

Vol. 7

No. 3

January 2022

ISSN: 2454-4531

AKCE QUEST
A Journal on Educational Research
Peer – Reviewed Quarterly Journal

ARULMIGU KALASALINGAM COLLEGE OF EDUCATION

**(Accredited by NAAC at B Grade with a CGPA of 2.87 on a four point scale &
Affiliated to Tamil Nadu Teachers Education University, Chennai)**

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FUTURE CAREER AWARENESS AMONG HIGHER SECONDARY SCHOOL STUDENTS

¹ G. R. Genifer

² Dr. A. Mary Delphine

“Education is the foundation upon which we built our future”

Christine Gregoire

Introduction

Education is not only a part of life that integrates knowledge, skills, values etc., but also the foundation of an individual, society and the future world.

The higher secondary school students or not just school students they are also decision makers of the future society and world at large. Hence they must be aware of their future career since their decision about their future career plays an important role in developing the society.

Significance of the Study

Future career awareness is the process of defining individuals' interest, value, aptitude towards their names and also their potential towards it. Future career awareness improves the following skills:

- Leadership
- Communication
- Innovation
- Stress management

Since education changes according to the needs of the society the younger and future generation of our world should be aware of their future career.

Importance of Future Career Awareness

Career planning is the roadmap to future that which can help one to manage the direction of his/her career. It is essential as it helps to create a detailed path for once teacher professional life.

- It involves identifying our strength and in researching fields that we can excel in.
- It can ensure job safety
- It can ensure financial stability
- It can help us to attain peace of mind.

The following are the steps to develop the future career plan:

Step 1:

Self assessment helps to understand personal and career goals, interest, preference, strength and weakness.

Step 2:

Consider one's career option and identify roles that fit within one's interest and ability.

Step 3:

Decide on one's career goals

Step 4:

Develop and implement a career strategy

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Step 5:

Review and adjust the strategy.

Sample

The researcher used 60 samples from higher secondary school students from Madurai

Tool Used

A descriptive cross-sectional study regarding the future career awareness among higher secondary school students and random sampling technique was used for the study. For open-ended questionnaire the investigator used 3 point Likert scale to measure the future career awareness of higher secondary School students. The Likert response format with degree of agreement ranging from 3-Agree, 2- Doubtful and 1-Disagree. In this study self-made tool is used.

Method

Survey method was used to collect data.

Statistical Techniques Used

Mean, Standard Deviation and 't'-test

Objectives

The following are the objectives of the study:

1. To find out the significant difference in their future career awareness among higher secondary school students based on gender
2. To find out the significant difference in their future career awareness among higher secondary school students based on students' educational group
3. To find out the significant difference in their future career awareness among higher secondary school students based on students' job interest sector

Hypotheses

The investigator framed the following hypotheses for the present study:

1. There is a significant difference in their future career awareness among higher secondary school students based on gender.
2. There is a significant difference in their future career awareness among higher secondary school students based on students' educational group.
3. There is a significant difference in their future career awareness among higher secondary school students based on students' job interest sector.

Analysis of Data and Interpretation**Hypothesis 1**

There is a significant difference in their future career awareness among the higher secondary school students based on Gender: Male/ Female

Table 1

Variable	SUB VARIABLES	SAMPLE	MEAN	S.D	't' VALUE	RESULT
Gender	Male	32	23.45	18.84	0.284	NS
	Female	28	23.97	22.21		

The about able 1, shows the calculated the value for the variables mentioned in the column based and compared to the table value 2.000 at 0.05 level

The results of the variables based on gender are **NOT SIGNIFICANT (NS)** in difference between their variables. Therefore the hypothesis, “there is a significant difference in the near future career awareness among the higher secondary school students based on Gender: Male/Female” is rejected.

Hypothesis 2

There is a significant difference in their future career awareness among the higher secondary school students based on Students' Educational Group: Science group/Arts Group

Table 2

Variable	Sub Variables	Sample	Mean	S.D	'T' Value	Result
Students' Educational Group	Science Group	31	22.90	18.51	0.024	N.S
	Arts Group	29	24.52	19.74		

The about able 2, shows the calculated the value for the variables mentioned in the column based and compared to the table value 2.000 at 0.05 level

The results of the variables based on students' educational group are **NOT SIGNIFICANT (NS)** in difference between their variables. Therefore the hypothesis, “there is a significant difference in the near future career awareness among the higher secondary school students based on Students' Educational Group: Science Group/ Arts Group” is rejected.

Hypothesis 3

There is a significant difference in the near future career awareness among the higher secondary school students based on students' job interest sector: Government sector/Private sector

Table 3

Variable	Sub Variables	Sample	Mean	S.D	'T' Value	Result
Students' job interest sector	Government sector	36	23.64	19.09	0.82	N.S
	Private sector	24	23.75	19.17		

The about able 3, shows the calculated the value for the variables mentioned in the column based and compared to the table value 2.000 at 0.05 level

The results of the variables based on students' job interest sector are **NOT SIGNIFICANT (NS)** in difference between their variables. Therefore the hypothesis, “there is a significant difference in the near future career awareness among the higher secondary school students based on students' job interest sector : Government Sector/Private Sector” is rejected.

Educational Implication

My contribution towards education through my research is to create proper decision makers to the world

The current study has brought the following implications:

- Students are creators of the society. Hence they should aware about the needs of the society.
- The students need to develop their curiosity towards their future career ambition.
- I recommend to the teachers to create curiosity about career opportunities and society needs among students.
- I recommend to the parents to pay attention towards their children's' career ambition

- The students need to develop their characteristics of gathering information regarding their future career.

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MEASURING COGNITIVE FATIGUE OF HIGH SCHOOL STUDENTS

¹ S. Sermathagam² Dr. H. Deepa**Abstract**

The aim of the study was to explore the mental fatigue among high school students of Tirunelveli District. Cognitive Fatigue is a psychological state induced by prolonged periods of demanding cognitive activity. Cognitive Fatigue causes increased feelings of tiredness, lack of energy, decreased motivation and alertness. Mental Fatigue has been shown to affect performance and cognitive functioning negatively. In the present study, 250 high school students from the Tirunelveli District of Tamil Nadu participated. A survey method was used for this study. Cognitive Fatigue was assessed with the Cognitive Fatigue Scale developed by the investigator. The data was collected using a random sampling technique and data analysis was performed. The results indicated that cognitive fatigue is present in high school students. The female students have more cognitive fatigue than male students and the Girls school students have more cognitive fatigue than boys and co-education school students.

Keywords: *Cognitive Fatigue, Mental tiredness, Academic Pressure*

Introduction

In the words of John Dewey, "Education is the process of living through a continuous reconstruction of experiences. It is the development of all those capacities in the individual which will enable him to control his environment and fulfill his philosophy". (Ramesh Ghanta & B.N. Dash, 2005, p.91). Education gives the knowledge of the world. It develops a perspective of looking at life. It helps build opinions and have points of view on everything in life.

The human brain is an incredible organ that holds memories, dreams, fears, hopes and every thought of an individual, both conscious and unconscious (Giles, 2002). cognitive schemas take the form and allow children to manipulate information and think logically about the issues and problems they encounter in life (Schaffer & Kipp, 2006). cognitive development plays a vital role in an individual. Cognitive development refers to the changes in children's thinking, reasoning, use of language, problem-solving, and learning by their physical development. Assessing the changes in the human brain is challenging because humans are dynamic, complex beings who are shaped by the environment. It is often difficult to conclude the major influences and experiences which are most important for certain aspects of cognitive development. Thus, psychologists analyze a variety of influences, including changes in the brain, the influence of parents, the effect of a child's interaction with siblings and peers.

Cognitive development influences every aspect of learners' psychosocial development. The brain is still maturing during the adolescent stage of a learner and this maturational process affects cognitive and emotional processing. Areas of the brain that control coordination and physical skills as well as emotional intensity develop during early adolescence and also, they are physically capable of many skills and emotionally like to take physical risks (James et al., 2013). The teacher may provide a stimulating environment to learners and ensure free interaction of the learner with all resources, materials, peers and the teacher herself. The school comprises a large part of an adolescent's existence.

