

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

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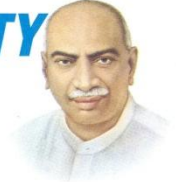


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## MESSAGE

It is with immense pleasure that I extend my greetings to the readers of the International Journal of Educational Research, Development, and Extension (Vol. 14, Issue 1 - January-March, 2023), published by the Centre for Educational Research, Madurai Kamaraj University. As we embark on another edition of this esteemed journal, we are presented with a collection of research articles that delve into the diverse realms of education, highlighting our university's commitment to fostering knowledge, innovation, and academic excellence.

As we probe into the rich content of this journal, I encourage all readers to engage deeply with these research findings. This volume serves as a catalyst for further exploration and dialogue in the field of education. I extend my felicitations to the authors, reviewers, and the entire team behind this journal for their dedication and scholarly contributions.

I appreciate our esteemed readers for their continued support and interest in the International Journal of Educational Research, Development, and Extension.

Together, let us continue to advance the frontiers of knowledge in the pursuit of excellence in education.

**VICE CHANCELLOR**

## Editor's Note

Dear Readers,

It is with great pleasure and pride that we present to you the first issue of Volume 14 of the International Journal of Educational Research, Development, and Extension. This journal has long been a platform for the exchange of innovative ideas and research findings in the field of education, and the current issue continues this tradition with a collection of insightful articles that span a wide range of educational topics.

In this issue, we are honored to feature research contributions from scholars and educators who have dedicated their efforts to advance our understanding of various facets of education. Each article showcases a unique perspective and brings to light the complexities and opportunities that exist within the field.

The article titled "Comparative Study of Gender Responsive Budgeting between India and Malaysia" by P. Ravichandran and M. Nazeer explores the critical issue of gender equity in budget allocation in the context of two distinct nations. Their rigorous analysis offers valuable insights into the challenges and progress being made in this vital area.

"Effect of Yoga on Enhancing Memory for Special Need Students in Middle School," authored by Latha. K and Vakkil. M, examines the potential benefits of yoga in enhancing the memory of students with special needs.

Xavier J's article, "Attitude Towards E-Learning Among the Postgraduate Students," investigates students' attitudes toward e-learning, shedding light on the ever-evolving landscape of higher education delivery methods.

"P. Kavitha's work on "Professional Ethics as Perceived by the School Teachers in Madurai District" delves into the ethical considerations that shape the teaching profession.

Lastly, "Decision Making Behavior Among Higher Secondary Students" by V. Meenakshi provides valuable insights into the decision-making processes of our youth, offering implications for educational strategies and career guidance.

As editors, we extend our deepest gratitude to the authors for their diligent research and scholarly contributions. We also thank our dedicated reviewers for their insightful feedback and commitment to upholding the quality of research presented in this journal.

We invite you, our esteemed readers, to engage with these articles and contribute to the ongoing dialogue in the field of education. Your thoughts and reflections are invaluable in advancing educational research, development, and extension.

Warm regards,

*Dr. R. Annadurai*  
Editor-in-Chief

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# COMPARATIVE STUDY OF GENDER RESPONSIVE BUDGETING BETWEEN INDIA AND MALAYSIA

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**P. Ravichandran & M. Nazeer**

## **Abstract**

The government's income and outlays, which are frequently seen reflected in the nation's fiscal policies during the annual budgeting process, determine the rate of economic growth of any nation. In this context, the gender responsive budgeting is one aspect to promote equality between men and women through fiscal policies. As such, gender responsive budgeting is one way for the government to consider successful budgeting. This is because gender responsive budgeting is considered as a great strategy to ensure that women are not left behind when creating such fiscal policies and to recognize women as a powerful entity contributing to government economic development and success. However, this should not be mistaken for creating separate budgets for women or merely boosting funding for their programmes as this is not what gender-responsive budgeting entails. Instead, gender-responsive budgeting aims to make sure that public resources are collected and distributed in ways that are efficient and advance gender equality and women's empowerment. In this study, an attempt has been made to compare gender responsive budgeting in two Asian countries, namely, India and Malaysia. The two countries were selected based on purposeful sampling and comparative research methodology was adopted in analyzing the two countries with respect to their gender-responsive budgeting policies and strategies.

**Keywords:** Gender Responsive Budgeting, Fiscal Policy, Gender Equality, Economic Development

## **Introduction**

Gender Responsive Budgeting (GRB) is followed by more than 80 countries in their budget process (Rubin & Bartle, 2021). In particular, GRB is followed among the members of the G20, which constitute Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States and the European Union. According to the United Nation's Development Fund for Women (UNIFEM), gender responsive budgets promote the following four items, namely, 1) Equity, 2) Accountability, 3) Efficiency and 4) Transparency. By incorporating a gender perspective into fiscal policy and in the budgeting process, Gender Budgeting (GB) can aid in the promotion of gender equity (Alonso-Albarran et al., 2021). At the same time, incorporating Gender budgeting means holding government accountable for their gender-based policy commitments. Gender



budgeting can ensure that efforts to promoting gender equality and women's development are considered when making public budgeting decisions on the basis of efficiency. At the same time, gender budgeting can ensure that the benefits go to society, and not always to a specific individual. By systematically providing gender-responsive budgeting, it can aid in boosting participation mechanisms in budgeting process, which in turn, will fosters greater transparency. In Asian content, Chakraborty (2016) surveyed gender budgeting efforts in Asia, encompassing prominent initiatives in Asia's developed and developing countries, including those in the Republic of Korea and Australia as well as India and the Philippines. In particular, Chakraborty (2016) provided a number of examples of the application of gender budgeting in India. For example, fiscal policy in India has employed gender budgeting for many years as a mechanism to address issues of gender equality and the goals of girls' and women's development in areas like education, health, and access to infrastructure, among other government services. Due to India's federalist approach to governance, which involves reducing many crucial public services to state governments, Gender Responsive Budgeting becomes particularly a fascinating application. As a result, the idea of GRB was introduced as a means of bridging the concepts of gender equality and budget and introducing women as both contributors and users of public budgets. This idea was done in order to close the gap between gender responsive policy making, which was introduced through gender mainstreaming, and budget planning and allocation processes. GRB is also seen as a primary focus of other counties like Malaysia, which are not in the G20 member list of countries. This is seen evident from action taken by Malaysian government in 2011, where a three day workshop was held on Gender Responsive Budgeting, in Penang from February 21-23, 2011. One of the outcome from the workshop was that they were already implementing it in Malaysia as their budget does not discriminate. However, the evidence from around the world indicated otherwise. Also, the current COVID-19 pandemic situation has also made it possible for gender gaps to get wider. Thus it become imperative to understand the exact situation and develop recovery strategies as recommendations for better understanding and utilization of GRB across different countries.

## **Literature Review**

Gender equity has been in focus in last fifty years and this evident from the literatures too. For Example, Elson, Budlender, Hewitt, and Mukhopadhyay (2002) noted in their research that over the past 25 years (since 2002), the movement toward gender parity has gained momentum in nations all over the world. A number of reviews (Unterhalter, 2005; Daly, 2005; Fennell and Arnot, 2007; Connell, 2010; Aikman, Halai, & Rubagiza, J. (2011); Aikman and Rao, 2012; Aikman and Unterhalter, 2013; Holmarsdottir, Nomlomo, Farag and Desai, 2013, Unterhalter, 2016) consider how the term gender has been deployed in

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discussions of education policy and practice. At the same time, gender budgeting for many years is seen as a mechanism to address issues of gender equality and the goals of girls' and women's development in areas like education, health, and access to infrastructure, among other government services (Chakraborty, 2016). Further, in order to bring the discussion of GRB into the mainstream of debate, scholars and practitioners like Marilyn M. Rubin and John Bartle (2005) described gender responsive budget as a “government budget that explicitly integrates gender into any or all parts of the decision-making process regarding resource allocation and revenue generation” (p.259). However, this should not be mistaken for creating separate budgets for women or merely boosting funding for their programmes as this is not what gender-responsive budgeting entails. Instead, gender-responsive budgeting aims to make sure that public resources are collected and distributed in ways that are efficient and advance gender equality and women's empowerment.

### **Understanding the Gender Responsive Budgeting Framework**

In many spheres of social and economic life as well as across nations, gender disparities still exist, and their sizes have changed little (Berger, 2017). Furthermore, it is necessary to continuously check these gaps because, depending on the economic circumstances of a country, situations like the COVID-19 pandemic may influence gender inequality. As a result, it's crucial that all stakeholders involved in implementing gender budgeting remove systemic biases while making decisions about the designing and execution of policies that can unintentionally have a detrimental influence on gender equality. As per Alonso-Albarran et al. (2021), “Gender budgeting can be a valuable tool to help tackle these challenges because it allows governments to better allocate and implement resources in a way that is more inclusive”.

A well formulated GRB helps government to:

1. Leverage tax and expenditure policies that address gender imbalances and account for the different impacts on men and women;
2. Mainstream a gender perspective throughout the budget cycle to help promote gender equality;
3. Increase transparency and accountability through greater oversight by parliament and civil society and
4. Provides parliament with an analysis of gender objectives relating to each budget chapter, improving awareness, and stimulating active debate (IDB, 2022, July 12).

Further, the gender responsive budget conceptual framework was developed by Sharp 2003 in Ichii (2010, 4) as depicted in the Fig 1.



