

OJSS July 2020

ISSN 2321 - 3493

Bi-Annual Journal
English

VOL.7(2)



ODISHA JOURNAL OF SOCIAL SCIENCE

ODISHA JOURNAL OF SOCIAL SCIENCE

VOLUME - 7
ISSUE - 2

ODISHA JOURNAL OF SOCIAL SCIENCE**A Bi-Annual Research Journal (English)****Members of Advisory Board:**

Prof. Alan D. Scott, (USA)
 Prof. Mieke O. Mandagi
 (Indonesia)
 Prof. Jung-NimKim (Japan)
 Prof. Nibedita Jena (India)
 Prof. A. Anjum (India)
 Dr. Laxmi Rani(India)
 Dr. Kirti Ranjan Swain (India)
 Dr. Mamata Mahapatra (India)
 Dr. Jyotimaya Satpathy (India)
 Dr. Barada Prasad Bhol (India)
 Dr. Ahalya Hejmadi (USA)

Chief Editor:

Dr. Santa Misra (India)

Co-Editor:

Prof. Ryo Takahashi (Japan)

Honorary Editor :

Prof. Irina Pervova (Russia)

Reviewer:

Prof. Michael C. Sturman,

Ithaca, New York

Prof. Raquel R. Smith, USA

Dr. Haresh Chandra Mishra (India)

Special Consultant:

Prof. Banamali Mohanty (India)

Dr. B. P. Rath (India)

Contents

Sl. No.	Topic & Author	Pg. No.
1	Edification through zen & zanshin from Sri Lanka for Japan in peace and harmony *Ryo Takahashi	01-07
2	A cognitive consonance between businesses intelligence and decision-making in BANCASSURANCE. *Soumen Nanda	08-26
3	Super Brain Yoga: A Panacea for positive wellbeing. *Upasana Mehra **Dr. Niharika Das	27-41
4	Assessment Of Adaptation And Coping Skills Among Adolescents *Madhumita Guru **Professor (Dr) Nibedita Jena	42-53
5	Covid -19 and Fear Psychosis : An overview *Prof. Santa Misra	54-65
6	Indigenous Psychologies of India *Late Prof. Adhikari Srikanta Dash	66-75
7	Elementary Education the Need of the 'DAY' *Dr. Nutan Kumari	76-86
8	Idea to Sublimate Ballet Into preventive Medicine for Knee Pain *Dr. Chiiho Sano	87 - 94
9	Teachers' Perception Of Need For Spiritually Healthy Lifestyles *Bina Kumari **Cyma Anjum	95 - 99
10	Autism Spectrum Disorder: Analysis Of A Case Study *Santwana Mohanty **Swagatika Panda	100 - 111

DECLARATION

1. Title of the Journal : ODISHA JOURNAL OF SOCIALSCIENCE
2. Language in which
It is published : English
3. Periodicity of Publication :Half-yearly
4. Publisher's Name,
Nationality & Address : Prof.(Dr) Santa Misra,
Visiting Prof in Psychology,
International Institute of Rehabilitation
Sciences and Research,
Bhubaneswar-751030, ODISHA,
(INDIA).
Indian
5. Place of Publication : 2624/3484, Baragada Canal Colony,
At/Po.-BJB Nagar, Bhubaneswar-751014
ODISHA(INDIA)
6. Printer's Name
Nationality & Address : Millenium Art Press, Jaydev Vihar,
Bhubaneswar, Odisha(INDIA)
7. Chief Editor's Name,
Nationality & Address : Prof .(Dr) Santa Misra,
Visiting Prof in Psychology,
International Institute of Rehabilitation
Sciences and Research,
Bhubaneswar-751030 ODIS(INDIA)
India
8. Owner's Name :Dr. Santa Misra
2624/3484,Baragada Canal Colony,
At/Po.-BJB Nagar, Bhubaneswar-751014
ODISHA (INDIA)

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

31st July, 2020



**(Santa Misra)
Publisher**

EDITORIAL

Amidst the crucial condition of pandemic Covid -19, when the whole world is concerned of its fatal consequences, Odisha Journal of Social Science is going ahead with its publication of July 2020 issue ,Volume -7 (2), as usual. This issue consists of the papers related to the facts like current affairs of Corona infections, its manifestations, spread, the causal factors, prohibition, prevention, control and suggestions on the same. Focus is given to fear psychosis among the people due to the dreadful hanging effects of Covid-19. Similarly cognitive sphere of mental functioning, teacher education, teaching learning situation in present scenario, inclusive & integrated education and elementary education also have their unique space in this issue with the 'Teachers' Perception of 'Need for Spiritually' to lead a healthy life-style .

Another interesting concern of this issue consists of the effects of 'super brain Yoga', the simple but important technique of yoga practice that helps in promoting healing process, immunity and, above all, the positive wellbeing. The issue also focuses on educating and fostering the behaviour of the mentally challenged and children with special needs describing several therapeutic techniques that can help in controlling, managing, challenging and maintaining their life leading processes. On its way, this volume highlights the recent system of Bancassurance in banking sector and how the cognitive consonance between business intelligence and decision making style have an effect on bankers, customers and other policy makers in the sector. Besides, the research on adaptation and coping skills of the adolescents in developing a healthy life is having its position in the issue. There is also evidence on international fellow feeling dealing with how Sri Lanka gave support to Japan for peace and harmony in the years following World War-II.

This issue also uniquely focuses on the various worthwhile parts of indigenous psychology. The author of one such papers, Prof Adhikari Srikant Dash, who recently passed away, submitted the paper earlier, but could not stay with us till its publication. I, on behalf of all the editorial board members and the contributors of the journal, pay heartfelt homage to the departed soul.

The valuable contributions from eminent authors have made this volume of Odisha Journal of Social Science rich and relevant .I take the opportunity to congratulate all the contributors who have made this volume innovative, informative and metacognitive.



Prof. Santa Misra
Chief Editor

31st July, 2020

EDIFICATION THROUGH ZEN & ZANSHIN FROM SRI LANKA FOR JAPAN IN PEACE AND HARMONY

***RyoTakahashi**

Abstract

Japan is one of the Asian countries which has been influenced and supported through Asian countries. This paper is discussed about Sri Lanka which gave support Japan to be independent. President Jayawardene's words gave peace to Japan and world that Asian people who want independence in the ideals set by Japan have sympathized with them." Quoting Buddha's words, "Stop by charity". This contained philosophy of Zanshin in Bushido and Zen through Buddhism.

Keywords: *Jayewardene, Zen, Zanshin, Edification, Sri Lanka*

INTRODUCTION

Many people are interested in Zen. Zen came from the Japanese term for the principle in Buddhism(Muelle 2019). The term Zen is derived from the Japanese pronunciation of the Middle Chinese word chan, which is a Chinese transliteration of the Sanskrit word of dhyāna ("meditation"). Bushido stresses importance of Zanshin within Buddhism. Zanshin is understood as the state when the mind is fully vigilant and aware of its surroundings; when the mind remains still without being attached to anything and is totally present during every moment and action in the here and now. Zanshin Zanshin is a concept found in Zen, Budo (Japanese martial arts), particularly Kyudo, Kendo, Shogido and in many Japanese arts, such as Ikebana (flower arrangement), Sado (the tea ceremony) and Shodo (ink painting), as well. We can Keiko in Bushido for practice among master and disciples. Keiko means to learn from the ancestors and old cultures in Japan. That can be understood as adaptive practical philosophy, as well. In nowadays,it is used not only martial arts and performing arts, but what masters and teachers teach is called practice. Also, practicing what you have just learned is called practice. Rehearsals include not only traditional performing arts but also piano lessons. In each case, we will improve our ability by practicing and practicing. Rehearsal is also used in the meaning of "rehearsal", but it is also used not only in the arts but also when it is not called "rehearsal" because it is included philosophy with all actions in all learning process in all life.

Keiko has philosophy to learn each other regardless age and length of experience with respect which is called Edification. The word edify comes from the French edifier and from the Latin aedificare and means to "improve spiritually" and to "instruct" (Robert K. Barnhart, The Barnhart Dictionary of Etymology [New York: H. W. Wilson Company, 1988], s.v. "edify," 315). The Oxford English Dictionary gives this meaning: "In religious use: To build up (the church, the soul) in faith and holiness; to benefit spiritually; to strengthen, support" (2nd ed., s.v. "edify," 5:71). Thus, to edify is to instruct and improve the soul in knowledge generally, and in particular to increase in moral and religious knowledge, in faith and holiness. To edify is part of a revelatory process.

*Professor Sendai University. Email – ro-takahashi@sendai-u.ac.jp

The word revelatory refers to the supernal gifts of the Spirit, the source of all light and truth. (Jensen 2011). Zen is not only practice, but also meditative prayer to universe. People may not be recognized that is pray or meditation. It is not really important because everything is relating to harmonize to one common language of human beings in universe as we breathe in each moment time. This paper is considered how men have been edified to create harmony through such practical philosophy.

SRI LANKA AND JAPAN THROUGH SIR JUNIUS RICHARD JAYEWARDENE

The author has known India as my second home country during living with my family(wife and two daughters) in Visakhapatnam of Andhra Pradesh for preparing International Gerontology Conference during staying with my family from 2008 to2009. At that that I have heard the name of the country, Sri Lanka, but I did not have chance to visit Sri Lanka. Sri Lanka is geographically separated from the Indian subcontinent by the Gulf of Mannar and the Palk Strait. Sri Jayawardenepura Kotte is the legislative capital while Colombo is the largest city and center of commerce. According to Wikipedia, Sri Lanka's...documented history spans 3,000 years, with evidence of pre-historic human settlements dating back to at least 125,000 years. It has a rich cultural heritage, and the first known Buddhist writings of Sri Lanka, the Pāli Canon, date back to the Fourth Buddhist council in 29 BC. Its geographic location and deep harbors made it of great strategic importance from the time of the ancient Silk Road through to the modern Maritime Silk Road. The above information is easy to access though books and internet, however we cannot access grassroots human network without listening with understanding heart.

I have known Ms. Reiko Takahashi on Oct 20, 2019 according to my journal as follows:’ While I was driving I saw the sign of Sri Lanka Center –Curry. I thought why a person decided to open up Sri Lanka Center. So, I decided to turn right to go about 900m in Natori city area. When I arrived to the parking lot, it was dark that I did not find the restaurant. I thought that they were closed or ended up the business. I decided to return to my apartment in Funaoka (Shibata Town, Miyagi Prefecture). But, at a moment I saw a light in a house to the back area. I stopped and walked to the place. I found that was curry restaurant. When returned to a car, the Holy Ghost whispered me that I should bring a business card. I just came to see why Sri Lanka Carrey restaurant is here. I ordered Carrey set (1380yen) with salad and ice cream.

After eating all I asked a lady why Sri Lanka Restaurant you decided to open up. Her mother around 80th came to me to explain. She was working as a jeweler, especially she was focusing to Ruby. That was reason why she visited Sri Lanka for collecting cherry pink ruby. She planned tour to Sri Lanka from Japan, as well. When she was reading about history of former Prime Minister Shigeru Yoshida, she found about relationship with treaty of San Francisco Treaty of Peace with Japan. It was officially signed by 49 nations on September8, 1952 and Junis Richard Jayewardene(17 September 1906-1 November 1996)from Sri Lanka(old called Ceylon) 2nd President of Sri Lanka in office 4 February 1978-2 January 1989. I brought my business card to introduce myself to Ms. Takahashi. I repented immediately that I did not listen to a small voice of the Holy Ghost. We exchanged the cards. I will write in English for Santa Misra’s Odisha Journal. Please bless me through the Holy

Ghost. I humbly pray in the name of Jesus Christ, Amen. P.S. Ms. Reiko Takahashi did signature collection to bring Sri Lanka airplane to Japan, as well.

I pray on the name of Jesus Christ, Amen.'(Takahashi Viol78: 92-95). The following photos were provided by Ms. Reiko Takahashi. When I asked why Sri Lankan Airline's model is displayed. Ms. Takahashi replied that she was voluntarily working to bring Sri Lankan Airline to Japan by a signature-collecting campaign to everywhere she could do as much as possible. According to Sendai City Mayor Ms. Kazuko Koori had kept in her diary on October 09, 2007 (Tue) as follows: It was a chilly morning....We had a meeting at the office, visited Mr. K, who was preparing for surgery, and then extended his legs a little and had a delicious curry at the Sri Lanka Center. Ms. Reiko Takahashi of the Sri Lanka Center is a kind ambassador who is a private friend between Japan and Sri Lanka. I took care of me during the Tohoku Broadcasting Era, and after a long time I had a special curry.(<http://www.koorikazuko.jp/diary/1671/>)

Photo1 Reiko Takahashi, Chndrika Kumar Bandaranaike & President Jayewardene



Photo2 Sri Lankan

3. Sir Junius Richard Jayewardene and Japan

Junius Richard Jayewardene(17 September 1906 – 1 November 1996), commonly abbreviated in Sri Lanka as J. R., was the leader of Sri Lanka from 1977 to 1989, serving as Prime Minister from

1977 to 1978 and as the second President of Sri Lanka from 1978 till 1989. He was a leader of the nationalist movement in Ceylon (now Sri Lanka) who served in a variety of cabinet positions in the decades following independence. A longtime member of the United National Party, he led it to a landslide victory in 1977 and served as Prime Minister for half a year before becoming the country's first executive president under an amended constitution. Jayawardana converted from Christianity to Buddhism and earned outstanding results at Colombo Law School and became a lawyer. However, he did not stay in the legal profession for a long time.



In 1951, he joined the United Nations as Finance Minister, and in the same year he attended the San Francisco Peace Conference as Ceylon representative. In a conference speech at that time, Jayawardene said, **"I want you to remember that Asian people who want independence in the ideals set by Japan have sympathized with them."** Quoting Buddha's words, **"Stop**

by charity," Ceylon (now Sri Lanka) gave a speech to waive claims for compensation from Japan and gained the support of each country, paving the way for Japan to return to the international community (Noguchi 2018).

In 1983, when the capital of Sri Lanka was relocated from Colombo to the ancient city of Kotte, Kotte was once called Sri Jayawardenepura Kotte with his own surname (a city with a shining victory) After renaming, the capital was relocated. In 1977, he was elected Prime Minister without a vote and worked energetically. In 1978, he became the first president.

Shigeru Yoshida and Jayewardene

Shigeru Yoshida (Shigeru Yoshida, 1878 September 22-1967 October 2nd is a Japanese diplomat and politician. President of Kogakkan University (1st), Director of Nikumatsu Gakusha (5th) Was held. Shigeru Yoshida met the young representative of Sri Lanka and thanked him for his speech. He frequently visits Japan as a minister, prime minister, and president, and has visited Japan even after retirement(Okazaki 2003). He also worked on exchanges between Japan and Sri Lanka, inviting Japanese Buddhist officials to Sri Lanka. In 1989, he attended on behalf of President Premadasa with his wife at the wish of Emperor Showa's



Photo4 Shigeru Yoshida

great mourning.

