

INTERNATIONAL JOURNAL OF EDUCATIONAL RESEARCH, DEVELOPMENT AND EXTENSION (IJERDE)

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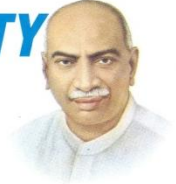
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MESSAGE

It gives me great pleasure to introduce the second issue of Volume 14 (April-June-2023) of the International Journal of Educational Research, Development, and Extension, published by the Centre for Educational Research at Madurai Kamaraj University. As we delve into the pages of this edition, we find a collection of research articles that embody the spirit of inquiry, innovation, and scholarship in the field of education.

Education is the cornerstone of progress and transformation in any society, and the articles within these pages reflect our commitment to advancing knowledge and understanding in this vital arena.

I extend my heartfelt appreciations to the authors, whose dedication to research and scholarship is the driving force behind this journal's success. I also commend the reviewers for their rigorous evaluation, ensuring the quality and integrity of the research presented.

To our readers, I encourage you to immerse yourselves in these articles, engage in discussions, and apply these findings to your own educational pursuits. By doing so, you contribute to the growth and advancement of education, which is the cornerstone of progress for our society.

Thank you for your continued support, and I look forward to witnessing the positive impact of the knowledge shared within these pages.

VICE CHANCELLOR

Editor's Note

Dear Readers,

We are delighted to present to you the second issue of Volume 14 of the International Journal of Educational Research, Development, and Extension. This issue continues our tradition of providing a platform for insightful research and innovative ideas in the field of education. The articles featured in this issue offer diverse perspectives and contribute significantly to our understanding of various aspects of education.

N. Jayapal Reddy & Dr. (Smt). R. Yasoda's article, "Prevalence of Peace Behavior among Undergraduate and Postgraduate Students in Rayalaseema Region of A.P. State," examines the prevalence of peace behavior among students, shedding light on the importance of fostering a culture of peace in educational institutions.

In "Enhancing the Skill of Constructing MCQ (KUAS Based) among Upper Primary Science Teachers in Ariyalur District," Dr. S. Balasubramanian presents strategies for improving the construction of multiple-choice questions (MCQs) among science teachers. This work is particularly relevant in the context of assessment and effective teaching practices.

A. Athavanraj and Dr. R. Meenakshi's article, "An Analysis of Occupational Stress among Higher Secondary Teachers Working in Private Schools," provides valuable insights into the stress levels experienced by teachers in the private school sector. This research highlights the importance of teacher well-being.

"Perspective and Work Commitment of Higher Secondary Teachers Towards Their Teaching Profession," also authored by Dr. S. Balasubramanian, delves into the perspectives and work commitment of academics in higher education. Understanding these aspects is crucial for enhancing the quality of teaching and academic practices.

The article titled "An Analysis of Cognitive Flexibility and Academic Achievement of UG Students" by A. Sathishkumar, B. Ananthavalli, and A. Jahitha Begum explores the relationship between cognitive flexibility and academic achievement among undergraduate students. This study contributes to our understanding of the cognitive factors that impact student success.

We extend our heartfelt appreciation to the authors for their dedication and scholarly contributions. Additionally, we would like to express our gratitude to the reviewers for their meticulous evaluation and valuable feedback, which have been instrumental in maintaining the high quality of research presented in this journal. Your insights and feedback are invaluable in advancing educational research, development, and extension. Thank you for your continued support, and we look forward to your continued readership and contributions in the future.

Dr. R. Annadurai
Editor-in-Chief

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PREVALENCE OF PEACE BEHAVIOR AMONG UNDER GRADUATE AND POST GRADUATE STUDENTS IN RAYALASEEMA REGION OF ANDHRA PRADESH STATE

N. Jayapal Reddy & R. Yasoda

Abstract

The aim of this study was to assess the prevalence of peace behavior among U.G. and P.G. students studying in the Rayalaseema region of A.P. state. The data was collected from 236 respondents using a peace behavior rating scale. Frequencies and percentages were obtained to analyze the data. The study reveals that majority of the students love peaceful environment at home and college, respect themselves, maintain self-dignity, want to be healthy and fit. But, the results also reveal that a large number of students expressed lack of tolerance, lack of trust, lack of confidence and forgiveness; fear of future, unable to balance the stressful situations, unable to control one's self and anger, unable to take right decision at right time, unable to concentrate on studies, difficult to work in teams, arguing with parents and teachers, not speaking softly with others, and therefore peace education is the grave need of the hour at higher education sphere.

Keywords: Peace behavior, Under Graduate and Post Graduate Students.

Introduction

Education is chiefly concerned with the development of man, the modification of his behavior and equipping him in the art of living successfully and efficiently. It is very important for the progress of individual and society. According to Sathya Sai Baba, "Education must instill the fundamental human values – Truth, Right conduct, Peace, Love and Non-violence and these should constitute the life and breath of students. Development of these corresponds to the five domains of human personality – intellectual, physical, emotional, psychic and spiritual – leading to holistic and integrated development".

Peace

Peace is the state of life in which individuals share their views on vital and important issues, they care for comforts of their fellow beings and make a resolve to make collective efforts for utilization of boons of science and technology for peaceful purposes, arms reduction, the spirit of peaceful co-existence promotion between countries and territorial integrity of nations.

Concept of Peace Behavior

Peace behavior is defined as actions that maintain and create nonviolent and harmonious relationships. Kindness and Cooperation are examples of peaceful behavior. The qualities like compassion, positive thinking, inner peace, skill for non-violent conflict resolution, respect for the self, living together and others etc. which are regarded as components of peace behavior. In other words, it is the harmonious development of the body, mind and spirit.

Components of Peace Behavior

The ten basic components of peace behavior which are regarded as some of the major declared objectives of peace education as given by NCTE are given below. It gives the basic characteristics of a peaceful person that we wish to see developing in students (NCTE, 2001). The following ten components are said to be of great significance in the present global context:

1. Positive thinking
2. Compassion
3. Inner peace
4. Be your true self
5. Living together
6. Think critically
7. Non-violent conflict resolution
8. Respect for human dignity
9. Peace in community and
10. Care for the planet.

From the above given components of peace behavior, five components were selected by the investigators for the present study such as Positive Thinking, Inner Peace, Be Your True self, Living Together and Peace in community.

Current Status of Students' Behaviour

Egbochukwu (2007) cited that 78% of the students experienced hurtful behavior by others. Similarly, 85% of the students have admitted that they bullied other students. Another study by Aluede and Fajoju mentioned in Aluede (2011) that 62.4% of the students have experienced bullying, whereas 29.6% students mentioned that they have bullied others. Asamu (2006) has stated that bullying behaviour is more specifically related to junior secondary school children (22.5%), whereas 21% of the male participants had bullied others. Omoteso (2010) found that the prevalence of aggression in students is 67.2%. So 88.1% students have been bullied whereas 33.1% were bullying others. Van Lier et al.

(2005) reported that aggression is a stable personal trait and a major prediction of later adolescence violent behavior. Aluede (2011) has stated that bullying, a subcategory of aggressive behavior, is encountered regularly by adolescents in the context of colleges universally.

Strategies for Internalization of Peace Behavior

Knowledge, skills, values and actions are the methods to imbibe the peace education in students. Ellis, A. R (2018) studied thoroughly the problem of early aggression and identifies emotion regulation and Social Information Processing skills as targets for aggression prevention.

Implementation of Peace Education Program increases empathy levels (Ali & Totan, 2003, multimodal relaxation program shown a positive impact on behavior and cognitive symptoms (Rosenblatt et al., 2011), yogic practices increases Sattvaguna and decreases Rajas and Tamas (Sudheer Deshpande (2007), Sushil S Khemka (2012), Ganesh Kumar (2013), Chokkalingam (2016) & Siddappa N (2020)), an integrated approach of yoga helps in negotiating the background stress levels at psychological and physiological levels (Birendranath Banerjee (2007), Gillen & Gillen (2007), Galantino et al (2008), Gangadhar (2012)), the practice of yoga helps in inculcate peace behavior (Mathai (2013), and Ronnesia et al (2014), Meditative yoga decreases psychological and physiological stress (Raghavendra Bhat (2013), Srinivas Rao (2015), Pammi Sesha Srinivas (2016) & Mallory et al (2020)).

Need of the Study

Everyone will agree that the need for generating peace consciousness among the growing generation is vital. This is especially so in the contemporary world where violence is increasing vertically and horizontally. We are living in an era of unprecedented violence in the forms of war, terrorism, crimes, injustice, oppression and exploitation amidst a seemingly outward development enjoyed by a few. The majority of mankind lives in stark poverty, struggling for bare survival. There is so much confusion and disorder in the society man has built for himself. Today teachers complain about increasing disciplinary problems in educational institutions. The youth of our nation seem to be selfish, narrow minded, lacking in intellectual depth, susceptible to the violent and corrupt social pressures and insensitive to the problems of society.

The National Policy on education has laid special stress on value-education. It has said that in our culturally plural society, education should foster universal and eternal values, oriented towards the unity and integration of our people. Such value education

should help eliminate obscurantism, religious fanaticism, violence, superstition and fatalism. Hence, peace component should be included in the process of education.

Research studies have come out with evidence which shows that changes in knowledge alone are not likely to generate measurable changes in behavior (Spar & Curnow, 2011). So a goal oriented approach becomes an imperative for inculcating positive values in children. But this was not adequately translated into practice and the curriculum at higher education went on emphasizing the acquisition of knowledge. Consequently, cognitive learning at the cost of developing students' emotional, social, moral and humanistic aspects dominated the syllabus of education at all levels. The consequences of such imbalanced learning are evident today in the form of youth unrest with their anti-social attitudes and behavioral problems manifesting in alcoholism, substance abuse, ragging, promiscuity, violence, etc. Against this backdrop, the present study is an attempt to find out the prevalence of peace behavior among UG and PG students in the Rayalaseema region of Andhrapradesh state.

Objectives of the Study

- To study the prevalence of peace behavior among UG and PG students.
- To suggest suitable strategies for inculcating Peace Behavior among UG and PG students.

Methodology

A descriptive survey method was used in the study to know the prevalence of peace behavior among students. In order to select the sample for the present study, 15 colleges from Rayalaseema region were selected randomly. The sample included '236' students studying in U.G. and P.G. in these institutions. The descriptive survey method has been used by the investigator for the purpose of the study. The Peace behavior rating scale developed and validated by the investigators was used for collecting the data from the subjects. It has five dimensions viz., positive thinking, inner peace, be your true self, living together and peace in the community. The first dimension has 12 items, the second 12 items, third 14 items, fourth has 7 items and the last dimension has 8 items to make a total of 53 items covering both positive (25) and negative (28) items. Each item has five responses viz., very rarely, rarely, sometimes, quite often, and always.

