24	N.S
Purposive Behaviours	50.15	10.39	49.75	9.35	0.60	N.S

Table 3 shows that there is no significant difference between rural and urban college students in their emotional regulation.

Discussion

It is observed that significant difference is found in the dimensions of emotional regulation such as Acceptance, Goals and Impulse between male and female students. Female students are found to be better in all these three dimensions. This may be because of the reason that More women are facing lot of emotional and social turbulence and are able to identify some of their own inner protective characteristics than their male counterparts. This is in tune with the findings of Ciarrochi & bajgar (2001) that EI was reliably measured higher for females than males. It is found from the table that no significant difference was found between Government aided college students and Private college students in their emotional regulation. This shows that the nature of institution does not have any influence on the handling or nurturing of emotions. Table 3 shows that no significant difference was found between rural and urban college students in their emotional regulation. This may be due to the fact that irrespective of locality, the reality of human life in general always receive some kind of emotional data and spends time in managing moods or emotions.

Conclusion

Youth are more likely to align their behavior with their standards when they are conscious of these components and they will be negatively affected if they don't live up to their personal standards and they tend to handle everything come in their way haphazardly. Empathy is a particularly important aspect of emotional regulation and researchers have known for years that it contributes to occupational success. Individuals who were best at identifying their emotions and used it appropriately were more successful in their academics as well as in their social lives. Furthermore, as the pace of change increase and the world of work makes ever greater demands on a person's cognitive, emotional and physical resources, the particular sets of abilities will become increasingly important. And that is good news that emotional regulation opens the era of improving productivity and psychological well being of the individual especially in the work place of tomorrow.

References

AlDahdouh,A.A.(2020). Emotion among Students Engaging in Connectivist Learning Experiences .*International Reviewof Researchin Open and Distributed Learning.*21 (2), 98-117.

Baisi Valeria, Conny De Vincenzo, &Nazarena Patrizi (2018). Cognitive Strategies, Motivation to learning, Levels of well-being and risk of droup-out: An empirical Longitudinal study for Qualifying Ongoing University Guidance Services. Journal of Educational and Social Research.8(2):79-91 DOI:10.2478/jesr-2018-0019.

Barrett, L.F.(2006). Are Emotions Natural Kinds?*Perspectives on Psychological Science*, 1 (1), 28-58.

Barrett, L.f., Niedenthal, P.M.&Winkielman, P. (2005),Emotionand Consciousness, New York: Guilford.

BarbaraKelly, Julie Long bottom, FayPotts&JimWilliams on(2004). Applying EmotionalIntelligence: Exploring the Promoting Alternative Thinking Strategies Curriculum. *Educational Psychology in Practice*, 20(3), 221-240. doi:10.1080/0266736042000251808.

Billett,S.(2009).Conceptualizing learningexperiences:Contributions and mediations of the social, personal, and brute.*Mind, Culture and Activity,*16(1),32-47.doi.org/10.1080/10749030802477317.

Ciarrochi, Joseph &Bajgar, Jane (2001). ***Measuring Emotional Intelligence in Adolescents.*** Journal of Personality and Individual differences, 31 (7),1105 -1119.

Cole, P.M., Martin, S.E., & Dennis, T.A. (2004). Emotion Regulation as a ScientificConstruct: Methodological Challenges and Directions for Child DevelopmentResearch.*Child Development*, 75(2), 317-333.

Cole, P.M., Martin, S.E., & Dennis, T.A. (2004). Emotion Regulation as a ScientificConstruct: Methodological Challenges and Directions for Child DevelopmentResearch.*Child Development*, 75(2), 317-333..

Daniel, Robert Elsey .(2002). *Psychological Defense and Academic Success during Adolescence.* Dissertation Abstracts International, 66 (09), 3979 .

Densie, L. (2005). *A Study on Psychoanalytic Process in a Single Case study.* Dissertation Abstracts International ,61 (03),1238.

Fruh, Jean,M .(2006). *The Correlation of Emotional Regulation,Academic Achievement and Clinical Performance in Undergraduate Athletic Training Students.* Dissertation Abstracts International, 67 (8),1265.

Gardener, H. (1983). *Frames of Mind.* New York : Bantam Books.

Goleman, Daniel. (1998). *Working With Emotional Regulation* . NewYork : Bantam Books.