Already his title was "ex-President", he was treated as a former guest and a guest of the same rank. 1991 Visits Hiroshima City with the invitation of Japanese Buddhism officials and tours the Hiroshima Peace Memorial Museum. November 1, 1996-Eye donation and cornea donation at the age of 90 at the age of 90. One eye was given to Japan, saying, "The right eye is for Sri Lankans and the left eye is for Japanese." According to his will, the left eye was transplanted to a woman in Nagano prefecture. In the past, Prime Minister Shigeru Yoshida said that **"Japanese people have to convey the benefits to Sri Lanka forever."** However, more than 70 years have passed since the end of the war, There are very few Japanese can speak about Japan's deep bond with Sri Lanka. Mr. Jayewardane, Sri Lanka's representative, quoted the Buddha's words and preached courtesy and tolerance between the nations, and continued as follows:**"Why are Asian nations interested in Japan having to be free, because of our longstanding relationship with Japan, and also among the Asian nations? Only Japan is powerful and free, because of the high respect that Asian nations had in Japan when they looked up as parents and allies. "**

It was a peace meeting to discuss Japan's return to the international community. However, the meeting of a country was relentless, and Japan's division, restrictions Jayawardane's speech as follows: Mr. Vice-President and Friends.

I consider it a great privilege to be afforded the opportunity of placing before this assembly of fifty-one nations the views of the Government of Ceylon on the draft Treaty of Peace which we have been invited to approve. My statement will consist of the reasons for our acceptance of this treaty. and I shall also attempt to meet some of the criticisms that have been leveled against it. It is true that I can speak only on behalf of my Government, but I claim that I can voice the sentiments of the people of Asia in their general attitude towards the future of Japan.

We in Ceylon were fortunate that we were not invaded, but the damage caused by air raids, by the stationing of enormous armies under the South-East Asian Command, and by the slaughter-tapping of one of our main commodities, rubber, when we were the only producers of natural rubber for the Allies, entitle us to ask that the damage so caused should be repaired. We do not intend to do so, for we believe in the words of the Great Teacher whose message has ennobled the lives of countless millions in Asia, that “hatred ceases not by hatred, but by love.” It is the message of the Buddha, the Great Teacher, the Founder of Buddhism, which spread a wave of humanism through South Asia, Burma, Laos, Cambodia, Siam, Indonesia and Ceylon, and also northwards through the Himalayas into Tibet, China, and finally, Japan, which bound us together for hundreds of years with a common culture and heritage. This common culture still exists, as I found on my visit to Japan last week on my way to attend this Conference; and from the leaders of Japan, Ministers of State as well as private citizens, from their priests in the temples, I gathered the impression that the common people of Japan are still influenced by the shadow of that Great Teacher of peace, and wish to follow it. We must give them that opportunity. The purpose of the treaty then is to make Japan free, to impose no restrictions on Japan’s recovery, to see to it that she organizes her own military defense against external aggression. and internal subversion, and that until she does so, she invites the aid of a friendly power to protect her, and that no reparations be exacted from her that harm her economy. This treaty is as magnanimous as it is just to a defeated foe. We extend to Japan a hand of friendship, and trust that with the closing of this chapter in the history of man. the last page of which. we write today, and with the beginning of the new one, the first page together to enjoy the full dignity of human life in peace and prosperity.

Jayawardene and Daisetsu Suzuki

Daisetsu Teitaro Suzuki (18 October 1870 – 12 July 1966) was born in Kanazawa, Ishikawa prefecture, Japan. Dr. Suzuki was a Japanese author of books and essays on Buddhism, Zen that was instrumental in spreading interest in Zen. Dr. Suzuki was a professor of Buddhist philosophy in the middle decades of the 20th century, Suzuki wrote introductions and overall examinations of Buddhism, and particularly of the Zen school. He taught at Columbia University from 1952 to 1957.

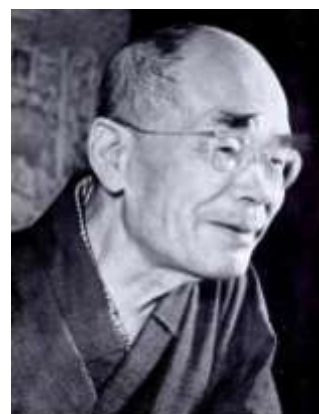


Photo 5 Daisetsu Suzuki

Daisetsu Teitaro Suzuki (18 October 1870 – 12 July 1966) was born in Kanazawa, Ishikawa prefecture, Japan. Dr. Suzuki was a Japanese author of books and essays on Buddhism, Zen that was instrumental in spreading interest in Zen. Dr. Suzuki was a professor of Buddhist philosophy in the middle decades of the 20th century, Suzuki wrote introductions and overall examinations of Buddhism, and particularly of the Zen school. He taught at Columbia University from 1952 to 1957.

When Jayawardene returned to Japan in 1979, a royal dinner was held for her being a Japanese benefactor(Kamisakamoto 2019). It has been almost 30 years since 1951, but President Jayawardene made another speech in front of His Majesty the Emperor as follows:“You were suffering from the catastrophe caused by the war. Some cities were completely destroyed, and more than half of Tokyo was destroyed. I visited several temples and met Buddhist leaders. I remember meeting with Dr. Daisaku Suzuki, who was considered the world authority on Zen since then. I asked Professor Suzuki how the Japanese people believe in Mahayana Buddhism and what we believe in, Mahayana Buddhism. Then the professor Suzuki said: Why do you try to emphasize the difference? Rather, both of us have a common understanding of protecting Buddhist monks, and I believe that we must adhere to Noble Eightfold Path to realize perseverance, suffering, and selflessness...When I returned to Japan in 1968, you were as prosperous as ever, in material terms. Today, the Japanese people have undergone a miracle revival, and the country has become rich and economically one of the world's leading countries.

But as we know it is not the only civilization. Even if the great, human-built structures around us disappeared, the words of Buddha we quoted in a speech in San Francisco just 28 years ago were remembered by people. It will be. As with all other nations, even with the epic power ending in Japan in its inevitable ending, the ideals that have spread from your temples and the meditation and pious words that your monks have practiced are remembered. And will shape the pattern of humanity for the coming generations.” This speech gave us a strong bond connecting Japanese Buddhists and Sri Lankan Buddhists.

CONCLUSION

The shadow of Buddhism has a great influence on Bushido. Inazo Nitobe talks about what Buddhism gave to Bushido as follows: Buddhism enumerates Bushido with a sense of peaceful reliance on fate, gentle obedience, ascetic serenity in times of danger and disaster, contempt for life and familiarity with death(Hanami 2018; Nitobe 2011). Zanshin is a central philosophy of Bushido. Zanshin is a way of Yawara. Zanshin is unconditional SOUL to grow for caring and concerning others even relaxing dairy living. Zanshin is to polite to others with humble heart to express thanks. Zanshin is a way of learning from everybody to grow oneself and going back to basic principle mind(Yui 2005). It is found in the Old Testament Bible in 1Kings 3:11-13 as follows:

11 And God said unto him, Because thou hast asked this thing, and hast not asked for thyself long life; neither hast asked riches for thyself, nor hast asked the life of thine enemies; but hast asked for thyself understanding to discern judgment;12 Behold, I have done according to thy words: lo, I have given thee a wise and an understanding heart; so that there was none like thee before thee, neither after thee shall any arise like unto thee. 13 And I have also given thee that which thou hast not asked, both riches, and honour: so that there shall not be any among the kings like unto thee all thy days. This explains human life and may be self-esteem with nothing which we call Mu in Japanese. In the world of traditional thinking way(do) like Shogido(Japanese chess), the spirit appears at the end of the game. Do or”do”means road.

This kanji character is made up of a combination of “neck and “shinyu”. In this case, “neck” refers to humans, and “shinyu” is a combination of letters that go when it stops, so it

seems that “road” is the place where humans go back and forth which means life. It is to admit to losing, and at the same time, to praise the winner. That means that it will inspire the true identity of the loser. In judo, it becomes the method of supporting the passive of the opponent without separating the opponent's hand(Sato 2020). All of these lead to the awareness of the heart of the heart that can be seen. In kendo, it is the state of the sense of meditation called the Ainuki. It is a state of fighting without fighting, and actually fighting in each other's mind.

What is interesting is that such a mind can only be reached to a master, but it is equivalent to the play of innocently playing children in a playful manner (Iida 2020). These are contents of Japanese philosophy for having peace and harmony what President Junius Richard Jayewardene had influenced by Japanese culture that we Japanese must not forget and remember with thanks to Sir Jayewardene with love. ඔබට ස්තූතියි

Reference

- De Silva KM&Wriggins H(1988)J.R.Jayewardene of Sri Lanka, University of Hawaii Press.Fuyu(2020) <https://www.zenlightenment.net/zanshin/> Hanami M(2018)Bushido no Gensen wo Saguru <https://www.kaiundou.biz/bushidou/?p=529>
- Iida H(2020)email to author from Professor Hiroyuki Iida on 2020/04/24 17:45
- Jensen JE(2011)that All May Be Edified, BYU Speeches. <https://speeches.byu.edu/talks/jay-e-jensen/that-all-may-be-edified-2/>
- Kamisakamoto K(2019)Daibutsu sama to Ai no Monument, Kamakura shunjusha. Keydel T(2017)Zanshin, LEAP Portfolio Print.
- Mueller R(2019)THE PHILOSOPHICAL RECEPTION OF JAPANESE BUDDHISM AFTER 1868, The Dao Companion to Japanese Buddhist Philosophy, DCCP, volume 8, 155-203.
- Nitobe I(2011)Bushido:The Soul of Japan, Createspace Independent Pub. Noguchi Y(2018)Haisengono Nihon wo Jihi to Yuukide Sasaeta Hito, Ginsuzusha.
- Okazaki H(2003)Yoshida Shigeru and His Time(Trans Noda M),Japan Publishing Industry Foundation for Culture.
- Sato T(2020)Judo no Shinzui to Kanousei wo Saguru< Kuroobi(manuscript not publish yet).Takahashi R (2019)Journal Viol78: 92-95.
- Yamaori T & Ueda N(2013) Seiyouni Fukai Eikyou on Ataeta Nihonjin Leaders <https://toyokeizai.net/articles/amp/22203?page=2> Yui N(2005)Kenkyu Tetsugaku,JAIST Press.

A COGNITIVE CONSONANCE BETWEEN BUSINESS INTELLIGENCE AND DECISION-MAKING IN BANCASSURANCE

***Soumen Nanda**

Abstract

It's a generic phenomenon that intelligence controls most of the human behaviour. Specifically considering decision making process it has a great role. When it is considered in business sectors, more often in banking sectors, Business Intelligence (BI) dominates the Decision Making Style (DMS) of the individual. Similarly the customers of the banking sectors now a days are not less calculative in their transaction process as per the profits. In regards to the Bancassurance system there must be a cognitive consonance between BI and DMS, between the Bankers and Customers of the banks in the same platform without which Bancassurance system can't be a successful one.

*With this objective the present paper (a part of PhD research work) aims at exploring the levels of Business Intelligence and Decision Making Style of the individuals (bankers and customers) relating to banking policy and how they are influencing each other in Bancassurance system in the nationalized banks of Bhubaneswar, Odisha . The analysis and interpretation is made only on exploring BI level, DMS level and the relationship between BI and DMS of the bankers and customers of the same bank, with analysis of the components of BI and DMS. Bankers (N= 25) and Customers (N= 25) of different nationalised banks were tested on BI and DMS level in their respective official situations. The significant relationship between BI and DMS of bankers ($r = 0.69^{**}$) and of customers ($r = 0.40^{*}$) indicates that there is a positive significant relationship between Business Intelligence and Decision Making style. In regard to the score of business intelligence between bankers and customers in banking sectors a significant relationship ($r=0.47^{**}$) is also found which indicates both the groups are influencing each other with respect to their concerns about Bancassurance system. Accordingly they are taking their decisions which is proved by the significant relationship in their DMS Scores ($r = 0.34^{*}$). The component wise analysis of total scores of BI and DMS indicates all the subjects are having sixty percent above scores in each components except dashboard management component of BI (58 %), Global (57.44 %), Instinctiveness (57.4) and Spontaneous (58 %) components of DMS. Which are supposed to be differential factors not so dependent on cognitive abilities like intelligence. Hence the study corroborates the hypothesis supporting the objective of the study, that, business intelligence influences decision making process of the individual, in different banking sectors, in the context of the Bancassurance system. And as BI and DMS are two vital components of cognition, there seems perfect cognitive consonance between the two variables that is clearly reflected in the significant results.*

Key words: Cognitive consonance, Business intelligence, Decision making style, Bancassurance, Bankers, & customers.

**PhD scholar, ISBM University, Chhatisgada. Email:soumennanda@gmail.com*

INTRODUCTION

“Knowledge decides what to say, Skill decides how to say, Attitude decides how much to say. And wisdom decides whether to say or not”

Psycho - social researches mainly social science networks in human resources management, in family, in society and in organizations now need focus for a positive wellbeing of the individual. Social network analysis and agent-based modeling provide direct ways of representing relations and dynamics of interdependencies among the variables that influences instant behaviours of the individual in different organizational sectors. Especially in social science researches psychological mechanisms such as attitude, desires, beliefs, motivation, Opportunity(Hedström,2005),Confidence(Canon 1964), closed-mindedness (Feather 1969) or value relevance of the presented content (Jonas et al. 2003) have been identified as moderators of the selective exposure effect of the individuals as a whole. The most relevant models that influence socio-psychological manifestation of value based behaviour is the intelligence .This constitutes an additional opportunity-driven mechanism to both individuals' desire for cognitive consonance in general and the relation between social value divisions and selective exposure to quality based decisions in particular.

As per the cognitive dissonance theory of Leon Festinger (1957),three factors influence the consistency between one's knowledge and attitudes and their usage of specific information , based on which the cognitive dissonance occurs. They are *Forced Compliance Behaviour, Decision Making, & Effort*. In one experiment Festinger and Carlsmith (1959) advocated that when someone is forced to do (publicly) something they (privately) really don't want to do, dissonance is created between their cognition (I didn't want to do this) and their behaviour (I did it). But People have several ways to reduce dissonance that is aroused by making a decision (Festinger, 1964).Brehm (1956) was the first person to investigate the relationship between dissonance and decision-making. The Business Intelligence (BI) as a cognitive process has become an important concept (Agarwal &Dhar 2014), providing useful insights, supporting decision-making and improving performance (Ramakrishnan et al. 2012) in business sectors. BI can be described as the technologies, applications, and processes for gathering, storing, accessing, and analyzing data to help users for making better decisions (Watson and Wixom, 2010). Business Intelligence is one of the important factor in business administration. It is the strategies and technologies used by the enterprises for the data analysis of business information (Dedić & Stanier ,2017). Identifying new opportunities and implementing an effective strategy on them based on insights, can provide businesses with a competitive market advantage and long-term stability (Rud,2009).Amongst its various uses, business intelligence helps organizations to gain insight into new markets, to assess demand and suitability of products and services for different market segments and to gauge the impact of marketing efforts (Chugh& Grandhi,2013). Business Intelligence (BI) refers to technologies, applications and practices for the collection, integration, analysis, and presentation of business information. The purpose of Business Intelligence is to support better business decision making style in human resource management. Essentially, Business Intelligence systems are data-driven Decision Support Systems (DSS). Business Intelligence is sometimes used interchangeably with briefing books, report and query tools and executive information systems.