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Difficulties in almost any area of life are often depicted as school problems. Learning disorders may embody for the first time as school becomes more challenging, particularly among bright children who previously could accommodate their areas of weakness.

Cognitive Fatigue of Adolescents

The present Adolescents are unable to cope with minor problems of life and that has led to increased psychological problems. Adolescents are not very comfortable expressing their problems to their teachers (Savitha, 2008). Students who study at the high school level have a heavy workload daily. Home works and studying for exams push teens into a stressful situation. Due to frequent examinations and busy syllabus schedules, students face academic stress. They have to study the lessons, do the homework, writing assignments and do the project works. Always they are busy with their academic schedules. They are unable to give any rest to their brain. Because of their prolonged work, their brain gets tired after a particular period. They lose the ability to think and work (Mizuno, Kei 2011). This stage is called cognitive fatigue. Cognitive factors (cognitive errors and control beliefs) linked with anxiety and depression also were associated with sleep problems among adolescents. (Candice A. et al. (2008). An alarming number of our adolescents suffer from emotional and behavioral problems which have their roots in the family environment. Adolescent depression is a serious problem with common symptoms that anyone can suffer from in daily life (Hang and Van 2007). Depressed teens seldom recognize their need for treatment. For this reason, parents, friends, and others involved with teens are the best people who can help them overcome this period's crisis. Engaging in too many activities cut into optimum sleep time and cause excessive tiredness (Alhola, P 2007).

Cognitive fatigue is, essentially, tiredness. Not physical tiredness, but mental exhaustion. It happens when pupils have to work with their minds for prolonged periods, whether writing an assignment, doing problems of a lesson, doing projects, doing homework, or reading a book. Essentially, any time their brain is busy, they're building towards cognitive fatigue. This mentally demanding task feels effortful and made more tired (Charles, Oleg, Borrigan, Alice, 2017). When they reach cognitive fatigue, even the most basic mental task becomes a struggle (Card, D. (2001). Cognitive fatigue can also affect healthy individuals after prolonged, intense mental or physical activity. Working or staying awake for long hours without a break increases the risk (Mizuno, Kei, 2011).

Cognitive fatigue can be defined as reducing one's cognitive abilities due to prolonged mental needs brought on by extreme wear and tear on the brain. Research shows that cognitive fatigue can significantly impair physical performance that could put a person at increased risk for making mistakes. Cognitive fatigue happens when the students have several demands on their thinking for a sustained period. The students ponder their lessons for a long time in school and out of school. The same way their muscles would get tired if they ran around for hours, their brain struggles to keep going if they are engaging it constantly. Some researchers view cognitive fatigue as a result of reduced energy resources that their batteries are running out or that they can't continue any longer. Giving a handful of academic activities during the working days and tests at school paves the way to cognitive fatigue, which will make the students mentally weak and physically tired. (Seung Wan (2017). Students become increasingly fatigued and more likely to perform on a standardized test (Hans, Sievertsen, 2016). Fatigue is a common complaint among high school students related to poor academic performance.

Researches show that mental fatigue was also associated with greater negative wellbeing and reduced academic attainment. The well-being includes anxiety, depression, stress, happiness, positive affect and life satisfaction (Andrew P, Smith, 2018). Fatigue showed a strong relationship with physical illness and mental health measures (Williamson RJ, Purcell S, 2005).

The existing education system of today education has been reduced to an exchange of instructions and information and nothing more. The education motive of earlier days was to infuse good values and morals into an individual's consciousness. In today's era, the education system forces the students only to achieve high grades of marks. So, the school teachers and parents push their children as much as possible.

The predictions on psychological research on cognitive fatigue, an increasingly common human condition that results from the sustained cognitive engagement that taxes people's mental resources. Their brain become gets tired because of prolonged work. They lose the ability to think and work. These all cause cognitive fatigue to them. Persistent cognitive fatigue has been shown to lead to burnout at work, lower motivation, increased distractibility, and poor information processing. In addition, cognitive fatigue is detrimental to individuals' judgments and decisions, even experts. It is an innate need for teachers to identify the cognitive fatigue problems of students and have to do the needful to overcome them. This study intended to measure the cognitive fatigue of high school students in the Tirunelveli district. This study will help teachers, parents and students to identify cognitive fatigue problems.

Literature Search and Study Selection

The investigator reviewed 29 studies carried out from 2011- 2021. Among them, 7 studies about the cognitive fatigue of students at school level, 4 studies about the cognitive fatigue of higher education level students, 3 studies about the cognitive fatigue of professionals, 6 studies related to the cognitive fatigue of peoples and 9 studies about the cognitive fatigue of patients with different diseases.

Hong, J.C, Hwang, M.Y, Chang, H.W, Tai K.H, Kuo Y.C, Tsai Y.H (2015) by their study states that Internet cognitive failure (i.e., trait cognitive disability) was positively correlated to Internet cognitive fatigue. Knight SJ, Politis J, Garnham C, Scheinberg A and Tollit MA (2018) suggest by their investigation. Adolescents with CFS demonstrated particularly higher rates of school absence, as well as poorer school-related quality of life, reduced school participation, poorer connectedness with school, and reduced academic performance. Tim Buff (2013) viewed that adults need between 7 and 9 hours of sleep per day to maintain optimum functionality and overcome Fatigue and tiredness. Carol Maher, Angela Crittenden, Kerry Evans, Myra Thiessen, Monica Toohey, Amanda Watson, James Bollman(2015) identified that cognitive fatigue was a substantial issue for this population, with young people with physical disabilities experiencing considerably more cognitive fatigue than their typically developing peers and children with major medical conditions.

Flindall, Ian Richard, A. Darzi & Mr. D. Leff (2015) states that the cognitive performance in the medical students decreased after a fatiguing cognitive task. Sangin Park, Myoung Ju Won, Eui Chul Lee, Sungchul Mun, Min-Chul Park & Mincheol Whang (2015) by their experiment. The results indicated that the alpha activity of the first and second HEP components was significantly increased after 3D video viewing relative to 2D among the students. Andrew P. Smith (2018) by their study, states that higher mental fatigue was associated with reduced well-being and lower academic performance.

Ilies, Remus; Huth, Megan; Ryan, Ann Marie; Dimotakis & Nikolaos (2015) found intraindividual relationships among workload and affective distress; cognitive, physical, and emotional fatigue; and work-family competition among school employees. Xuejiao Xing, Botao Zhong, Hanbin Luo, Timothy Rose, Jue Li, Maxwell Fordjour Antwi-Afari (2020) states that high physical fatigue can significantly accelerate mental fatigue. Maamer Slimani, Hela Znazen, Nicola Luigi Bragazzi, Mohamed Sami Zguira, and David Tod (2018) portraits that Mental fatigue impairs aerobic and cognitive performance in active male endurance athletes.

Herzog, Thomas R, Hayes, Lauren J, Applin, Rebecca C, Weatherly, Anna M(2011) suggest that handling cognitive load between individuals with and without MS results in a similar task-related consequence of subjective CF. Axel Jonasson, Christopher Levin, Marielle Renfors, Sara Strandberg, Birgitta Johansson (2018) indicates impaired cognitive performance over time after cognitive activity for individuals suffering from mental fatigue after an acquired brain injury. Kyosuke Watanabe, Akihiro T. Sasaki, Kanako Tajima, Kenji Mizuseki, Kei Mizuno & Yasuyoshi Watanabe (2019) demonstrated that acute mental fatigue induced by the long-lasting working memory task led to the alteration of cognitive processing of negative emotional information in healthy volunteers. Nora Spiegelberg, Svenja Breuer, Jörn Nielsen, Jochen Saliger, Christian Montag, Hans Karbe, Sebastian Markett(2020) states that Cognitive fatigue was the only unique and significant predictor of cognitive mistakes in both groups. Kyle A.

Bernhardt, Dmitri Poltavski (2021) found from their study the increased feelings of fatigue tend to decrease ratings of task engagement.