Goleman, Daniel. (1995). *Emotional Regulation : Why it can matter more than IQ*. New York : Bantam Books.

ISSN 2277-3576

Frontiers in Education and Research | N.V.K.S.D. College of Education, Attoor.

nvksdjournal@gmail.com

Logical-MathematicalIntelligence and Metacognitive Skills of Prospective Teachers

* Sangeetha G S

** Dr. Deepa R P,

Abstract

This study focused on the correlation between Logical-Mathematical Intelligence and Metacognitive Skills among Prospective teachers. A normative survey method was adopted for the study. The sample consisted of Prospective teachers from various teacher education colleges from Kanyakumari District were selected using a simple random sampling technique and the size of the sample was 400. Logical-Mathematical Intelligence Test and Metacognitive Skill Test were used to assess the Logical-Mathematical Intelligence and Metacognitive skills of Prospective Teachers. The data collected were analysed using Pearson Product moment correlation, t-test and ANOVA. The results of the study indicated a significant correlation between Logical-Mathematical Intelligence and Metacognitive Skills. Gender and Educational qualification had significant difference in the Logical-mathematical Intelligence and Metacognitive Skills.

Keywords: Metacognitive skills, Logical-Mathematical intelligence, Prospective Teachers

Introduction

The development of 21st-century learners requires teachers who can ignite new dimensions of learning in each concept. Howard Gardner (1993) defined intelligence as the ability to solve problems or create products valued within one or more cultural settings. Gardner introduced the concept of Multiple Intelligence in 1983in his book Frames of Mind.He proposed eight distinct intelligences, including Verbal - Linguistic, Logical-mathematical, Musical, Spatial, Bodily-kinesthetic, Intrapersonal, Interpersonal and Naturalistic Intelligence.He emphasized that spatial, linguistic, and logical/mathematical intelligences are the best tools to assess an individual's overall intelligence. Veemana and Spaansa, 2005and Furnham 2006,also proves the same. A logical-Mathematical intelligent can categorize, infer, and make generalizations, apply knowledge in different contexts, think logically.Visser, Ashton & Vernon (2006) point out that the people with Logical-Mathematical Intelligence appreciates activities like strategy games, math activities, logic puzzles,

* *Research Scholar, N.V.K.S.D College of Education, Attoor*

** *Assistant Professor, N.V.K.S.D College of Education, Attoor.*

planning and arranging, conducting experiments, reasons logically and explains the scientific changes logically.

Flavell (1979) defined metacognition as "the knowledge and cognition about cognitive phenomena and monitoring the individual's cognitive processes". It is a high-level cognition process that includes thinking about knowledge and how to gain that knowledge through a reflective process.Flavell's dimensions of metacognition include metacognitive knowledge, metacognitive experiences, metacognitive skills.Thesethree dimensions of metacognition influence the learning process through twofunctions: monitoring and control(Efklides, 2006).Brown (1987) differentiated between two broad categories of metacognition: knowledge of cognition and regulation of cognition. Knowledge of cognition includes declarative, procedural, and conditional knowledge and regulation of cognitioninvolves activities such as planning, evaluating, and monitoring.

Need and Significance of the Study

Students should be encouraged to use their intelligence for lifelong learning(Snyder, 2000), building confidence, self-efficacy, and motivation to handle harder subjects(Teele, 2000). Teachers should understand their intelligence profiles to cater to their students' needs and teach strategies based on their characteristics. Logical and mathematically intelligent learners are better at using metacognitive strategies in problem-solving activities (Sharifzadeh,E, 2023). Metacognitive skills are critical for prospective teachers, as knowledge about cognitive processes can guide them in developing strategies to improve performanceand create a culture of metacognition in the classroom.Teachers should be trained to promote metacognitive instruction in the school context to increase problem-solving ability and logical reasoning (Gunstone and Northfield, 1994). Basic literacy skills, such as reading or writing, are no longer essential, as children with high Logical-Mathematical Intelligence can read critically, write creatively, think logically(Ciascai, et.al, 2014). To become change-maker teachers, prospective teachers should be trained to help their learners acquire metacognitive skills. The investigator plans to find the Logical-Mathematical Intelligence and Metacognitive skills of prospective teachers.