In one study Nanda et.al. (2020) while comparing the effect of BI on DMS with regard to their opinion on Bancassurance system, between India and Netherlands, found that there is a significant difference ($p > .01$) between the BI of Netherlands and Indian subjects irrespective of their counterparts (Employees and customers). Similarly a significant difference ($p > .01$) also was found between subjects of India and Netherlands, with regard to their decision making style irrespective of their counterparts (Employees and customers). Besides Compliance, tangible Infrastructure, Reliability, Responsiveness and Assurance also effective variables that contribute the effectiveness of Bancassurance. Studies also indicate that Business Intelligence influences the decision making in organizational sectors, integrating different approaches in the neurodevelopmental perspective in administrative sphere (Md. Shamsul,et.al., (2015); Mohamad,et.al., (2015) Saeed, et.al., (2016).

Business Intelligence (BI) as an important concept (Agarwal &Dhar 2014), providing useful insights, supporting decision-making and improving performance (Ramakrishnan et al. 2012; Hannula and Pirttimäki 2003, Yoon et. al. 2014; Wixom and Watson (2010), &Rezaie et al. 2011) . As described by Wixom and Watson (2010), BI is commonly used to describe the technologies, applications, and processes for gathering, storing, accessing, and analysing data to help users make better decisions. In other words BI can be described as a decision support system(Gorgan ,2015) that increase competitiveness and success of the organisations (Elbashir et al. 2008; Hou 2016; Jones &Jimmieson ,2005; Ramakrishnan et al. 2012). .

As described by Eckerson (2003) the features of BI and how it functions in practice can be well understood from the following figure.

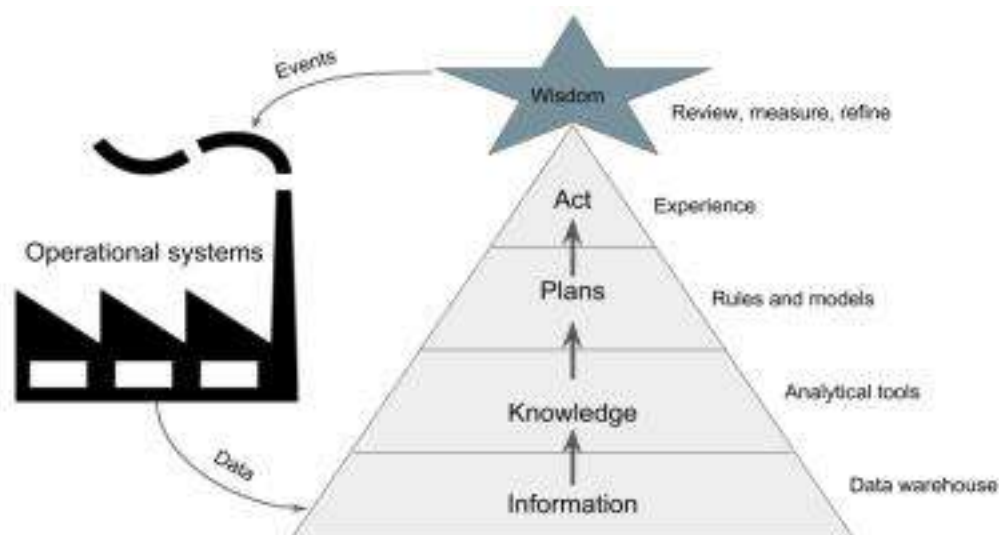


Fig 1 :BI visualized as a data refinery, based on Eckerson (2003, p. 4)

Data to information

Data is extracted from several transaction and operational systems, integrated and stored in the data warehouse.

Information to knowledge

Information is accessed and analyzed in the data warehouse through analytical tools, which identifies trends, patterns, and exceptions that in turn becomes knowledge.

Knowledge to plans

From knowledge, rules may be established ranging from simple rules – order new products when stock get low; to rules of a predictive nature – forecasts or projections based on historical trends and assumptions; to complex rules – dynamically configured prices in response to fluctuations in the market. Rules are then implemented by creating plans, e.g. businesses may define what products to offer to which customers based on an analysis of customer segments and customer responses from previous efforts.

Plans to actions

Businesses create action by using the plans that are based on the rules and knowledge.

Feedback

Response data from the actions (e.g. sales) is stored in the data warehouse. This data is then reviewed and analyzed and later turned into knowledge.

Eckerson (2003) further explains that BI is comprised of *two components*, like , **data warehouse environment and analytical environment**. In these environments, there are two different types of users, the technical team and the business user. The technical team spends its time in the data warehouse environment extracting, transforming, transferring, and loading transactional data from one or more operational system into the data warehouse. A visualization of this concept is shown in figure 2. Considering the fact that the data not always is clean or consistent between every separate operational system, it is rarely easy to integrate. Therefore, this can be quite a difficult job and involve a considerable amount of effort. The business user on the other hand, interact with the BI system through the analytical environment where the user receives reports or visual aids; queries the system for specific requests; and at the end, acts on the data from the data warehouse.

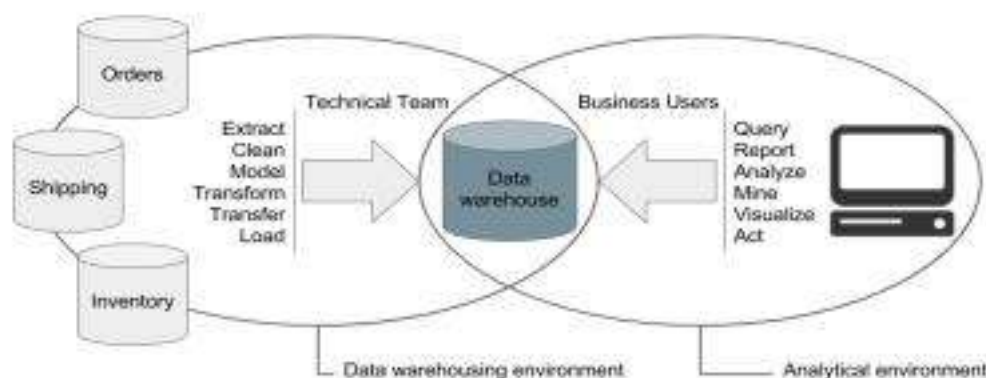


Fig 2 : The two components of BI as explained by Eckerson (2003, p. 6)

Besides, the other components work within it can be as follows:

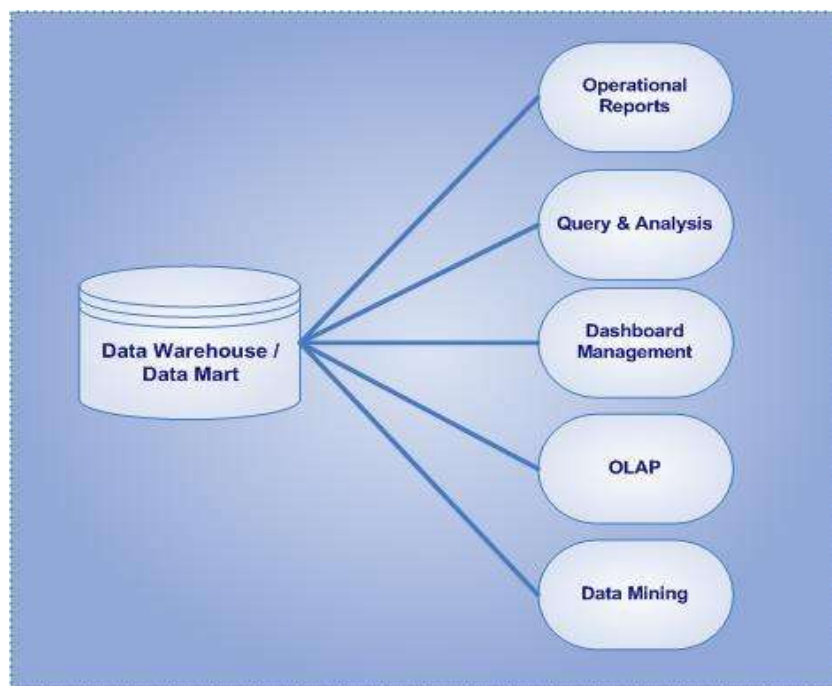


Fig 3 : Showing some components of BI

Analyzing the impact of BI on organizational sectors Ramakrishnan, et. al. (2012), argued that BI plays a crucial role in organizations by providing useful insights on decision-making process and as such improving the performance.

Gorgan (2015) opined that with Bi, decision support is also have useful effects on the profit making strategies of the organisations. Wieder and Ossimitz (2015) argued that BI management – managing purpose and strategy; implementation; and support of BI systems – has a positive effect on data quality, information quality, and the scope of BI (number of business functions or processes supported by BI tools). These effects – in combination – translate to a positive effect on the quality of the Decision Making Process (DMP). In particular, BI management has a significant effect on the DMP through gathering high-quality data and information (Wieder&Ossimitz 2015) ;reduce the time and increase the efficiency of the DMP by allowing BI systems to acquire information(Rezaie et. al. ,2011) and knowledge from huge volumes of data; high-quality data and information has a positive effect on the quality of DMP(Wieder and Ossimitz ,2015) . Because it can have access to large volumes of data and possess the power to handle it through a BI system, leading to better decisions in less time.

In 2010, Hou and Papamichail found that BI has positive impacts on decision-making (Aziz and Sarsam,2013), arguing that an enterprise resource planning (ERP) system integrated and powered by BI increases the decision-making performance of organizations, unlike organizations that only use ERP.But the effectiveness and success of BI is often influenced more on individual level (Yoon et al. 2014).Because it is dependent upon several determining factors like, technology (Powers 2011), motivation, social influence, Strategic alignment. (Williams & Williams 2004) and situational constraints faced by organisations as well as by the individual. In short the benefits of BI can be explained as: - it is faster more accurate process of reporting critical information; it facilitates better and efficient decision-making process; it provides timely information for better customer relationship management; it improves profitability of the

company; it provides a facility of assessing organization's readiness in meeting new business challenges; supports usage of best practices and identifies every hidden cost.

Thus Business Intelligence is a framework of processes, tools and technologies which required for transforming data into information and information into knowledge using which managers are able to make better decisions and thus, improve the performance of their organization. As stated by Falah,et.al., (2015) Decision-making is an integral part of management process in each organization and at all organizational levels. Weber has considered decision making as "determined task of managers". Since some managers enjoy success in decision-making more than others, many studies have been carried out for evaluation of roots, causes and elements which are effective in decision making process.

As the decision making process of bankers have considerable role in implementing banking policies (i.e. Bancassurance,etc.) customer's perception, attitude, believes and decision making style also are having equal values. Customers' perception and their satisfaction level can be found through the customers' assessment of the quality of service provided by the bankers with their overall contributions (Zeithaml&Bitner, 2003). Customers' perception with respect to a bank means the customers' overall picture of the bank, including bank's image, expectations, external influences, service quality, and so forth. All interactions that occur between the customers and the bank will ultimately affect the customers' view and image of the bank. All that the customers experience are linked together and form their overall perception towards the bank (AspfSors, 2010).

Above all the business intelligence of the customers provokes them to be attracted to the new policies of the bank. So to convince the customers, business intelligence of the bank employees/ bankers, plays a vital role. Because Bi of the employees triggers the DM process of customers. And the BI and DMS of the bankers and customers can have a joint effect for the successful implementation of "Bancassurance" system among those person who are interested for their monetary improvement transactions.

The attributes that can affect the Bancassurance policies can be as given below.



Fig 4 : Attributes that can affect the Bancassurance

Besides Compliance, tangible Infrastructure, Reliability, Responsiveness and Assurance also effective variables that contribute the effectiveness of Bancassurance. Based on these above descriptions the rationale of the research can be as follows.

RATIONALE:

The research question is:-

RQ1: *How does Business Intelligence influence the decision-making process Banking Sectors?*

RQ 2: *Is there any relationship between BI and DMS*

Banking Sector supposed to be dealing with most important cognitive dealings as it is related to the financial substrata of the people and the government. Accordingly the people related to banking sector if will not have proper business intelligence then the output of the bank will be a big “ZERO”. Again, Business Intelligence influences the decision-making style of the individual. Thus the proper output of the bank is dependent upon the cognitive consonance between business intelligence and decision-making style of the Bankers & the customer, in the banks.

OBJECTIVE:

The analytical objective of the study, thus, is to make a mechanism-based contribution, intended to explore:-

- The business-intelligence of the customers in different banking sectors
- The business-intelligence of the Bankers in different banking sectors.
- The decision-making style of the Customers in banking sectors.
- The decision-making style of the Bankers in different banking sectors.
- The relationship between the business-intelligence & decision-making style
- The relationship between the business-intelligence & decision-making style among the Bankers and customers in banking sectors with regard to their impression on Bancassurance system

RESEARCH METHODOLOGY

Sampling:-

The study was conducted with fifty number of subjects (N=50) divided into two groups. One for employees (N=25) and another for customers (N=25), tested their business-intelligence test and decision-making style. The Group-1 subjects & the Group-2 subjects were randomly selected from different banking sectors irrespective of Age, gender, caste, creed and condition.

Instruments:-

- ❖ The decision-making style Questionnaire
- ❖ The Business-intelligence Questionnaire

The decision-making styles questionnaire (5-point scale) consist of 40 items whereas the business-intelligence questionnaire consist of 14 items (5-point scale). The items include different components of an individual's decision-making style & business-intelligence.

The BI was tested of dealing with following components:

1. Query and Analysis: Q 1, + Q 6,+ Q14
2. Dashboard Management: Q 5,+Q 7,+ Q 9
3. On-line Analytical Processing (OLAP): Q 2+ Q 3+ Q 12+ Q 13
4. Data Mining & Predictive Analytics: Q 4 + Q 8 + Q 10 + Q 11

The DMS was tested f dealing with following components:

The items of the questionnaire were made on the basis of different components of DMS (Global, Control, Logical, Social resistance, Istinctiveness, Intuitiveness, Dependent, Rational, Avoidant & Spontaneous) and were also given different scores on the basis of the nature of the components in the questionnaire. The distribution of the components as used in the questionnaire is given below.

1. Global = Q8+Q12+Q18+Q31+Q36
2. Control = Q1+Q5+Q6+Q11+Q15
3. Logical = Q9+Q10+Q13
4. Social resistance= Q16+Q38+Q40
5. Istinctiveness = Q2+Q3+ Q29+Q30
6. Intuitive = Q19+Q21+Q37+Q39
7. Dependent = Q20+Q22+ Q23+Q26+Q34
8. Rational = Q7+Q17+Q25+Q27+Q28
9. Avoidant = Q24+Q33+Q35
10. Spontaneous = Q4+Q14+Q26+Q32

Procedure:-

All the subjects were given the business-intelligence and decision-making questionnaire individually in their respective official situations with the permission of their respective authorities. After collecting the data, the researcher has analyzed the score as per the scoring key given. After that all the scores were analyzed and interpreted by SPSS technique. Accordingly the results were interpreted.

RESULTS AND DISCUSSION

It's a general phenomenon that intelligence controls most of the human behaviour. Especially in taking decision intelligence has a great role. When it is considered in business sectors, especially in banking sectors, business intelligence dominates the decision making style of the Bankers. Similarly the customers of the banking sectors now days are not less calculative in their transactions process as per their profits. From the result table 1 it is clear that the mean BI score of Bankers and customers are 47.28 and 47.8, respectively. This difference is not found to be significant ($P < .05$). But the positive significant correlation ($r = 0.47^{**}$) between Bankers and

customers reveals the idea that both the groups are having similar status of BI and both are influencing each other with regard to effectiveness of Bancassurance system.