Kei Mizuno, Masaaki Tanaka, Kouzi Yamaguti, Osami Kajimoto, Hirohiko Kuratsune, Yasuyoshi Watanabe (2011) states that decreased parasympathetic activity and increased sympathetic activity induced by mental fatigue. Marika Christina Möller, Catharina Nygren de Boussard, Christian Oldenburg, Aniko Bartfai (2014) states that patients have more mental fatigue and perform worse on tests of psychomotor and executive fatigability than the healthy controls. M. Hu, N. Muhlert, N. Robertson, M. Winter (2019) & Marika C Möller, Jan Johansson, Giedre Matuseviciene, Tony Pansell, & Catharina Nygren Deboussard (2019) their studies indicated that higher in state fatigue showed more fatigability.

The reviewed studies state that cognitive fatigue affects the performance of students in their academic activities such as attention, concentration, processing speed ability, cognitive performance, endurance ability, higher rates of school absence, as well as poorer school-related quality of life, reduced school participation, poorer connectedness with school, and reduced academic performance. Fatigue severity and emotional symptoms were significantly associated with most aspects of school function. So, it is important to identify the cognitive fatigue symptoms such as concentration difficulties, slowness in thinking, mood swings, rapid drain on mental energy, sleep problems and memory problems of students. Identifying the cognitive problems is the prime responsibility of the teachers and parents. Going through the abstracts and studies conducted in the area of Cognitive Fatigue, it was found that so much researches have been conducted in this area in the context of different aspects and variables. But no study was found that has studied the Cognitive Fatigue problem of high school students in the Tirunelveli district. Since all the reviewed studies assessed one or two aspects of cognitive fatigue, the investigator intended to fill the research gap by assessing some more aspects.

Statement of the Problem

In today's world, students have been facing so many mental tasks and physical activities to perform academically. This will push them to the point of cognitive exhaustion. The signs of mental fatigue, such as a drop in effectiveness and a rise in distractedness and irritability, signify the mental effort needed to sustain focus. So, the present study focuses on measuring the cognitive fatigue of the students studying in government high schools. So, the research topic is stated as "Cognitive Fatigue of high school students in Tirunelveli district."

Operational Definition of Key Terms

Cognitive Fatigue

Cognitive Fatigue (CF) refers to a decrease in cognitive resources such as poor academic performance, poor attention, the time needed to plan, weakened cognitive control and decreased high-level information processing, or even declining physical performance of school students.

High School Students

It refers to the Standard X wards studying in high schools under the Equitable System of Education of Tamil Nadu State Board during 2020-21.

Method

The investigator preferred the survey method for the study.

Participants

The investigator visited seven high schools in Tirunelveli educational district with the prior permission of the heads of the institution. The investigator explained the purpose of the research work to the heads of the institutions and the students. The students were asked to be free and frank while giving responses. The cognitive fatigue scale was administered to the randomly selected 250 students. The time duration for the administration of the tool was 30 minutes.

Measurement Instruments

In the present study, the investigator used the following Tools (i) Personal Data Sheet (ii) Cognitive Fatigue Scale. (i) In the personal data sheet, the students are required to give background variables such as the name of the student, name of the school, standard, gender, type of school, nature of the school, locality of the school, hobbies, mode of social media usage and online class duration. (ii) The Cognitive Fatigue scale assessed the student's level of mental tiredness in academic activities. Mental tiredness is a key factor in students' academic performance, so some statements related to the students' academic activities were included. The cognitive Fatigue scale included the statements such as cognitive performance, attention and concentration, performance in academic Activities, exhaustion problems and endurance ability. The tool consists of 63 statements and a 5point Likert scale was used for measurement. The tool was scored through the scoring procedure 'Always' as 5, 'Often' as 4, 'Sometimes' as 3, 'Rarely' as 2, 'Never' as 1 for positive questions. The scoring procedure 'Always' as 1, 'Often' as 2, 'Sometimes' as 3, 'Rarely' as 4, 'Never' as 5 for negative questions.

Objectives of the Study

1. To find out the level of cognitive fatigue of Male and Female high school students.
2. To find out the level of cognitive fatigue of Rural and Urban high school students.
3. To find out whether there is any significant difference between Male and Female high school students in their cognitive fatigue.
4. To find out whether there is any significant difference between Rural and Urban high school students in their cognitive fatigue.
5. To determine whether there is any significant difference among the Boys, Girls and Co-education high school students in their cognitive fatigue.
6. To find out whether there is any significant difference among the Government, Aided and Private high school students in their cognitive fatigue.

Hypotheses of the Study

1. There is no significant difference between Male and Female high school students in their cognitive fatigue
2. There is no significant difference between Rural and Urban high school students in their cognitive fatigue.
3. There is no significant difference among the Boys, Girls and Co-education high school students in their cognitive fatigue
4. There is no significant difference among the Government, Aided and Private high school students in their cognitive fatigue

Data Analysis & Discussion

Levels of Cognitive Fatigue of High School Students

To find out the level of Cognitive Fatigue among boys and girls high school students in the Tirunelveli district.

Table 1: Levels of Cognitive Fatigue of Boys and Girls High School Students

Cognitive Fatigue	Boys (N = 125)						Girls (N = 125)					
	Low		Moderate		High		Low		Moderate		High	
	N	%	N	%	N	%	N	%	N	%	N	%
	18	12.9	101	72.7	20	14.4	20	18	74	66.7	17	15.3

It is inferred from the above table that 12.9% of boys and 18% of girls have low 72.7% of boys and 66.7% of girls they have moderate and 14.4% of boys and 15.3% of girls their high level of Cognitive Fatigue.

To find out the level of Cognitive Fatigue among rural and urban high school students in the Tirunelveli district.

Table 2: Levels of Cognitive Fatigue of Rural and Urban High School Students

Cognitive Fatigue	Rural (N = 125)						Urban (N = 125)					
	Low		Moderate		High		Low		Moderate		High	
	N	%	N	%	N	%	N	%	N	%	N	%
	20	15.6	88	68.8	20	15.6	18	14.8	87	71.3	17	13.9

It is inferred from the above table that 15.6% of rural and 14.8% of urban have low 68.8% of rural and 71.3% of urban have moderate and 15.6% of rural and 13.9% of urban have a high level of Cognitive Fatigue.

Hypotheses Testing

Null Hypothesis 1

There is no significant difference between male and female high school students in their Cognitive Fatigue in the Tirunelveli district.

Table 3: Difference Between Males and Females in their Cognitive Fatigue

Cognitive Fatigue	Male (N=125)		Female (N=125)		Calculated t value	Remarks at 5 % level of significance
	Mean	Standard deviation	Mean	Standard deviation		
	64.9281	6.24574	68.1261	6.02890	-4.101	S

(At 5% level of significance, for df 248, the table value of t is 1.96).

S – Significant, NS- No significant

It is inferred from the above table that there is a significant difference between boys and girls in their Cognitive Fatigue.

While comparing the mean scores of males (mean=64.9281) and females (mean=68.1261), the female students have more Cognitive Fatigue than the male students.

Null Hypothesis 2

There is no significant difference between rural and urban high school students in their Cognitive Fatigue.

Table 4: Difference Between Rural and Urban High School Students in their Cognitive Fatigue

Variable	Rural (N=125)		Urban (N=125)		Calculated t value	Remarks at 5% level of significance
	Mean	Standard deviation	Mean	Standard deviation		
Cognitive Fatigue	66.9844	6.18098	65.6803	6.46320	1.629	NS

(At 5% level of significance, for df 248, the table value of t is 1.96).

S – Significant, NS- No significant

It is inferred from the above table that there is no significant difference between rural and urban in their Cognitive Fatigue.

Null Hypothesis 3

There is no significant difference among boys, girls and co-educational school students in their Cognitive Fatigue of high school students in the Tirunelveli district.

Table 5: Difference Among Boys, Girls and Co-Education High School Students in their Cognitive Fatigue

Variable	Source of variance	Sum of squares	Mean sum of squares	Degrees of freedom	Calculated F value	Remarks at 5% level of significance
Cognitive Fatigue	Between group	503.683	251.842	2	6.542	S
	Within group	9509.041	38.498	247		

(At a 5% level of significance for 2,247 df, the table value of F is 3.84).