Objectives of the study

1. To study the level of Logical-Mathematical Intelligence and Metacognitive Skills of Prospective Teachers
2. To study the correlation between Logical-Mathematical Intelligence and Metacognitive Skills of Prospective Teachers.
3. To study the significant difference in the mean scores of Logical-Mathematical Intelligence of Prospective teachers concerning their background variables namely gender, locality and educational qualification.
4. To study the significant difference in the mean scores of Metacognitive skills of Prospective teachers concerning their background variables namely gender, locality and educational qualification.

Hypotheses of the study

1. There exists a significant correlation between Logical- Mathematical

Intelligence and Metacognitive Skills of Prospective Teachers.

2. There exists a significant difference in the mean score of Logical-Mathematical Intelligence of Prospective teachers based on the background variables namely gender, locality, and educational qualification.
3. There exists a significant difference in the mean score of Metacognitive Skills of Prospective teachers based on the background variables namely gender, locality, and educational qualification.

Methodology in Brief

Method

The normative survey method was adopted.

Sample

Sample consisted of Prospective Teachers studying from various colleges in Kanyakumari District. Sample size was 400 and it was selected through Simple random sampling technique.

Tools used

The following tools were used for the study

i. Logical-Mathematical IntelligenceTest (Prepared by Sangeetha G S and Dr Deepa R P, 2023)
ii. Metacognitive Skill Test (Prepared by Chandra Malar, M and Dr Deepa R P, 2015)

Statistical techniques used

Pearson's product-moment correlation, t-test, ANOVA.

Results and Discussion

Table 1

Percentage distribution of different levels of Logical-Mathematical Intelligence and Metacognitive Skills of Prospective teachers

Levels	Logical-Mathematical Intelligence		Metacognitive skills	
	Count	Percentage	Count	Percentage
High	88	22	75	18.75
Medium	240	60	274	68.5
Low	72	18	51	12.75
Total	400	100	400	100

It is clear that about 60% of prospective Teachers possess medium, 22% possess high and 18% possess low Logical – Mathematical Intelligence and also68.5 % of prospective teachers possess Medium, 18.75 % possess high and 12.75% possess low Metacognitive Skills.

Table 2

Correlation between total sample of Logical-Mathematical Intelligence and Metacognitive Skills

Sample	N	R	Verbal Interpretation
Total	400	0.67	Substantial Relationship

From the above table, it is clear that correlation coefficient between Logical-Mathematical Intelligence and Metacognitive skills for the total sample is found to be 0.67, which is significant at0.05 level.Hence"There exists a significant correlation between Logical-Mathematical Intelligence and Metacognitive skills of Prospective Teachers" is accepted.

Table 3

Comparison of mean scores of Logical-Mathematical Intelligence among prospective teachers based on Gender and Locality

Background Variables		Mean	Standard Deviation	t-test	Remark
Gender	Male	42	7.5	2	Significant at
	Female	43.4	7.1		0.05
Locality	Rural	43	7.3	2.04	Significant at
	Urban	43.9	7.4		0.05

From the above table it is clear that the calculated *t* value is greater than the table value, and is significant at 0.05 level. Therefore the hypothesis "There exists a significant difference between the mean score of Logical-Mathematical Intelligence of Prospective teachers based on the background variables namely gender andlocality" is accepted.

Table 4

Comparison of mean scores of Logical-Mathematical Intelligence among prospective teachers based on educational qualification.

Background Variables		Mean	Standard Deviation	Source	Sum of Squares	Df	F	Remarks
Educational	UG	42.29	7.318	Between	1516.1	2	14.92	Significant
Qualification	PG	43.83	7.010	Within	2016.92	397		at 0.00
	M.Phil	48.97	5.984	Total	21677.0	399		

From the above table, it is clear that the calculated F value 14.92 is significant at 0.00 level. Therefore the hypothesis "There exists a significant difference in the mean score of Logical-Mathematical Intelligence of Prospective teachers based on educational qualification" is accepted.

Table 5

Scheffe's procedure for pair-wise comparison of mean scores of Logical-Mathematical Intelligence of Prospective Teachers.

Educational Qualification	Mean	N	Pair	Scheffe's p	Remark
UG (A)	42.29	260	A Vs B	0.18	Not Significant
PG (B)	43.83	102	A Vs C	0.00	Significant
M.Phil (C)	48.97	38	B Vs C	0.00	Significant

From the above table, it is clear that the prospective teachers who qualified UG and M.Phil differ significantly in their Logical-Mathematical Intelligence. Hence prospective teachers who qualified M.Phil were found to be significantly higher in Logical-Mathematical Intelligence.