<u>Group</u>	<u>DMS</u>	<u>Mean</u>	<u>SD</u>	<u>t'</u>	<u>r</u>
Bankers <u>(N=25)</u>	3190	<u>127.06</u>	18.20	0.19	0.34*
<u>Customer</u> <u>(N=25)</u>	3300	<u>132</u>	17.39		

Table 1: Showing the BI Scores of subjects

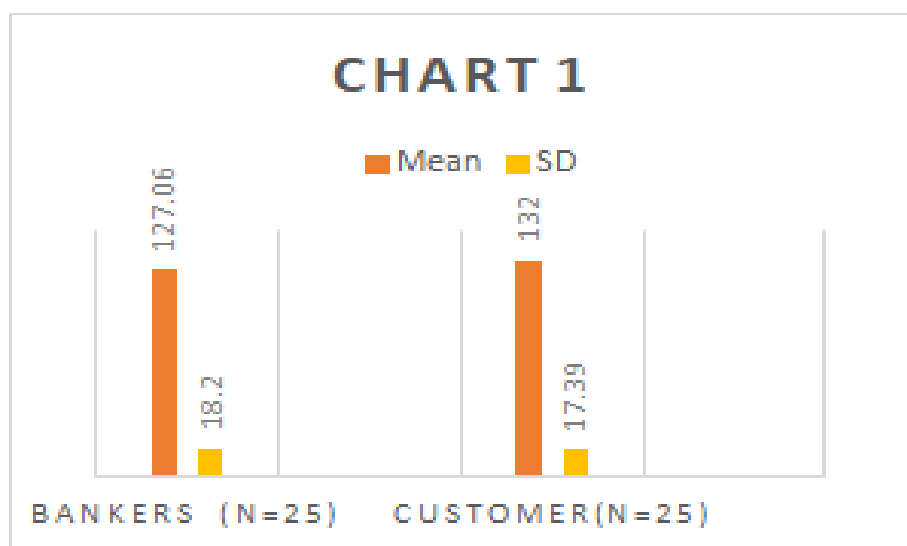


Chart 1: Showing the BI Scores of subjects

<u>Group</u>	<u>BI</u>	<u>Mean</u>	<u>SD</u>	<u>t'</u>	<u>r</u>
Bankers <u>(N=25)</u>	1182	47.28	12.54	0.212	0.47**
<u>Customer</u> <u>(N=25)</u>	1195	47.8	11.38		

Table 2 : Showing the DMS Scores of subjects

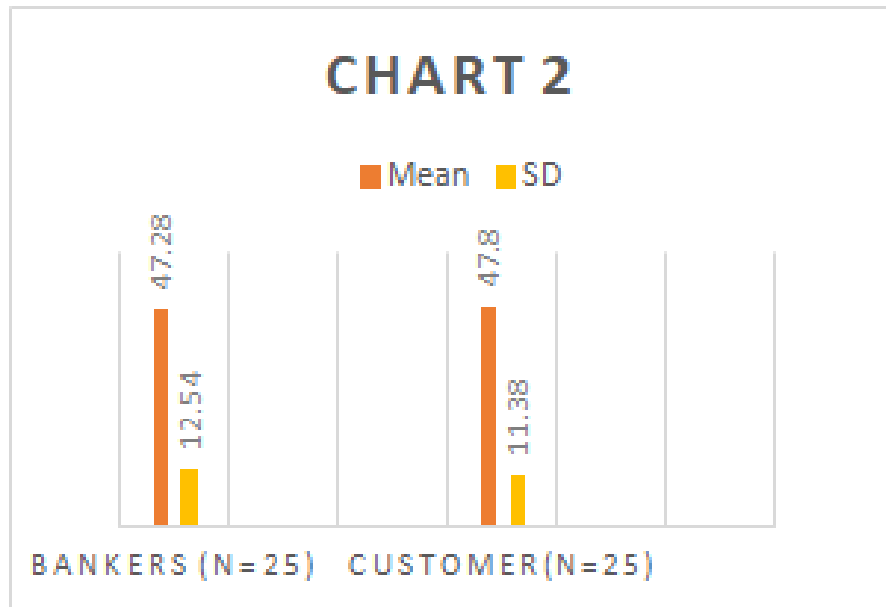


Chart 2: Showing the DMS Scores of subjects

<u>Group</u>	<u>BI</u> <u>Mean</u>	<u>DMS</u> <u>Mean</u>	<u>R</u>
Bankers	47.28	127.06	0.69**
<u>Customer</u>	47.8	132	0.40*

Table 3 : Showing the correlation between DMS and BI of the subjects

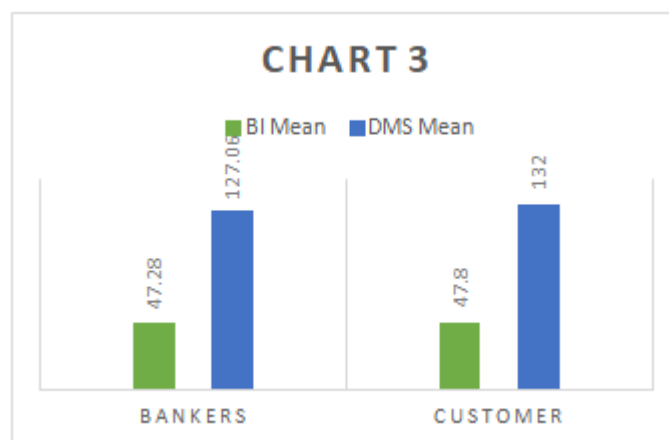


Chart 3: Showing the correlation between DMS and BI of the subjects

Referring to Table 2 it is noticed that the mean decision making style score of Bankers and customers are 127.06 and 132, respectively. This difference is not found to be statistically significant ($p < .05$). Further the relationship between total DMS of Bankers and customer revealed that both the groups are having significant positive relationships ($r = 0.34^*$) which indicates that both Bankers and customers are influencing each other with regard to effectiveness of Bancassurance system. Further the relationship between BI and DMS of both the samples were assessed (Table 3) that indicates that the r value of Bankers ($r = 0.69^{**}$) and customers ($r = 0.40^*$) are found to be statistically significant. This justifies the fact that the business intelligence positively influencing the decision making processes of Bankers and customers in banking sectors with regard to Bancassurance system.

Component wise analysis of DMS of Customers in all the ten factors(Global, Control, Logical, Social resistance, Instinctiveness, Intuitiveness, Dependent, Rational, Avoidant & Spontaneous) it is found that the percentage of scores are 57.44 %,65.28 %,77.86 %,68.63 %,64.04 %,64.04 %,64.32 %,71.84 %,78.13 %,76.04 %,respectively. It clearly indicates that all the subjects are keeping above 64% of scores in all components except the Global. Hence their decision making qualities are more that better in all components except global.

<u>Component</u>	<u>Total score</u>	<u>Percentage</u>
<u>1</u>	<u>359</u>	<u>57.44 %</u>
<u>2</u>	<u>408</u>	<u>65.28 %</u>
<u>3</u>	<u>292</u>	<u>77.86 %</u>
<u>4</u>	<u>257</u>	<u>68.63 %</u>
<u>5</u>	<u>322</u>	<u>64.04 %</u>
<u>6</u>	<u>322</u>	<u>64.04 %</u>
<u>7</u>	<u>402</u>	<u>64.32 %</u>
<u>8</u>	<u>449</u>	<u>71.84 %</u>
<u>9</u>	<u>293</u>	<u>78.13 %</u>
<u>10</u>	<u>382</u>	<u>76.04 %</u>

Table 4 : Component wise analysis of DMS of Customers

Component wise analysis of Bi of customers in all the four factors like, Query and Analysis, Dashboard Management, On-line Analytical Processing (OLAP) and Data Mining & Predictive Analytics, are having 64.8 %,58.4 %,73.2 %,74.6 %, percentage of scores respectively. This result indicates that like decision making style the customers are also having

more than better cores (above 64% of scores in all components except dashboard management) in their business management techniques

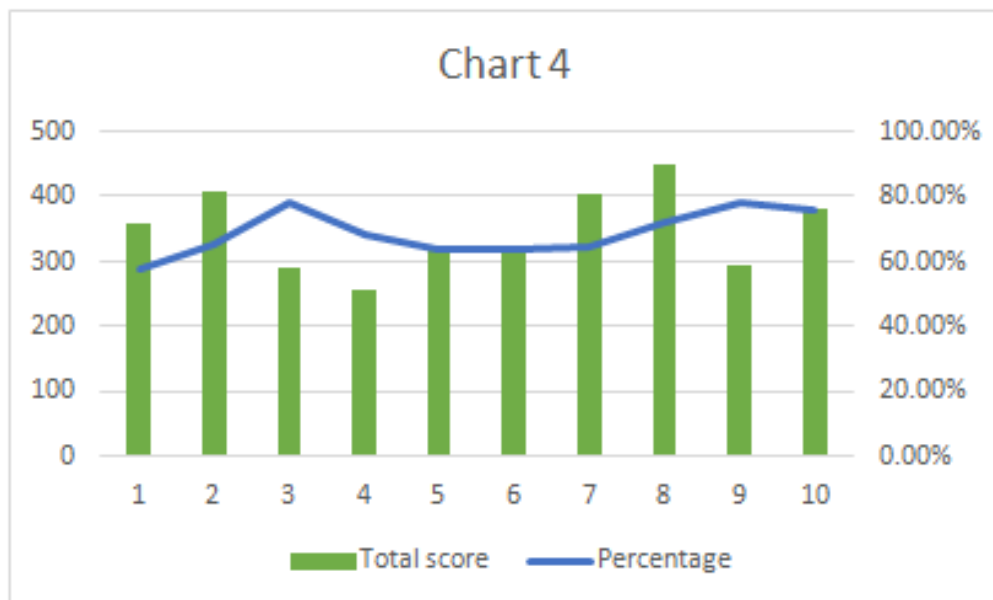


Chart 4: Component wise analysis of DMS of Customers

<u>Component</u>	<u>Total score</u>	<u>Percentage</u>
<u>1</u>	<u>243</u>	<u>64.8 %</u>
<u>2</u>	<u>219</u>	<u>58.4 %</u>
<u>3</u>	<u>366</u>	<u>73.2 %</u>
<u>4</u>	<u>373</u>	<u>74.6 %</u>

Table 5 : Component wise analysis of Bi of Customers

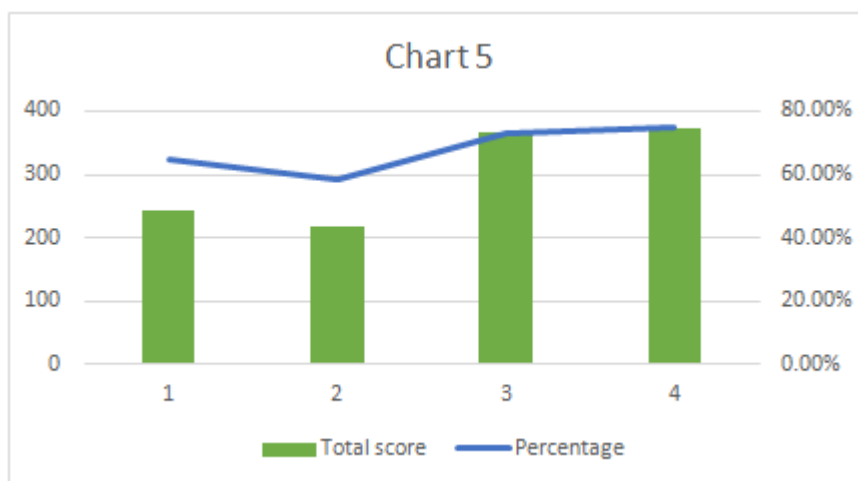


Chart 5: Component wise analysis of Bi of Customers

Component wise analysis of DMS of Bankers in all the ten factors(Global, Control, Logical, Social resistance, Instinctiveness, Intuitiveness, Dependent, Rational, Avoidant & Spontaneous) it is found that the percentage of scores are: 62.24 %,62.08 %,64.26 %,66.13 %,57.04 %,62.8 %,64.48 %,66.4 %,60.8 %,58. %, respectively. The result conveys the idea that all the subjects are having above sixty percent scores n all components except Instinctiveness (57.4 %) and Spontaneous (58 %) components of DM strategies.

<u>Component</u>	<u>Total score</u>	<u>Percentage</u>
<u>1</u>	<u>389</u>	<u>62.24</u> %
<u>2</u>	<u>388</u>	<u>62.08</u> %
<u>3</u>	<u>241</u>	<u>64.26</u> %
<u>4</u>	<u>248</u>	<u>66.13</u> %
<u>5</u>	<u>337</u>	<u>57.04</u> %
<u>6</u>	<u>314</u>	<u>62.8</u> %
<u>7</u>	<u>403</u>	<u>64.48</u> %
<u>8</u>	<u>415</u>	<u>66.4</u> %
<u>9</u>	<u>288</u>	<u>60.8</u> %
<u>10</u>	<u>290</u>	<u>58.</u> %

Table 6 : Component wise analysis of DMS of Bankers

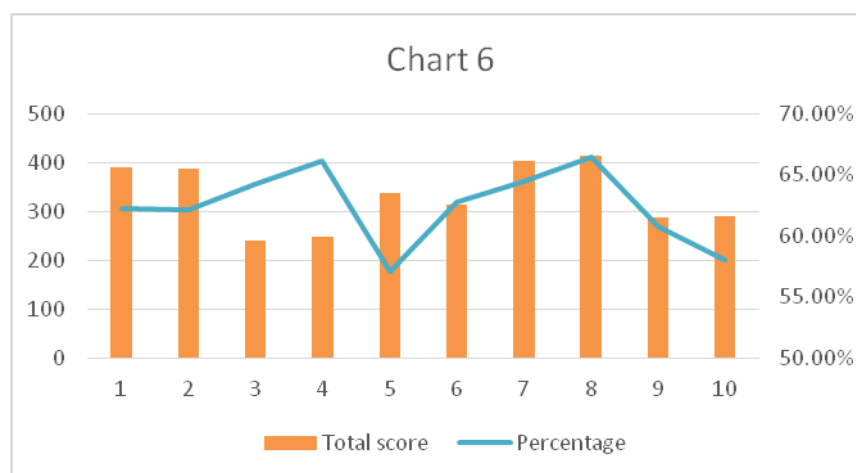


Chart 6: Component wise analysis of DMS of Bankers

Component wise analysis of Bi of bankers in all the four factors like, Query and Analysis, Dashboard Management, On-line Analytical Processing (OLAP) and Data Mining & Predictive Analytics, are having 64.8 %, 65.6%,63%,73.6 %, percentage of scores respectively. This result indicates that like decision making style the business intelligence of the customers are also having more than better scores (above 63%) in all components which proves their higher level of business intelligence capacities.