S – Significant, NS- No significant

It is inferred from the above table, the calculated 'F' value (6.542) is greater than the tabulated value of the 'F' (3.84) at a 5% level of significance. Hence the null hypothesis is rejected. It is concluded that there is a significant difference between boys and girls and co-education school students in their Cognitive Fatigue.

While comparing the mean score shows that the girl's school students have a higher mean score than the boys and co-education school students in their Cognitive Fatigue.

Null Hypothesis 4

There is no significant difference among government, aided, and private high school students in their Cognitive Fatigue in the Tirunelveli district.

Table 6: Difference Among Govt, Aided and Private High School Students in their Cognitive Fatigue

	Source of variance	Sum of squares	Mean sum of squares	Degrees of freedom	Calculated F value	Remarks at 5% level of significance
Cognitive Fatigue	Between group	175.470	87.735	2	2.203	N S
	Within group	9837.254	39.827	247		

(At a 5% level of significance for 2,247 df, the table value of F is 3.84).

S – Significant, NS- No significant

It is inferred from the above table, the calculated 'F' value (2.203) is lesser than the tabulated value of the 'F' (3.84) at a 5% level of significance. Hence the null hypothesis is accepted. It is concluded that there is no significant difference among govt, aided, and private school students in their Cognitive Fatigue.

Findings of the Study

1. There is a significant difference between male and female high school students in their cognitive fatigue. 'to-test shows a significant difference between boys and girls high school students in their cognitive fatigue. From the mean score values, the female students have more cognitive fatigue than the male students. This may be because the female students had more anxiety and depression than boys when they did not complete their homework and class activities. These induce cognitive fatigue in female students.

2. There is no significant difference between rural and urban high school students in cognitive fatigue.
3. There is a significant difference among boys and girls and co-educational high school students in their cognitive fatigue. 'F' test analysis shows that there is a significant difference among boys and girls and co-education high school students in their academic achievement. From the mean scores, the girl's school students have more cognitive fatigue than the co-education and boys' school students. This may be because the female students are easily exhausted and try to act continuously. This makes them cognitively fatigued.
4. There is no significant difference among government, aided, and unaided high school students in their cognitive fatigue.

Recommendations

1. The school should organize extra activities and games for the students for relaxation.
2. Parents may be given education on the cognitive fatigue of their wards and how they help them overcome it.
3. The schools should have counseling centers so that the students can get help for their future careers.
4. Various refreshment courses, co-curricular activities such as yoga can be given to the students.
5. Seminars and talks on cognitive fatigue and how to overcome it should be frequently arranged.

Conclusion

The present study was evident in the presence of cognitive fatigue among students. The teacher should understand the cognitive fatigue of the students and handle them smoothly. The parents also take care on students and understand their cognitive problems and motivate them accordingly. It also means that the teachers should know how to reduce their cognitive fatigue. Then only can the students improve themselves. The recommendations given by the investigator may be very helpful in creating more awareness regarding the cognitive fatigue of the students. This study will be more fruitful if the suggestions given by the investigator are taken up and applied for further research.

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**A GENDER-WISE ANALYSIS OF EMPLOYABILITY SKILLS OF
UNDERGRADUATE ARTS AND SCIENCE STUDENTS**

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² P. Manjula

Abstract

The objective of the study is the analysis of employability skills of undergraduate arts and science students in terms of their gender. The investigator has used a simple random sample technique for selecting the sample from the population. The randomization has been done based on Gender. The sample consists of 500 undergraduate arts and science students selected from 5 colleges of Virudhunagar district, consisting of 290 males and 210 females. The Employability skills questionnaire developed by Cotton (2001) is used in the study. The questionnaire consists of 45 items. The findings revealed that the level of Employability skills with its dimensions of undergraduate arts and science students about gender is average. Also, there is no significant difference in Employability skills of undergraduate arts and science students about Gender.

Introduction

Employability Skills can also be described as 'skills' required not only to earn employment but also to progress within an industry to achieve one's potential and contribute successfully to enterprise strategic directions. Employability Skills are skills that are connected across a variety of jobs and life contexts. They are often referred to as key skills, core skills, life skills, essential competencies, necessary skills, and transferable skills. Industry's preferred term is Employability Skills. Education is the process of Human workforces also developed on – the - job through organized or informal training programs. Countless workers increase their production by developing new employability skills (technical and non-technical) and perfecting the old ones.

Non-technical skills involve essential employability skills. While on the one side, the world's largest store of scientists, engineers and administration graduates, which has been unskillful to highest full economic gain from this talent pool since the mismatch between enterprise needs and university output. Skillful management of the academic funds could be a driver for development and is vital for the Indian economy.

Significance of the Study

The employability skill will be improved by expectations among the Arts and Science students and industry stakeholders. Employability skills can't cultivate overnight. The applicant has to find out the required skill sets necessary by the future employers from different promotions from time to time. This article concentrates on why educational institutions have failed to fulfill the needed expectations of the industry. This growing mismatch between the instruction imparted and instruction required to enhance the employability needs and be considered seriously. There are numerous employment opportunities, but the problem is the gap between the grade of higher education and the expectations of the job needs. S such, employability is affected by both the supply side and demand side factors which are often outside of individual control. Higher education institutions may deliver the subject matter expertise but still lack in imparting the critical skills in graduates to secure, maintain, and advance in economically and mentally fulfilling careers. Thus, the present research tries to find the employability Skills of undergraduate arts and science students in terms of their gender.

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Review of Literature

Gowsalya et al. (2016) found the relationship between the employability of the arts and science graduates of Namakkal district in Tamil Nadu and their parents' education. The skill level of the students for ten identified skills was studied. The results revealed that the students were unaware of employable skills required for getting employed. The undergraduates were found to be poor in communication skills and problem-solving skills. The relationship between the graduates' skill level and the parents' education were analyzed using Structural Equation Modelling, but the result of the analysis exhibited no relationship between them.

Vani and Pal (2013) throw the light on the employability skills needed for management graduates and assess the employability skills of MBA students in individual in the National Capital Region of Delhi. The purpose of the study as the author mentioned, is to consider the employability skills of MBA students of the specified management institutions operating at NCR.

The research design used for this analysis is a descriptive-correlational research design. The study concluded that the institutions could do updating the curriculum or course content, enhance their intellectual capital, Adopting optimal HR policies.

Varwandkar, A. (2013) explored the factors influencing the employability of engineering graduates in the state of Chhattisgarh. The study says that the means of the variable's domain knowledge, empathy, communication skills & managerial ability have a significant effect on the employability of engineering graduates. However, the separate variable „Motivation“ has not been marked to have caused any significant impact on the employability of engineering graduates.

Reddy and Sunethri (2013) highlight the importance of soft skills in creating students employable as the researcher said that the educational trends and courses had undergone drastic changes. With the changing trends in the professional world of education, there are drastic changes in the requirements of the job market. Somalingam and Shanthakumari (2013) attempted to examine the employability skills and competencies of graduate engineers in the Indian organizational context. The very definition of graduate education is not just gaining the knowledge and skill but also acquiring employment fit to the qualification.

Methodology

The normative survey method is used in this study. The population for the present study is undergraduate arts and science students studying in the colleges of Virudhunagar District. The investigator has used a simple accidental sampling technique for selecting the sample from the population. The randomization has been done based on Gender. The sample consists of 500 undergraduate arts and science students selected from 5 colleges with 290 males and 210 females. The Employability skills questionnaire developed by Cotton (2001) is used in the study. It has three dimensions such as basic skills, higher-order thinking skills and affective skills. Each dimension has 15 statements. The questionnaire consists of 45 items. Each item has been rated on a five-point scale.

Operational Definitions

Employability Skills

Employability Skill is defined as the ability to carry out the tasks and duties of a given job.

Undergraduate Arts and Science Students

After completing school education, the students studying in arts and science colleges are undergraduate arts and science students.

Objectives of the Study

1. To find out the employability skills of undergraduate arts and science students concerning gender.
2. To find out whether there is a significant difference in employability skills of undergraduate arts and science students concerning Gender.