**Figure 1:** Gender Responsive Budgeting Conceptual Framework  
(Source: Sharp 2003 in Ichii, 2010, 4)

In the above Fig 1, Sharp’s three step conceptual framework provided an overview of steps involved in implementing GRB. The first step was initiated to raise awareness among stakeholders of gender issue and impacts embedded in budgets and policies. Step 2 was initiated to make government accountable for translating their gender equality commitments into budgetary commitments and Step 3 focused on changing budgets and policies to promote gender equality (Sharp 2003, 9). However, Sharp’s framework lacked the detail that is required to provide practitioners with the answers to ‘how’ these three goals can be achieved.

This resulted in researchers moving to different framework. One such framework which is worth looking into helping gender equality in GRB is the GRB cycle developed by (IMF, 2017). This Framework is shown in Fig 2. The Figure shows four main domains and highlights gender specific Public Financial Management tool (PFM), which can be used in each phase of the budget cycle. This is because, “There seems to be a direct and logical link between performance based budgeting and GRB as both focus on results and a broader cycle of policy planning, implementation and evaluation” (Klatyer, 2008, p. 12-13).



**Figure 2:** IMF Gender budgeting approach and framework

Another framework based on gender budgeting is the Global Gender Gap Index which was introduced by the World Economic Forum in the year 2006. This framework used gender parity between the countries across four dimensions, namely, economic opportunities, education, health and political leadership. In order to capture gender parity based on these four dimensions were the following 4 variables, namely, 1) Economic participation and opportunity, 2) Educational attainment, 3) Health and survival and 4) Political Empowerment (World Economic Forum, 2022).

Having understood the GRB process and framework the next sections capture the two Asian Countries' Gender responsive budgeting system. For the purpose of this study, two Asian countries India and Malaysia were taken. The justification for selecting these two countries is given in the objective and methodology section of this study.

### **Gender Responsive Budgeting in India**

In the year 2001, the Indian Government developed a National Policy for the Empowerment of Women, which focused on women's growth and empowerment. The main goal of this policy is to abolish all types of discrimination among women and to promote their active participation in all public and private areas. This type of policy initiation and urge to remove women's discrimination triggered the Indian government to move forward with the recommendations suggested by various Expert Groups. As such, India's initiative to go for Gender Responsive Budgeting started as early as 2004, when the Finance Minister accepted the Expert Group's recommendations on gender responsive budgeting and it was announced in the Union Budget Speech that India would be undertaking gender budgeting for the 2005/06 Union Budget. Gender budgeting means holding the government accountable for its gender-based policy commitments. Accountability was also seen as an

essential item by the United Nations Development Fund for Women (UNIFEM) to promote Gender Responsive Budgeting. In India, the accountability mechanism was initiated by the Planning Commission's XII Five Year Plan Report of the Working Group on Women's Agency and Empowerment (2012). The Working Group was mandated to carry out a review, analysis and evaluation of the existing provisions and programmes for women and make recommendations for the XII Five Year Plan. The following recommendations were suggested by the Working Group for accountability mechanisms (see Government of India 2011).

1. The Results Framework Document is an accountability mechanism that must be gender mainstreamed.
2. Evaluation and impact assessment of schemes by an external agency are mandatory requirements for the continuation of existing schemes beyond the plan period. All impact assessment and evaluation of schemes should include impact assessment/status of gender mainstreaming.
3. At the state level, mandatory gender audits of all centrally sponsored and central schemes should be undertaken.
4. A quantum leap in GRB can be achieved if gender perspectives are incorporated within the expenditure and performance audits conducted by the Comptroller and Auditor General (CAG).
5. The Mid-Term Appraisal of the XII Five Year Plan should include the conducting of an independent gender assessment of all flagship programmes.

Apart from XII Five Year Plan, several initiatives were taken by the Government of India to provide women empowerment and one such initiative is Gender Responsive Budgeting (GRB). In India, the leading players in these GRB initiatives were UN Women and the Ministry of Women and Child Development (MWCD) in collaboration with the National Institute of Public Finance and Policy (NIPFP), and the Ministry of Finance. Thus, in India, GRB is emerging as a significant socio-economic innovation tool for transparency and accountability by analysing budgetary policies and identifying their effects on gender development (Chakraborty, 2013). This is also evident from the Global Gender Gap report released by the World Economic Forum (WEF), which stated that the Global Gender Gap Index rated India at 114<sup>th</sup> out of 142 nations in 2015. Furthermore, data pertaining to India's ranking on the Global Gender Gap Index continued to decline, with the country dropping from 108th position in 2019 to 112th position among 153 countries in 2020 and further to 140th position among 156 nations in 2021. Further, the Global Gender Gap report released in 2022 by the World Economic Forum (WEF) indicates that India ranked 135 out of 146 countries with the Gender Gap index score placed at 0.629 (The

Hindu, 2022). Besides, this has to be seen in the context of Government of India report which reveals that women are exposed to a variety of risks throughout their lives, particularly during pregnancy and childbirth. The majority of them are subjected to discrimination from the time of conception and it continues until their death; violence, harassment, or abuse; neglect due to dependency and lack of access to resources; social prejudice; and exploitation, whether economic, political, social, or religious are just a few examples of what they face (Government of India, 2015).

Although women's discrimination is reported in the Government of India report (2015), still there are details of women-specific schemes promoted in India showing the budgetary estimates. The details are shown in Table 1 below.

**Table 1:** Women-specific Schemes of Government of India (Rs in crore)

Schemes	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Beti BachaoBeti Padhao	90	97	100	200	244.73	200	200
IGMSY	400	438	634	2700	1055	2300	2500
Hostel for Working Women	22.5	27	28	50	30.35	45	150
Nirbhaya Fund	1000	2000	3000	3000	848.66	851.75	855
STEP	18	27	30	40	4.47	3.00	-
National Commission for Women	18.45	25.15	25.6	25.6	22.92	25	26
ICDS	16561	15502	14850	16745	19234	23357	27584
Swadhar	115	50	100	-	25	35	50

Source: Computed from the budgetary estimates of the Ministry of Women and Child Development in the Gender Budgeting Statements of the Government of India

Thus from the details of data available in the context of women discrimination and Gender responsive budgeting, it is evident that various initiatives have been taken by the Government of India to promote Gender Responsive Budgeting.

### Gender-responsive Budgeting in Malaysia

Gender gender-responsive budgeting initiative in Malaysia has been led by the Ministry of Women, Family and Community Development (MWFCD) with technical and financial assistance provided by the United Nations Development Programme (UNDP). MWFCD, works with and through the Ministry of Health; on education issues, through the Ministry of Education; and on finance and related issues, through agencies such as the Ministry of Finance and the Economic Planning Unit (EPU). According to the details provided in the Statista.com website (<https://www.statista.com/statistics/972985/global->

gender-gap-score-wage-equality-malaysia/), the Global Gender Gap report indicates that Malaysia is ranked 112 out of 156 countries in 2021 and that its index score reported at 0.68, with a score of 1 being absolute parity and a score of 0 being absolute imparity. Malaysia has one of the biggest gender gaps in Southeast Asia (Hirschmann, 2021). However, Malaysia's gender gap index score has improved in the last few years according to the Department of Statistics Malaysia's (DOSM) latest report, Statistics on Women Empowerment in Selected Domains, Malaysia, 2021. Table 2 below shows the details of the Malaysia Gender Gap Index (MGGI) score from the year 2018- 2020.

**Table 2:** Malaysia Gender Gap Index (MGGI) score, 2018-2020

Sub- Index	2018	2019	2020
Economic participation and opportunity	0.727	0.717	0.738
Educational attainment	1.054	1.053	1.059
Health and Survival	0.958	0.958	0.956
Political empowerment	0.106	0.108	0.100
MGGI score	0.711	0.708	0.714

Although Table 2 shows a steady increase in MGGI scores, still Malaysia Gender Gap Index during 2021 reported a drop at 0.68 and a slight increase of +0.005 at 0.681 for the year 2022.

In the year 2022, out of 146 countries Malaysia ranked 103 on the World Economic Forum's (WEF) Global Gender Gap Index. Across various sub-indexes, economic participation scored 60.3%, educational attainment at 94.4%, health and survival gender gap at 95.8% and political empowerment by 22%.

Overall, from the data available on gender gaps with respect to the four sub-indexes, Malaysia's rank has shown improvement from 112 in 2021 to 103 in 2022. However, the MGGI score index only increased marginally by +0.005 from 2021 to 2022.

### **Research Objective and Methodology**

The main objective of this study is to compare the Global Responsive Budgeting process and strategies adopted in two Asian countries (India and Malaysia). The reason for selecting these two countries is because India is a member of G20 listed countries as Malaysia is not a G20 listed country. So, to avoid biases these two countries have been selected based on purposeful sampling. This study uses Comparative research methodology

which has a long history and has gained much attention in the current research due to globalization, technological advances, etc. on cross-national platforms (Azarian, 2011). Conventionally, comparative analysis emphasized on the “explanation of differences, and the explanation of similarities” (p.2).

## Discussion and Findings

Comparing the evidence of the literature discussed in this study, it is evident that both countries India and Malaysia have marginal differences in their gender gaps with respect to the four sub-indexes formulated by the World Economic Forum’s (WEF) Global Gender Gap Index. Table 3, shows the details of the four sub-index scores.

**Table 3:** Comparison between India and Malaysia WEF’s Gender Gap Report 2022 index

Sub-index	India		Malaysia	
	Rank	Score	Rank	Score
Global gender gap index	135	0.629	103	0.681
Economic participation and opportunity	143	0.350	88	0.656
Educational attainment	107	0.961	56	0.995
Health and Survival	146	0.937	68	0.972
Political empowerment	48	0.267	123	0.102

From Table 3, it is evident that Malaysia seems to be marginally better in terms of Global Gender Gap (GGP) ranks except for the political empowerment sub-index against India's GGP scores. One of the reasons for this difference could be due to the country’s population size and government policies. However, one good news from this data with respect to both countries is in their educational attainment and health and survival sub-index scores. At the same time, Malaysia’s Gender Gap rank has shown improvement from 112 in 2021 to 103 in 2022. However, the MGGI score index only increased marginally by +0.005 from 2021 to 2022 which seems an alarming factor. Similarly, India’s GGI score index showed a marginal increase of +0.003 from 2021 to 2022. Also, India's Gender Gap rank also moved from 140<sup>th</sup> in 2021 to 135 in 2022.