The tool was scored by giving weightages 1 to 5 to the positive items and 5 to 1 to the negative items. Pilot study has been conducted on 400 students selected from 4 colleges employing simple random sampling technique to test the suitability of the items. The tool has content validity, intrinsic validity and face validity. The reliability of the tool is 0.80

(Garret, 1981). The data obtained were analyzed by using Frequencies and Percentages. For the purpose of analysis, the frequencies under ‘always’ and ‘quite often’ are added and shown under ‘always’, and similarly the frequencies under ‘rarely’ and ‘very rarely’ are added and shown under ‘very rarely’ in the following table:

Results and Discussion

Table 1: Response pattern of students on ‘Positive Thinking’

Item No.	Item Description	Response Pattern			Rank
		Always	Some Times	Very Rarely	
01	I think before I act	102 (43%)	80 (34%)	54 (23%)	9
02	I cannot trust all my friends	77 (33%)	99 (42%)	60 (25%)	11
03	I feel confident in case of a crisis	100 (42%)	95 (41%)	41 (17%)	10
04	I feel that my life is boring	111 (47%)	92 (39%)	33 (14%)	8
05	I believe that dedication to work in any field will lead to success	179 (76%)	38 (16%)	19 (8%)	1
06	I like to correct myself instead of finding faults with others	141 (60%)	57 (24%)	38 (16%)	4
07	I feel bad if someone is better than me	130 (55%)	59 (25%)	47 (20%)	6
08	I appreciate the good qualities of my close friends only.	57 (24%)	58 (25%)	121 (51%)	7
09	I think good listening solves many problems	171 (72%)	41 (18%)	24 (10%)	3
10	I always like to see good, hear good, do good and be good	174 (74%)	40 (17%)	22 (9%)	2
11	I can't tolerate failure	76 (32%)	103 (44%)	57 (24%)	12
12	I feel that my life is useless	136 (58%)	65 (27%)	35 (15%)	5

The response pattern of students with respect to “Positive Thinking” from the above table clearly indicates that majority of the students always believe that dedication to work in any field will lead to success (76%), students like to see good, hear good, do good and be good (74%), they think that good listening solves many problems (72%), and they like to correct themselves instead of finding faults with others (60%). But, the student’s response pattern also reveals that around half of them always feel that their life is useless and they feel bad if someone is better than them (55%), that their life is boring (47%), that they cannot trust all their friends (33%), and that they cannot tolerate failure (32%).

Table 2: Response pattern of students on ‘Inner Peace’

Item No.	Item Description	Response Pattern			Rank
		Always	Some Times	Very Rarely	
13	I feel that different activities in the morning assembly help in the development of peace of mind	136 (58%)	68 (28%)	32 (14%)	2
14	I feel sad without reason	99 (42%)	96 (41%)	41 (17%)	7
15	I get irritated very frequently	118 (50%)	79 (33%)	39 (17%)	4
16	I smile even in difficulties	125 (53%)	76 (32%)	35 (15%)	3
17	I worry about my future	68 (29%)	100 (42%)	68 (29%)	12
18	I frequently suffer from disturbed sleep	93 (39%)	96 (41%)	47 (20%)	9
19	I find it difficult to control my anger	92 (39%)	86 (36%)	58 (25%)	8
20	I maintain calmness by doing meditation	105 (44%)	73 (31%)	58 (25%)	6
21	I find happiness in the service of needy people	136 (58%)	70(29%)	30 (13%)	1
22	I express humility in my thought, word and deed	106 (45%)	81 (34%)	49 (21%)	5
23	I cannot treat praise or blame, gain or loss, and pleasure or pain as same	81 (34%)	84 (36%)	71 (30%)	10
24	I find it difficult to maintain balance in stressful situations	72 (31%)	105 (44%)	59 (25%)	11

The response pattern of students with respect to the dimension “Inner Peace” reveals that students always find their happiness in the service of needy people (58%) and also feel that morning assembly activities in the college help in the development of peace of mind (58%), they smile even in difficulties (53%), students express humility in thought, word and deed (45%), and maintain calmness by doing meditation (44%). The results are supported with the results of Raghavendra Bhat (2013), Srinivas Rao (2015), Pammi Sesha Srinivas (2016) & Mallory et al (2020). But the students’ response pattern also reveals that they always get irritated very frequently (50%), they feel sad without reason (42%), they suffer from disturbed sleep and they find it difficult to control their anger (39%), students expressed their inability in treating praise or blame, gain or loss, pleasure or pain as same (34%), they find it difficult to maintain balance in stressful situations (31%), they worry about their future (29%).

The above results clearly indicate that there is a dire need to train the students on emotional stability/ mental balance, otherwise this may lead to mental illness in long run.

Table 3: Response pattern of students on ‘Be Your True Self’

Item No.	Item Description	Response Pattern			Rank
		Always	Some Times	Very Rarely	
25	I satisfy with who I am	149 (63%)	55 (23%)	32 (14%)	5
26	I get tired too easily	97 (41%)	82 (35%)	57 (24%)	10
27	I am unable to concentrate on my studies	107 (45%)	80 (34%)	49 (21%)	8
28	I maintain punctuality and discipline	169 (72%)	45 (19%)	22 (9%)	4
29	I can control my senses	136 (58%)	64 (27%)	36 (15%)	6
30	I like to be healthy and fit	176 (75%)	39 (16%)	21 (9%)	3
31	At times I fail to perform my duties	93 (39%)	99 (42%)	44 (19%)	12
32	I struggle a lot to complete a given task	93 (39%)	88 (38%)	55 (23%)	11
33	I don't like to take-up responsibilities in class/ College/ family	110 (47%)	76 (32%)	50 (21%)	7
34	I feel it difficult to take right decision at right time	89 (38%)	99 (42%)	48 (20%)	13
35	Practice of Yoga works only on the body but not on the mind	104 (44%)	76 (32%)	56 (24%)	9
36	I maintain self-dignity	181 (77%)	41 (17%)	14 (6%)	2
37	I cannot control myself when the situation demands.	74 (31%)	102 (44%)	60 (25%)	14
38	I respect myself	195 (83%)	31 (13%)	10 (4%)	1

The results from table-3 with respect to the response pattern of UG and PG students with respect to the dimension ‘Be Your True Self’ reveals that always students respect themselves (83%), they maintain self-dignity (79%), like to be healthy and fit (75%), maintain punctuality and discipline (72%), satisfy with how they are (63%), and they can control their senses (58%). But the students also reveal that always they do not like to take up responsibilities in class/ college/ family (47%), they are unable to concentrate on their

studies (45%), they believe that practice of Yoga works only on the body but not on the mind (44%), the results of the present study are not agree with the results of Mathai (2013), and Ronnesia et al (2014), they get tired too easily (41%), they struggle a lot to complete a given task and at times they fail to perform their duties (39%), find it difficult to take right decision at right time (38%), and they cannot control themselves when the situation demands (31%).

Table 4: Response Pattern of Students on ‘Living Together’

Item No.	Item Description	Response Pattern			Rank
		Always	Some Times	Very Rarely	
39	I support my friend when he/ she is in trouble	168 (71%)	51 (22%)	17 (7%)	2
40	I don't like to share my food and books with my friends	129 (55%)	45 (19%)	62 (26%)	4
41	I consider my family as a source of help to me in finding solutions to most of the problems I have.	129 (55%)	75 (31%)	32 (14%)	5
42	I find it difficult to work in groups/ teams.	102 (43%)	75 (32%)	59 (25%)	7
43	I maintain a good relationship with all my friends/ classmates.	179 (76%)	39 (16%)	18 (8%)	1
44	I argue with my parents and teachers at times.	122 (52%)	64 (27%)	50 (21%)	6
45	Most of my family members are closely attached to each other	160 (68%)	47 (20%)	29 (12%)	3

Results from the table-4 clearly indicate the response pattern of students with respect to ‘Living Together’. They expressed that always they maintain a good relationship with their all friends/ classmates (76%), they support their friend when he/ she is in trouble (71%), their family members are closely attached to each other (68%), and they consider their family as a source of help to them in finding solutions to most of the problems that they have (55%).

Though a majority of students responded positively towards ‘Living Together’, but they have also expressed that they always they don’t always like to share their food and books with their friends (55%), they argue with their parents and teachers (52%). They find it difficult to work in groups/ teams (43%).

Table 5: Response Pattern of Students on ‘Peace in Community’

Item No.	Item Description	Response Pattern			Rank
		Always	Some Times	Very Rarely	
46	I love the peaceful environment at home and college.	189 (80%)	28 (12%)	19 (8%)	1
47	I won't tolerate it if someone criticizes me.	66 (28%)	89 (38%)	81 (34%)	8
48	I solve difficulties without any agitation	101 (43%)	99 (42%)	36 (15%)	3
49	I like to serve needy people	164 (69%)	63 (27%)	9 (4%)	2
50	I cannot speak softly always.	79 (33%)	102 (43%)	56 (24%)	6
51	I cannot forgive if someone commits a mistake	69 (29%)	104 (44%)	63 (27%)	7
52	I don't wait for evidence while suspecting others.	92 (39%)	91 (39%)	53 (22%)	5
53	I accept other's ideas without discrimination	102 (43%)	96 (41%)	38 (16%)	4

From the table-5, it is evident that with respect to ‘Peace in Community’ students always have a peaceful environment at home and college (80%), like to serve needy people (69%), accept others' ideas without discrimination (43%) and solve their difficulties without any agitation (43%). But, the results also reveal that the majority of students always don't wait for evidence while suspecting others (39%), they cannot speak softly (33%), they cannot forgive if someone commits a mistake (29%), and they don't tolerate if someone criticizes them (28%).

The above results also reveal that there is an urgent need to train the students on the ‘Peace behavior’ so as to improve their overall personality. Therefore, necessary steps should be taken by the respective principals and the faculty members in terms of regular yoga practice, group singing, group activities and involvement in dramas which in turn will enable the students to develop self-confidence, self-esteem, universal brotherhood and sharing and caring etc., among the students. Special care should be taken by the principals of these colleges to include Yoga, Arts and Crafts and etc., in the regular timetable.

Findings of the Study

- With respect to ‘Positive Thinking’, the majority of Undergraduate and postgraduate students always believe that dedication to work in any field will lead to success, they like to see good, hear good, do good and be good, they think that good listening solves many problems, and they like to correct themselves instead of finding faults with others.
- But, Undergraduate and postgraduate students feel that their life is useless and they feel bad if someone is better than them, their life is boring, that they cannot trust all their friends, and that they cannot tolerate failure.
- With respect to “Inner Peace” the UG and PG students find their happiness in the service of needy people and also feel that morning assembly activity in the college help in the development of peace of mind, they smile even in difficulties, students’ express humility in thought, word and deed, and maintain calmness by doing meditation.
- But, UG and PG students get irritated very frequently, they feel sad without reason, they suffer from disturbed sleep and they find it difficult to control their anger, students expressed their inability to treat praise or blame, gain or loss, pleasure or pain as same, they find it difficult to maintain balance in stressful situations, and they worry about their future.
- Concerning the dimension “Be Your True Self”, students respect themselves, maintain self-dignity, like to be healthy and fit, maintain punctuality and discipline, satisfy with how they are, and can control their senses.
- But, they do not like to take up responsibilities in class/ school/ family, they are unable to concentrate on their studies, they believe that practice of Yoga works only on the body but not on the mind, they get tired too easily, they struggle a lot to complete a given task and at times they fail to perform their duties, find it difficult to take the right decision at the right time, and they cannot control themselves when the situation demands.
- With respect to ‘Living Together’, students maintain a good relationship with their friends/ classmates, they support their friend when he/ she is in trouble, their family members are closely attached to each other, and they consider their family as a source of help to them in finding solutions to most of the problems that they have.
- But, they don’t like to share their food and books with their friends, they argue with their parents and teachers, and they find it difficult to work in groups / teams.
- With respect to ‘Peace in Community’, students always love the peaceful environments at home and school, like to serve needy people, accept others’ ideas without discrimination and solve their difficulties without any agitation.

- But, UG and PG students don't wait for evidence while suspecting others, they cannot speak softly, they cannot forgive if someone commits a mistake, and they don't tolerate if someone criticizes them.