<u>Component</u>	<u>Total score</u>	<u>Percentage</u>
<u>1</u>	<u>243</u>	<u>64.8%</u>
<u>2</u>	<u>246</u>	<u>65.6%</u>
<u>3</u>	<u>315</u>	<u>63.0%</u>
<u>4</u>	<u>368</u>	<u>73.6%</u>

Table 7 : Component wise analysis of Bi of Bankers

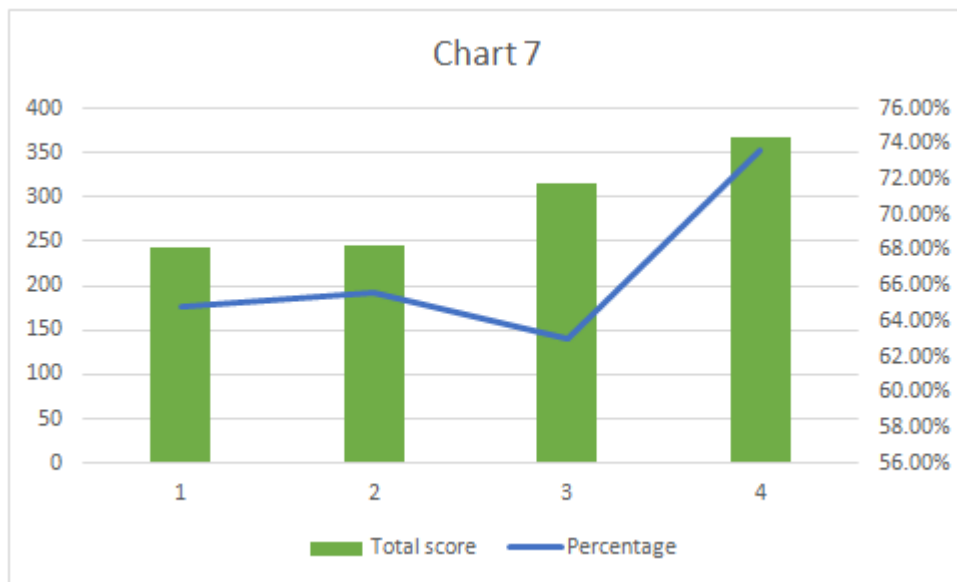


Chart 7: Component wise analysis of Bi of Bankers

CONCLUSION:

Definitely the objectives of each bank are profit sharing in their business strategies keeping in view of the Bi of the bankers / employees. Customers are also, should be equally capable (on the basis of their business intelligence level), to get the profits with their investments in banking sectors. To explore this basic idea this paper is an attempt to analyze the business intelligence of the bankers and customers in the same platform and how this is influencing their decision making style in relation to the Bancassurance policy. As per the results revealed and the above discussions the following conclusions can be drawn:

- The business-intelligence of the customers in different banking sectors ,as taken ,are more than better level (above 64%) in all components , except one .
- The business-intelligence of the Bankers in different banking sectors are also having more than better scores (above 63%) in all components which proves their higher level of business intelligence capacities.
- The decision-making style of the Customers in banking sectors are also in higher level as influenced by their business intelligence
- The decision-making style of the Bankers in different banking sectors are also more than satisfactory level derived by their business intelligence strategies.
- There is significant relationship between the business-intelligence scores between customers and bankers
- In regards to decision making style scores also there is significant relationship between the customers and bankers
- The relationship between the business-intelligence & decision-making style ,irrespective of bankers and customers in banking sectors, with regard to their impression on Bancassurance system is also found to be statistically significant

IMPLICATIONS:

- The study implicates keeping in view of the importance of business intelligence and its influence on decision making process the administration in banking sectors should be particular in their recruitment, selection, posting and placement of the bankers in their banks.
- The policies and administrations should be made pointing out remarkably to the decision making processes of customers and bankers.
- Training and awareness programme should be provided for the enhancement of business intelligence that can have better impacts to their decision making style

SUGGESTIONS:

- The administrator or policy holders should empower the system owner to carry out the strategies independently
- There must be implementation of a better feedback system

- Consistent training offered to the bankers and customers, time to time, observing the situational determinants, can result in positive effects on several factors that need improvements.

References:

- Aggarwal,P. (2004). “The Effects of Brand Relationship Norms on Consumer Attitudes and Behavior” *Journal of Consumer Research* ,31(1) · DOI: 10.1086/383426
- Agarwal, R. &Dhar, V. (2014). Editorial—Big data, data science, and analytics: The opportunity and challenge for IS research. *Information System Research*, 25(3), 443-448.
- Arefin, S, Hoque,R& Bao,Y. (2015). “The impact of business intelligence on organization's effectiveness: an empirical study”, *Journals of system and information Technology*, Vol 17,ISSN,1328-7265
- AspfSors, (2010).” What is Customer Experience: Strategy, Examples, TipsHotjar <https://www.hotjar.com/customer-experience/>14 Jan 2020 .
- Aziz, M. N. &Sarsam, Z. (2013). The impact and power of Business Intelligence (BI) on the Decision making process in Uppsala University: A case study. Master’s Thesis. Uppsala: Uppsala University, Master programme in Information Systems
- Brehm (1956) -Brehm, J. W. (1956). Postdecision changes in the desirability of alternatives. *The Journal of Abnormal and Social Psychology*, 52(3), 384–389. <https://doi.org/10.1037/h0041006> . Up dated By Saul McLeod, updated Feb 05, 2018
- Canon, L. K. (1964), Self-condence and Selective Exposure to Information, in: Festinger, L (ed.), *Conict, Decision, and Dissonance*, Stanford, 8395
- Chaudhury,M. &Singh , R. (2017) . “Customers’ Perception regarding Assurance of Bancassurance Channel”, DOI: 10.1515/auseb-2016-0005
- Chugh ,R. &Grandhi, S.(20130 “Why Business Intelligence? Significance of Business Intelligence Tools and Integrating BI Governance with Corporate Governance” *ResearchGate*, August,2013. DOI: 10.4018/ijeei.2013040101
- Dedic,N. &Stanier,C. (2017). “Towards Differentiating Business Intelligence, Big Data, Data Analytics and Knowledge Discovery”, Edition: *Lecture Notes in Business Information Processing (LNBIP)* 285 DOI: 10.1007/978-3-319-58801-8_10 Chapter Number: 10 Issn: 1865-1348 Publisher: Springer International Publishing AG 2017
- Elbashir, M.Z., Collier, P.A. and Davern, M.J. (2008), “Measuring the effects of business intelligence systems: the relationship between business process and

organizational performance”, International Journal of Accounting Information Systems, Vol. 9 No. 3, pp. 135-153.

Falah, D.; Mojtaba, A.S. & Reza, T. (2015). “Approaches use business intelligence to improve decision-making bank managers (case study credit institution Samen”, the first International Conference on Management, Economics, Accounting and Educational Sciences, Sari, ***Company Research and future consulting***, PNU complete.

Eckerson, W. (2003), “Smart companies in the 21st century: the secrets of creating successful business intelligence solutions”, TDWI Report Series No. 7, Seattle

Falah D, Mojtaba AS, Reza T (2015) Approaches use business intelligence to improve decision- making bank managers (case study credit institution Samen), the first International Conference on Management, Economics, Accounting and Educational Sciences, Sari, Company Research and future consulting, PNU complete.

Feather, N. T. (1969), Preference for Information in Relation to Consistency, Novelty, Intolerance of Ambiguity, and Dogmatism, in: Australian Journal of Psychology 21, 235,249

Festinger, L. (1957), A Theory of Cognitive Dissonance, Evanston

Festinger, L. (Ed.). (1964). *Conflict, decision, and dissonance (Vol. 3)*. Stanford University Press. Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *The Journal of Abnormal and Social Psychology*, 58(2), 203.

Gorgan, V. (2015). Requirement Analysis for a Higher Education Decision Support System. Evidence from a Romanian University. *Procedia – Social and Behavioral Sciences*, 197 (7th World Conference on Educational Sciences), 450-455

Hannula, M. & Pirttimäki, V. (2003). Business intelligence empirical study on the top 50 Finnish companies. *Journal of American Academy of Business*. Cambridge, 2(2), 593-599.

Hedström, P. (2005). *Dissecting the Social: On the Principles of Analytic Sociology*. Cambridge, UK: Cambridge University Press First Published June 1, 2007 Review Article <https://doi.org/10.1177/0048393107299737>

Herschel, R. T. and N. E. Jones (2005). "Knowledge management and business intelligence: the importance of integration." *Journal of Knowledge Management* 9(4): 45-55.

Hou, C-K. & Papamichail, K.N. (2010). The impact of integrating enterprise resource planning systems with business intelligence systems on decision-making performance. *International journal of technology, policy and management*, 10(3), 201–226.

Hou, C-K. (2016). Using the balanced scorecard in assessing the impact of BI system usage on

organizational performance: An empirical study of Taiwan's semiconductor industry. *Information Development*, 32(5), 1545-1569.

Jones, R.A. & Jimmieson, N.L. (2005). "The Impact of Organizational Culture and Reshaping Capabilities on Change Implementation Success: The Mediating Role of Readiness for Change", *Journal of Management studies*, First published: 22 February 2005 <https://doi.org/10.1111/j.1467-6486.2005.00500.x> Citations: 267.

Jonas, E., J. Greenberg, D. & Frey (2003), Connecting Terror Management and Dissonance Theory: Evidence That Mortality Salience Increases the Preference for Supporting Information after Decisions, in: *Personality and Social Psychology Bulletin* 29, 1181-1189

MARZAI, E. (2018). "Bancassurance in a digital era", DOI: 10.2478/picbe-2018-0054

Malik, M. (2014). Bancassurance: boon to insurance development. *American International Journal of Research in Humanities, Arts and Social Sciences*, 7(2): 155–159

Mohamad, S. S. & Razmi, J. (2015), "Business intelligence competence, agile capabilities, and agile performance in supply chain: An empirical study", *The International Journal of Logistics Management*, Vol. 26 Iss 2 pp. 356-380 <http://dx.doi.org/10.1108/IJLM-01-2013-0012>

Naderlo, H.R., Naderlo AR (2015) Application development, business intelligence as a tool for decision support in the banking system, the second congress of new technologies to Iran. pp: 16-18.

Nanda, S.; Bhol, B.P. & Misra, S. (2020). "business intelligence and decision making influence Bancassurance system", *Odisha Journal of Social Sciences*, Vol 7 (1), P- 11- 22.

Powers, W. (2011). Business Intelligence Gets Smarter. <https://www.universitybusiness.com/article/business-intelligence-gets-smarter> [2017-05-09]

Ramakrishnan, T., Jones, M., & Sidorova, A. (2012). Factors influencing business intelligence (BI) data collection strategies: An empirical investigation. *Decision Support Systems*, 52(2), 486-496.

Rezaie, K., Ansarinejad, A., Haeri, A., Nazari-Shirkouhi, A. & Nazari-Shirkouhi, S. (2011). Evaluating the business intelligence systems performance criteria using group fuzzy AHP approach. In *Computer Modelling and Simulation (UKSim)*, 2011 UkSim 13th International Conference, 360-364

Rouhan, S. (2016). The impact model of business intelligence on decision support and organizational benefits, (2016).

- Rud, O.P. (2009), *Business Intelligence Success Factors: Tools for Aligning your Business in the Global Economy*, Vol. 18, Wiley, Hoboken, NJ.
- Saeed,A.A.;Bahnassy,A.A.;Al-Hamdan,N.A.;Almudhaibery,F.S.&Alyahya^AZ.(2016),
“Perceived stress and associated factors among medical students”,*J.Family Community Med.* 2016 Sep-Dec; 23(3): 166–171.doi: 10.4103/2230-8229.189132
- Venugopal. P.(2012) *Financial Inclusion and Women Empowerment: A Study on Women’s Perception of East Godavari District, Andhra Pradesh*”, *International Journal of Research in Commerce & Management* Vol. 3, No. 12, December 2012, pp.53-57.
- Wieder, B. &Ossimitz, M. (2015). *The Impact of Business Intelligence on the Quality of Decision Making – A Mediation Model*. *Procedia Computer Science*, 64, Conference on Enterprise Information Systems/CENTERIS October 7-9, 1163-1171
- Williams, S. & Williams, N. (2004). *Assessing BI Readiness: A Key to BI ROI*. *Business Intelligence Journal*, 9(3), 15-23.
- Wixom, B. and H. Watson (2010). "The BI-based organization." *International Journal of Business Intelligence Research (IJBIR)* 1(1): 13-28.
- Yoon, T., Ghosh, B. & Bong-Keun, J. (2014) *User Acceptance of Business Intelligence (BI) Application: Technology, Individual Difference, Social Influence, and Situational Constraints*. 47th Hawaii International Conference on System Sciences (Hicss), Hawaii, 2014
- ZAMANI, et al, (2017)*Customers’ perception is formed through its customers’ assessment of the quality of service provided and their satisfaction level with its overall service* (Zeithaml&Bitner, 2003).
- Zeithaml, V.A. & Bitner, M.J.(2003).*Services marketing integrating customer focus across the firm*.3rd Edition, New York: McGraw-Hill/Irwin.

SUPER BRAIN YOGA: A PANACEA FOR POSITIVE WELLBEING.

***Upasana Mehra**

**** Dr.Niharika Das**

Abstract

From the time immemorial Yoga has been the pivotal role in the wellbeing of the mankind. Based on this view this paper aims at focusing on 'Super Brain Yoga'(SBY), its simple procedure , simple technique, and simple way out, but magnificent role, on physical and mental growth of adolescents (N=210, consists of 100 girls and 110 boys) by using Yale Happiness test, memory test and MMSS TEST. It is assumed that there will be a significant difference between Pre and post test scores of all the measures before and after of SBY practice.

Key words: SBY, Wellbeing, positive wellbeing, autopilot, the circadian clock, Chakras,Alpha Waves, MMSS TEST, Yale Happiness test.

INTRODUCTION

“What consumes your mind that controls your life”

Positive Psychology is now amplifying the recent research among social scientists, aiming at contributing to wellbeing of the mankind, incorporating studies on positive elements of behavioural manifestations, normally known as positive wellbeing. Well-being is the experience of health, happiness, and prosperity. It includes having good mental health, high life satisfaction, a sense of meaning or purpose, and ability to manage stress. More generally, well-being is just feeling well (Davis, et al. , 2013). Well-being is something sought by just about everyone, because it includes so many positive things, like, feeling happy, healthy, socially connected, and purposeful. Although the world is now running thirsty for peace and tranquillity and it was really difficult to measure wellbeing of the individual, recent research on wellbeing has become now the focus of research to assess the wellbeing and to take appropriate steps to foster it in each and every mind of the individual. The Berkeley Well-Being Institute is one of the example.

Well-being can be measured by four convergent methods: the presence of (1) positive emotions and the absence of negative emotions, as measured by the Positive and Negative Affect Scale (PANAS) (Watson and Clark, 1997); (2) mature character traits, including self-directedness, cooperativeness, and self-transcendence, as measured by the Temperament and Character Inventory (Cloninger, Svrakic and Przybeck, 1993); (3) life satisfaction or quality of life, as measured by the Satisfaction With Life Scale (SWLS) (Pavot and Diener, 1993), and (4) character strengths and virtues, such as hope, compassion, and courage (Peterson and Seligman, 2004).

* Research scholar, Psychology, E mail : khannaupasana@yahoo.com

** Asst Prof in Psychology, SSS College for Women, Bhubaneswar, Odisha, India.

E mail: niharikadas@gmail.com

Research has shown that these measures converge to identify the same individuals, which means that authentic well-being involves all of these features. In other words, a person cannot feel good (as measured by positive emotions and life satisfaction) without doing good for all around him/her (as measured by maturity of character and virtuous conduct) described by Cloninger, (2004). Henriques, et.al., (2014), in his “Nested Model of well-being” described the domains of wellbeing as follows: 1) clear and straightforward and 2) anchored to a theoretically sophisticated formulation of the human condition. It accomplishes this by introducing the Nested Model, which posits that there are four nested domains that make up the construct of human well-being: 1) the Subjective Domain, which is the first person, phenomenological, conscious experience of happiness (versus misery) along with the self-conscious, reflected levels of satisfaction (or dissatisfaction) with life and its various domains; 2) the Health and Functioning Domain, which can be further divided into two broad dimensions of functioning, the biological and the psychological; 3) the Environmental Domain, which can also be effectively divided into two broad domains of the material and the social environment; and 4) the Values and Ideology Domain, which refers to the morals, ethical perspective, and worldview of the evaluator.