Overall, from the comparative analysis done between the two countries (India and Malaysia), there seem to be similarities in terms of their Gender gap scores. However,



India's achievement with respect to minimizing the gender gaps is evident from the large number of schemes that have been initiated both by the government and Non-Government Organizations (NGO's). Although, Malaysia also has initiatives taken for Gender equality it is no evidence as much that is seen in India via its various schemes. Further, India is considered as a developing country and despite its huge population, the Global Gender Gap index seems still impressive. Whereas, Malaysia as a developed nation shows a steady movement in its global gender gap ranking but still sees no record of substantial growth in its Gender gap index score. There can be a number of reasons affecting Malaysia and India in terms of their Gender gap index score growth. Some of the predominant reasons could be due to the following items listed below.

1. Malaysia's population is mainly divided into three ethnic groups, Malay, Chinese and Indian. Since, the government of Malaysia has policies and priorities specifically to address the Bumiputra population, it is most likely that the gender gap equality may not be uniform across the three ethnic groups. This eventually may have an impact on the countries' Gender gap index score.
2. In the category of Wage equality for similar work, Malaysia stands at 25<sup>th</sup> place at 74.2% while India's Wage equality for similar work stands at 122<sup>nd</sup> place at 50.6%.
3. Gender budgeting has been seen as a potential tool to transform gender equity and countries like India, the Philippines and South Korea have evidence of its efforts leading to substantiate fiscal policies of the respective countries (Chakraborty, 2016). Similarly, other countries, such as, Malaysia need to see how they can align Gender budgeting with that of the countries' fiscal policies. As such, it is critical for Asian countries to assess the role of public policy, and specifically fiscal policy, in addressing gender inequality (Chakraborty, 2010a).
4. As per the Ministry of Statistics and Programme Implementation (MOSPI) report, the Labor Force Participation Rate in India remained unchanged at 47.30 percent in the first quarter of 2022 from 47.30 percent in the fourth quarter of 2021. The Department of Statistics, Malaysia reports, that the Labor Force Participation Rate in Malaysia increased to 69.60 percent in July from 69.50 percent in June of 2022.

Even though there may be other factors that influence India and Malaysia's gender gap index scores, it is still important for the respective stakeholders involved in designing Gender Responsive Budgeting to consider the factors listed above to ensure gender gap equality.

## Conclusion

In this study, an attempt has been made to compare the Global Responsive Budgeting process and strategies adopted in two Asian countries (India and Malaysia). In attempting to compare the two countries, various literature, government reports, Forums and Gender gap index scores were taken into consideration. The four main variables that were taken for analyzing this comparative study are based on the World Economic Forum. The variables 1) Economic participation and opportunity, 2) Educational attainment, 3) Health and survival and 4) Political Empowerment were compared between the two countries and the results showed similarities in terms of their Gender gap scores. However, India's achievement with respect to minimizing the gender gaps is evident from the large number of schemes that have been initiated both by the government and Non-Government Organizations (NGO's). Although, Malaysia also has initiatives taken for Gender equality it is not evident as much that is seen in India via its various schemes. Further, India is considered as a developing country and despite its huge population, the Global Gender Gap index seems still impressive. Whereas, Malaysia as a developed nation shows a steady movement in its global gender gap ranking but still sees no record of substantial growth in its Gender gap index score. Therefore, in order to enhance both the country's overall Gender Gap index rank and its Gender Gap index score, it is the time for the Malaysian government to consider implementing additional Gender Specific Schemes to Promote GRB.

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## **EFFECT OF YOGA ON ENHANCING MEMORY FOR SPECIAL NEED STUDENTS IN MIDDLE SCHOOL**

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**Latha. K & Vakkil. M**

### **Abstract**

Children are the picture of affection and innocence and are very adaptable. They adopt the characteristics of the mould that their parents and other external forces have provided for them. As a result, the formative years of childhood are a pivotal time for shaping habits, character, and essential personality traits. The effect of the environment, particularly the home and the school, adds important components for students with special needs to monitor their progress. Students today lack the time for exercise since they have so much to learn. Yoga education is a part of the school curriculum, therefore physical wellness may be guaranteed if it is presented in the classroom. Special needs middle school 90 pupils from the Panchayat Union make up the sample. For this investigation, an experimental methodology was used. Both descriptive and differential analysis were performed on the data. The main finding of this study was that the 90 special needs middle school students in the panchayat union received favourable feedback and evaluations.

**Keywords:** Yoga, Memory, Special needs.

### **Introduction**

A human's life is incredibly important to them and includes learning. Although it is essential to society's growth and development as well as survival skills, we are ineffective without the ability to use its by-products in the natural world. Memory is the psychological word for the ability of the mind to retain and recreate past experiences as needed. The mind's memory functions by keeping track of, holding onto, and producing ideas acquired through its activities. Our effectiveness goes up with memory. We may remember crucial details, concepts, names, and other pieces of knowledge thanks to memory. One of a person's best companions, teachers, and philosophers is memory. An absence of memory makes an individual inaccurate and ineffective. Yoga acts as a sort of heavenly intervention in this situation. Yoga is a science that may be used by everyone. Perhaps the best way to acquire balance in the area of the mind, body, and soul is to incorporate yoga as a habit from an early age.

The human body's most subtle organ is the brain. It uses 20% of the oxygen that the body uses, and memory is a person's greatest asset. The human brain has an incredible and

unfathomably large capacity, but the average person uses less than ten percent of it. Yoga serves as a catalyst and brings out all the beautiful talents that children have.

Different physical and mental problems in children with exceptional needs have an impact on their mental attitudes. They are insecure and have a negative view of themselves. Because they are conscious of their own oddity and lack of achievement in all areas, they start to feel inferior. People find it frustrating because they cannot or only very laboriously complete seemingly easy chores. They are therefore extremely tense and easily get exhausted from physical activity. Since the spine is rigid, it causes a lot of pain, which further restricts mobility and throws off the coordination of the limbs. Moreover, they struggle with concentration.

Beginning with the structural level of the body, Hatha Yoga practise helps to straighten the spine, improve flexibility, and build stronger muscles. Internal organs are also toned and rejuvenated, and the digestive, lymphatic, cardiovascular, and pulmonary systems are cleansed of toxins and waste. Finally, the nervous, endocrine, and cardiovascular systems are normalised and balanced, and brain cells are nourished and renewed. The final consequence is an improvement in emotional stability, mental clarity, and general well-being.

## **Yoga**

The ancient art of yoga is built on a method that promotes the growth of the body, mind, and spirit in harmony. The Sanskrit root 'Yuj', which means 'to unite' or 'to yoke,' is where the term 'yoga' originates. It can also refer to communion or togetherness. It is the real coming together of our will and God's will. One of the six Indian philosophical systems is yoga. In his major book, the Yoga sutras, Patanjali gathered, organised, and systematized it. There are numerous yoga systems available to meet the needs of diverse sorts of people and transform the individual. The founder of yoga and creator of the Yoga-sutra, Patanjali, was a yoga adept who made a brilliant contribution to the philosophy of yoga by outlining a system that was deeply ingrained in Indian culture and history. It was Patanjali who organised yogic philosophy and communicated it to his students through the Sutras, a collection of a few words that served as shorthand.

## **Yoga and Memory for Middle School Students**

The word "memory" is referred to as "smiriti" in Sanskrit. According to Patanjali's yoga sutras, memory is the mental persistence of an experienced item. Yoga activities improve the brain's ability to pay attention, think, process sensory data, and perceive images. Asanas, Pranayama, and meditation are examples of yoga techniques that improve

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blood flow to the brain. This promotes mental clarity and improves focus. The power of recall can be strengthened by yogic techniques, which can also help prevent memory gaps. By consistently practicing yoga, one can access the mind's enormous power. Due to all the distractions, kids appear to forget everything. Daily yoga practice brings about a distinct form of tranquility by reducing mental turbulence can be seen all along the road.

### **Benefits of Yoga for Special Children**

- yoga helps coordinate the activities of the mind, body, and emotions
- improves activities of day-to-day living to a degree that could never be achieved
- improves one's ability and helps one to rely on their own selves, making them independent
- helps develop social relationships, and reduces frequency of violent emotional upsets
- improved attention span, increased eye-hand coordination, and decreased hyperactivity.
- it also the enhances immunity; Decreases aggression; Reduces drug dependence
- increases the effectiveness of the nervous system, which aids in recovery
- enhances appetite and sleep; Enhances general health.

### **Objectives of the Study**

- To find out the memory level of special needs students in both experimental and control groups.
- To find out the investigation of the impact of yoga on enhancing memory.
- To find out the identifying the gender difference in memory level.
- To find out the examination to the ability of critical and logical thinking.

### **Hypotheses of the Study**

- There is no significant difference in the memory level between the experimental group and the control group in the pre-test.
- There is no significant difference in the memory level between the experimental group and control group in the post-test.
- There is no significant difference in the memory level between boys and girls of control group in the pre-test.
- There is no significant difference in the memory level between the boys and girls of experimental group in the post-test.