Educational Implications of the Study

Keeping in view the findings of the study, the following practical and theoretical implications may be made:

1. Peace education needs to be made a subject of study not only at the Higher Education level but also at all levels of education.
2. Peace education through ART, CRAFT, and YOGA etc. should be a part of the curriculum in harmony of society.
3. Peace education should be a part of the Teacher Education Curriculum so as to prepare the teachers to meet the challenges in their classrooms competently.
4. In-service teachers at all levels should be sensitized to the need for peace education to produce healthy citizens in the country.
5. The assessment of students in the subject of peace education should not test based. It is performance based or practice based.
6. The biographies of great leaders like Sri Ramakrishna Paramahansa, Mahatma Gandhi, Tilak, Tagore, Abdul Kalam, etc., Plays and short stories on Universal Human values viz., Truth, Righteousness, Peace, Love and Non-violence should occupy a prominent place in the curriculum.
7. Students should be involved in social activities in the rural villages such as cleaning the educational institutions, temples, churches, mosques, plantations, Watering, gardening, etc.

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ENHANCING THE SKILL OF CONSTRUCTING MCQ (KUAS BASED) AMONG UPPER PRIMARY SCIENCE TEACHERS IN ARIYALUR DISTRICT

S. Balasubramanian

Abstract

Testing is an indispensable part of the teaching-learning process. The multiple-choice tests are the best choice for standardized achievement tests if practicality is a main concern. These tests provide high score reliability. Belal Mahmood (2017) studied the flaws of Multiple Choice Questions in teacher constructed nursing examinations. The findings show that 91 percent of MCQ have one (or) more items writing flaws. SCERT Tamilnadu has conducted some in-service training programs for teachers on the construction of Question banks. The teachers are unable to construct understanding, application and skill-based Questions. If the teachers are capable of constructing knowledge based, understanding based, application based and skill-based questions, the perfect MCQ will be an inducer to students' cognitive thinking. So, this research study has taken up to develop the teacher's skill in constructing KUAS based MCQs. Objectives: To improve the MCQ construction skills of the science teachers in Ariyalur District. To find out the significant improvement in dimension-wise (KUAS) MCQ construction skill of the science teachers after intervention. A single-group experimental method was used in the present study. The total sample is 36. There are no constructed tools used for this research study. The teachers' level of MCQ construction skill was measured at the entry-level and exit level. The teachers were instructed to construct 16 MCQ questions covering four dimensions. The total score was 48. After a three-day orientation programme (Intervention) the teachers were instructed to construct 16 questions covering K, U, A and S dimensions four questions for each dimension. The questions were analyzed through experts and the scores were tabulated. These scores were taken into account for data analysis. After the three-day intervention, the percentage of teachers constructing perfect MCQ based on K,U,A and S was increased considerably. The research studies confirmed that the teachers' MCQ construction skill has improved significantly after an intervention. Multiple Choice Question construction is a skill and it has been practiced regularly. So, the teacher's orientation programme on MCQ construction skills should be conducted every year.

Keywords: Constructing Skills, MCQ, KUAS

Introduction

Testing is an indispensable part of the teaching-learning process. It includes a wide variety of different techniques to assess students' performances. These Multiple-Choice Questions (MCQ) tests techniques are frequently used by the educational institutions.

However, some researchers are really in doubt whether multiple-choice tests have properly measured students' real performances (or) not. There are different opinions among researchers regarding the use of Multiple-Choice Questions. Madsen (1983) claims while multiple-choice tests can be used successfully in testing grammar, they do not seem to work as well in testing conversational ability. Though there are different concepts, multiple-choice tests are the best choice for standardized achievement tests if practicality is a main concern. These tests provide high score reliability, ease of administration and scoring, usefulness in testing varied content and objective scoring (kurz. 1999)

After the learning was completed, the evaluation process reflected the results of the learning. It is concerned with assessing the effectiveness of teaching methods and techniques. It provides feedback to the teachers about their teaching and the learners about their learning. Evaluation can be characterized as being either formative (or) summative. Now continuous and comprehensive evaluation is introduced by the Right to Education Act of India. These evaluation systems consist of Multiple-Choice Questions, short answer questions, and descriptive answer-type questions. The students are given their answers to the questions and evaluated by the teachers. These evaluation systems do not give much importance to Multiple-choice questions. For the question papers of all classes (from I standard to XII standard) five to ten percent weightage may be given for the MCQ. Descriptive answer-type questions occupied a major portion of the examination. However, these examination marks would be considered as feedback given by the students for the teaching.

Asian et al (2013) studied pre-service teachers' competency in multiple-choice items development. Eighty-eight pre-service teachers were allotted to construct ten items each and the findings revealed that females performed better than their male teachers in MCQ construction. Madhav (2015) carried out an item analysis of Multiple Choice Questions and three formative examinations in prosthodontics. None of the three examinations had items that were too difficult (or) defective and large percentage of easy items and many items had a low discrimination index. Begada et al (2016) have studied a comparison between three options from options and five options Multiple Choice Questions test for Quality parameters. Third-semester MBBS students were divided into three groups and each group was given three options, four options and five options randomly. The participants' options selection was analyzed. The students scored more and took less time the complete three options as compared to four options and five options groups.

Belal Mahmood (2017) studied the flaws of Multiple Choice Questions in teacher-constructed nursing examinations. The findings show that 91 percent of MCQs have one (or) more items of writing flaws. The flaws include linguistic errors and problems with stem

and in-answer options. Gareth Davis (2018) studied the development and use of Multiple Choice Questions assessment to foster deeper learning – a Qualitative investigation. The findings suggest new model assessment promoted wider and more prolonged and resulting in deeper learning. Bing Jia (2020) analysed the Quality and features of Multiple Choice Questions in education. The findings show few guessing behaviours are included in MCQ exams. The Quality of MCQ depends more on the degree of training of examiners. Justin Mery (2021) studied whether should students change their initial answers on MCQ. The results showed that answer changes usually harm student grades but 51 percent of students believed answer changes helped their scores.

Need and Significance of the Study

SCERT has conducted some in-service training programmes for teachers on the construction of Question banks. The researcher being a resource person for these training programmes observed that the teachers are struggling to construct MCQ in the higher-level cognitive skills. The teachers are capable of constructing knowledge (low cognitive level questions) based on Questions. But understanding, application and skill-based Questions are really a difficult task for them. The researcher has observed some flaws in constructing MCQ.

1. The stem is not clear. Sometimes it is ambiguous.
2. Poor stem, incomplete stem (or) very lengthy stem are common problems in constructing stem.
3. Unnecessary information is found in the stem.
4. More than one correct option, is found in some questions.
5. 80% of the MCQs are targeted at the knowledge level only.

Besides many studies supported that one of the most common problems in the teachers' constructed MCQ is the presence of item writing flaws (IWF). Item writing flaws are violations of these accepted item writing guidelines which can affect student performance on MCQs. Making the question either easier (or) more difficult to answer (Downing 2005). A search of the CINAHL database evaluating the quality of MCQ in nursing. In that study, Maters et al 2001 examined the quality of MCQ in test banks and found 2233 item writing flaws in 2913 nursing test bank questions. Hence there are often substantial deficiencies in tests prepared by course teachers. The question construction skills of the teachers must be enhanced. Even though the students are facing 10-15% MCQ in their school examinations and they are going to face quality MCQ in NEET, JEE and other competitive examinations. The development of the students in facing examinations should start from the upper primary level. If the teachers are capable of constructing knowledge

based, understanding based, application based and skill-based questions, the perfect MCQ will be an inducer of students' cognitive thinking. So, this research study has taken up to develop the teacher's skill in constructing KUAS-based MCQs.

Objectives

1. To improve the MCQ construction skills of the science teachers in Ariyalur District.
2. To find out the significant improvement of after intervention MCQ construction skills of the teachers.
3. To find out the significant improvement in dimension-wise (KUAS) MCQs construction skills of the science teachers after prevention.

Hypotheses

1. There is a significant improvement in MCQ construction skills among upper primary teachers.
2. There is a significant improvement after intervention of science teachers in MCQ construction KUAS based skills.

Methodology

Single group Quasi-experimental method was used in the present study. Pre-assessment post assessment single-group design was adopted in the present study. The design was illustrated as follows:

- Q1 x Q2
- Q1 – pre-test
- Q2 – posttest
- X – Experimental group

Sample

A sample is a small portion of a population selected for analysis. While selecting the sample following criteria were fixed purposive sampling method was followed.

1. Representation from High school and middle schools.
2. The Sample size should not exceed 50 because of Covid-19 the pandemic period.
3. The control group and experimental group planning were changed into a single group because of Covid-19 pandemic guidelines given by the Tamilnadu government.
4. Teachers belong to four science subjects Physics, Chemistry, Botany and Zoology representation is ensured.

Tools

Thirty-six teachers were selected as a sample. The teachers' level of MCQ construction skill was measured at the entry level and exit level.

Pretest

On the first day of the orientation programme the teachers were instructed to construct 16 MCQ questions and covering knowledge, understanding, application and skill dimension four questions each in each dimension. The teachers were allowed to choose one lesson from the eighth standard science textbook. Each correct answer was awarded by three marks and a zero mark was given for an incorrect answer and these marks were considered as perfect scores. The total mark was 48.

Posttest

After a three-day orientation programme (Intervention) the teachers were instructed to construct 16 questions covering K, U, A and S dimensions four questions for each dimension. After an intervention, the lesson was allotted by the researcher to every teacher. Three marks were allotted for each correct answer. The total mark was 48 and these marks were considered as posttest scores. These scores were taken into account for data analysis.

Percentage Analysis

Table 1: Percentage Analysis of Teachers' MCQ Construction Skill Based on Pretest and Posttest

No. of Questions perfectly constructed	Pretest Dimensions							
	Knowledge		Understanding		Application		Skills	
	No. of Teachers	%	No. of Teachers	%	No. of Teachers	%	No. of Teachers	%
4	32	88.8	2	5.6	0	0.0	2	5.6
3	2	5.6	2	5.6	2	5.6	3	8.3
2	1	2.8	4	11.0	1	2.8	4	11.1
1	0	0	10	27.8	6	16.6	3	8.3
0	1	2.8	18	50	27	75.0	24	66.7
Total	36	100	36	100	36	100	36	100

No. of Questions perfectly constructed	Posttest Dimensions							
	Knowledge		Understanding		Application		Skills	
	No. of Teachers	%	No. of Teachers	%	No. of Teachers	%	No. of Teachers	%
4	34	94.4	6	16.7	9	25.0	6	16.67

3	1	2.8	13	36.1	3	8.3	11	30.5
2	0	0.0	11	30.5	10	27.8	3	8.3
1	1	2.8	5	13.9	6	16.7	10	27.8
0	0	0.0	1	2.8	8	22.2	6	16.7
Total	36	100	36	100	36	100	36	100

Percentage Analysis of Teachers' MCQ Construction Skills Based on Pre-Test

This table shows that 32 teachers (88.8 percent) have constructed the knowledge dimension questions perfectly. When we analyze the understanding dimension 50 percent of the teachers are unable to construct understanding based questions. Only 5.6 percent of the teachers constructed the understanding questions perfectly. 11 percent of the teachers constructed 50 percent of the understanding dimension questions. 27.8 percent of the teachers constructed only one question. This percent analysis clearly shows the teachers are unaware and unable to construct understanding based questions.

In the next dimension application, no one has constructed four questions. (0 percent) 75 percent of the teachers did not construct even a single question. Only 5.6 percent of teachers constructed three understanding questions. Only 16.6 percent of teachers were able to construct one question and 2.8 percent of teachers can construct two questions. The skills-based questions are very difficult for the teachers. 66.7 percent of teachers were not able to construct even a single question. Only 5.6 percent of teachers were capable of construct four questions. 11.1 percent of teachers constructed two questions and 8.3 percent of teachers constructed three questions. 8.3 percent of teachers constructed only one question. The pre test scores clearly indicate that the teachers are very familiar with constructing knowledge-based questions but they are facing many difficulties in constructing understanding based, application based and skills based MCQs.