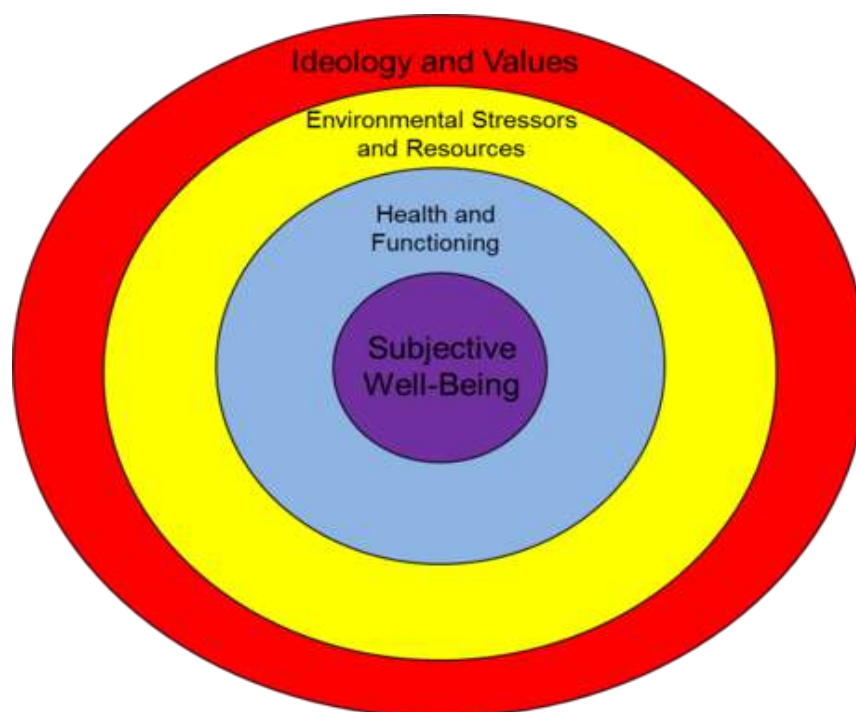


Fig 1: “*Nested Model of well-being*” by Henriques,et.al., (2014), *Values and Ideology Domain, which refers to the morals, ethical perspective, and worldview of the evaluator*

Major Types of Well-Being can be explained as:

- Emotional Well-Being. The ability to practice stress-management techniques, be resilient, and generate the emotions that lead to good feelings.
- Physical Well-Being. The ability to improve the functioning of your body through healthy eating and good exercise habits.
- Social Well-Being. The ability to communicate, develop meaningful relationships with others, and maintain a support network that helps you overcome loneliness.
- Workplace Well-Being. The ability to pursue your interests, values, and purpose in order to gain meaning, happiness, and enrichment professionally.

- Societal Well-Being. The ability to actively participate in a thriving community, culture, and environment.

To build the overall well-being, one have to make sure all of these types are functioning to an extent. And there are some key skills to achieve all these wellbeing. Like:

- Happiness Skills
- Mindfulness Skills
- Positive Thinking Skills
- Resilience Skills
- Eating for Health
- Detoxing Your Body
- Correcting Nutritional Deficiencies
- Removing Plastic From Your Home
- Practicing Gratitude
- Building Meaningful Social Connections
- Managing Your Relationship with Technology
- Maintaining Work-Life Balance
- Finding Your Purpose
- Living Your Values
- Creating a Plastic-Free Home
- Making Positive Impacts in Other People's Lives
- Kindness

The affective value of positive wellbeing on health can be, as cited by Vázquez, et.al., in 2009.

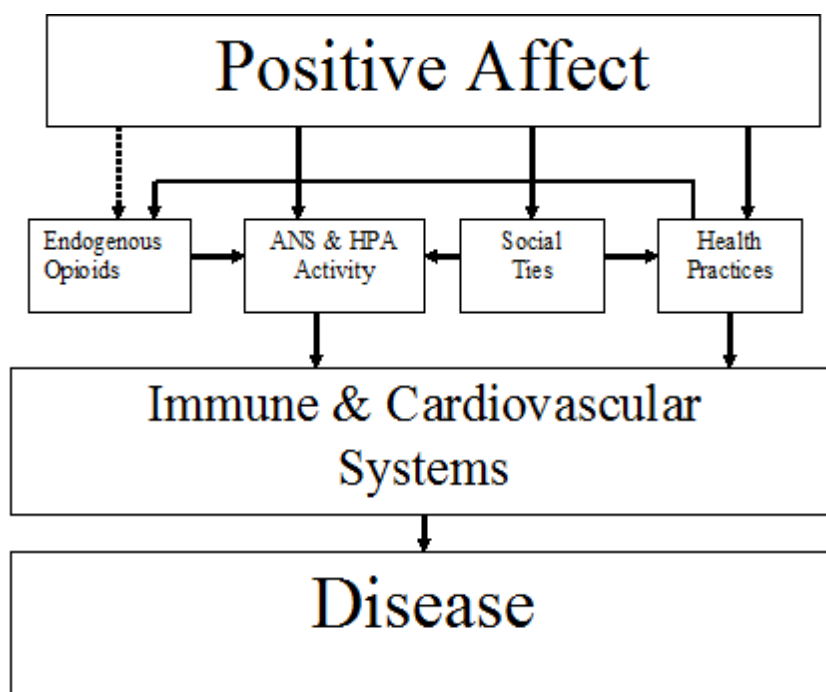


Fig 2 :Psychological well-being and health. Contributions of positive psychology by Vázquez, et. al., 2009.

Sometimes positive wellbeing interchangeably used as “psychological wellbeing”, which describes an individual’s emotional health and overall functioning. The ways to improve positive wellbeing / psychological wellbeing are positive thinking and fostering positive relationships. To gain it, physical and mental accumulation of strength of brain is essential. Yoga is considered to be the best technique to accumulate physical and mental strengths. One such Yogic technique is Super Brain Yoga (SBY) consisting of a simple and fast way of balance to energize the brain. Super Brain Yoga is a sort of yoga which invigorates the pressure point massage focuses in the ear cartilage. This imparts electrical signs to the mind, animating and boosting intellectual lucidity. The outcome is a more honed / improved and more settled psyche, diminished ADHD, better execution in school and whatever else that includes learning, maintenance, and review.

SBY, as the name suggests, aims at working on the brain and yoga depicts union of body and soul. Hence Super Brain Yoga (SBY) aims at helping the practitioner in improving and unifying his brain, body and soul. Super Brain Yoga includes series of steps meant to activate brain cells. It is a technique that aims to increase one’s intelligence by combination of ear acupressure. Super Brain Yoga combines breathing and acupressure to balance the right and left hemispheres of the brain. The activity is simple to learn, relatively quick, and can be practiced anywhere. Indian Rishis have developed this technique to increase the intelligence of people based on the principle of ear acupuncture and the science of prana/energy movement through various chakras. Chakras absorb, digest and allocate prana to the different parts of the body and are responsible for the proper functioning of human metabolic activities. Super Brain Yoga moves energy trapped in the basic and sex chakras through the major energy centers and finally up into the crown chakra that controls the pineal gland and overall brain health. After performing Super Brain Yoga, one’s energy centers and aura will be bigger.



Fig 3 : Activation of chakras

SBY is a technique safe to be incorporated in one's lifestyle from early ages of life and safe to be practiced till the last days of old age. An age old elixir for brain vitality, this exercise gives manifold benefits if practiced regularly. Due to optimum functioning of brain one can witness improvement in intelligence, creativity and overall performance of an individual.

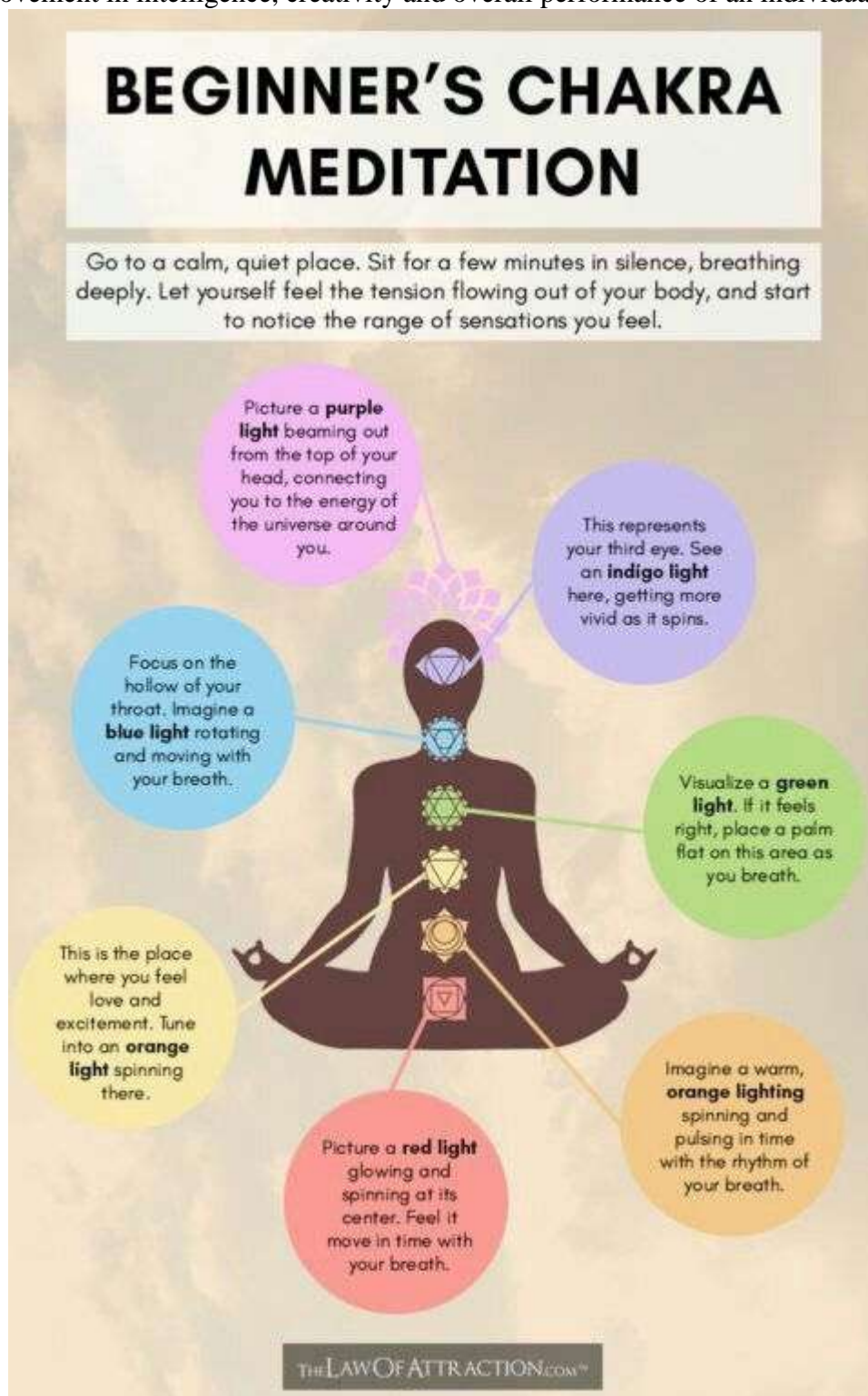


Fig 4 :Different Chakras activated by SBY Practice

Super Brain Yoga, based on the ancient principles of yoga & acupuncture, encourages a free flow of energy from the brain, through the spine and the entire peripheral *nervous system*. It

allows the clear flow of energy through the energy centres, otherwise known as chakras. Practicing Super Brain Yoga for 15 minutes can help you to get to profound, reflective alpha brainwave state. Going from 9 to 14 Hz, alpha waves are initiating relaxed and calm alertness also known as a brain's natural state of flow. It is in this state we can get to a greater amount of our memory and review. This is the point at which we are the most innovative and natural capacity to problem solving adequately. Most craftsmanship, music, and poetry is additionally made in the alpha state.

Super Brain Yoga helps to grow activities of Brain

The cerebrum/ Forebrain work each second, yet for most of the time, followed by *autopilot*, the *circadian clock* within the organism, We do things unknowingly, overlooking that we have the ability to reshape our cerebrum. Present day mind checking uncovers that every one of us can shape and reshape a totally extraordinary cerebrum. And we can utilize our psyche purposely to shape the cerebrum we need.

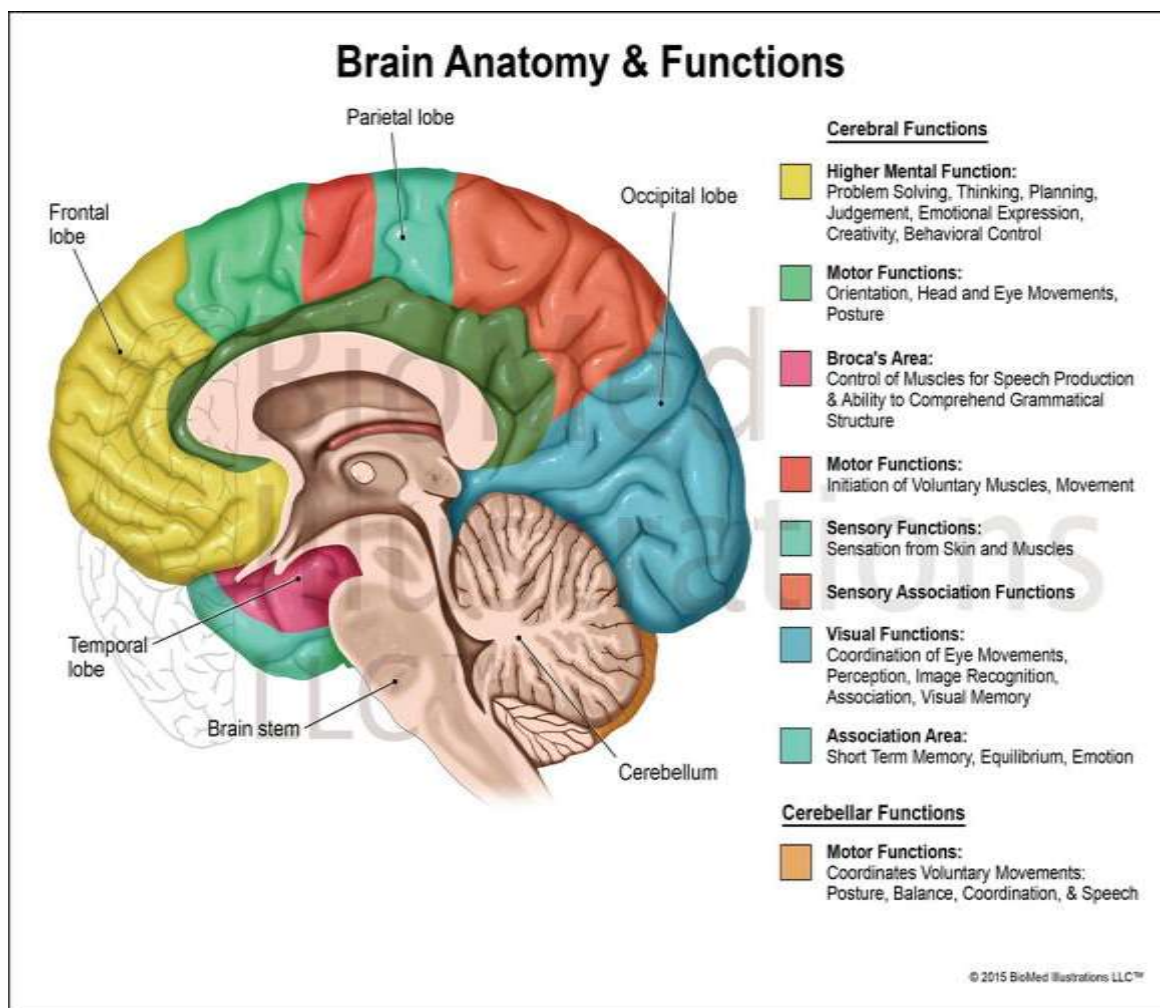


Fig 5 : Functional anatomy of the brain

Small habits done daily can grow the super brain. Furthermore, synchronizing our mind gives us more access to cerebrum development. Super Brain Yoga practices helps the psyche

to learn quicker, and this implies we can conquer difficulties faster and in a simple manner. It equips us more, than we give ourselves acknowledgment for our activities.