## Methodology of this Study

In the present study experimental method was adopted by the investigator. For the study, the investigator selected 90 panchayat union middle school special needs students in Salem district in Tamil Nadu by using a purposive sampling technique. After data collection, the data were analyzed through descriptive (mean and standard deviation) and differential analyses ("t"- test).

## Analysis and Interpretation of Data

### Hypothesis – 1

There is no significant difference in the memory level between the experimental group and the control group in the pre-test and post-test.

**Table 1:** Percentage Analysis of Pretest of a Control Group and Experimental Group

No of Repetitions	Group	No correct responses Pre-test			Percentage (%)		
		Boys	Girls	Total	Boys	Girls	Total
1.	Control	51	50	101	63.7	50	56.85
2.		53	62	115	66.2	62	64.1
3.		68	59	127	85	59	72.0
4.		66	69	135	82.5	69	75.75
1.	Experimental	50	52	102	62.5	52	57.25
2.		58	59	117	72.5	59	65.75
3.		67	59	126	83.7	59	71.35
4.		65	68	133	81.2	68	74.6

**Table 2:** Percentage Analysis of Posttest of a Control Group and Experimental Group

No of Repetitions	Group	No of correct responses Post-test			Percentage (%)		
		Boys	Girls	Total	Boys	Girls	Total
1.	Control	57	38	95	71.2	38	54.6
2.		60	59	119	75	39	57.0
3.		67	52	119	83.7	52	67.85
4.		75	67	142	93.7	67	80.35
1.	Experimental	65	59	124	81.2	59	70.1
2.		60	65	125	75	65	70.0
3.		68	65	133	85	65	75.0
4.		76	89	165	95	89	92.0

From the above table (1&2) it is observed that there is no significant difference in the memory level between the experimental group and the control group in the pre-test. The

above table describes the percentage achieved by the control group at the post-test level. There is no significant difference in the memory level between the pre-test and post-test scores of the control group. Describes the percentage achieved by the students of the experimental group in the pre-test level. Due to continuous receptions, the subject responses have been increased. The subject response after the yoga treatment has been increased. Hence there is a significant difference in the memory level between the pre-test and post-test of the experimental group.

### Hypothesis – 2

There is no significant difference in the memory level between the experimental group and the control group in the pre-test and post-test.

**Table 3:** Mean Value of Pretest and Posttest of the Control Group and Experimental group

S.No	Test	Category of the group	N	Mean	S.D	't' value	Result
1.	Pretest	Control Group	45	59.7	6.28	0	Not Significant
		Experimental Group	45	59.7	7.13		
2.	Posttest	Control Group	45	59.3	10.4	2.13	Significant
		Experimental Group	45	68.23	26.2		

From the above table (3) it is noted that the calculated 't' value is zero. Hence, the null hypothesis is accepted. There is no significant difference in the pre-test of memory level between the experimental group and the control group in the pre-test. Hence the null hypothesis is accepted. Post-test the calculated 't' value is 1.96. It is greater than the tabulated value 0.05 level of significance. Hence the null hypothesis is rejected. There is a significant difference in the memory level between the experimental group and the control group in the post-test.

### Hypothesis – 3

There is no significant difference in the memory level between boys and girls in the experimental group and control group in the pre-test and post-test.



**Table 4:** Mean Score of the Boys and Girls in the Pretest and Posttest of the Control Group and Experimental Group

S. No	Group	Test	Category of the Group	N	Mean	S.D	't' value	Result
1.	Control Group	Pretest	Boys	20	64.7	7.09	4.03	Significant
			Girls	25	54	10.6		
		Posttest	Boys	20	64.7	7.09	4.03	Significant
			Girls	25	54	10.6		
2.	Experimental Group	Pretest	Boys	20	67.2	6.67	0.83	Not Significant
			Girls	25	69.5	11.5		
		Posttest	Boys	20	59.3	7.04	1.92	Not Significant
			Girls	25	58.9	8.96		

From the above table (4) it is noted that the calculated 't' value is 4.03. It is greater than the tabulated value of 3.00. Hence the null hypothesis is rejected. There is a significant difference in the memory level between boys and girls in the control group at the pre-test and post-test. Hence the null hypothesis is rejected. In the above table, it is noted that the calculated 't' value is 0.83 and 1.96. It is less than the tabulated value. Hence the null hypothesis is accepted. There is no significant difference in the memory level between boys and girls and the experimental group at the pre-test and post-test.

## Sum Up

A good way to begin would be to train children in yogic techniques during designated school hours, which will ensure discipline and consistency in the practice of yoga. The practice should ideally be started early in a simple manner, to build the practice effectively in the child's life. There is no significant difference in the memory level between the pre-test and post-test of the control group. Significant difference in the memory level between the pre-test and post-test of the experimental group. According to the investigation, the results reveal that there is an improvement in memory after yogic treatment. Many techniques are available for improving memory.

The infirmities are being treated using current medical methods, but they have had only sporadic success. While the exact mechanism of action of many psychically active medications is not entirely understood, yoga therapy has been proven to be more effective than the treatment provided to such youngsters. These children are typically given major and minor tranquilizers, antidepressants, and anticonvulsants. It has been noted that many of these medications function broadly and have a sizable number of side effects, some of which are negative and some of which are extremely significant. Yoga is a science of experience (Anubuthi Shastra). Measured and well-established physiological,

pharmacological, and psychological advantages. Research on the impaired and disabilities is currently at a very early stage. Apart from the various bodily advantages, it can be mentioned with authority that the practices provide them with a sense of well-being, improve their quality of life, and make them glad, happy, and exuberant. These children have extraordinary perceptual skills. They impart valuable knowledge about the hard facts of life. They live their lives in accordance with the plan that God has for them; they do not grumble or moan about it. These are the Unique Creations of the illogical play of the Almighty. Implementing yoga education programs enables students and teachers to decrease stress, increase memory and improve responsible behaviour and academic achievement. Hence yoga and meditation should be made compulsory in every school in the country.

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# ATTITUDE TOWARDS E- LEARNING AMONG THE POST GRADUATE STUDENTS

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**Xavier J**

## **Abstract**

This paper reports on the Attitude towards E-Learning among the Post Graduate Students. The education systems around the world are under increasing pressure to use new information and communication technology (ICT) to enhance the knowledge and skills of students in the ensuing years of the 21<sup>st</sup> century. An innovative application of computer in the teaching and learning process is e-learning, e-learning may be network-based, intranet-based or Internet based, which includes text, video, audio, animation and virtual environments, e-learning provides faster learning at reduced costs, increased access to learning, and clear accountability for all participants in the learning process. In the present study, the investigator employed the 'Survey method'. The survey method is a method for collecting and analysing data, obtained from the large number of respondents representing a specific 250 population collected through highly structured, detailed questionnaire and statistical techniques. Teaching methodology will shift from teacher-centered education to learner-centered education. Teacher's dominance will be replaced by the knowledge dominance. So students now learn through computer teachers, television teachers and Internet teachers.

**Keywords:** Attitude, E-Learning and Post Graduate Students

## **Introduction**

Information and communication technology (ICT) is defined as the implementation of different branches of technology in information and communication processing. In a broader sense, ICT is taken to refer to the whole set of enabling technologies concerned with communication, manipulation of information (hardware and software), networking, data storage, transmission-encompassing data, voice and video.

- ICT was originally intended to serve as a means of improving efficiency in the educational process.
- It can help to improve memory retention, increase motivation and gradually deepen understanding.
- ICT can also be used to promote collaborative learning including role-playing, group problem solving activities and articulated objects.
- Generally, ICT is promoting new approaches to work, learning and new ways of literacy.
- ICT also changes the nature of motivation to learn.

The use of computer technology delivers the same kinds of instruction and testing that were offered in the traditional classroom and testing that were offered in the traditional classroom. The same time pattern, content-centeredness, student-centeredness and tasks can be replicated through electronic devices. The opportunities offered by new advances in electronic information processing technologies are combined with a new view of the learning process and learning styles, which revolutionize the teaching paradigms found in the academy. This will begin to gain some innovative directions. Provide expanded opportunities through computers the easiest way is to find software programs that offer encyclopaedia collections, drills and demonstrations. The delivery of a learning, training or education program by electronic means. E-learning involves the use of a computer or electronic device (e.g. a mobile phone) in some way to provide training, educational or learning material. (Derek Shockley 2003).

### **Statement of the Problem**

An innovative application of computers in the teaching and learning process is e-learning, e-learning may be network-based, intranet-based or Internet based, which includes text, video, audio, animation and virtual environments, e-learning provides faster learning at reduced costs, increased access to learning, and clear accountability for all participants in the learning process. A present study is entitled "A study on Attitude towards e-learning among the post graduate students of Tiruchirappalli district".

### **Objectives of the Study**

To find out whether there is any significant difference in the mean scores of attitude towards e-learning among the postgraduate students with respect to their

- Age
- Gender
- Year of Study
- Subject studying
- Residence
- Locality of the Institution
- Types of Management
- Parents' Educational Qualification
- Parents' Occupation
- Do you have a computer in the home

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## Hypotheses of the Study

- Post graduate students have favorable attitude towards e-learning.
- There is no significant difference in attitude towards e-learning among the postgraduate students with respect to their
  - Age
  - Gender
  - Year of Study
  - Subject Studying
  - Residence
  - Locality of the Institution
  - Types of Management
  - Parents' Educational Qualification
  - Parents' Occupation
  - Do you have a computer in home

## Significance of the Study

Communication is Educational and Education is knowledge. This is an age of knowledge explosion and exploration. Rapid progress in computer technology has invaded the arena of education. Technology has had a significant effect on the education system for many years. In the classroom, we have moved from the days of chalk and talk to the use of overhead projectors and more recently multimedia presentation techniques. Technology continues to move forward. The development in computer technology has resulted in e-learning. E-learning is considered a more effective way of teaching to a large group of students, thereby providing consistency in educational quality. Now the opportunity made available through e-learning are both significant and numerous.