After the intervention, the teachers attained significant improvement in constructing MCQs. Regarding the knowledge dimension, 94.4 percent of teachers constructed MCQ perfectly. Whereas this percent are before intervention was 88.8. The knowledge-based questions the teachers are not much differed in their percentage in construction.

But we can witness significant improvement in the other dimensions. The understanding-based Questions, only 2.8 percent of the teachers were unable to construct even a single Question. Whereas the percent was 50 in pre test. 16.7 percent of teachers constructed four questions perfectly. Similarly, 36.1 percent and 30.5 percent of teachers constructed three Questions and two Questions respectively. This percent was increased from 5.6 to 36.1 and from 11.00 to 30.5 percent.

The application-based Questions 25.0 percent of teachers constructed 4 Questions correctly. Whereas the percent was 0 before intervention. 22.2 percent of teachers unable to construct even a single application-based question but this percent was 75.0 before intervention. The number of teachers constructed two Questions increased from one to ten.

The last dimension skill is considered, 67.7 percent of teachers were unable to construct even a single Question in pretest but this percent is reduced to 16.7. 30.5 percent of teachers constructed three skills-based questions perfectly. Only 8.3 percent of teachers were able to construct two skills-based questions. The MCQ construction is a skill and it may be gradually increased by practice. After the three days' intervention the percent was increased considerably. Even though we cannot attain hundred percent skills, we achieved these skills among the teachers significantly. These skills should be improved by the practice regularly. 16.7 percent and 30.5 percent teachers constructed four and three skills-based Questions perfectly but this percent was 8.3 and 11.1 before the intervention.

Differential Analysis

Table 2: Paired 't' Test for Pre and Posttest Scores and Dimensions for all the Teachers

Paired variables	Mean \pm SEM	Mean difference	't' value	'p' value	95% Confidence Interval of difference	
					Lower	Upper
Pre test total score	40.58 \pm 2.52					
Posttest total score	65.17 \pm 2.32	24.59	-9.986	0.000	-29.581	-19.585
Pretest knowledge	11.33 \pm 0.38	0.34	-1.435	0.000	-0.80495	0.138
Post knowledge	11.67 \pm 0.26					
Pretest understanding	2.67 \pm 0.58					
Posttest understanding	7.33 \pm 0.51	4.66	-6.855	0.000	-6.048	-3.284
Pretest application	1.17 \pm 0.40					
Posttest application	5.42 \pm 0.64	4.25	-6.796	0.000	-5.519	-2.980
Pretest skills	2.33 \pm 0.63					
Posttest skills	5.42 \pm 0.65	3.08	-5.013	0.000	-4.33209	-1.834

The mean of pretest total score was found to be 40.58 and standard error mean \pm 2.52 and the mean of post-test score was found to be 65.17 and standard error mean \pm 2.32. The mean difference of pre and posttest total score was found to be 24.59. This result shows that there was a statistically significant improvement was observed in posttest total score among the teachers.

The calculated 't' value was -9.986, the 95% confidence interval of difference was found to be lower 19.58 and upper 29.58. The calculated 'p' value was lesser than 0.0001 and it was significant at 1% level.

Regarding the four dimensions of knowledge, understanding, application and skills the mean difference between pre and posttest total score was found to be significant except in the dimension knowledge. The calculated value was found to be -1.435, 'p' value was 0.160 and it is higher than 0.0001 and there is no significant improvement among the teachers in the dimension knowledge.

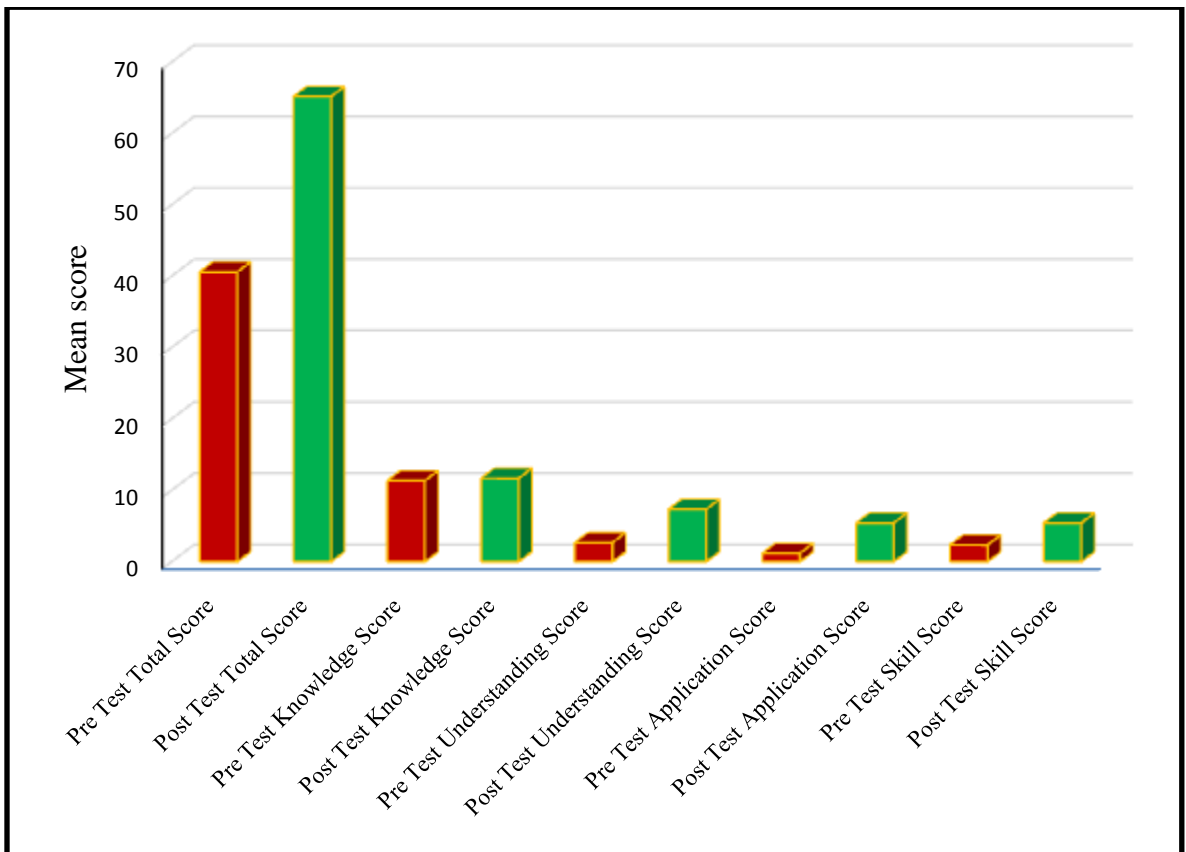
The 't' value was -6.855 in the dimension understanding -6.796 in the dimension application and -5.013 in the dimension skills. The calculated 'p' value was found to be lesser than 0.0001 and it is statistically significant at 1% level for all dimensions except in the dimension knowledge.

Hypothesis Testing

There is a significant improvement in MCQ construction skill among upper primary teachers.

H₁- There is a significant improvement in MCQ construction skills and in KUAS dimensions among science teachers after intervention.

This hypothesis was accepted. The 'p' value is lesser than 0.0001 for total score and three dimensions, understanding, application and skills. So, there is significant improvement observed in MCQ construction skills and in the dimensions understanding, application and skills. This hypothesis was rejected for the dimension knowledge, because 'p' value (0.160) was greater than 0.0001. Hence there is no significant improvement in the knowledge dimension among science teachers.



All teachers mean score

Figure 1: Bar Diagram for Pre-Posttest Total Scores of all Teachers

Conclusion

The pre-test percentage analysis indicates that the teachers are well known about construction of knowledge based MCQ. But the other three dimensions understanding, application and skill concerned they do not know how to construct these higher order cognitive skill multiple choice questions. 5.6 percent of teachers are able to construct understanding based and skill-based questions perfectly. Whereas the percentage was zero for application dimension. After three days' intervention. The percentage of teachers cannot construct even a single question on understanding, application and skill based was very high (U-50%, A-75% and S-66.7) in pretest and it was reduced considerably (U-2.8%, A-22.27% and S-16.7%) after an intervention. So, the MCQ construction skill of teachers have increased significantly.

It is concluded from differential analysis that there is a significant difference between pre-test and post test scores ($p < 0001$) for all teachers. Teachers' MCQ construction skill improved in four dimensions (KUAS) also.

This research study finding were coinciding with research study of Hamza Mohamad Abdulghani et al 2014, Piotr Przymuszala et al 2020. The research studies confirmed that the teachers MCQ construction skill has improved significantly after an intervention.

Recommendations

Multiple Choice Question construction is a skill and it has been practiced regularly. So, the teachers' orientation programme on MCQ construction skill should be conducted every year. Weightage for MCQ in school examination is low (10-15 percent) and more weightage (70 percent) should be given for MCQ in school examination system and implemented from upper primary classes. It will be helpful for students on facing MCQ Question easily. All the competitive examination (NEET, JEE) are conducted on MCQ basis. It has been practiced from upper primary class on wards. MCQ question bank for all subjects should be prepared by the teachers and kept in school for students' usage. These question banks will be useful for the students to face JEE and NEET examinations.

Scope for Futher Study

1. This research study may be conducted for all upper primary subject teachers. It will enhance MCQ construction skill of the teachers.
2. This research study may be conducted for high school and higher secondary subject teachers.
3. Only knowledge, understanding, application and skill dimensions were taken for this research study. Studies may be conducted in Convergent thinking, divergent thinking, and synthesis skills.
4. Research studies will be conducted on higher order thinking skill (HOT)

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AN ANALYSIS OF OCCUPATIONAL STRESS AMONG HIGHER SECONDARY TEACHERS WORKING IN PRIVATE SCHOOL

A. Athavanraj & R. Meenakshi

Abstract

The present study reports on the occupational stress among higher secondary teachers who are working in private schools. A sample of 175 teachers are taken working in private schools in Madurai District of Tamil Nadu served as the subjects of the study. This study reveals that teachers who are in below 40 years of age and those who reside in urban areas have less occupational stress as compared to their counterparts.

Keywords: Occupation, Stress, Private school

Need for the Study

Everyone has experienced stress in life. Stress is common to the human condition in life. It is also a significant problem because the same life events that make one person disturbed can be an invigorating experience for another (Selye, 1956). Stress which is a general term used for pressure that people are exposed to in life may be defined as the individual harmonious effort that the person displays against a stimulant which has excessive psychological and physical pressure on the person when a person feels insufficient in dealing with demands and challenges in life, he/she experiences stress (Griffins, 1990). Stress is a situation in which a person is required to perform tasks that threaten to exceed the person's ability and resources to meet them, under conditions where he or she expects a large difference in the rewards from meeting the demands or not. According to Moorhead and Graffin (2004), stress is a person's adaptive response to a stimulus that places excessive psychological or physical demands on him or her. Stress at work resulting from the increasing complexities of work and its divergent demand has become a prominent and pervading feature of modern organizations. Stress is a pressure of adverse influences, or circumstances (such as stress of teaching) that disturb the natural physiological balance of the body (Robinson, 2007).

Pendharkar & Vaishnav (2016) are of the view that stress is the individual's response to the events that are stressors. Occupational stress may be the result of the individual characteristics of the person or related to his/her environment (Bachkirova, 2005; Tytherleigh, Betoret, 2006; Grebennikov and Wiggins, 2006; Jepson and Forrest, 2006; Lazarus, 2006 and Zhang, 2007). Life events and the stress they place on the individual are

not the problem until the individual fails to handle the situation competently and engages in poor coping skills.