Hypotheses of the Study

1. The employability skills of undergraduate arts and science students concerning gender are average.
2. There is no significant difference in employability skills of undergraduate arts and science students concerning Gender.

Distribution of the Sample in Terms of Gender

Table 1: Gender Wise Distribution of the Sample

S.No.	Gender	Frequency	Percentage
1.	Male	290	58
2.	Female	210	42
Total		500	100%

The above table shows that 58% of the students are male 42% are female undergraduate arts and science students.

Percentage Analysis

Objective :1

To find out the employability skills of undergraduate arts and science students concerning gender.

Table 2: Level of Employability Skills and its Dimensions Among Undergraduate Arts and Science Students Concerning Gender

Dimensions	Gender	Low		Average		High	
		N	%	N	%	N	%
Basic Skills	Male	64	22	170	59	56	19
	Female	52	25	105	50	53	25
Higher-Order Thinking Skills	Male	75	26	165	57	50	17
	Female	40	19	110	52	60	29
Affective skills	Male	80	28	164	57	46	15
	Female	73	35	102	49	35	16
Total Employability Skills	Male	84	29	155	53	51	18
	Female	53	25	91	43	66	32

It is observed from Table 1, a large percentage of male undergraduate arts and science students have an average level of basic skills (59%), higher-order thinking skills (57%), effective skills (57%) and total employability skills (53%).

It is observed from Table 1, a large percentage of female undergraduate arts and science students have average basic skills (50%), higher-order thinking skills (52%), effective skills (49%) and total employability skills (43%).

Differential Analysis

Null Hypothesis 1

There is no significant difference in employability skills of undergraduate arts and science students concerning Gender.

Table 3: Significant Difference Between Male and Female Undergraduate Arts and Science Students in their Employability Skills and its Dimensions

Dimensions	Gender	N	Mean	SD	Calculated 't' value	Remarks at 5% Level
Basic Skills	Male	290	13.9031	2.42335	0.13	NS
	Female	210	13.9423	2.53835		
Higher-Order Thinking Skills	Male	290	11.6071	1.58963	0.92	NS
	Female	210	11.7788	1.44784		
Affective Skills	Male	290	11.4184	1.67591	1.50	NS
	Female	210	11.7212	1.64557		
Total Employability Skills	Male	290	59.2296	12.45518	0.90	NS
	Female	210	59.2308	13.75742		

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

The above table revealed no significant difference between male and female undergraduate arts and science students in the dimensions- basic skills, higher-order thinking skills, affective skills and total employability skills. Since the calculated 't' values 0.13, 0.92, 1.50 and 0.90 are less than the table value 1.96. Hence the null hypothesis is accepted.

Findings of the Study

1. Among 500 undergraduate arts and science students, 58% of students are male 42% are female students.
2. The level of undergraduate arts and science students with its dimensions about gender is average.
3. There is no significant difference in undergraduate arts and science students about Gender.

Conclusion

Employability skills are the most wanted after in the place of work but not ignoring the hard/technical skills as they are also necessary. Still, most research has revealed that employability skills contribute more to job success and job satisfaction. Given the findings, recommend the course curricular designing, use of examples by faculty members to allow enhanced perceptive of course content, academic case analysis and organizing case competitions to enhance critical thinking capability of the students, inclusion of more general teaching course in the syllabi, incorporating more challenging major subjects in the curricula, and providing training in "soft skills" for communication and individual skill development.

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A STUDY ON MINDSET OF TEACHERS TOWARDS INCLUSIVE EDUCATION

¹ Dr. C. Meenakshi**Abstract**

Education gives us details about the world around us. It makes children capable of interpreting something in the right perspective." Inclusion" does not simply mean placing students with disabilities in general teaching classes. Teachers play an important role in success in this Inclusive and Equity Mission. The investigator has adopted the Survey method of research to determine teachers' mindset towards inclusive education. The sample consisted of 90 school teachers belonging to Government, Government Aided and matriculation Schools in Madurai District. The study's findings are that the level of the mindset of school teachers towards inclusive education is high. There is a significant difference between teachers in their perspective towards inclusive education on the following population variables like Gender, Marital status and Location of School.

Introduction

Education is how a society transmits its accumulated knowledge skills and values from one generation to another. Education gives us knowledge about the world about us. It makes children capable of interpreting things in the right perspective." Inclusion" does not simply mean placing students with disabilities in general teaching classes. This process must incorporate fundamental change in how a school community supports and addresses each child's individual needs. As such, effective models of inclusive instruction not only benefit students with disabilities but also create an atmosphere in which every student, including those who do not have disabilities, has the opportunity to flourish. Teachers play an important role in success in this Inclusive and Equity Mission.

Significance of the Study

Research shows that when a child with disabilities attends classes alongside peers who do not have disabilities, good things happen. But we now know that when children are educated together, positive academic and social outcomes occur for all the children involved. Inclusive education occurs when there is ongoing advocacy, planning, support and commitment of teachers. The purpose of this study was to explore teachers' mindset towards inclusive education.

Statement of the Problem

The study determines teachers' mindset towards inclusive education among the selected population variables.

The Method Used for the Study

The investigator has adopted the Survey method of research to find out teachers' mindset towards inclusive education

Population

The population selected for this study is school teachers in Madurai and Virudhunagar Districts.

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Sample

The sample consisted of 90 school teachers belonging to Government, Government Aided and matriculation Schools in Madurai District

The Tool used for the Study

The Rating Scale was downloaded and used for collecting the data from the sample chosen. The tool is a five-pointer scale and consists of 13 items.

Statistical Techniques Used

Statistical techniques are essential for any research. It will help the investigator to analyse and interpret the data. In the present investigation, the following statistical measures used were Mean, Standard Deviation and 't-test.

Variables of the Study

Independent Variables

Mindset of teachers towards inclusive education

Demographic Variables

Gender, Marital status and Location of School

Objectives of the Study

1. To know the level of the mindset of school teachers towards inclusive education.
2. To find out the significant difference between teachers in their mindset towards inclusive education on the following population variables like Gender, Marital status and Location of School.

Hypotheses of the Study

1. The level of the mindset of school teachers towards inclusive education is not high.
2. There is no significant difference between teachers in their mindset towards inclusive education on the following population variables like Gender, Marital status and Location of School.

Analysis and Interpretation

H_0^1 : The level of the mindset of school teachers towards inclusive education is not high.

Table 1: Mindset of School Teachers Towards Inclusive Education

Variable	No. of Teachers	Theoretical Mean	Calculated Mean
School teachers	90	39	45

Result

Having analysed the data, the calculated mean score of the mindset of school teachers towards inclusive education is higher than the theoretical mean. So the null hypothesis, "The level of the mindset of school teachers towards inclusive education is not high", is rejected. The teacher's mindset towards inclusive education is high due to the pre-service and in-service training.

H_0^2 : There is no significant difference between teachers in their mindset towards inclusive education on the following population variables like Gender, Marital status and Location of School.

Table 2: Difference between Teachers in their Mindset Towards Inclusive Education about Background Variables

Background variables	Sub variables	N	Mean	S.D	Calculated 't' Value	Remark
Gender	Male	40	38	6.319	8.715	S

	Female	50	48	3.990		
Marital status	Married	60	48.4	2.145	7.795	S
	Unmarried	30	39.3	6.212		
Location	Urban	50	40.01	4.226	13.105	S
	Rural	40	48.2	1.156		

(At 5% level of Significance, the table value is 1.96)

It is inferred from the overhead table that there is a significant difference between teachers in their mindset towards inclusive education on the following population variables like Gender, Marital status and Location of School. This result may be due to their involvement, teaching experience, several special and normal students in their class and the training received.

Findings of the Study

The level of the Mindset of school teachers towards inclusive education is high. There is a significant difference between teachers in their mindset towards inclusive education on the following population variables like Gender, Marital status and Location of School.