## Research Methodology

In the present study, the investigator employed the 'Survey method'. Survey method is a method for collecting and analyzing data, obtained from large number of respondents representing a specific population collected through highly structured and detailed questionnaire or other techniques. According to Goode and Hatt (1952) the word questionnaire refers to a device for securing answer to questions by using a form while the respondent fills in himself. According to S.D. Sukhia (1974) "the instrument employed as a means to gather new factors to explore new fields are called tools. Without powerful instrument no data can be collected". A great variety of research tool has been developed to aid in the collection of data. The selection of suitable tools is of vital importance for

successful research. According to Goode et.al (1952) "Like the tools in a carpenter' box, each research tool is appropriate in a given situation to accomplish a particular purpose".

The final draft of the tool consisted of 40 items where choices were given for each item in the form such as, strongly agree, agree, neutral, disagree, strongly disagree, in five columns. The respondents were requested to put a tick mark in the column in which they felt the most appropriate. Each answer was allotted a maximum mark of five to a minimum mark of one according to the respondents of the respondent. A good sample must be representative of the entire population for this study, 250 samples have been collected using a random sampling technique.

## Findings and Discussion

### Significance of Difference in Attitude Towards E-Learning Among Postgraduate Students

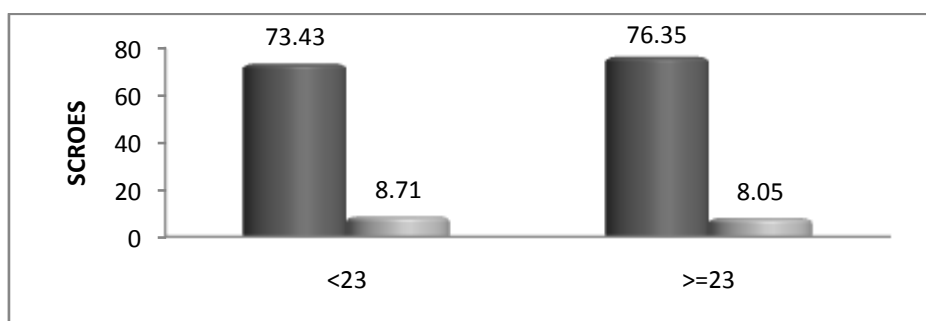
Whole Sample	N	Mean	SD
	250	74.35	8.6

In the above table the mean score 74.35% is found to be greater than 50%, and consequently, the hypothesis is to be accepted. Therefore postgraduate students have a favorable attitude towards e-learning.

### Test of Significance of Difference in Attitude Towards E-Learning Among the Postgraduate Students with Respect to Their Age

Age	N	M	SD	SE <sub>d</sub>	M1~M2	df	't'
<23	172	73.43	8.71	1.12	2.92	248	2.58*
>=23	78	76.35	8.05				

The above table shows that the computed 't' value 2.58 is greater than the critical value 1.96 at 0.05 levels and hence it is significant. Consequently, the null hypothesis is to be rejected.

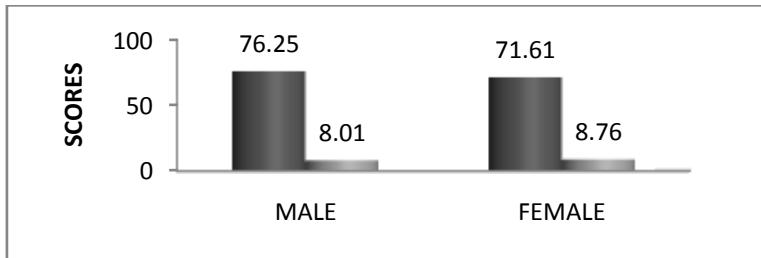


Bar Graph Shows the mean difference between the below23 and above 23 age group of students attitude towards e-Learning

Test of Significance of Difference in Attitude Towards E-Learning Among the Postgraduate Students between Male and Female Students

Gender	N	M	SD	SE <sub>d</sub>	M1~M2	df	't'
Male	145	76.25	8.01	1.08	4.57	248	4.20*
Female	104	71.61	8.76				

The above table shows that the computed 't' value 4.20 is greater than the critical value 1.96 at 0.05 levels and hence it is significant. Consequently, the null hypothesis is to be rejected.

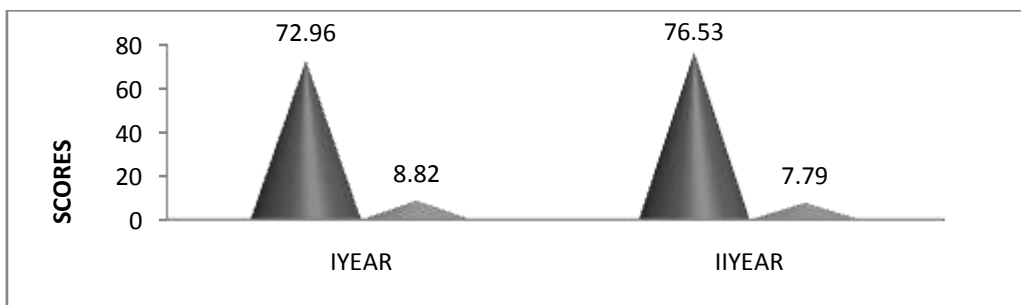


Cylinder Shows the mean difference in attitude towards e-learning among the postgraduate students between male and female students

Test of Significance of Difference in Attitude Towards E-Learning Among the Postgraduate Students with Respect to their Year of Studying

Year of Studying	N	M	SD	SE <sub>d</sub>	M1~M2	df	't'
I Year	153	72.96	8.82	1.06	3.57	248	3.35*
II Year	97	76.53	7.79				

The above table shows that the computed 't' value 3.35 is greater than the critical value 1.96 at 0.05 levels and hence it is significant. Consequently, the null hypothesis is to be rejected.



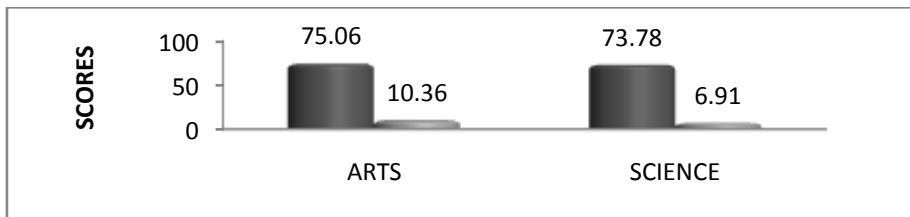
Cone shows the mean difference in Attitude towards E-Learning among the Postgraduate Students with Respect to their Year of Studying



Test of Significance of Difference in Attitude Towards E-Learning Among the Postgraduate Students with Respect to Their Subject Studying

Subject studying	N	M	SD	SE <sub>d</sub>	M1~M2	df	't'
Arts	110	75.06	10.36	1.14	1.28	248	1.12*
Science	140	73.78	6.91				

The above table shows that the computed 't' value 1.12 is less than the critical value 1.96 at 0.05 levels and hence it is not significant. Consequently, the null hypothesis is to be accepted.

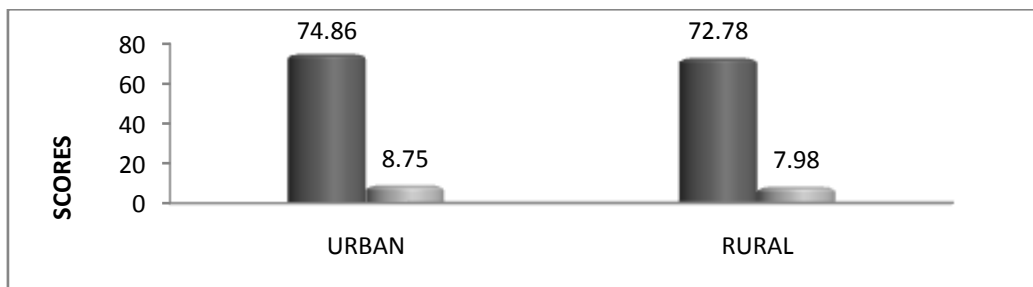


Cylinder shows the mean difference in Attitude towards E-Learning among the Postgraduate Students between with Respect to their Subject Studying

Test of Significance of Difference in Attitude Towards E-Learning Among the Postgraduate Students with Respect to their Residence

Residence	N	M	SD	SE <sub>d</sub>	M1~M2	df	't'
Urban	188	74.86	8.75	1.19	2.08	248	1.73*
Rural	62	72.78	7.98				

The above table shows that the computed 't' value 1.73 is less than the critical value 1.96 at 0.05 levels and hence it is not significant. Consequently, the null hypothesis is to be accepted.

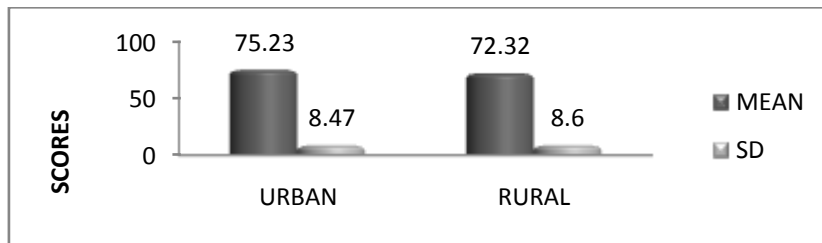


Cylinder shows the mean difference in Attitude towards E-Learning among the Postgraduate Students with Respect to their Residence

Test of Significant of Difference in Attitude towards E-Learning Among the Postgraduate Students between Rural and Urban College

Locality of the College	N	M	SD	SE <sub>d</sub>	M1~M2	df	't'
Urban	174	75.23	8.47	1.17	2.90	248	2.46*
Rural	76	72.32	8.60				

The above table shows that the computed 't' value 2.46\* is greater than the critical value 1.96 at 0.05 levels and hence it is significant. Consequently, the null hypothesis is to be rejected.