Occupational Stress "Workplace stress" is the harmful physical and emotional responses that can happen when there is a conflict between job demands on the employee and the amount of control an employee has over meeting these demands. In general, the combination of high demands in a job and a low amount of control over the situation can lead to stress. Fear of job redundancy, layoffs due to an uncertain economy, and increased demands for overtime due to staff cutbacks act as negative stressors. Employees who start to feel the "pressure to perform" can get caught in a downward spiral of increasing effort to meet rising expectations with no increase in job satisfaction. The relentless requirement to work at optimum performance takes its toll on job dissatisfaction, employee turnover, reduced efficiency, illness and even death. Absenteeism, illness, alcoholism, "petty internal politics", bad or snap decisions, indifference and apathy, and lack of motivation or creativity are all by-products of an over-stressed workplace. In the workplace, stress can be the result of any number of situations. One of the main causes of occupational stress is work overload. Occupational stress is often caused by an increased workload without the addition of employees to take on that additional work. Instead, the increased amount of work is given to the current employees to finish in the same time span that they would be asked to finish their regular or standard workload but stress doesn't always happen in response to things that are immediate or that are over quickly.

Teachers play a very crucial role in achieving the objectives and the related development of our nation. Students are the backbone of the educational process. Education is a process and acts also as an instrument to bring out the innate behaviour of the individual. The destiny of a nation lies in its classroom. The strength of our nation depends on the teacher's ability to rear well-educated, responsible, well-adjusted youth who will step forward when the adult generation passes on retirement. The students of today are the youths of tomorrow and future citizens of the country, therefore it is the responsibility of teachers, society and the government to see that they are physically, mentally, emotionally and educationally healthy. The needful steps taken at this period ensure a healthy democracy in the country. Everyone has experienced stress in life. Stress is common to the human condition in life. It is also a significant problem because the same life events that make one person disturbed can be an invigorating experience for another (Selye, 1956). Stress which is a general term used for pressure that people are exposed to in life may be defined as the individual harmonious effort that the person displays against a stimulant which has excessive psychological and physical pressure on the person when a person feels

insufficient in dealing with demands and challenges in life, he/she experiences stress (Griffins, 1990).

Occupational stress has significant effects on the psychology of a human and leaves a serious account of the health and behavioral consequences (Fletcher, 1991). Stress needs to be understood within the particular occupational context in which it occurs. Social change and economic imperatives have challenged the teaching profession over the period of time, making it important to document the effects of these challenges and changes on teachers. Though Occupational stress is a matter of concern among teachers. Hence need for the present study which is entitled “**An Analysis of Occupational Stress among Higher Secondary Teachers Working in Private School**”.

Terms and Definitions

Occupational Stress: refers to the physiological and physical effects of negative activity in the workplace as a result of many factors including external events, internal events, job demands and colleague behaviour of the private school teachers.

Higher Secondary Teachers Working in Private Schools: refer to the teachers who are handling XI and XII standards in the unaided schools (private schools) under the Tamil Nadu State Board syllabus.

Variables of the Study

Dependent Variable

- Occupational stress

Independent Variables

- Gender: Male / Female
- Age : Upto 40 / 41 and above
- Qualification : B.Ed. / M.Ed.
- Teaching experience : Upto 10 years / 11 and above years
- Residence : Rural / Urban
- Family income : Adequate / Inadequate
- Family type : Joint / Nuclear
- Marital status : Married / Unmarried
- School locality : Rural / Urban
- Subject teaching : Arts / Science

Objectives of the Study

- To measure the level of Occupational stress among the higher secondary school teachers working in private schools.
- To find out whether the select independent variables influence the level of occupational stress among the higher secondary school teachers working in private schools.

Hypotheses of the Study

The study has been designed to verify the following hypotheses:

1. Higher secondary school teachers working in private schools have an average level of occupational stress.
2. Gender exerts a significant influence on occupational stress among higher secondary school teachers working in private schools.
3. Age exerts a significant influence on occupational stress among higher secondary school teachers working in private schools.
4. Qualification exerts a significant influence on occupational stress among higher secondary school teachers working in private schools.
5. Teaching experience exerts a significant influence on occupational stress among higher secondary school teachers working in private schools.
6. Residence exerts a significant influence on occupational stress among higher secondary school teachers working in private schools.
7. Family income exerts a significant influence on occupational stress among higher secondary school teachers working in private schools.
8. Family type exerts a significant influence on occupational stress among higher secondary school teachers working in private schools.
9. Marital status exerts a significant influence on occupational stress among higher secondary school teachers working in private schools.
10. School locality exerts a significant influence on occupational stress among higher secondary school teachers working in private schools.
11. Subject teaching exerts a significant influence on occupational stress among higher secondary school teachers working in private schools.

Methodology-in-Brief

Sample

A stratified representative sample of 175 Higher secondary school teachers working in private schools in Madurai district constituted with due representation given to the variables, viz. Gender, Residence and Subject Teaching.

Tool

The Occupational Stress Inventory developed by Sukumar, A. (2015), was used for data collection.

Technique

The survey technique was employed for the study.

Statistical Treatment

- 't'-test between the means of large independent samples.
- Karl Pearson's Product Moment Correlation 'r'.

Occupational Stress among Higher Secondary School Teachers Working in Private School

The mean scores of the Occupational stress among higher secondary school teachers working in private schools in this study is found to be 62.83 while the theoretical average is 40 only. Thus school teachers have more occupational stress.

Differential Studies in Occupational Stress

Occupational stress and Independent Variables

The statistical measures and the results of the test of significance of the difference between the mean scores of Occupational stress among school teachers working in private schools in terms of Independent variables are presented in Table.

Table 1: Statistical Measures and Results of the Test of Significance of the Difference between the Means of Occupational Stress: Independent Variables - Wise

Variable	Sub-variables	N	M	SD	't' - value	Significance At 0.05 level
Gender	Male	65	63.953	10.525	0.897	Not Significant
	Female	110	62.654	7.269		
Age	Upto 40	59	59.508	7.909	4.237	Significant
	41 and above	116	64.982	8.402		
Qualification	B.Ed.	97	63.804	9.173	1.162	Not Significant
	M.Ed.	78	62.307	7.849		
Teaching Experience	Below 5 years	136	63.367	9.047	0.762	Not Significant
	5 and above	39	62.333	6.956		
Residence	Rural	117	62.2393	8.97280	2.087	Significant
	Urban	58	64.9483	7.60522		

Family income	Adequate	135	62.777	8.890	1.021	Not Significant
	Inadequate	40	63.975	7.315		
Family type	Joint	110	62.672	8.937	0.952	Not Significant
	Nuclear	65	63.923	8.053		
Marital status	Married	135	63.118	8.757	0.054	Not Significant
	Unmarried	40	63.200	8.231		
School locality	Rural	134	62.9851	8.75565	0.435	Not Significant
	Urban	41	63.6341	8.23333		
Subject teaching	Arts	119	62.831	9.088	0.729	Not Significant
	Science	56	63.785	7.555		

Hypotheses Verification

1. Higher secondary school teachers working in private schools have an average level of occupational stress - **Accepted**
2. Gender exerts a significant influence on occupational stress among higher secondary school teachers working in private schools - **Rejected**
3. Age exerts a significant influence on occupational stress among higher secondary school teachers working in private schools - **Accepted**
4. Qualification exerts a significant influence on occupational stress among higher secondary school teachers working in private schools - **Rejected**
5. Teaching experience exerts a significant influence on occupational stress among higher secondary school teachers working in private schools - **Rejected**
6. Residence exerts a significant influence on occupational stress among higher secondary school teachers working in private schools - **Accepted**
7. Family income exerts a significant influence on occupational stress among higher secondary school teachers working in private schools - **Rejected**
8. Family type exerts a significant influence on occupational stress among higher secondary school teachers working in private schools - **Rejected**
9. Marital status exerts a significant influence on occupational stress among higher secondary school teachers working in private schools - **Rejected**
10. School locality exerts a significant influence on occupational stress among higher secondary school teachers working in private schools - **Rejected**
11. Subject teaching exerts a significant influence on occupational stress among higher secondary school teachers working in private schools - **Rejected**

Conclusions

The major conclusions that emerged from the present study are presented below.

- Occupational stress among higher secondary school teachers working in private schools is found more than average level.
- Occupational stress among higher secondary school teachers working in private schools is found dependent on
 1. Age
 2. Residence
- Occupational stress among secondary and higher secondary school teachers working in private schools is found independent of
 1. Gender
 2. Qualification
 3. Teaching experience
 4. Family income
 5. Family type
 6. Marital status
 7. School locality
 8. Subject teaching
- Occupational stress among higher secondary school teachers working in private schools is found to be better facilitated by
 1. Those who are age 41 and above and who are aged up to 40
 2. Those who reside in an urban area than those who reside in the rural area

Educational Implications

Occupational stress is necessary for individuals and at the family and community levels. Education is the most effective means of inculcating Occupational stress. The first step is Occupational stress education is to teach people what their shared rights and freedoms are, so that they may be respected, and to promote the will to protect those of others.

The finding reveals that higher secondary school teachers working in private schools' Occupational stress is above the average level. It should be minimized among the teachers.

This study reveals that teachers who are below 40 years of age and those who reside in urban areas have less occupational stress as compared to their counterparts. Hence the educational authorities may take necessary steps to minimize occupational stress among the teachers and among the teachers who have more occupational stress.

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PERSPECTIVE AND WORK COMMITMENT OF HIGHER SECONDARY TEACHERS TOWARDS THEIR TEACHING PROFESSION

S. Balasubramanian

Abstract

The present study focus on Perspective and work commitment of upper education academics towards their teaching profession at different levels of teaching on the basis of their gender, experience, qualification and pay scale. The researcher could not survey or investigate the entire population of teachers and students. The population or the universe of the study consists teachers of higher secondary institute of Tiruchirappalli District. A sample of 200 teachers was taken from the central suburban higher secondary school in the area of Trichy District and working in both aided and unaided schools. Simple random sampling technique was employed in selecting the teachers from various higher secondary schools. In coming generation and new teacher should understand that their role as a teacher is very important in the development of society, nation and it depends upon the economic condition of nation. It will be guided by the teachers and they should maintain a character to present a role of teacher in their subject because the teacher is the model for their students.

Keywords: Perspective, Work Commitment, Education and Teaching Profession

Introduction

Psychologically generally agree that the Perspectives are not innate; rather they are learnt and are enduring like all other learning. Freeman (1959) remarked that Perspectives might be said to have learned and become one's typical mode of response. The aspects of responses that define Perspectives are with respect to learned stimuli, identified as goal objects. The general principles of learning apply as directly to Perspectives as to other behavior such as acquisition of knowledge and skills.

Work Commitment

It is evident from the survey of the various conception of the term commitment that it is subjective aspect of an individual; it refers to a socio-psychological bonding of an individual to his group or organization, its goals and values; or to his occupation and profession. The real test of commitment arises when circumstances are not so congenial when individuals encounter dilemmas involving conflicted interaction, incompatible preferences or alternative temptations or options. In such a situation if an individual decides

to stick and stay, bearing the costs and sacrifice for such a decision he can definitely be called a committed person. Thus, commitment is a positive feeling or Perspective that one entertains towards someone or something or some principle one loves, adores or respects.