Educational Implication

The results of this study showed that teachers' minds set were found to be strongly influenced by the nature and harshness of the disabling condition delivered to them, the length of teaching experience, and training. In the last few decades, special instruction has changed in all societies. Instead of segregating students with special needs in particular classes and schools, the ideology of inclusive teaching is about fitting schools to meet the needs of all students. The academic system is responsible for having students with special needs for proper education for all. The idea of inclusion seems to be a significant challenge in many countries but the teachers' mindset and positive attitude help progress in this great mission in India.

Suggestions for Further Studies

1. Similar studies can be extended to the school teachers of other districts in Tamilnadu.
2. Similar studies can be extended to the school students of other districts in Tamilnadu.

Delimitations of the Study

1. The data were collected from the Madurai district only.
2. The data were collected only from school teachers.

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RISK-TAKING INVOLVING ANTI-SOCIAL BEHAVIOUR AMONG HOME-REARED ADOLESCENTS

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Abstract

A qualitative method with a descriptive approach was used in this research. Data were obtained by in-depth interviews taken from 64 home-reared male adolescents from Sathankulam talk at Thoothukudi district. In this research, five themes were evolved with this risk-taking involving anti-social behaviour of home-reared adolescents that is i) shoplifting, ii) Vandalism, iii) Driving bikes and cars at high speed, iv) Fire-lighting and v) listening to loud and aggressive music. Research has found that warmth and affection, reasonable discipline, and an authoritative parenting style positively affect children. This can help them create positive risk-taking behaviour and improve school performance.

Keywords: Home-reared adolescents, Risk-taking, Antisocial behaviour

Introduction

Adolescents also need to express themselves as individuals. Risk-taking involving anti-social behaviour is part of their lane to become self-governing adolescents with their own identities. Adolescents engage in more thoughtless, risky, and thrill-seeking behaviours than their younger and older peers. Adolescents take more risks than any other age group (Steinberg, 2008). Despite educational hard work to provide teens with information about risky behaviour, many adolescents engage in risky behaviour (Kann et al., 2014). Anti-social behaviour is generally understood to be an activity that violates social norms and problems and the rights of others (Pena and Grana, 2006). Experimentation by home-reared adolescents may involve a significant amount of risk-taking behaviour. Many of them like to have fun and enthusiasm and do things that their parents have not allowed them to do. This predisposes them to consider winning in anti-social behaviours.

Review of Related Studies

Brindle, K.A et al. (2018) conducted a study on Gender, Education and Engagement in Antisocial and risk-taking behaviours and Emotional Dysregulation. This research has contributed to our understanding of engagement in antisocial behaviours and emotional dysregulation and specifically identified gender differences within each of these constructs. It has also highlighted education attainment as a protective factor against engagement in antisocial behaviours and emotional dysregulation. Michael, K (2010) conducted a study on Risk-Taking among Adolescents: Associations with Social and Affective Factors. Correlations and multiple regression analysis showed that risk behaviour among male adolescents was mainly related to an orientation towards the peer group. For female adolescents, relationship with parents was the prominent factor in risk behaviour. The parental factor also contributed to the depressive mood of both genders in the sample. However, depressive mood showed only a weak association with risk-taking. These results underscore the differential associations of relationship with parents vs peers among adolescent boys and girls, respectively, regarding risk-taking. McCrystal, P. et al. (2007) conducted a study on Exclusion and Marginalisation in Adolescence: The Experience of School Exclusion on Drug Use and Antisocial Behaviour.

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The findings show higher levels of drug use and antisocial behaviour among school excludes, lower levels of communication with their parents/guardians, higher levels of contact with the criminal justice system and increased likelihood of living in communities characterised with neighbourhood disorganisation. This lifestyle suggests that these young people are leading a life that is already taking them towards the margins of society.

Need and Significance of the Study

Confronting anti-social behaviour challenges can be harmful to those who cannot respond adaptively. However, confronting challenges is an essential part of the home-reared adolescent's journey towards adulthood. As adolescents, the individual has to take responsibility for dealing with whatever situations and events present themselves. Learning how to overcome problems is one of the home-reared adolescent's developmental tasks. Home-reared adolescents often seek help from counsellors when they are unable to deal adaptively with particular challenges. It is the counsellor's task to enable home-reared adolescents to find satisfactory methods for overcoming hazards so that they can move forward along the required developmental path. So, the in-depth interview of home-reared adolescents is essential to understand the risk-taking involving anti-social behaviour.

Operational Definition of the Terms

1. **Risk-Taking Involves:** Risk-taking refers to those behaviours undertaken volitionally, whose outcomes remain uncertain with the possibility of an identifiable negative health outcome.
2. **Anti-Social Behaviour:** Antisocial behaviour refers to disruptive acts, aggression, hostility, social violations, authority defiance, deceitfulness, theft, reckless disregard.
3. **Home-Reared Adolescents:** Home-reared adolescents are adolescents who grow up without anxiety at home in a hygienic environment.

The Objective of the Study

1. To find out the risk-taking involving antisocial behaviour among home-reared adolescents.
2. To find out restricted anti-social behaviour among home-reared adolescents.

Method of the Study

A qualitative method with a descriptive approach was used in this research. Data were obtained by in-depth interviews using simple random sampling towards 32 male home-reared adolescents in Sathankulam taluk at Thoothukudi District.

Data Analysis

Data were obtained by in-depth interviews taken from 64 home-reared male adolescents from Sathankulam taluk at Thoothukudi district. Based on the results of this study, the researcher identified five themes of risk-taking involving anti-social behaviour from home-reared adolescents that is i) shoplifting, ii) Vandalism, iii) Driving bikes and cars at high speed, iv) Fire-lighting and v) listening to loud and aggressive music. These five themes are risk-taking involving anti-social behaviour among home-reared adolescents.

Shoplifting

There are 14 adolescents involved in shoplifting. It has been found that the tendency for teenagers to shoplift is not related to socioeconomic variables but is related to fun, thrills and peer pressure. Shoplifting is strongly influenced by friends' shoplifting behaviour but may be moderated by home-reared adolescents' attachment to their parents and their own beliefs regarding this behaviour.

Vandalism

There are 8 adolescents involved in vandalism. Many home-reared adolescents feel a sense of powerlessness and a lack of respect by society in general and consequently become frustrated or angry. These feelings may be acted out by vandalism. Likewise, some will state their feelings during the use of graffiti. Usually, graffiti has to be created clandestinely, and the risk factor is appealing to many home-reared adolescents. Graffiti can be attractively creative and satisfying and can be used to convey messages and express ideas and observed that. For some home-reared adolescents, graffiti could express concern for belonging and identity, and for others, it might emphasise popular values taken to the extreme.

Driving Bikes and Cars at High Speed

There are 10 adolescents involved in driving bikes and cars at high speed. Home-reared adolescents are tempted to drive cars recklessly. As previously mentioned, they often have the impression that they are indestructible. They are looking for a uniqueness of which they can be arrogant. They, therefore, like to test their skills in complex situations. High-speed driving raises their adrenaline level, is risky, thrilling, fun and gives them a chance to show off in front of their peers.

Fire-Lighting

There are 14 adolescents involved in vandalism. Although serious addiction to fire-lighting indicates psychiatric disorder, some home-reared adolescents like the thrill involved in lighting fires and enjoy watching things burn. Fires present risk, excitement and challenge, exactly what the young person may be seeking. It is also easy to light fires.

Listening to Loud and Aggressive Music

There are 18 adolescents involved in listening to loud and aggressive music. Home-reared adolescents want to explore every facet of their existence and this includes exposure to sensation. Loud music, especially of the hard rock or heavy metal variety, provides a high level of auditory and somatic stimulation. In discos, high noise levels seem to change the state of consciousness of the participant so that they become engulfed by the music and transported from the pressures of their daily lives. Additionally, the lyrics of popular teenage music often hook into the young person's current emotional frustrations and experiences. Unfortunately, there are dangers in listening to loud music. Home-reared adolescents listen to loud music at discos but also play electronic games. Extreme noise can be invasive to others and injure relationships and, more importantly-concerning the long-term well-being of the adolescents, it can and does result in deafness.