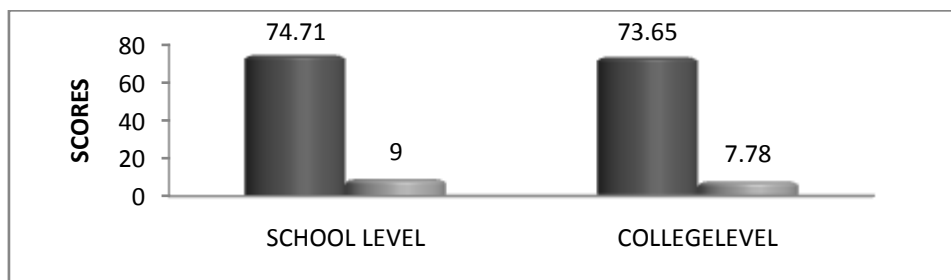


Cylinder shows the mean difference in Attitude Towards E-Learning among the Postgraduate Students between Rural and Urban College

Test of Significant of difference in Attitude Towards E-Learning Among the Postgraduate Students with Respect to Their Parents Educational Qualification

Parents Educational Qualification	N	M	SD	SE <sub>d</sub>	M1~M2	df	t
School level	164	74.71	9.00	1.09	1.06	248	0.97*
College level	86	73.65	7.78				

The above table shows that the computed 't' value 0.97 is less than the critical value of 1.96 at 0.05 levels and hence it is not significant. Consequently, the null hypothesis is to be accepted.

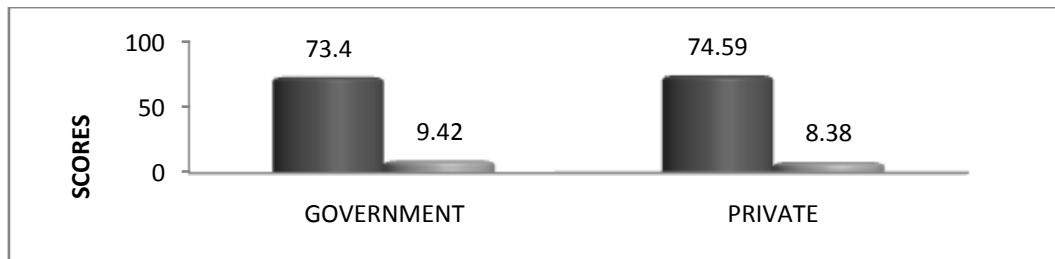


Cylinder shows the mean difference in Attitude Towards E-Learning among Postgraduate Students with Respect to their Parents' Educational Qualification

Test of difference in Attitude Towards E-Learning Among the Postgraduate Students with Respect to their Parental Occupation

Parents Occupation	N	M	SD	SE <sub>d</sub>	M1~M2	df	t
Government	52	73.40	9.42	1.43	1.19	248	0.83*
Private	198	74.59	8.38				

The above table shows that the computed 't' value 0.83\* is less than the critical value of 1.96 at 0.05 level and hence it is not significant. Consequently, the null hypothesis is to be accepted.

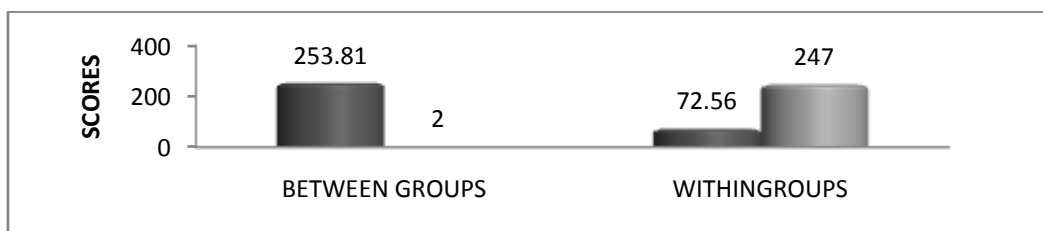


Cylinder shows the mean Difference in Attitude Towards E-Learning Among Postgraduate Students with Respect to their Parental Occupation

Test of Differences in Attitude Towards E-Learning Among the Postgraduate Students with Respect to Their Types of Management

Source of variation	Sum of squares	Df	Mean	'F' value
Between groups	507.62	2	253.81	3.49*
Within groups	17921.49	247	72.56	

The above table shows that the computed 'F' value 3.49 is less than the critical value 4.78 at 0.01 levels and hence it is not significant. Consequently, the null hypothesis is to be accepted.

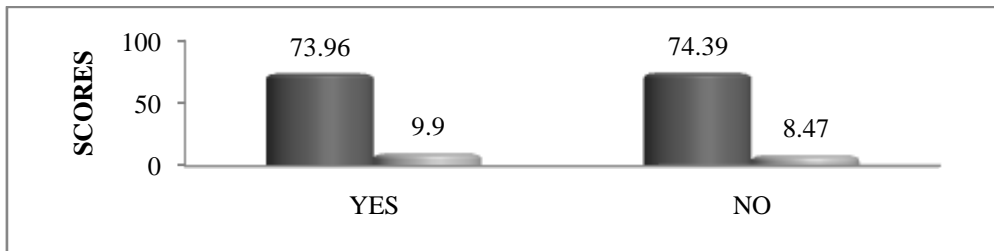


Cylinder Shows the Significance of Differences in Attitude Towards E-Learning Among Postgraduate Students with Respect to their Types of Management

Test of Significance of Difference in Attitude Towards E-Learning among the Postgraduate Students those who Have Computer in Home Or Not

Computer in home	N	M	SD	SE <sub>d</sub>	M1~M2	df	t
Yes	25	73.96	9.90	2.05	0.43	248	0.21*
No	225	74.39	8.47				

The above table shows that the computed T' value 0.21 is less than the critical value of 1.96 at 0.05 levels and hence it is not significant. Consequently, the null hypothesis is to be accepted.



The Cylinder Graph shows the mean Difference in Attitude Towards E-Learning Among Postgraduate Students who have having Computer at Home or Not

## Conclusion

Most of the teachers and teacher-educators do not have an open mind on the use of e-learning material in general as well as for teaching purposes. The teachers and teacher-educators should be motivated to get training in the use of e-learning material. It can be done with the use help of various types of workshops, which will develop in them a positive attitude towards e-learning. One of the findings of the study shows that students have a favorable attitude towards e-learning. In this age of competition, students want to get the latest information not only in the field of academics but also in the field of jobs. So, the teachers and teacher-educators should motivate them to access different job opportunities. It indicates that students of every stream understand the importance of this modern facility, which helps them to explore various aspects in depth. In this way, e-learning has become part and parcel of everyone's life. Growth and development depend upon the frequent use of e-learning in every field.

## Recommendations

- Encourage all the universities to have networking among themselves by providing funds generously.
- Minimize the cost of computers and motivate the learners to purchase computers by offering loans with minimum interest.

- As Internet functioning needs the use of telephone, telephony should be technologically improved and the government should make all the local calls free, Internet access will become cheaper.
- Internet facilities should be provided to rural areas and a computer literacy program needs to be conducted in rural areas.
- Make the knowledge of computers compulsory for all types of recruitment.
- Develop the habit of reading through computer monitors.

### **Limitation of the Study**

Even though every attempt has been made to make the study more precise & objective as possible, the investigator in the present study noted a few limitations. The following are the important limitations. The present study was restricted to Post Graduate Arts and Science College students of Trichy District. The study was conducted among the Postgraduate Arts and Science College students and not extended to other students studying in engineering college because of various constraints.

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- Kalamadi. (2010) in her paper on “ICT for Capacity Building Programs in Teacher Training Institutions” discussed the role of ICT in building the capacity of student-teachers in Teacher Training Institutions.
- Rajeswari. (2009) conducted a study on “Awareness and Application of ICT in Higher Education at Kodaikanal”. This study discussed the awareness of ICT in Higher Education.

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## PROFESSIONAL ETHICS AS PERCEIVED BY THE SCHOOL TEACHERS IN MADURAI DISTRICT

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**P. Kavitha**

### **Abstract**

The present study reports on the professional ethics among school teachers. A stratified representative sample of 230 teachers constituted from various schools in Madurai District with due representation given to variables, viz. Gender, Kind of school and School location were selected for this study as sample. This study reveals that the teachers who are male teachers, those who have B.Ed. qualification, those who are Non-Hindu, those who are unmarried and those who are handling arts subjects possess a lower level of professional ethics than their counterparts.

**Keywords:** Professional Ethics, School Teachers

### **Need for the Study**

As long as children go to school to get knowledge and develop themselves, so long as teachers are in need, and as long as teachers are working with young personalities, so long as the question of their professional ethics is staying on the agenda. Ethics can be inborn but it can and should be developed. Some people are born tactful, tolerant and moral enough to become good professionals in terms of ethics. Some are taught how to behave in order to correspondent to necessary requirements of ethical conduct. What kind of a person one needs to be an ethical teacher? Certainly, a teacher has to be loyal, being patient to students and caring about them, despite their individual abilities.