Table 6

Comparison of mean scores of Metacognitive Skills among prospective teachers based on Gender and Locality

Background Variables		Mean	Standard Deviation	t-test	Remark
Gender	Male	30.5	5.7	3.6	Significant at
	Female	30.3	5.16		0.05 level
Locality	Rural	30.2	5.36	2.12	Significant at
	Urban	30.9	5.6		0.05 level

From the above table it is clear that the calculated *t* value is significant at 0.05 level. Therefore "There exists a significant difference between the mean score of Metacognitive Skills of Prospective teachers based on the background variables genderand locality" is accepted.

Table 7

Comparison of mean scores of Metacognitive Skills among prospective teachers based on educational qualification.

Background Variables		Mean	Standard Deviation	Source	Sum of Squares	Df	F	Remark
Educational	UG	29.8	5.78	Between	285.90	2		Significant
Qualification	PG	30.5	6.08	Within	13334.19	397	4.256	at 0.05
	M.Phil	32.7	4.97	Total	13620.09	399		level

From the above table, it is clear that the calculated F value is significant at 0.05 level. Therefore "There exists a significant difference between the mean score of Metacognitive Skills of Prospective teachers based on the educational qualification" is accepted.

Table 8

Scheffe's procedure for pair-wise comparison of mean scores of Metacognitive skills of Prospective Teachers

Educational Qualification	Mean	N	Pair	Scheffe's p	Remark
UG (A)	29.8	260	A Vs B	0.62	Not Significant
PG (B)	30.5	102	A Vs C	0.01	Significant
M.Phil (C)	32.7	38	B Vs C	0.12	Not Significant

From the above table, it is clear that the prospective teachers who qualified UG and M.Phil differ significantly in their Metacognitive Skills. Hence prospective teachers who qualified for M.Phil were found to be significantly higher in Metacognitive Skills.

Conclusion

The education system should prioritize students' Logical-Mathematical Intelligence and critical thinking skills to ensure their survival in the future. Teachers with high levels of Metacognitive skills and Logical Mathematical Intelligence can solve professional problems more easily. Pre-service teachers should learn these strategies during pre-service education and apply them in their classes. Teachers who expect metacognitive skills to develop in the classroom must possess it themselves. Therefore, prospective teachers should be well-aware of their Logical-Mathematical Intelligence and Metacognitive skills.

References

Brown, A. (1987). Metacognition, executive control, self-regulation and other mysterious mechanisms. *Metacognition, motivation and understanding*. Hillsdale, NJ: Erlbaum.

Ciascai, Liliana & Haiduc 'uteu, Lavinia. (2014). Thinking Metacognitively: Metacognitive Skills and Science Performance. *New Educational Review.*37(2), 69-279. Doi: 0.15804/tner.14.37.3.21.

Desoete, A. &Ozsoy, G. (2009). Introduction: metacognition, more than the Loch Ness monster? *International Electronic Journal of Elementary Education, 2 (1),* 1 – 6.

Efklides, A. (2006). Metacognition and affect: what can metacognitive experiences tell us about the learning process? *Educational Research Review, 1*, 3 – 14.

Flavell, J. H. (1979). Metacognition and Cognitive Monitoring: A New Area of Cognitive Developmental Inquiry, *American Psychologist*, *34*(10), 906-911.

Furnham, A. (2006). Self-estimates of intelligence: Culture and gender differences in self and other estimates of both general (g) and multiple intelligences. *Personality and Individual Differences.* 3, 11381-1405

Gardner, H. (1983). *Frames of Mind: The theory of multiple intelligences*, New York: Basic Books.

Gunstone, R. & Northfield, J. (1994). Metacognition and learning to teach. *International Journal of Science Education, 16(5),* 523 – 537.

Hartman, H.J. (2001). Teaching metacognitively. In H. Hartman (Ed.), *Metacognition in Learning and Instruction: Theory, Research and Practice*. 149 – 172.