Discussion

Risk behaviour actions can potentially threaten an adolescent's health or the health of others. It is important to recognise that adolescents can control most risk behaviours. By understanding the risks associated with certain behaviours, adolescents can make safe and responsible decisions about avoiding risks. Early Intervention services can help compute anti-social behaviour and, in point of fact, teach adolescents the positive behaviours that should be adopted, which they will carry into adolescents and give a positive social impact on their local society. Primary prevention -this would include engaging students in school-wide activities that could deter antisocial behaviour, such as teaching conflict resolution, anger management skills and emotional literacy. Secondary prevention - this targets students at risk for developing antisocial tendencies and engages them in individualised activities, including specialised tutoring, small group social skills lessons, counselling and mentoring. Tertiary prevention - the third step is continuing intensive counselling. This treats antisocial students and students with constant patterns of criminal behaviour and violence. The centre suggests that family, counsellors, teachers, and others, coordinate to treat adolescents with antisocial behaviour. Other ways to treat antisocial behaviour include problem-solving skills, training, cognitive behavioural therapy, behavioural family intervention and family therapy and adolescent therapy. Parents can also undergo parent

management training to address any unhelpful parenting issues put into the child's antisocial behaviours. Research has found that warmth and care, reasonable obedience, and an authoritative parenting style have activist outcomes for children. This can help them create encouraging good risk-taking behaviour and improve school performance.

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VALUE PERCEPTION OF HIGHER SECONDARY SCHOOL STUDENTS

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Abstract

“Value perception of higher secondary school students” is the topic of the current study. The Values reveal a true vision of any society's or nation's progress. They describe how much a community or country has progressed. Intrinsic values, principles, and qualities, as well as functions and beliefs based on them, are all examples of values. The current study's goal is to determine the worth of high school students. A survey of 300 higher secondary school students in the Virudhunagar district was used to conduct the research. Data is analysed using statistical methods such as percentage analysis, mean, standard deviation, and differential test. The majority of students in upper secondary school have a moderate level of value perception.

Keywords: Value Perception And Students In Higher Secondary

Introduction

Values are currently falling. Individuals strive for material wealth. People must make money in any manner they can, including unethical methods. Moral principles among people and understudies during the underlying periods of youth would be the ideal setup, and schools and schools are the organizations that may carry this responsibility.. As a result, there is a need to do study in the area of moral values. In academic and political circles, societal infections such as debasement of traits in public, private, corporate, and political spheres have resulted in defilement, misdirection, cruelty, psychological warfare, and meaningless daily living. It's remarkable to see the government surreptitiously support viciousness and psychological dictatorship, while a few organizations benefit from hidden sponsorship from global networks and personal stakes. The young and disadvantaged are enticed to such horrible activities by syphoning money benefits for their affluent lifestyles from their meaningless and un-work. If the current trend continues, anti-social uprisings will erupt across the country, prompting the installation of equal administrations (governments) that will push the common man back to the divider. Because the understudy, in general, and the optional understudy, in particular, are the planners of our public's future texture, it is critical that they avoid social component manoeuvres.

Need and Significance of the Study

Value education assists in addressing these difficulties at their source. All difficulties can be efficiently addressed if the residents have untainted, amiable, and genuine control over their minds. Children are inherently unaltered, sincere, and eager to learn. The immaculateness of the understudy can keep up with and improve if the schools/universities successfully impart the worth of character building's values. They seek assurance that instilling virtues in children at a young age will benefit them and that India will have a bright future. Many schools used to offer significant intellectual lessons up to the ninth grade in prior years, perhaps up until 1970. It gradually faded from view. No one knows what's going on. The current understanding of the school requires value awareness. Our country is a socially oriented country with various morals such as the Bhagavad Gita, Ramayana, Mahabharata, Quran, and Bible, but many people in the lowest classes have never heard of them. There are few moral children when family values are considered. Because there are many turning moments in our lives at various phases, schools should once again emphasise the importance of education.

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Objectives

1. To find out the level of value perception of higher secondary school students.

Value Perception

1. To find out whether there is any difference in Value perception with respect to the demographic variables such as gender and structure of family.

Hypotheses

1. There is no difference in Value perception with respect to the demographic variables such as gender and structure of family.

Delimitations of the Study

1. This study is limited to only higher secondary school students.
2. This study is confined only to the Virudhunagar district in Tamilnadu.

Sample for the Study

"A sample is a portion of a population that has been chosen for observation and analysis." According to John W. Best and James V. Kahn (1980). For this study, the investigator chose 300 higher secondary school pupils at random from the Virudhunagar district.

Tools Used for Present Study

Poggio and Lokanadha reddy developed and standardized a value perception inventory (2001)

Statistical Techniques Used

The following statistical measures were explored in this investigation: analysis of percentages The standard deviation, the mean, and the t-test.

Analysis of Data

Objective: 1

To find out the level of Value perception of higher secondary school students

Table 1 : Levels of Value Perception Among Higher Secondary School Students of Entire Sample

Variable	Low		Moderate		High	
	N	%	N	%	N	%
Value perception	49	16.3%	199	66.3 %	52	17.3 %

The following inference draws from the above table in respect of the entire sample of higher secondary school students, 16.3 % of the total samples have a low level of Value perception, 66.3% of them have a moderate level , 17.3% of higher secondary school students have a high level of Value perception. These findings reveal that the majority of the higher secondary school students belong to the moderate level of Value perception.

Hypothesis No. 1

There is no difference in Value perception with respect to the demographic variables such as gender and structure of family.

Table 2: Difference in Value Perception with Respect to the Demographic Variables such as Gender and Structure of Family

Gender	N	Mean	SD	't' value	Level of Significance
Male	161	73.35	15.54	0.26	Not Significant
Female	139	72.88	16.03		
Nuclear	265	71.98	14.97	3.001	Significant
Joint	35	81.89	18.76		

The preceding table indicates that there is no substantial difference in value perception between male and female higher secondary school pupils. While comparing the mean scores of male (mean = 73.35) and female (mean = 72.88) students, Male higher secondary school students have more value perception than female students.

It is deduced that the value perceptions of nuclear and joint family higher secondary school pupils differ significantly. While comparing the mean scores, the mean score of Nuclear family higher secondary school students (mean = 71.98) has less mean scores than Joint family higher secondary school students (mean = 81.89) in their Value perception.

Major Findings

1. 16.3 % samples have a low level of Value perception, 66.3 % have a moderate level, and 17.3 % have a high level of Value perception.
2. There is substantial difference in value perception between male and female higher secondary school students. Male students have a higher value perception than female students (mean = 73.35), according to the mean scores of male (mean = 73.35) and female (mean = 72.88) students.
3. In Table 1.3, the predicted critical ratio value was found to be 3.001, which is significant at the 0.05 level. High school students from nuclear and joint families are likely to hold very different values.

Interpretation

The findings demonstrate that there is a considerable variation in value assessment between students from nuclear and combined families in higher secondary school. It seems that there are high mean scores in the value perception of joint family students as compared to nuclear family students. Kids in a conjugal family miss the affection they receive from uncles, aunts, and cousins living under one covering. The children are bounded by family lead a protected and joyful life. There are a number of reasons why individuals prefer to live in a joint family, one of them is that it ensures strong family relationships. Children learn significant values such as sharing, mingling, bonding, and understanding while living in a joint family.

Recommendations of the Study

1. The current research sheds new light on the current situation of value perception and academic achievement among students in higher secondary schools. Based on the foregoing important findings, the following recommendations are made:
2. This needs a thorough integration of the educational system with regard to schooling. Raising a sensible, practical, yet compassionate, strict, yet educated individual. Society's, culture's, religion's, and science's values should all work together fairly so that culture revitalises the country's logical disposition.
3. Through value-direction programmes, in-administration training, and avenues for expert improvement and advancement of instructors, the main goal should be to create a new dynamic disposition.
4. Teachers, in particular, should believe that they have a responsibility to instil and strengthen values in students not only through education (for example, esteem-based instructional destinations), but also by setting a positive example for them.