Super Brain Yoga increased Brain Synchronization

Many studies have made scientists believe that synchronization of the brain makes:

- Makes Learning large amount of information at a faster pace
- Induces high creativity
- Helps, restore, & control over all emotions.
- It is during meditation and deep relaxation when the left and right brain wave pattern happen together.

Super Brain Yoga involves squeezing one's earlobes with thumb and forefinger in a particular position and squatting following a prescribed breathing technique facing a particular direction. Super Brain Yoga. cleanses and energises the energy centres needed for the brain to function efficiently. According to the founder of Pranic Healing Master Chao Kok Sui (2005), “ while doing SBY the right earlobe is gently squeezed with the left thumb and the left index finger and the left earlobe with the right thumb and right index finger. The ear produces the necessary energy connection to the left and the right brain. This connection causes the left brain and the pituitary gland to become energized and activated as explained in *auriculotherapy*. Hence, the purpose of the Super Brain Yoga is to enhance the qualitative and quantitative *Pranic* energy or Bioplasmic energy in the brain”.

The working of the brain related to memory and concentration:

The brain is made up of billions of nerve cells, commonly called neurons. Neurons gather and transmit electrochemical signals that evoke our thoughts and motor functions. The cerebral cortex is associated with our memory, thought, attention, awareness, and consciousness. The frontal lobes in cerebral cortex are considered our emotional control centre and home to our personality. The frontal lobes are responsible for motor function, spontaneity, problem solving, initiation, judgement, impulse control, memory, language, and social and sexual behaviour. In humans, the Prefrontal cortex is the largest part of the frontal cortex and it is responsible for internal, purposeful mental action, commonly called reasoning or Prefrontal Synthesis.

Effect of Alpha waves on functioning of the brain:

The electrical pulses produced from masses of neurons communicating with each other form wave-like patterns called brainwave. There are four categories of the brainwaves. Ranging from the most activity to the least activity, the brainwaves are as follows:

1. Beta Waves
2. Alpha Waves
3. Theta Waves
4. Delta Waves

Alpha waves ranging from 8 to 12 Hz, are present when our brain is in an idling default-state typically created when one is daydreaming or consciously practicing mindfulness or meditation.

Benefits of Alpha Waves

- More Alpha waves generated show more benefits as it creates a relaxed concentrated state of mind which makes a person more alert.
- There is a synchronization of the right & Left sides of the brain.
- Anxiety and stress related disorders have been relieved by increase in Alpha waves.
- It strengthens the immune System, thereby improves the ability of the body to heal faster.
- This is effective for reprogramming our inner conscious levels.
- It creates a state of high creativity leading to peak performance.

A new study from the University of North Carolina (UNC) School of Medicine has identified the first evidence that a low dose of electric current of 10-hertz can enhance the alpha brain wave activity and boosts creative thinking by 7.4 percent in healthy adults. Practitioners of Super Brain Yoga claim that regular practice of this technique aid in their overall mental coordination, calmness, alertness, mind/body integration and learning. Various studies have ben done to establish the authenticity in these claims. Yale neurobiology researcher Dr. Eugenius Yang, Jr. says “the practice stimulates neural pathways in the brain by activating acupuncture points on the earlobes--and synchronizes the right and left hemispheres of the brain, as demonstrated by EEG (electroencephalograph) scans. "I do it every day," he says.”

A study revealed that that yogic intervention along with the practice of Super Brain Yoga techniques significantly increases the level of alpha wave of the secondary level students in the experimental group and with the use of regular Super Brain Yoga, the children were calmer and more focused. Overall improvement is shown in all areas including function and behavior; interacting with the environment with more success. (Verma . and Kumar , 2016). Grand Master Choa Kok Sui (2005), founder of the Philippines-based Institute for Inner Studies, Incorporated (IISI), conducted extensive research and developed the modern version of the practice. According to him regular practice of Super Brain Yoga helps in strengthening the immune system and promoting fast healing (due to the increase in alpha wave activity), Reprogramming our state of inner consciousness, improving intelligence, creativity, and overall performance, synchronizing the right and left hemispheres of the brain.

Benefits of Alpha waves have attracted many studies and another study to prove the increase of alpha waves in brain by practicing Super brain Yoga was conducted (Ramesh, 2007) , it stated that after 15 minutes of Super Brain Yoga there was significant increase in brain wave activity, especially Alpha Wave activity. They also observed that, by doing this exercise brain waves have improved their coordination and balance between the right and left sides.

A few studies and researches have brought to light that an exercise session can help upgrade our subjective capacities and improve mental concentrate. Subjecting adolescents aged 13-16 years to10 minutes of coordinated activity exhibited efficiency in completing the concentration and attention task (Budde, Voelcker-Rehage, Pietrayk-Kendziorra ,Ribeiro & Tidow, 2008)An examination led on teenagers and youthful grown-ups additionally discovered that 10 to 40 minutes of activity can give a quick lift to ones intellectual prowess and can likewise expand concentration levels by improving blood flow to the mind. In an article in Holistic Health (Gordan A. May 2017) it quoted Harvard Business School, recommending a squatting exercise similar to Super Brain Yoga to improve memory and thinking skills. Yoga

showed beneficial results in exceptional students with ADHD, learning disabilities and anxious learners when incorporated in their daily routine helping them by providing them the skills for self control and focusing the mind (Goldberg,2004)

With researches done to bring to surface the benefits of exercise for brain , researches also conducted research to study the comparative effect of Super Brain Yoga and Aerobics on memory (Francis, T., Devi, R. G., & Jyothipriya, A,2019) . It demonstrated the positive impact of Super Brain Yoga on attention control and working memory function. They also concluded that in comparison to aerobic exercise, the effects were more pronounced on working memory and visual reaction time and recommended this technique to be integrated into the physical education system of school-going pre-adolescents and adolescents. As consistency is the key to reap the benefits of Super brain Yoga therefore this practice was recommended to be included in Physical Education of students. To review this a study was done on 1,945 students age ranged from 6 to 18 yearsconcluded that there was increase in the concentration, memory, and confidence of students to face examination after practicing Super Brain Yoga for 3 months (Srikanth & Lancy, 2018)

Super Brain Yoga known as Thoppukaranam in South India also attracted some researchers to assess the benefit of this age old practice done by devotees as a mark of devotion to Lord Ganesha. However the research failed to establish any relationship between the practice and attention span as the sample used for study were a mix of novice and long-term yoga practitioners who were part of an on-going residential yoga course. Thus, making it unclear what effect the yoga practice had in influencing the participants' performance and psychological states. (Chandrasekeran A., Rajesh S. and Srinivasan Jan-Jun 2014). However a doctor in Los Angeles quoted Thoppukaranam a “fast, simple, drug-free method of increasing mental energy” and its prescription helped one of his student to raise his grades from C's to A's.(Robins E)

A routine practice of many people, this technique has patrons like Jim Kwik, one of the world's most in-demand accelerated learning experts amongst celebrities, professionals, and top performers – with clients like Harvard, Nike, Virgin, Fox Studios, and Singularity University. A study on Super Brain Yoga,(Feb 13, 2017) states that besides improving daily cognitive function, Super Brain Yoga has found to be very helpful with ADHD, learning disabilities, dyslexia, Alzheimer's and even autism. And this technique is a constant feature in Jim Kwik's programs who is a leading authority on improving memory.

Thus various studies have pointed out to the relationship between Super Brain Yoga and concentration and memory of children.

Steps of Super Brain Yoga Technique:

1. Stand up straight, facing the sunrise if possible.
2. Place your tongue on the roof of your mouth, directly behind your teeth. (This should feel like you are about to make the sound “la.”) Keep this placement throughout the activity.
3. Move your left hand across your upper body. Reach for your right earlobe with your thumb and forefinger, keeping your thumb in front.

4. Move your right hand across your upper body and reach for your left earlobe. Again, keep your thumb in front of your forefinger.
5. You should now be gently pressing against both earlobes. At this point, take stock of your position. Make sure your left arm is close to your chest and tucked inside your right arm.
6. Inhale deeply through your nose. While doing so, move toward the ground in a squat position.
7. Hold your breath for a beat or two. Move back into a standing position, and then exhale.
8. Repeat this process 14 to 21 times. Assess your position and continue holding your earlobes. Make sure your tongue is still touching the roof of your mouth.

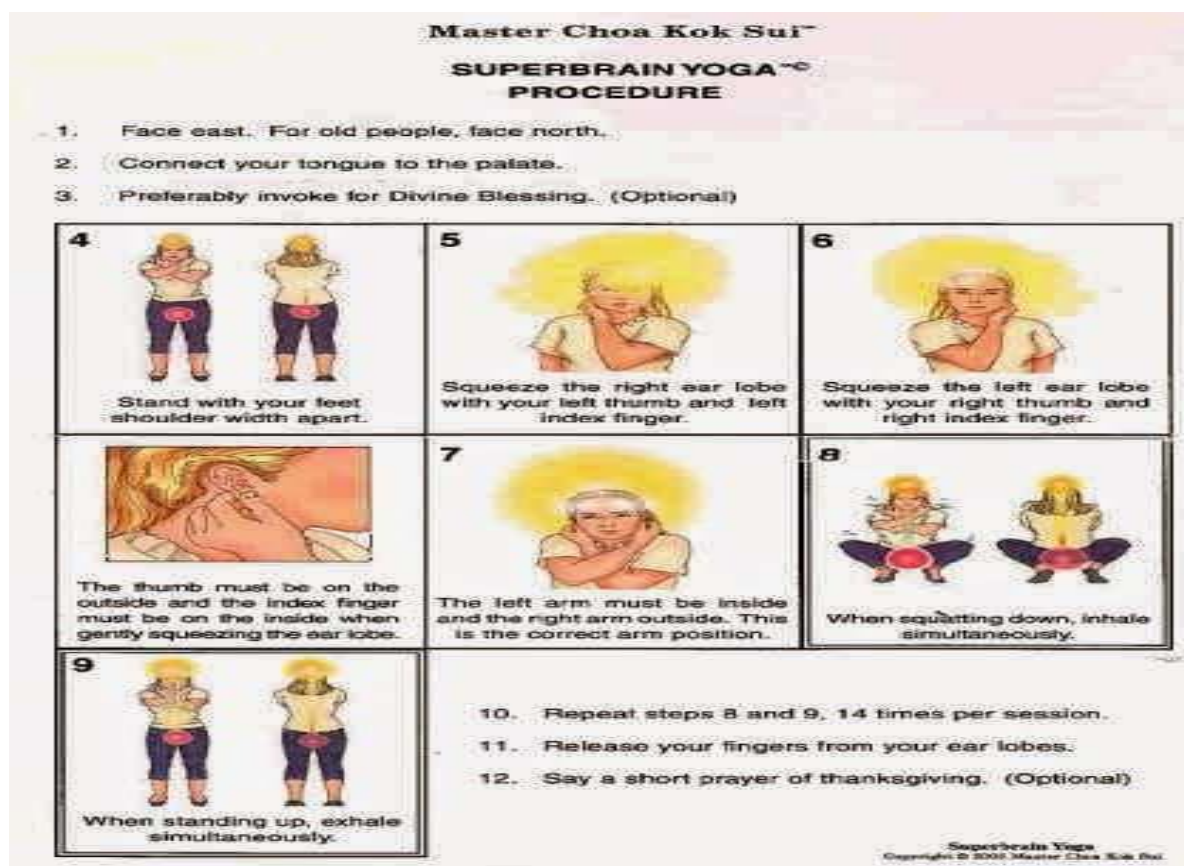


Figure 6 – Procedures of Super Brain Yoga

According to WHO -worldwide 10-20% of children and adolescents experience mental disorders. Half of all mental illness begin by the age of 14 and three -quarters by mid 20s. Neuropsychiatric conditions are the leading cause of disability in young people in all regions. If untreated, these conditions severely influence children's development, their educational attainments and their potential to live fulfilling and productive. Super Brain Yoga claims to move energy from base of the spine to the crown and increases alpha waves in the brain. Hence an attempt is made to access if a simple act of holding ears and squatting would help adolescents focus in studies. Super Brain Yoga has shown tremendous improvement in skills of the children and with this study we will access its effect on adolescents if practiced regularly.



Figure 7 -Practicing the Super Brain Yoga

According to some studies this method has shown to help children focus well in their work and also helps keep them calm as seen in ADHD children. One of the jewels of Indian tradition that has been lost in this modern world fascinated me to take up this topic that would enable us produce a generation of calm, focused human beings. According to Dalai Lama “Calm mind brings inner strength and self-confidence, so that’s very important for good health”

A person who can train himself to stay in a calm and poised frame of mind will lead a healthy, happy life. And good health and happiness is the key to success in life. A lot of Energy Schools- who work on ailments without administering vaccines but through the ‘prana or chi’ energy of body have successfully tested the benefits of a simple exercise Super Brain Yoga on balancing the two hemispheres of the brain. With the growing technology and awareness what seemed like a behavior issue has been now tested and termed as ADHD, autism etc. With science blaming the quality of food being the reason of deteriorating genes in children a lot of study and experimentation has been done to reverse the ill effects. But as it requires a mass change thus it is reaping trivial effects.

RATIONALE OF THE STUDY

In the 21st century the emphasis has been given mostly on Neuro-physiological and Neuro-Psychological growth and development of the human being. With the increasing pollution and escalated stress to be the best, the children these days can in no way be less than perfect. This leads to further increase in stress within (the important transition point of the life span) and this stress has manifested in shortcomings in respect to their behavior as a whole. Super Brain Yoga is a simple exercise of squatting. It is an easy process that improves and preserves ones physical and mental health especially helps the growth of brain. SBY depends on the rule of ear acupuncture therapy and pranic energy development in the body. Thus it upgrades the subjective and quantitative pranic vitality in the mind. It intends to improve the concentration, memory, and certainty of understanding by rehearsing Super Brain Yoga. Keeping in view of the above reviews of literature and theoretical background on benefits and effectiveness of Super Brain Yoga, the present study has taken up for studying the relationship between Super Brain Yoga technique and its effects on concentration and memory of adolescents.