Teacher Commitment

Teacher commitment is thought to be important because it is seen as significant in achieving quality teaching, the ability of teachers to adapt to change, teacher attendance, burnout, staying in the profession, organizational health of the institutional and student Perspectives and learning outcomes (Firestone, 1996: Graham, 1996). Teacher commitment may play a vital role in assisting institutions and teachers to adapt to the formidable demands of reframing teaching and learning in institutions for the knowledge society and beyond (Caldwell, 1999). Teaching as profession has undergone some extensive reforms and has been in a state of constant change for over a decade (Sealy, Robson and Hutchins, 1997).

Need and Significance of the Study

The constitutional mandate of universalization of elementary education can be achieved in the near future only through professionally competent and intrinsically committed teachers. This confers greater responsibility on policy makers, teacher preparation institutions and management systems to ensure the availability if such teachers in the classrooms and outside the classrooms for each and every child of the nation. Teacher preparation needs to be viewed in the global context and all new initiatives are to be planned accordingly. In the Indian context, a teacher is a person who is supposed to ensure enrolment, create an environment for retention of children in the higher institute and produce high quality of learner attainments even in conditions of deficiencies and deprivations.

Objectives of the Study

- To find out whether there is any significant difference in the Perspective of teachers working in aided and unaided higher secondary schools with reference to gender, experience, academic qualification and pay scale.
- To find out whether there is any significant difference in the work commitment of teachers working in aided and unaided higher secondary schools with reference to gender, experience, academic qualification and pay scale.
- To find out whether there is any significant correlation between the Perspective of teachers and work commitment of teachers working in aided and unaided higher secondary schools.

Hypothesis of the Study

- There is no significant difference in the Perspective of teachers working in aided and unaided higher secondary schools with reference to gender, experience, academic qualification and pay scale.
- There is no significant difference in the work commitment of teachers working in aided and unaided higher secondary schools with reference to gender, experience, academic qualification and pay scale.
- There is no significant correlation between the Perspective of teachers and work commitment of teachers working in aided and unaided higher secondary schools.

Review of Related Literature

Sumangala, V & Ushadevi V. K (2009) “Role Conflict, Perspective towards teaching Profession and Job Satisfaction as Predictors of Success in Teaching”. The objective of the study was to find out the efficiency of role conflict, Perspective towards teaching profession and job satisfaction in predicting success in teaching among the Ph.D. institute women teachers of Kerala State. The hypothesis of the study was that all the three variables viz. Role Conflict, Perspective towards teaching profession and job satisfaction are significant predictors of success in teaching. The survey was carried out in Kerala among 300 Ph.D. institute women teachers working in 53 governments and private-aided Ph.D. higher institute of 10 districts. Stratified Random Sampling technique was employed.

Hulya Yesul (2011)“Turkish Language Teaching Students’ Perspective to wards teaching profession”. The aim of the research is to analyze Perspectives of the students who are studying in Turkish Language Teaching department towards teaching profession in terms of socio-demographic features. The following research questions were asked the Perspectives of candidate teachers towards teaching profession 145 candidate teachers, students who are studying in Turkish Language Teaching departments of the universities in Turkish Republic of Northern Cyprus in 2009-2010 academic years constitute working group of the research. “Perspective Scale Towards Teaching Profession” that was developed by Cetin (2006) and whose Cronbach-alpha reliability coefficient is 0.96 was used as a data collecting tool.

Methodology

The purpose of this study, the descriptive method of study has been used for processing the data, classifying, analyzing them and interpreting the findings so that the researcher can draw conclusive evidence from the study and arrive at generalizations. The research approach used in this study is quantitative.

Perspective of teachers towards the teaching profession and their commitment at different levels of teaching on the basis of their gender, experience, qualification and pay scale. The researcher could not survey or investigate the entire population of teachers and students in whom she was interested as it would entail a very lengthy process. The population or the universe of the study consists teachers of higher secondary schools of Tiruchirappalli district only.

S. No.	Tool	Method	Reliability	Validity
1.	Teacher Perspective Inventory by S.P. Ahluwalia	Split-half method	0.79	Content validity
2.	Work Commitment Inventory by Indira Shukla	Split-half method	0.8391	Content validity

Hypothesis Testing

Table 1: Significant Difference in the Perspective of Teachers Working in Aided and Unaided Higher Secondary Schools with Reference to Gender

Category Gender	N	Mean	SD	t (stat)	t (tab)	Significance at 0.05 level
Female	110	184.19	15.68	1.15	1.97	NS
Male	90	181.32	20.16			

Analysis

From the above table it is seen that the calculated t value (1.15) is less than the table value of t (1.97) at 0.05 level is significance. Therefore, the null hypothesis has been accepted.

Bar diagram showing Mean and SD scores of the Perspective of teachers working in aided and unaided higher institute with reference to gender.

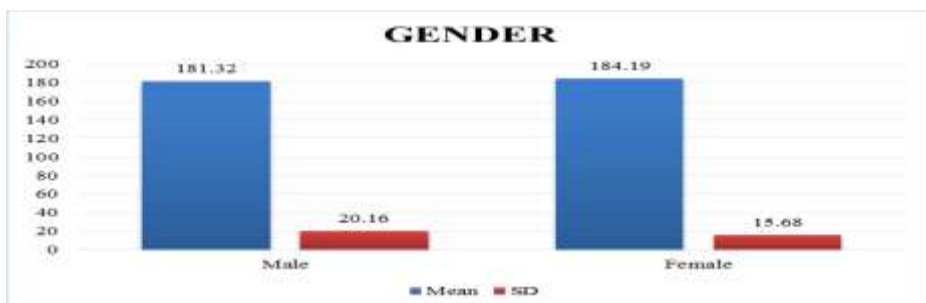


Table 2: Significant Difference in the Perspective of Teachers Working in Aided and Unaided Higher Institute with Reference to Experience

Category Experience	N	Mean	SD	t (stat)	t (tab)	Significance at 0.05 level
Experience less than 10 years	115	183.76	16.39	-0.34	1.97	NS
Experience more than 10 years	85	184.32	13.96			

Analysis

From the above table it is seen that the calculated t value (-0.34) is less than the table value of t (1.97) at 0.05 level of significance. Therefore, the null hypothesis has been accepted.

Bar diagram showing Mean and SD scores of the Perspective of teachers working in aided and unaided higher institute with reference to experience.

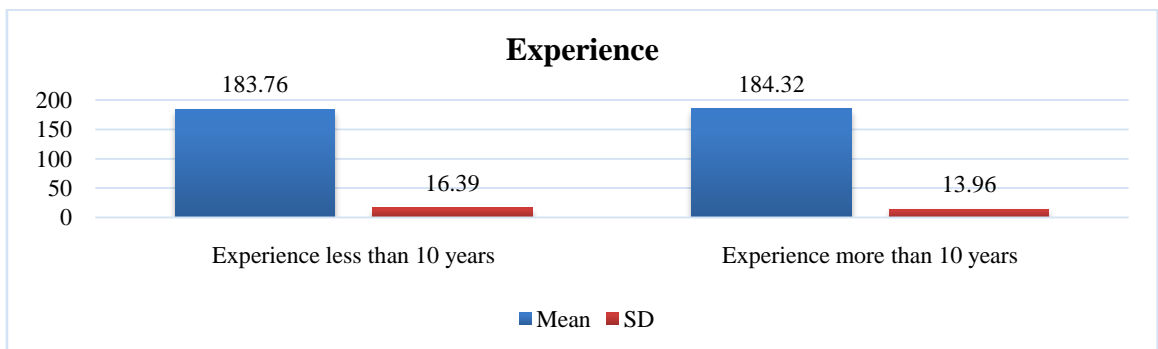


Table 3: Significant Difference in the Perspective of Teachers Working in Aided and Unaided Higher Institute with Reference to Academic Qualification

Category Academic Qualification	N	Mean	SD	t (stat)	t (tab)	Significance at 0.05 level
Trained	140	183.52	15.58	0.77	1.97	NS
Untrained	60	184.71	14.34			

Analysis

From the above table it is seen that the calculated t value (0.77) is less than the table value of t (1.97) at 0.05 level of significance. Therefore, the null hypothesis has been accepted.

Bar diagram showing Mean and SD scores of the Perspective of teachers working in aided and unaided higher institute with reference to academic qualification.

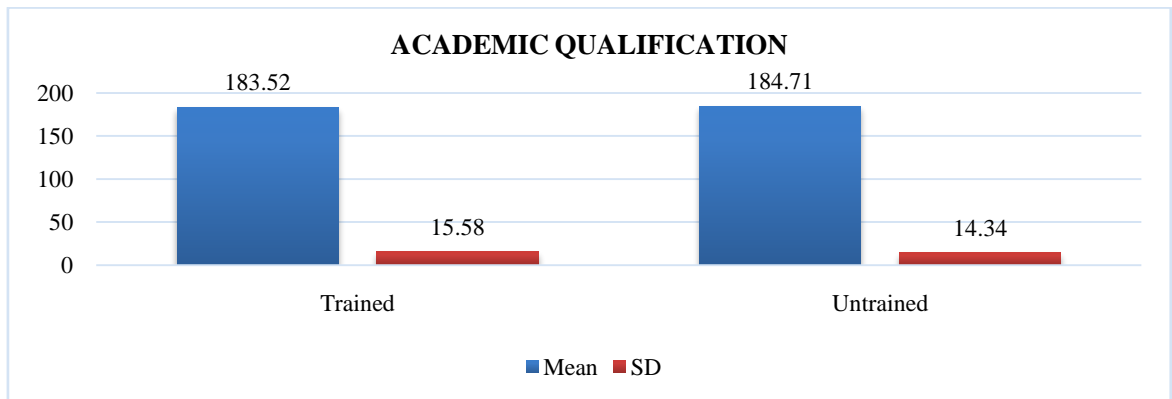


Table 4: Significant Difference in the Perspective of Teachers Working in Aided Higher Institute with Reference to Pay Scale

Source of Variation	Sum of Squares	Df	Mean Squares	F-Value	P-Value	F Critical	Significance At 0.05 Level
Between groups	5236.78	2	2187.88	14.59	7.47	3.02	S
Within groups	46895.91	254	218.49				

Analysis

From the above table it is seen that the F value (14.59) is higher than the tabular value of F (3.02) at 0.05 level of significance. Therefore, the null hypothesis has been rejected.

Bar diagram showing the Perspective of teachers working in aided higher institute with reference to pay scale.

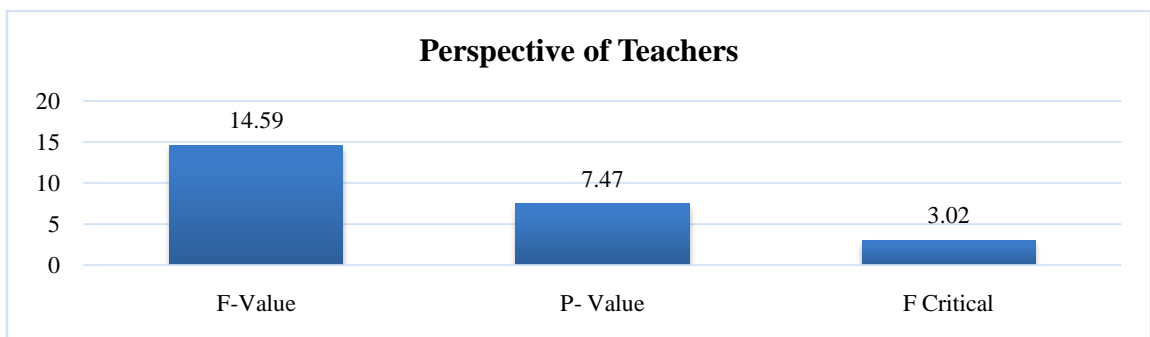


Table 5: Significant Difference in the Work Commitment of Teachers Working in Aided and Unaided Higher Institute with Reference to Gender

Category Gender	N	Mean	SD	t (stat)	t (tab)	Significance at 0.05 level
Female	110	198.94	21.20	1.54	1.97	NS
Male	90	193.45	26.70			

Analysis

From the above table it is seen that the calculated t value (1.54) is less than the table value of t (1.97) at 0.05 level of significance. Therefore, the null hypothesis has been accepted.