As faculty members influence their surroundings as well students, so it is necessary that they are equipped by ethical education and moral virtues and familiarized with ethical principles. What worthy here is professional ethics which depends on faculty member's attitude and knowledge about it. Professional ethics is clearly defined as a set of moral codes and rules of the professional practice. Action framework and moral or immoral judgment is intended to professionals (zohor and khalaj, 1889). Professional ethics is a broader concept than business ethics. Professional in one's life involves professional and organizational ethics in whole. Everyone works with three ethics areas which are in common: personal ethics, business ethics, and organizational ethics (Qaramalaki, 1988). Recently, researches about professional ethics are relatively wide and many researchers studied this field which among them we can point to the necessity of moral codes and ethical components (Albafyan, 1988) ethical standards in business (Vadadhyr and others,

1987)ethics in Entrepreneurship (Khanijazani, 1987) the nature, methods and challenges of applied ethics (Khazae, 1985)) work culture and ethics pathology (Zandipor ,1388);the relationship between Islamic ethics, business, and organizational commitment among managers (Rashidi, 1983) theoretical foundations of Professional ethics in Islam (Ameli, 1981), the relationship between solicitors professional ethics (Josephmahalle, 1986) ethics of professional bus and truck drivers (Ebrahim-Nia, 1975); the community work culture and work ethics of a sociological perspective (Sultanzade, 1983); the amount of professional ethics of nurses (Deenmohammad, 2003);scientific" status of professional ethics in higher education quality assurance (Frastkhah, 2005); the relationship between organizational commitment and profession (Abtahi, and Mowla'ii, 1986)); work ethic and its effective factors among administrative staff (Moidfar, 2005); teaching ethical principles based on Islamic ethics (Bironi Kashani, and Bagheri, 2006); ethics in Total Quality Management (Sarmadi, and, Shalhaf , 1386). Abroad research also indicates that there are concerns about professional ethics especially in human dignity is a key dimension. (Ubenstein. 2010); the results of school education field indicates that some factors such as climate department, and the student experience is closely linkage with morality (Vadadhyr.and others, 1387); some researchers emphasized to professional ethics as an academic course (Davis and Walton, 2007); some studies have emphasized the role of the teacher as a moral and spiritual factors in the classroom (Campbell and Thiessen, 2010). In this regard, special standards, and codes of ethics are important for training centres, particularly the faculty training (Vontz, 2007)

Teacher should not shout at students and demonstrate irritation. That doesn't mean that teachers should allow everything or let alone allow disrespect. Today students rarely hear about punishment, which was an indispensable element of education some centuries or even decades ago. Some conservative-minded people claim that punishment brought positive fruit in the form of students' commitment to discipline and self-discipline, as a result. Teachers' ethics should not allow teachers choose "favorites" in the group and differentiate students. If one monitors Mass Media reporting or at least tracks mainstream reports one will definitely recollect some notorious cases of teachers' sexual harassment, which shock public. Sure, sexual harassment is probably most dishonorable examples of violating teacher's ethics and is even a subject of criminal law. Teachers are the people, who should serve for students not only as examples of high education but of decent behavior as well. That is why each violation of teacher's ethics may cause some really serious consequences and turn into crucial mistakes. Moreover, the investigator being a teacher educator having varied experiences at schools and colleges as learner and teacher is highly interested in analyzing the present teacher's ethical views, opinions and beliefs. It is in this

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context, the investigator has taken this study to measure and find out the professional ethics of school teachers. Hence the conduct of the present study.

### **Terms and Definitions**

**Professional Ethics** - refers to moral principles considered for deciding what is right and what is wrong in their profession by the teachers selected for the study. The score gained by the sample population (Teacher), out of the Professional Ethics Rating Scale.

**School Teachers** - refer to the teachers who are handling classes VI through XII standard in Tamil Nadu State Board Schools at Madurai District.

**Madurai District** - refers to one of the southern district in the state of Tamil Nadu

### **Variables of the Study**

#### **Dependent Variable**

Professional Ethics

#### **Independent Variables**

Gender, Age, Qualification, Teaching experience, Designation, Residence, Family income, Family type , Marital status, School locality, School kind, Subject teaching and Nature of employment

### **Objectives of the Study**

1. To measure the level of professional ethics among the school teachers.
2. To find out whether the select independent variables influence the professional ethics among the school teachers.

### **Hypotheses of the Study**

The study has been designed to verify the following hypotheses:

1. School teachers have above the average level of professional ethics.
2. Select independent variables that exert a significant influence on professional ethics among the School teachers.

### **Sample**

A stratified representative sample of 230 teachers constituted from various schools in Madurai District with due representation given to variables, viz. Gender, Kind of school and School locality.



## Tools

The tools used for data collection are as follows:

1. Professional (Teacher) Ethics Rating Scale Constructed and Standardized by Sathiyagirirajan S., (2010)
2. Personal Data Sheet structured by the Investigator

## Statistical Treatments

Test of significance of difference of the means of large independent samples.

## Professional Ethics Among School Teachers

The mean of the Professional ethics among school teachers in this study is found to be value is 89.30 while the theoretical average is 80 only. Thus the school teachers have more than the average level of professional ethics.

## Differential Studies on Professional Ethics

### Professional Ethics and Independent Variables

The details of results of test of significant difference between the mean scores of Professional ethics in terms of Independent variables are given in table.

**Table 1:** Statistical Measures and Results of Test of Significance of Difference Between The Means of Professional Ethics: Independent Variables – Wise

Variable	Sub-variables	N	M	SD	't' - value	Significance At 0.05 level
Gender	Male	86	86.387	14.688	2.174	Significant
	Female	144	90.747	12.398		
Age	Upto 40	73	89.589	13.278	0.225	Not Significant
	41 and above	157	89.165	13.332		
Qualification	B.Ed.	127	87.433	13.393	2.401	Significant
	M.Ed.	103	91.601	12.850		
Teaching Experience	Below 5 years	180	90.005	12.075	1.274	Not Significant
	5 and above	50	86.760	16.855		
Designation	B.T.	167	89.802	12.659	0.868	Not Significant
	P.G.	63	87.968	14.854		
Residence	Rural	158	88.898	12.322	0.626	Not Significant
	Urban	72	90.180	15.252		
Family income	Adequate	149	88.879	12.675	0.627	Not Significant
	Inadequate	81	90.074	14.397		
Family type	Joint	179	89.731	13.207	0.908	Not Significant
	Nuclear	51	87.784	13.590		

Marital status	Married	161	91.018	12.050	2.716	Significant
	Unmarried	69	85.623	15.777		
School locality	Rural	176	89.647	13.302	0.716	Not Significant
	Urban	54	88.166	13.301		
School kind	Unisex	179	89.709	12.850	0.810	Not Significant
	Mixed	51	87.862	14.768		
Subject teaching	Arts	160	87.425	13.278	2.518	Significant
	Science	70	93.300	13.186		
Nature of employment	Permanent	162	90.179	11.942	1.383	Not Significant
	Temporary	68	87.205	15.951		

### Hypotheses Verification

The study has been designed to verify the following hypotheses:

1. School teachers have above the average level of professional ethics- Accepted.
2. Select independent variables that exert a significant influence on professional ethics among the School teachers.

Out of thirteen independent variables four variables exert significant influence on professional ethics among the School teachers– Hence Hypothesis is minimally accepted.

### Conclusions

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

1. Professional ethics among School teachers in general, is found higher than the average level.
2. Professional ethics among School teachers is found dependent on
  - Gender
  - Qualification
  - Marital status
  - Subject teaching

### Educational Implications

It is quite heartening to find that the professional ethics among school teachers are found above average level.

This study also reveals that the teachers those who are male, and those who have B.Ed. qualification, those who are unmarried and those who are handling arts subjects possess a lower level of professional ethics than their respective counterparts. Hence the educational administrator may take steps to enhance professional ethics among the above-mentioned school teachers which in turn paves the way to commitment towards their profession as well as to society.

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## DECISION MAKING BEHAVIOUR AMONG HIGHER SECONDARY STUDENTS

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**V. Meenakshi**

### **Abstract**

The study aimed to identify the decision making behaviour of higher secondary students. The multi-stage random sampling technique was used to draw a sample of 355 students from Madurai District. The instrument for data collection named as Decision Making Styles Questionnaire developed by Rajaram, K (2009). The data was collected through the survey research method and was analyzed by applying descriptive statistics i.e. mean and standard deviation and inferential statistical analysis technique. The results of the study revealed that there was a significant difference in Decision Making Behaviour of higher secondary students in terms of Gender, School locality, School kind and Medium of Instruction

**Keywords:** Decision Making Behaviour, School Students & Problem Solving

### **Need for the Study**

Our decisions determine the outcome of our lives. People forget the great power they hold within that will shape their life and they ignore the importance of decision making. Well, don't be one of those underplaying the importance of being one of life's decision makers. Our life is shaped by the choices we make. We are the one who chooses how to live our life or create our life's path. So make the decisions that will take our life in the direction we require.

“Success and failure are not overnight experiences. It's the small decisions along the way that cause people to fail or succeed.” Anthony Robbins

Sometimes we rush into making decisions and regret the choices we make. A hasty decision could lead to long-term disappointment. So it's best you think through everything clearly, but don't delay too long, because sometimes we'll go past the point where our decisions matter.

Our decision is final is an expression we hear a lot. And the truth is to move forward we have to make decisions and stick with them. But it is of utmost importance to look at each question clearly that is associated with the decision we are about to make and determine categorically whether it is the right one. Coming up with the right answer can be hard, even uncomfortable, but it is essential. What we were reminded by this situation was that we should frequently be visualizing the life we really want. What does it look like, what

does it feel like? This will help us to make decisions in alignment with our dreams. We should stop and examine the choices we make, evaluating them to determine they fit with our chosen path.