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A STUDY ON ATTITUDE TOWARDS ICT AMONG TEACHER EDUCATION STUDENTS

¹ Dr. A. R. Anandha Krishnaveni² A. Mathumathi**Abstract**

The future progress of man sleeps upon his ability to apply the achievement of science and technology. There is a necessity that the students in schools and colleges be imparted the principles of science and technology to contribute to their progress. In this context, the teachers have to play a further role than their earlier roles. They should have a clear understanding of the basis of their profession and command of science and encourage and inspire the learners who are studying under their direction. In this study, the investigator has used a simple random technique. By this technique, 300 students were selected. This sample consists of 105 male and 195 female teacher education students. The sample data were collected from 7 teacher education colleges in Virudhunagar district. The Information and Communication Technology Attitude Scale (ICTATS) was developed and validated by Krishnaraj and Anbuezhian (2005). This Scale consists of 50 items and it is a Likert type of scale having five alternatives. The investigator found out the level of Information and Communication Technology Attitude of teacher education students concerning gender and locality of college is average. There is no significant distinction between rural and urban locality teacher education students.

Introduction

Modern science and technology have carried out new changes in all strolls of human life. People are now living in a communication society, the latest in the development of human society. Information and communication technology has carried out newer changes in education, with the application of new electronic and other technology to the hold, selection and transformation and diffusion of information of all kinds. It involves scientific, technological and engineering fields and management techniques used in information handling and processing, their application, computers and their exchange with men and machines, and associated with social, economic and artistic values.

According to Kapur (1998), ICT has revolutionized education; teachers can give their assignments on a specified home page for the method on the internet and students can copy from there or can obtain printed copies of the appointment from their computers. After the teacher has updated the assignment, the teacher gives the complete solution of the assignment, the marking scheme and errors made by students on the internet so that the students can check not only their marks but also know the types of mistakes that they usually commit in the problem given in the assignment. Sometimes the teachers permit the students to mark the assignments themselves according to the marking assignment scheme given. Usually, the distinction in the marks given by the teachers and the students to themselves is very little.

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Significance of the Study

Information and Communication Technology (ICT) have become commonplace entities in all facets of life. Across the past twenty years, the use of ICT has fundamentally varied the rules and procedures of almost all forms of endeavor within business and governance. Within instruction, ICT has begun to have a presence but the impact has not been as extensive as in other fields. Education is a very socially taught activity and quality education has traditionally been associated with powerful teachers having high degrees of individual contact with learners. The use of ICT in instruction lends itself to more student-centered knowledge settings and often, this creates some suspense for some teachers and students. But with the world driving rapidly into digital media and communication, the role of ICT in education is evolving more and more important. This importance will continue to expand and develop in the 21st century.

In the new technology era, the role of the teacher has changed. It continues to change from an instructor to a constructor, facilitator, coach and creator of the learning situation. A teacher will be able to integrate ICT into teaching effectively if he has acquired various competencies like creativity, flexibility, logistic skills, skill for project work, administrative and organizational skills and collaborating skills. Integrating information and communication technologies can help revitalize teachers and students as they improve and develop the quality of education by providing curricular help in difficult subject areas. To achieve these, teachers need to be involved in collaborative projects and include ICT as a tool for the teaching-learning process. Teachers' attitudes are major predictors of new technologies in instructional settings. Teachers' attitudes toward ICT shape not only preparing students for real life in our technological and diverse world requires that teachers embed ICT in significant learning experiences (Braun & Kraft, 1995). Studies show that most teachers do not use the potential of ICT to donate to the quality of learning environments, although they value this potential rather significantly (Smeets, 2005). Hence the investigator attempts to study the attitude of teacher education students towards ICT.

Methodology

In this study, the investigator has used a simple random technique. By this technique 300 teacher education students were selected. This sample consists of 105 male and 195 female teacher education students. The sample data were collected from 7 teacher education colleges in Virudhunagar district. The Information and Communication Technology Attitude Scale (ICTATS) was developed and validated by Krishnaraj and Anbuhezian (2005). This Scale consists of 50 items and it is a Likert type of scale having five alternatives. Both positive and negative items are included. For positive items, the following scoring procedure is adopted: A weightage of 5 is assigned to a 'strongly agree' response. A score of 4 is given to the 'agree' response. A score of 3 is assigned to a 'neutral' response. A score of 2 is assigned to a 'disagree' response. A weightage of 1 is assigned to a 'strongly disagree' response. For negative items, the scoring procedure is reversed.

Operational Definitions

ICT

It refers to a term used to represent the role of unified communications and the integration of telecommunications, computers, and the necessary software, storage, and audio-visual systems, which enable users to access, store, transmit and manipulate information.

Attitude Towards ICT

It refers to the feeling of a person who thinks, value and reacts to the use of ICT.

Teacher Education Students

Students are studying in colleges of education undergoing secondary teacher education programs in the academic years 2021-2022 in colleges of education in Virudhunagar district.

Objectives of the Study

1. To find out the level of attitude towards ICT among teacher education students concerning Gender and location of the college.
2. To find out the significant difference in the attitude towards ICT among teacher education students concerning Gender and location of the college.

Descriptive Analysis

To determine the attitude towards ICT among teacher education students concerning Gender.

Table 1: Level of Attitude Towards ICT Among Teacher Education Students With Reference to Gender

Gender	Low		Average		High	
	N	%	N	%	N	%
Male	14	13.5	74	71.2	16	15.4
Female	39	19.9	125	63.8	32	16.3

It is inferred from the above table that, about male teacher education students, 13.5% of students have low level, 71.2% of students have average level and 15.4% of them have a high level of attitude towards ICT.

It is inferred from the above table that, about female teacher education students, 19.9% of students have low level, 63.8% of students have average level and 16.3% of them have a high level of attitude towards ICT.

To determine the attitude towards ICT among teacher education students concerning college location.

Table 2: Level of Attitude Towards ICT Among Teacher Education Students with Reference to Location of College

Location of college	Low		Average		High	
	N	%	N	%	N	%
Rural	22	18.2	78	64.5	21	17.4
Urban	31	17.3	121	67.6	27	15.1

It is inferred from the above table that, about rural college teacher education students, 18.2% of students have low level, 64.5% of students have average level and 17.4% of them have a high level of attitude towards ICT.

It is inferred from the above table that, about urban college teacher education students, 17.3% of students have low level, 67.6% of students have average level and 15.1% have a high level of attitude towards ICT.

Differential Analysis

There is no significant difference in attitude towards ICT among teacher education students concerning Gender.

Table 3: Significance Difference in Attitude Towards ICT Among Teacher Education Students with Reference to Gender

Gender	Number	Mean	S.D	Calculated 't' Value	Remark at 5% Level
Male	104	1.273	11.747	3.26	S
Female	196	1.475	12.09		

(At 5% level of significance the table value 't' is 1.97)

It is inferred from the above table that the calculated 't' value 3.26 is greater than the table value. Therefore there is a significant difference between male and female teacher education students in attitude towards ICT. Hence the null hypothesis is rejected.

There is no significant difference in attitude towards ICT among teacher education students concerning the Location of college.

Table 4: Significance Difference in Attitude Towards ICT Among Teacher Education Students with Reference to Location of College

Location of College	Number	Mean	S.D	Calculated 't' Value	Remarkat 5% Level
RURAL	121	1.273	12.239	0.77	NS
URBAN	179	1.271	11.791		

(At 5%level of significance the table value 't' is 1.97)

It is inferred from the above table that the calculated 't' value of 0.77 is greater than the table value. Therefore there is no significant difference between rural and urban college teacher education students in attitude towards ICT. Hence the null hypothesis is accepted.

Findings of the Study

1. The level of teacher education students in attitude towards ICT concerning gender and location of the college is average.
2. There is a significant difference between male and female teacher education students in attitude towards ICT.
3. There is no significant difference between rural and urban college teacher education students in attitude towards ICT.

Conclusion

The study findings reveal no significant difference between rural and urban college teacher education students in attitude towards ICT. It is good for the institution and has a positive symptom for developing the education system of the country. By using different technological devices, the classroom environment can be improved and make the future citizen skilled. ICT has undoubtedly become a powerful tool that is breaking the traditional methods of education. The ICT-based teaching-learning process may lead to the effectiveness and efficiency of the educational system.

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