Bar diagram showing Mean and SD scores of the work commitment of teachers working in aided and unaided higher institute with reference to gender.

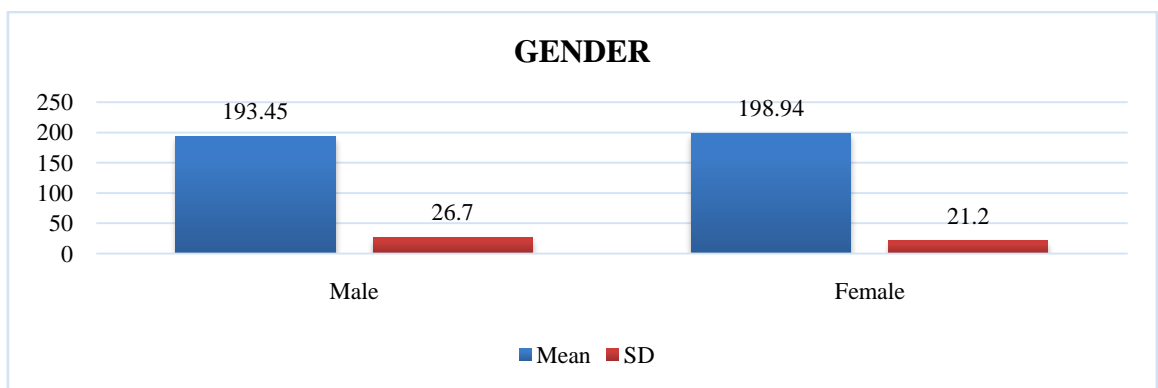


Table 6: Significant Difference in the Work Commitment of Teachers Working in Aided and Unaided Higher Institute with Reference to Experience

Category Experience	N	Mean	SD	t (stat)	t (tab)	Significance at 0.05 level
Experience less than 10 years	115	184.15	21.89	1.07	1.97	NS
Experience more than 10 years	85	183.74	22.25			

Analysis

From the above table it is seen that the calculated t value (1.07) is less than the table value of t (1.97) at 0.05 level of significance. Therefore, the null hypothesis has been accepted.

Bar diagram showing Mean and SD scores of the work commitment of teachers working in aided and unaided higher institute with reference to experience.

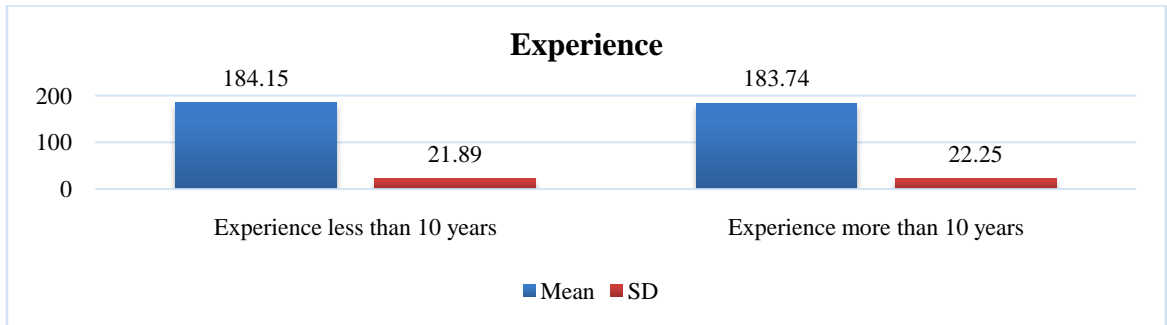


Table 7: Significant Difference in the Work Commitment of Teachers Working in Aided and Unaided Higher Institute with Reference to Academic Qualification

Category Qualification	N	Mean	SD	t (stat)	t (tab)	Significance at 0.05 level
Trained	140	183.30	21.69	0.20	1.97	NS
Untrained	60	183.73	19.37			

Analysis

From the above table it is seen that the calculated t value (0.20) is less than the table value of t (1.97) at 0.05 level of significance. Therefore, the null hypothesis has been accepted.

Bar diagram showing Mean and SD scores of the work commitment of teachers working in aided and unaided higher institute with reference to academic qualification.

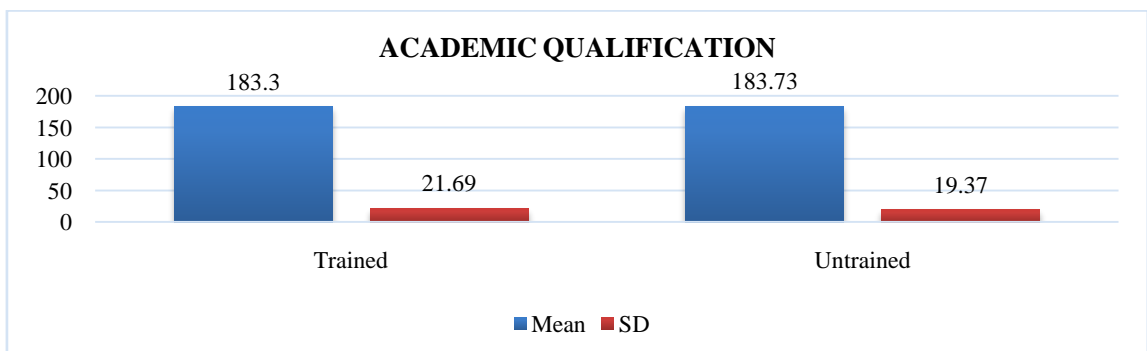


Table 8: Significant Difference in the Work Commitment of Teachers Working in Aided and Unaided Higher Institute with Reference to Pay Scale

Source of Variation	Sum of Squares	df	Mean Squares	F-value	p-value	F critical	Significance at 0.05 level
Between groups	11096.4	2	5548.198				
Within groups	175816.7	254	416.627	13.32	2.46	3.02	S

Analysis

From the above table it is seen that the F value (13.32) is more than the table value of F (3.02) at 0.05 level of significance. Therefore, the null hypothesis has been rejected.

Bar diagram showing the work commitment of teachers working in aided and unaided higher institute with reference to pay scale.

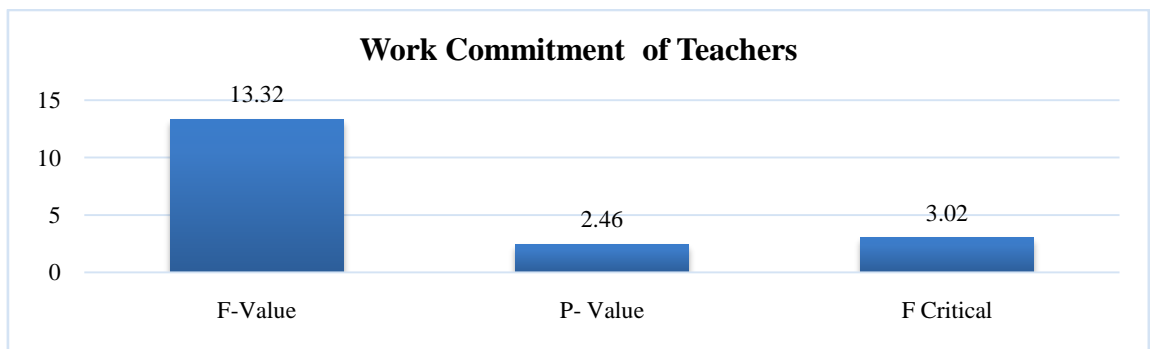


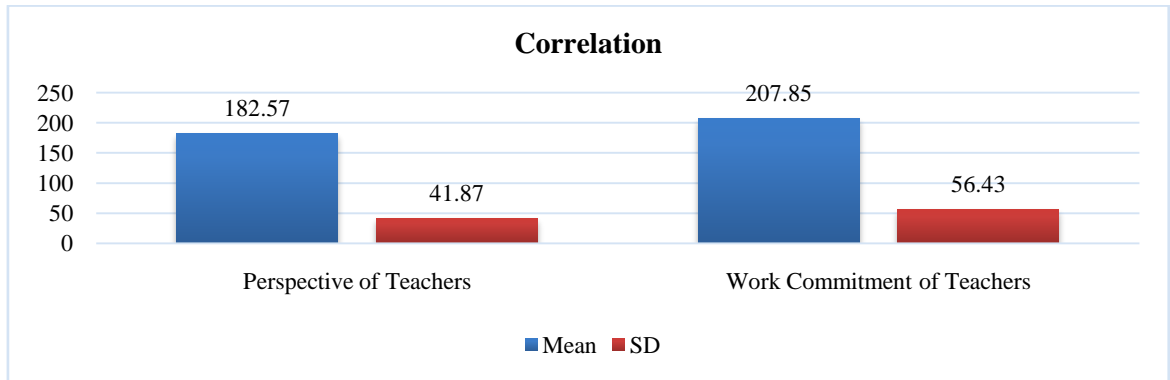
Table 9: Significant Correlation Between the Perspective of Teachers and Work Commitment of Teachers Working in Aided and Unaided Higher Institute

Variable	N	Mean	SD	R	Level of Significance
Perspective of teachers	200	182.57	41.87	0.97	Significant
work commitment of teachers	200	207.85	56.43		

Analysis

From the above table it is seen that the r value (0.97) is greater than the table value of r (0.098) at 0.05 level of significance. Therefore, the null hypothesis has been rejected.

Bar diagram showing the correlation between the Perspective of teachers and work commitment of teachers working in aided and unaided higher institute.



Conclusion

Teachers are understand that their role as a development of society, nation and it depends upon the economic condition of nation and it will be guided by the teachers of the nation. So they should maintain a character and should present a role teacher in their subject because the teacher is the model for their students.

Recommendations

To increase the work commitment, the authorities need to elaborate their roles and provide guidelines for proper work. This is also necessary for stopping the exploitation of teachers. Teachers should be involved in the decision making process related to education and teaching including drafting of the curriculum. Administration should create conducive work climate to reduce stress and improve the Perspective and work commitment among teachers. Motivation by the principal / management and democratic relationship with the teacher has to be maintained. It is the duty of the management to develop the skills of communication and language proficiency in the teachers by planning some developmental activities. Teachers should be taught to plan and properly utilize the resources to the fullest extent possible.

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AN ANALYSIS OF COGNITIVE FLEXIBILITY AND ACADEMIC ACHIEVEMENT OF UG STUDENTS

A. Sathishkumar, B. Ananthavalli & A. Jahitha Begum

Abstract

The ability to adjust in a self-sufficient position, being aware of one's possibilities in any situation, and being aware of one's alternatives is known as cognitive flexibility. Beyond academic achievement, cognitive flexibility might affect how much undergraduate students look at different career options and academic paths. This study aims to investigate the association between undergraduate students' cognitive flexibility and academic accomplishment. The participants were served with a Battery constructed by the researchers to assess the twelve skills essential for cognitive flexibility and their achievement scores were collected. The Spearman Brown (split-half) method is used to ensure that the instrument's reliability. The findings showed that the participants' cognitive flexibility and academic achievement are on average. As a result, cognitive flexibility and academic achievement scores are positively correlated.

Keywords: Cognitive Flexibility, Executive Functioning Skills, Academic Achievement, UG Students.