Decision making style is a learned, usual response pattern that a person shows in a decision situation (Ding, Xu, Yang, Li & Heughten, 2020). Decision making styles are a blend of how a person recognizes and understands the situation and the manner in which he / she selects the alternative to respond to a particular situation (Greenberg, 2016). Decision making styles with alternatives are chosen by managers. Vroom-Yetton decision making styles are focused on such circumstances and conditions in which managers collaborate with others in decision making.

These styles present the matter of participation of subordinates in a more complex way and also assist the managers in judging the situation and determining the style of decision making which may be currently useful to resolve the issue (Chitpin & Evers, 2015). Good, effective and successful decisions making styles always lead toward high quality, well-organized, understandable and acceptable for those whose assistance is required for its implementation (Nahavandi, Denhardt, Denhardt, & Aristigueta, 2015).

According to Vroom and Yetton (1974), decision making is a social process. They developed five decision making styles which are available to managers for use in any problematic situation. These styles include two autocratic, two consultative and one group decision making styles Decision-making can be regarded as a problem-solving activity yielding a solution deemed to be optimal, or at least satisfactory. It is therefore a process that can be more or less rational or irrational and can be based on explicit or tacit knowledge and beliefs. Tacit knowledge is often used to fill the gaps in complex decision-making processes. Usually, both of these types of knowledge, tacit and explicit, are used together in the decision-making process.

Human performance has been the subject of active research from several perspectives:

**Psychological:** examining individual decisions in the context of a set of needs, preferences and values of the individual have.

**Cognitive:** The decision-making process is regarded as a continuous process integrated into the interaction with the environment.

**Normative:** the analysis of individual decisions concerned with the logic of decision-making, or communicative rationality, and the invariant choice it leads to. A major part of decision-making involves the analysis of a finite set of alternatives described in terms of

evaluative criteria. Then the task might be to rank these alternatives in terms of how attractive they are to the decision-maker(s) when all the criteria are considered simultaneously. Another task might be to find the best alternative or to determine the relative total priority of each alternative (for instance, if alternatives represent projects competing for funds) when all the criteria are considered simultaneously. Solving such problems is the focus of multiple-criteria decision analysis (MCDA). This area of decision-making, although very old, has attracted the interest of many researchers and practitioners and is still highly debated as there are many MCDA methods that may yield very different results when they are applied to exactly the same data. This leads to the formulation of a decision-making paradox. Logical decision-making is an important part of all science-based professions, where specialists apply their knowledge in a given area to make informed decisions.

The decision-maker's environment can play a part in the decision-making process. For example, environmental complexity is a factor that influences cognitive function. A complex environment is an environment with a large number of different possible states which come and go over time. Studies done at the University of Colorado have shown that more complex environments correlate with higher cognitive function, which means that a decision can be influenced by the location. One experiment measured complexity in a room by the number of small objects and appliances present; a simple room had less of those things. Cognitive function was greatly affected by the higher measure of environmental complexity, making it easier to think about the situation and make a better decision.

It is important to differentiate between problem solving, or problem analysis, and decision-making. Problem solving is the process of investigating the given information and finding all possible solutions through invention or discovery. Traditionally, it is argued that problem solving is a step towards decision making, so that the information gathered in that process may be used towards decision-making.

### **Characteristics of Problem Solving**

- Problems are merely deviations from performance standards.
- Problems must be precisely identified and described
- Problems are caused by a change from a distinctive feature
- Something can always be used to distinguish between what has and hasn't been affected by a cause
- Causes of problems can be deduced from relevant changes found in analyzing the problem

- Most likely cause of a problem is the one that exactly explains all the facts, while having the fewest (or weakest) assumptions (Occam's razor).

### **Characteristics of Decision-Making**

- Objectives must first be established
- Objectives must be classified and placed in order of importance
- Alternative actions must be developed
- The alternatives must be evaluated against all the objectives
- The alternative that is able to achieve all the objectives is the tentative decision
- The tentative decision is evaluated for more possible consequences
- Decisive actions are taken, and additional actions are taken to prevent any adverse consequences from becoming problems and starting both systems (problem analysis and decision-making) all over again
- There are steps that are generally followed that result in a decision model that can be used to determine an optimal production plan
- In a situation featuring conflict, role-playing may be helpful for predicting decisions to be made by involved parties.

The assessment of students' decision making style can help teachers to plan instruction and structure the classroom environment so as to help students develop more enlightened beliefs about learning. Hence the researcher wants to know the level of decision making style among higher secondary students. Hence conduct of the current study.

### **Terms and Definitions**

**Decision making behaviour-** refers to the selection of a belief or a course of action among several alternative possibilities

**Higher secondary school students** – refers to students who are studying in XI and XII standard in government, aided and unaided schools in Madurai District under the state board syllabus of Tamil Nadu State.

### **Variables of the Study**

The variables involved in this study are as follows:

#### **Dependent Variables**

Decision Making Behaviour

## Independent Variables

1. Gender : Male / Female
2. Medium of instruction : Tamil / English
3. School Locality : Urban / Rural
4. School Kind : Unisex / Mixed
5. School Management : Government / Self-Financing
6. No. of Intimate Friends : Many / Few
7. Residing in Hostel : Yes / No

## Objectives of the Study

1. To measure the Decision making behaviour among higher secondary school students.
2. To find out, whether there is a significant difference among higher secondary school students in terms of select independent variables in their Decision making behaviour

## Hypothesis of the Study

Select independent variables exert a significant influence on decision making behaviour among higher secondary school students.

## Methodology- in -Brief

**Design** : Descriptive

**Method** : Normative

**Technique** : Survey

## Sample

A sample of 355 higher secondary school students in Madurai District selected as the subjects of the study.

## Tools used

1. Personal Information Schedule
2. Decision Making behaviour Inventory constructed and standardized by Rajaram, K. (2009).

## Statistical Treatment

Test of significant differences between the large independent sample.

## Delimitations of the Study

Though there are three kinds (State board, ICSE and CBSE) of the school system at the high school stage, this study involved state board system students only. Hence the



findings of the present study need not necessarily be applicable to the ICSE and CBSE school students. There may be more variables influencing the decision making style and achievement in mathematics of the students. But seven variables are taken for this study. The samples were collected from Madurai district only. These are the delimitations of the present study.

## Analysis and Interpretations

### Decision Making Behaviour Among Higher Secondary School Students

The empirical average score of decision making behaviour among higher secondary school students is found to be 46.17, while the theoretical average is 40 only. This shows that the Decision making behavior among the higher secondary school students is above the average level. In other words, Decision making behaviour is found to be good among higher secondary school students.

**Table:** Statistical Measures and Results of Test of Significance for Difference Between the Means of Decision Making Behaviour: Independent Variables– Wise

Variable	Sub-variables	N	M	SD	't' - value	Significance At 0.05 level
Gender	Male	120	44.001	8.170	3.743	Significant
	Female	235	47.242	6.753		
Medium of instruction	Tamil	283	46.523	8.108	3.045	Significant
	English	72	44.666	3.166		
School locality	Rural	212	47.306	5.165	3.279	Significant
	Urban	143	44.426	9.609		
School kind	Unisex	175	44.240	7.630	6.483	Significant
	Mixed	180	48.000	6.711		
School management	Govt. / aided	261	46.325	8.155	0.959	Not significant
	Self-finance	94	45.648	4.782		
No. of intimate friends	Few	94	42.074	8.868	5.581	Significant
	Many	261	47.613	6.207		
Residing in hostel	Yes	117	46.521	5.953	0.738	Not significant
	<b>NO</b>	<b>238</b>	<b>45.962</b>	<b>8.038</b>		

Five out of seven independent variables taken up in this study exert any significant influence on decision making behaviour among higher secondary students. Hence hypothesis is substantially accepted.

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## Conclusions

1. Higher secondary school students have good Decision making behaviour.
2. Decision making behaviour among higher secondary school students is dependent upon
  - Gender
  - Medium of instruction
  - School locality
  - School kind
  - No. of Intimate friends
3. Decision making behaviour of higher secondary school students is independent upon
  - School management
  - Residing in Hostel
4. Decision making behaviour among the higher secondary school students in favour of
  - Female than Male students
  - Those who are studying in Tamil medium than English medium
  - Those who are studying in Rural schools than Urban schools
  - Those who are studying in co-education schools rather than unisex schools
  - Those who have many friends than those who have few friends.

## Educational Implications

Nowadays a lot of attention is paid to the construction of learning environments that provide instruction tailored to higher secondary school students' needs. Harel & Dubinsky (1992) argue that higher secondary school students who can use multiple representations of a concept yield deeper and more flexible understandings than those who use fewer representations. The multiple representations have become more accessible, for functions in particular, through technological advancement.

The assessment of higher secondary school students' decision-making style can help teachers plan instruction and structure the classroom environment so as to help higher secondary school students develop more enlightened beliefs about mathematics and mathematics learning.

This study reveals that the higher secondary school students those who are male, who are studying in English medium, who are studying in urban schools, who are studying in unisex schools and who have few friends have less decision-making style and achievement in mathematics than their counterparts. Hence they should be facilitated through proper training for developing their Decision-making behaviour.

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## MADURAI KAMARAJ UNIVERSITY CENTRE FOR EDUCATIONAL RESEARCH

The Centre for Educational Research, Madurai Kamaraj University, was commissioned on 15-07-2008, in commemoration of the 106th Birthday celebrations of Bharath Rathna Shri. K. Kamaraj.

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