Sardag,M., et.al. (2021). An Examination of the relationship between Pre-Service Epistemological Beliefs and types of Multiple Intelligence. *International Journal of Progressive Education.* 17(4), 155-170. https://doi.org/10.29329/ijpe.2021.366.10

Sharifzadeh, E., Sadighi, F. (2023). The relationship between metacognition and multiple intelligence of Iranian elementary and intermediate EFL learners and their reading comprehension. *Contemporary Educational Research Journal*. 13(1), 34-47. https://doi.org/10.18844/cerj.v13i1.8751

Snyder, R. F. (2000). The relationship between learning styles/multiple intelligences and academic achievement of high school students. *High School Journal. 83*(2), 11–20.

Teele , S. (2000). *Rainbows of intelligence: Exploring how students learn.* California: Corwin Press, INC.

Veenmana, M., &Spaansa, M. (2005). Relation between intellectual and metacognitive skills: Age and task differences. *Learning and Individual Differences*. 15, 159–176

Visser, B. A., Ashton, M. C., & Vernon, P. A. (2006). g and the measurement of Multiple Intelligences: A response to Gardner. *Intelligence*, *34*(5), 507–510. https://doi.org/10.1016/j.intell.2006.04.006.

STATEMENT SHOWING OWNERSHIP AND OTHER PARTICULARS

Place of Publication	:	N.V.K.S.D. College of Education, (Autonomous), Attoor.
Periodicity of Publication	:	Bi-annual
Chief Editor	:	Dr. S. Sreelatha
Publisher	:	Principal, N.V.K.S.D. College of Education, (Autonomous), Attoor-629177
Printed at	:	Stalin Digital Press, Arasumoodu, Kulasekharam.

I do hereby declare that the particulars given above are true to the best of my knowledge and belief.

Dr. S. Sreelatha,
Principal
Chief Editor & Publisher,
Frontiers in Education and Research.

SUBSCRIPTION FORM

I/We would like to subscribe for the Frontiers in Education and Research. My/ Our details are given below.

Category	:	Individual / Institution
Name	:	.....
Designation	:	.....
Address	:	.....
		.....
		.....
Phone No.	:	.....
E-mail ID	:	.....

I am/ We are enclosing a DD for Rs ...../ (Rupees .....) in favour of The Editor, Frontiers in Education and Research, N.V.K.S.D. College of Education payable at State Bank of India, Thiruvattar.

DD. No .....

Name of the Bank:

.....

.....

Place.....

Date.....

(Please fill in the subscription form and mail to: Dr.V.P. Bindu Gouri, Editor, Frontiers in Education and Research, N.V.K.S.D. College of Education, Attoor, Kanniyakumari District, Tamil Nadu, South India, Pin:629177)

Subscription Rate

	India	Abroad
One Year (2 Issues)	300	$15
Two years (4 Issues)	600	$30
Three Years (6 Issues)	800	$40

FRONTIERS IN EDUCATION AND RESEARCH
NOTES TO CONTRIBUTERS

The Editorial Board invites contributions bearing on the broad field of Education from diverse perspectives. The articles shall be emperical philosophical, historical and interdisciplinary in nature.

- *Articles should be titled and should contain the name, address and contact number of the author.*
- *Manuscripts should be typed in A4 paper on one side in Times New Roman, 12 size, double space with wide margins in MS word.*
- *Articles should be in about 1000 to 1500 words with an abstract of maximum 200 words. The abstract should include major objectives, method, sample, tools and conclusions of the study.*
- *References should be in APA 7thstyle.*
- *Articles should be mailed to nvksdjournal@gmail.com. One hard copy should be sent by post.*
- *A declaration of the author should be sent stating that the article submitted for publication is original and not published before in any other journal or media.*
- *A biographical resume of the author (and all co-authors if any) with the details of office address and qualifications should be sent.*
- *Articles will be referred to experts in the respective areas after preliminary screening. Comments and suggestions for refinement from the referees will be forwarded to the authors for revision.*
- *Articles should reach the editor before September 30th and March 31st for January and July issues respectively.*

Articles may be sent to
The Editor
Frontiers in Education and Research
N.V.K.S.D. College of Education, Attoor,
Kanniyakumari District - 629 177, Tamil Nadu.
Off: 04651- 282130, Mob: 9446103362
e-mail : nvksdjournal@gmail.com

The points of view featured in the journal are those of the authors and not represent the views of N.V.K.S.D. College of Education.

SDP#9994239490