Introduction

Cognitive flexibility skills are essential for equipping teachers and students with the advanced thinking skills and adaptability needed for the 21st century (Esen-Aygun, 2018). Cankaya, O, N. et. al. (2022) in their studies emphasized the significance of cognitive flexibility as a key component of executive functioning (EF) has been well-documented. Several fields of research have examined the internal mechanism underlying cognitive flexibility (Feng, X., Perceval, G. J., Feng, W., 2020). According to Anderson (1998), Jacobson & Spiro (1995), and Cox (1980), Cognitive Flexibility is the ability to notice options, have confidence in one's choices, be willing to adapt to changing circumstances, and develop new thoughts. It is a skill that can be taught (Canas, Quesada, Antol, and Fajardo, 2003). Cognitive Flexibility (CF) is a feature that is deeply embedded in how people view social situations and enables them to use alternative conflict resolution techniques (Gokcen, G.C. et. al., 1995). Researchers have examined cognitive flexibility from the perspective of flexible behaviour, such as the capability to switch between tasks or so-called multitasking, to adapt behaviour in response to new rules, discover novel solutions to age-old problems, or develop new skills or tools (Crone et al., 2006; Goldstone & Landy, 2010; Leber et al., 2008; Chang, Y., Wang, R., (2022).

Cognitive flexibility, a crucial facet of human intelligence, is demonstrated by the ability to quickly move between tasks or stimulus sets. Cognitive flexibility, in the words of Diamond (2013) and Muller et al. (2014), is the ability to switch between tasks and stimulus sets in a quick and flexible manner (Feng, X., Perceval, G. J., Feng, W., 2020). Cognitive flexibility required for harmonic and balanced thinking to replace discordant thinking has two sub-dimensions. The first sub-dimension is the ability to generate alternative solutions. This speaks to the ability to find answers in difficult situations. The second sub-dimension is controllability. This sub-dimension pertains to the belief that difficult situations can be overcome (Cankaya, O. N. Aydogan, (2022). In order to regulate this process of perception and establish it with other people in the outside world, a person must be able to grasp who they are, what they are doing, how they feel, and what attitudes they have (Cormier & Hackney, 2008).

Significance of Cognitive Flexibility

Building on prior knowledge and organising knowledge according to the situation is essential. Students should be flexible in their ability to apply their knowledge to varied situations. High degrees of cognitive flexibility are characterised as being possessed by assertive, sensitive, self-assured communicators who are aware of their options in communication and problem situations (Martin & Rubin, 1995). (Jonassen & Grabowski, 1993) stated that they are said to be tolerant of disagreements and uncertainty. Similar to this, cognitively flexible people are able to recognize alternative possibilities and choose the best one. They are also analytical, self-controlled, and receptive to new ideas. O. Cankaya, N. Aydogan, and others (2022). Contrary to certain other professions, teaching entails contacts and relationships with a wide range of people. Therefore, those who are in the teaching profession must have cognitive skills as well as the capacity to adapt to a variety of situations and come up with original solutions when faced with difficulties. In conclusion, high levels of cognitive flexibility are one of the most important characteristics that a teacher should have.

According to Anderson (2002), those with high levels of cognitive flexibility do not have strict, unbending rules; rather, they are adaptive to new situations. According to the research findings, those with better academic knowledge and skills who follow a schedule with little variations experience a decline in their cognitive flexibility. On the other hand, it is hypothesized that greater teaching experience boosts a teacher's cognitive flexibility since as a teacher acquires experience, more people and life events are expected of him or her Cankaya, O., & Aydogan, N. (2022). Researchers have shown a link between this skill and students' academic success, cognitive development, and creative growth. Cognitive flexibility is a powerful predictor of academic performance in children, as claimed by Stad

et al. (2018). Lehto and Elorinne (2003) and Dong et al. (2016) supported these findings. When it comes to learning tasks like the Iowa Gambling task, which includes making judgments under uncertainty and shares some neural pathways with rule learning, kids and adults with high levels of cognitive flexibility often perform better (Feng, X., Perceval, G. J., Feng, W., & Feng, C., 2020).

Review of Related Studies

Sathishkumar, A., and Begum, Jahitha A. (2020 & 2021), confirmed that Executive functioning abilities must be taken into account as a significant predictor of academic achievement, and there is a strong association between executive functioning skills and academic achievement. People with high EFs were found to have higher academic achievement than people with low EFs. They also proved that there is a significant link between participants' executive functioning skills and their achievement in chemistry. Working memory, attention, and inhibition were found to be less effective predictors of chemistry achievement than Cognitive Flexibility. Cankaya, O., & Aydogan, N., (2022) revealed a substantial correlation between pre-service teachers' degrees of cognitive flexibility and their reasoning abilities. When these findings are taken into consideration for the current research, it is clear that cognitive flexibility is an important and potent predictor of academic achievement (Gulden, 2020).

Feng, X., Perceval, G. J., Feng, W., & Feng, C. (2020) findings demonstrated that the high flexibility group acquired rules at a higher level and had much higher post-learning accuracy than the low flexibility group. Performance in the probabilistic rule task following rule acquisition is correlated with cognitive flexibility. Vanessa Aran Filippetti & Gabriela Krumm (2020) findings pointed out that flexible thinking and the ability to produce a variety of responses in accordance with various aims as being a vital talents for academic success in reading and writing. Virginia E. Vitiello, (2011) findings imply that cognitive flexibility, a higher order cognitive process, was associated with student's capacity for adequate attendance and persistence inside the classroom. Children's preparation for school was correlated with attention perseverance. Kercood, S., Lineweaver, (2017) found that cognitive flexibility is significantly correlated with academic achievement in reading, math, and writing and that students with attentional deficits tend to describe themselves as less flexible cognitively than students without attention deficits. Sagar, M. E. (2021) revealed a substantial inverse association between cognitive flexibility and self-control and social media addiction. This study also revealed that self-control and cognitive flexibility variables were important predictors of the social addiction variable.

Objectives

This study is explorative in nature with the aim of exploring the level of cognitive flexibility and achievement level of UG students with the following objectives.

- To assess the level of Cognitive Flexibility possessed by UG students
- To find out the Academic Achievement scores of UG students
- To find out any significant correlation between Academic Achievement and Cognitive Flexibility of the participants.

Hypotheses

The following hypotheses were formulated and tested.

- The UG students will possess an average level of Cognitive Flexibility
- The Achievement Scores of UG students will be average
- There will be a significant positive correlation between Cognitive Flexibility and Academic Achievement of the participants.

Participants

The participants were 30 students between the age group of 18 and 19 second year of the UG programme (B.Sc. Chemistry) from a self financing Arts and Science College in the Salem District of Tamil Nadu, India.

Instrumentation

The participants were administered the tool cognitive flexibility assessment battery among the UG students. The tool was constructed by Sathishkumar, A., and Begum Jahitha. A. in 2021 to evaluate Cognitive Flexibility. To determine the Tool's validity, experts in the field of cognitive psychology were consulted. A pilot study was done to determine reliability, face validity, and construct validity. In light of their recommendations, the Cognitive Flexibility Assessment Tool was modified. The participants were given ten tasks to complete that measured twelve cognitive flexibility skills (12), which are essential for learning and success. The 12 Cognitive Flexibility skills are creativity, rule-breaking, unconventional thinking, prioritisation, categorization, planning, information gathering, social interaction, shifting perspectives, revised planning, shifting demands, and spatial navigation. A split-half test is used to establish reliability with 'r' value of 0.81 as Spearman-Brown coefficient.

The Cognitive Flexibility scores and achievement scores in chemistry were collected from the participants and they are analysed as shown in the following tables.

Table 1: Level of Cognitive Flexibility (CF) of UG Students

Rage of Scores in CF	No. of Students	% of Students
1-10	12	40
11-20	18	60
21-30	-	-

Table 1 reveals the level of Cognitive Flexibility of the participants. The participants of UG students, 60 % of participants were Average level (11-20) in Cognitive Flexibility, likewise 40 % of participants were low (1-10) in Cognitive Flexibility and no participants scored in the high level 20 to 30 in cognitive flexibility.

Table 2: Level of Academic Achievement of UG Students

Rage of Scores in CF	No. of Students	% of Students
1-8	2	7
9-16	25	83
17-25	3	10

Table-2 reveals the level of Academic Achievement of the participant. Among the participants of UG students, 10% of participants were High level (17-25) in Academic Achievement, likewise 83% of participants were Average (9-16) and only 7% of Students scored low level (1-8) in Academic Achievement.

Table 3: Correlation between Cognitive Flexibility and Academic Achievement in Chemistry

Variables	Mean	SD	'r' Value
Cognitive Flexibility	11.57	2.78	0.34
Academic Achievement	12.63	2.88	

Table 3 Result of Karl Pearson's correlation co-efficient showed that there is significant low positive correlation between cognitive Flexibility and Academic Achievement, $r = 0.34$, $p > 0.05$.

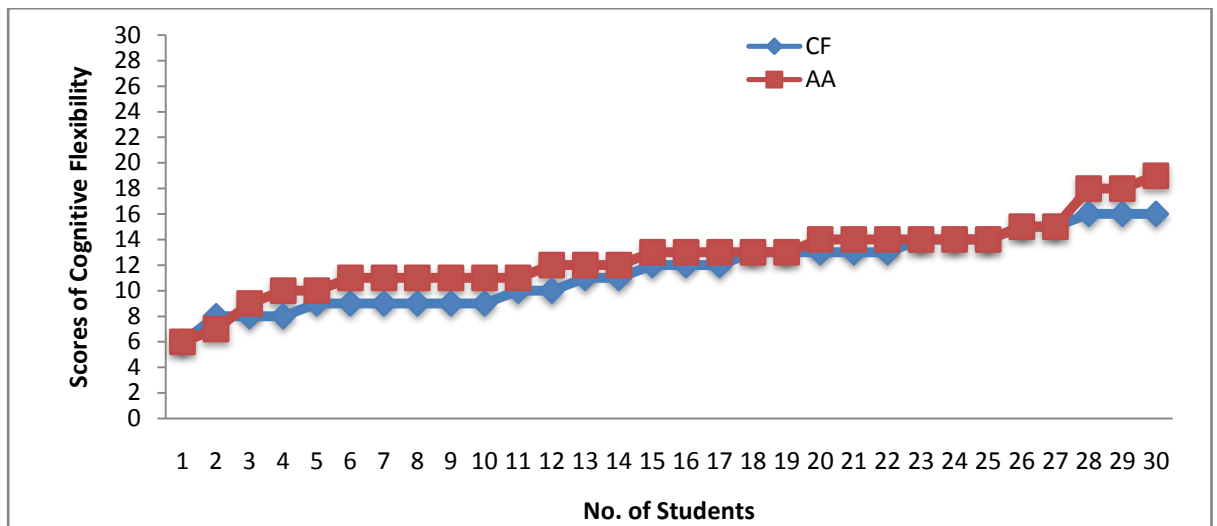


Figure 1: Scores of Cognitive Flexibility and Academic Achievement

Conclusion

However, many studies have specifically focused on Cognitive Flexibility as a predictor and / or correlate of school promptness and Academic Achievement. Cognitive Flexibility (CF) engages in recreation a central role in maintaining and calibrating the development of academic skills as well as in school performance in general. According to Best J. R., et al. (2011), cognitive flexibility is seen as a necessity for learning and is directly associated with academic achievement in children and adolescents. One of the key executive functioning skills identified as essential for academic performance in the twenty-first century and regarded as a pre-requisite for academic achievement is cognitive flexibility. The current study is useful in determining the level of academic achievement and cognitive flexibility among UG students. Both cognitive flexibility and academic achievement scores are on average level and both the variables are positively correlated.

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