Research Design

Objective

Thus the primary objectives of the project aim at:

- To measure the concentration and memory of adolescents (aged 15-19 years) before and after the practice of Super brain Yoga.
- To determine the relationship between Super Brain Yoga and the concentration level of adolescents
- To determine the relationship between Super Brain Yoga and memory of adolescents
- To measure the strength of the relationship between these two variables with the SBY as intervening variable.
- To find out the effectiveness of Super Brain Yoga on adolescents' cognitive development
- To explore the positive wellbeing among those who are practising SBY

Hypothesis

The post test scores after practicing Super Brain Yoga is better than pre-test score.

Independent variable - Regular practicing of Super Brain yoga technique for 30 days.

Dependent variable – Effects of Super Brain Yoga on concentration, memory and wellbeing

METHODOLOGY

Sample size:

The sample will consist of random selection of 210 students from a population of 1500 adolescents between the age group 15-19 years from different Yoga centers of South Delhi, India. The sample consists of 100 girls and 110 boys. The students consent will be obtained to participate in the study with the permission of authorities of Yoga schools / centers.

Tools for Data Collection:

- An Online Questionnaire - MMSS TEST.docx will be used to assess the effects of Super Brain Yoga on the concentration.
- Memory will be tested by percentage of memory and no. of learning trials taken by the subjects for perfect learning using 10 nonsense syllables.
- The Yale Happiness Test

PROCEDURE

Super Brain Yoga will be introduced to the students through the teachers for a period of 30 days. A questionnaire will be attempted by the sample before commencing the practice of Super Brain Yoga. After 30 days of practice, excluding Sundays and holidays, the responses from the students will again be collected using a questionnaire centered on concentration and memory of students. A Mizan meta-memory and meta-concentration scale Questionnaire will be used to seek information from the selected group. It will be kind of written interview and will be carried out through online. An e-mail, including a brief description of the study and a link to the online questionnaire, will be sent to all potential participants. MMSS (Manzar et al.

BMC Psychology 2018) is a brief questionnaire that assess two aspects of metacognition, i.e., meta-memory and meta- concentration.

Test of memory will be done with help of 10 nonsense syllables. Through online conferencing each sample will be shown a nonsense syllable for 5 seconds and their trials to remember them will be recorded. This procedure will be attempted with each sample. A total of 10 syllables will be given to subject to learn. After perfect learning the no of trials used by the subject will be recorded. Then after perfect learning a five min. rest interval will be given, after which the recall of the subject will be taken. Same procedure of pre-test will be followed with another set of 10 nonsense syllable, after 30 days of practice and the subjects' performances will be recorded. Similarly the Yale Happiness Test will be used to measure the wellbeing of the adolescence

CONCLUSION:

This paper is part of project work. Due the outbreak of Covid -19 pandemic, this paper is in progress, unable to be completed. The objective of the presentation here, is to solicit suggestions and accumulation of facts to enrich the result.

“Success is the sum of small efforts, repeated, day in and day out”

References

- Chandrasekaran, A. K., Rajesh, S. M., & Srinivasan, T. undefined. (2014). Effect of repetitive yogic squats with specific hand position (Thoppukaranam) on selective attention and psychological states. *International Journal Of Yoga*, 7(1), 76–79. doi: <https://dx.doi.org/10.4103/0973-6131.123497>.
- Davis, T. S., et al. (2013). Look on the bright side: Effects of positive reappraisal training on psychological health. Society for Personality and Social Psychology, Emotion Pre-Conference. New Orleans, LA.
- Francis, T., Devi, R. G., & Jyothipriya, A. (2019). Comparative study on the effect of intense exercise and yoga on memory. *Drug Invention Today*, 12(4). doi: <http://jpr solutions.info/files/final-file-5cbc25a8321e34.91038530.pdf>
- Goldberg, L. (2004). Creative Relaxation: “A Yoga-Based Program for Regular and Exceptional Student Education”. *International Journal of Yoga Therapy*, 14(1), 68–78. Retrieved from <https://ia y t journals.org/doi/abs/10.17761/ijyt.14.1.50524j511674v292>
- Gordan, A. (2017, May). Exercises to increase your brain power'. Retrieved from <https://www.afpafitness.com/blog/9-exercises-to-help-you-increase-your-brain-power>

- Henriques, G., Kleinman, K., & Asselin, C. (2014) The Nested Model of well-being: A unified approach. *Review of General Psychology*, 18(1), 7-18. doi: 10.1037/a0036288
- Jois, S. N., D'Souza, L., & Moulya, R. (2017). Effectiveness of Superbrain Yoga on Short-term Memory and selective attention of Students. *Indian J Public Health Res Dev*, 16, S35–S39. Retrieved from <https://pdfs.semanticscholar.org/327e/c648cf38b4a2e33c96f96ae22d14aa86e685.pdf>
- Jois, S. N., & D'Souza, L. (2018). Effectiveness of Super Brain Yoga on Academic Performance and Students' Attendance in School. *Psychology and Education Journal*, 55(1&2), 57–61. Retrieved from <http://www.psychologyandeducation.net/pae/2018/06/02/effectiveness-superbrain-yoga-academic-performance-attendance-school-students-dr-srikanth-n-jois-dr-lancy-dsouza/>
- Jois, S. N., & D'Souza, L. (2018). The Effectiveness of Super Brain Yoga on Concentration, Memory and Confidence in School Students. *Indian Journal of Traditional Knowledge*, 2018(4), 741–744. Retrieved from [http://nopr.niscair.res.in/bitstream/123456789/45059/1/IJTK_17\(4\)_741-744.pdf](http://nopr.niscair.res.in/bitstream/123456789/45059/1/IJTK_17(4)_741-744.pdf)
- Jois, S. N., & Moulya, L. (2018). Effectiveness of Superbrain Yoga on Short-term Memory, Visuospatial Ability and Academic Performance of Students. *Indian Journal of Public Health Research & Development*, 9(3), 183-187. Retrieved from http://www.indianjournals.com/ijor.aspx?target=tech_error
- Koterba, R. (2007). Superbrain Yoga in Children with Autism and ADHD. *Prana World*. Retrieved from <https://www.energie-institut.com/wp-content/uploads/2015/05/2006-Koterba-Superbrain-Yoga-USA.pdf>
- Layous, K. and S. Lyubomirsky (2012). The how, who, what, when, and why of happiness: Mechanisms underlying the success of positive interventions. Light and dark side of positive emotion J. Gruber and J. Moskowitz. Oxford, Oxford University Press.
- Manzar, M. D., Albougami, A., Salahuddin, M., Sony, P., Spence, D. W., & Pandi-Perumal, SR. (2018). The Mizan Meta-memory and meta-concentration Scale for students (MMSS): A test of its psychometric validity in a sample of university students. *BMC Psychology*, 6(1). Retrieved from https://www.researchgate.net/publication/329402961_The_Mizan_Meta-memory_and_metaconcentration_Scale_for_students_MMSS_A_test_of_its_psychometric_validity_in_a_sample_of_university_students
- Budde, H., Tidow, C. V., & Ribeiro, P. (2008, June 13). Acute Coordinative Exercise Improves Attention Performance in Adolescents. Retrieved from doi: 10.1016/j.neulet.2008.06.024

- R, D. (2007). Super Brain Yoga ~ “A Research Study”. *Prana World*. Retrieved from <http://upload.vedpuran.net/Uploads/7671sby-a-research-study.pdf>
- Sui, C. K. (2016). Superbrain Yoga. In *Super Brain Yoga* (5th ed., Vol. 1, pp. 29–31). Bangalore: Institute Of Inner Studies. India Pvt. Ltd.
- Tamir, M., et al. (2007). "Implicit theories of emotion: Affective and social outcomes across a major life transition." *Journal of Personality and Social Psychology* 92(4): 731-744.
- Verma, S., & Kumar, K. (2016). Evidence based study on super brain yoga and its application on alpha E.E.G. in adolescence. https://www.researchgate.net/Journal/0972-5938_Indian_journal_of_traditional_knowledge. doi: www.ijsc.net
- Vincent, R. (2017, November). 'Thoppu karanam. - super brain yoga - tamilian origin - arise roby. Retrieved from <https://www.slideshare.net/robymariavincen/thoppu-karanam-super-brain-yoga-tamilian-origin-arise-roby>.
- Vázquez, C.; Hervás, G. Rahona,J.J. & Gómez,D. (2009). “Psychological well-being and health. Contributions of positive psychology”,*Annuary of Clinical and Health Psychology*, 5, (2009,) 15-27)

ASSESSMENT OF ADAPTATION AND COPING SKILLS AMONG ADOLESCENTS

*Madhumita Guru

**Professor (Dr) Nibedita Jena

Abstract

Life is Like a Series of Moments. No matter what has occurred in our life up to this point, it should have no bearing at all. Rather we should be aware of what determines now to lead our own life. If we focus our entire life on accomplishing a specific goal we'll end up feeling meaningless. So focus should be on the journey, not on the destination. We have no control on the past nor on the future, only on the present, so embrace it, enjoy it, and live mindfully adapting and coping to the situation. Achieving happiness and positive wellbeing requires thought, study and action — hard work — it turns out. In other words adaptation and coping to the life incidents should be the basic clue of all individual. Again in adolescence this counts a lot.

With this idea the present field study is to assess the level of adaptation and coping skills among adolescents of four undergraduate students (two boys and two girls). The study was done by following proper procedure for data collection and the scoring was done as per the scoring key. The results suggest that the level of adaptation and coping skills in boys are higher than the girls, revealing the idea that boys had more effective adaptive and coping strategy than girls. Further very little statistical difference between the scores of adaptation and coping skills found among them.

KEYWORDS: *Adaptation, Coping skill, Gender role*

INTRODUCTION

“You never really know what's coming. A small wave, or maybe a big one. All you can really do is hope that when it comes, you can surf over it, instead of drown in its monstrosity.”

— Alysha Speer

Adapting is seen as a result of a series of strategies such as acceptance of the situation, reappraisal, positive orientation and proactive engagement in the situation as it is. Importantly, the paper describes adapting as frequently being a social or socially referred process, often involving interaction with others to reappraise the situation and developing a positive reorientation. Additionally it was found that adaptation often hinges on previous personal experience of adaptation and the need to adapt. Adaptability means remaining as the efforts to controls, reduce, or learn to tolerate the external events that lead to stress. Different people use different coping styles. Lazarus & Folkman, 1984 suggested there are two types of coping responses Emotion focused coping and Problem focused coping. Emotion focused coping involves trying to reduce the negative emotional responses associated with stress such as embarrassment, fear, anxiety, depression, excitement and frustration. This may be the only realistic option when the source is outside the person's control. Drug therapy can be seen as emotion focused coping as it focuses on the arousal caused by stress not the problem. Other emotion coping techniques include: - Distraction, e.g. Keeping yourself busy to take your mind off the issue, praying for guidance and strength, meditation, eating more, using drugs.

* Ravenshaw University Cuttack, Odisha, email drnjena@gmail.com

**Research Scholar, Ravenshaw University Cuttack, Odisha,

A meta-analysis revealed emotion focused strategies are often less effective than using problem focused methods in relation to health outcome (penley, tomaka, & weibe,2012). Emotion focused coping does not provide a long term solution and may have negative side effects as it delays the person dealing with the problem. However they can be a good choice if the source of stress is outside the person's control. Problem focused coping is the coping mechanism that helps people to deal with stress by identifying the fundamental cause of the stress in an objective manner, without letting ones emotion get in the way. Problem focused coping mechanism usually involves problem solving, time management and strategy development. An upcoming exam may be a source of stress for someone and it can be dealt in one of two ways: preparing a study schedule in advance or complaining to everyone about the test. Some people cope with a difficult problem by dealing directly with it either through overt action or through realistic problem solving activities. When we face a difficult problem, we may fight it out, run away from the immediate dangers (Bilings& mous, 1982) In the problem focused coping, the focus is on the problem that threaten us and induce stress. In general problem focused coping is best, as it removes the stressors, so deals with the root cause of the problem, providing a long term solution. Problem focused strategies are successful in dealing with stressors discrimination (Pascoe & richman,2009) HIV (Moskowitz, Hult, Bussolari& Acres,2009) and diabetes (Duangdao & Roesch, 2008). However, it is not always possible to use problem focused strategies may not be very helpful for the bereaved. Dealing with the feeling of loss requires emotion focused coping. A successful coping depends upon finding match between the coping strategies and the specific features of the external stressors. When it comes to better understanding and treating addiction, we can learn a lot by looking at a person's coping mechanisms.

Coping mechanism are the skills we all have that allow us to make sense of our negative experience and integrate them into a healthy, sustainable perspective of the world. For a successful a person should have number of coping strategies, it is more likely that he would achieve a match and manage the stressful event. One can cope with difficult circumstances by a) turning threat into challenge, b) making a threatening situation less threatening, c) changing one's goals and priorities, d)taking physical action and e)prepareng for stress before it comes. Celin Chioma &Weng Asuzu (2009) investigated the influence of shift duty and stress coping strategies among nurses in the university college hospital in Nigeria. The total sample was 166 students working in various wards. Shift duty was reported as stressful by (47.6%) of the nurses studied. Whereas the various stress coping responses were identified which were largely based on planning? Also there are no significant influence between nurse on the base of their age and seniority. The positive coping styles correlated negatively with the negative ones but the negative correlations were significant in only two instances namely between planning and denial ($P<0.01$) and between positive interpretations and growth and alcohol – drug disengagement ($P<0.05$) Stress coping responses of nurses were largely based on planning and active coping. Jayashree Nayak & Susheela P. Sawakr (2008) investigated of factors influencing stress and coping strategies was conducted on a random sample of 200 (100) male and (100) degree college teachers of Dharwad city. Questionnaire for Demographic characteristic and Coping Strategies were used along with Employment Organization Sources of Stressors scale Telaprolu and George 2005. Frequency, percentage, t-test, correlation and step wise regression were used for analysis. The factors that caused stress always were mainly due to the interference of the employment organizational responsibilities with their family organizational role, lack of their involvement in decision making that reduced their

responsibilities and the participatory model in their organizational set up which enhanced their responsibilities to the point of exhaustion. Majority of the teachers revealed that stress was basically due to their laziness and also they were happy with fewer responsibilities. The overall results of stress level revealed that, higher percentage of teachers was in low stress category. Gender wise significant difference observe in case of personal development stressor and interpersonal relation stressors, while it was no significant in e coping strategies, thus reducing the need for reactive coping case of work, role and organizational climate stressors Age was the influencing factor on the total stressors which was statistically highly significant. Keeping ready well ahead, taking rest, avoiding strenuous posture, taking balanced diet, walking, using sleeping pills and hot water therapy were practiced by the teachers when they were physically stressed. Offering prayer, positive thinking, working in-group, avoiding painful reminders, delegating the tasks and listening songs were practiced when they were mentally stressed. There was no significant gender difference found with respect to physical stress management where as it was significant.

A comparative study on “Coping strategies adopted by adolescents” in relation to gifted status, gender, and family size”, Breik & Zaza (2019) focuses on differences in coping strategies (CSs) in relation to gifted status, gender, and family size. Two hundred gifted adolescents were selected from gifted schools, and 1000 non-gifted adolescents were selected from ordinary schools. It is found that Coping strategies, like, “Seeking Professional Support”, “Investing in Close Friend” and “Ventilating Feelings” between gifted and non-gifted adolescents among the selected variables (i.e. gifted status, gender, and family size), contributed the most in distinguishing between the subjects in relation to family size.

According to Patterson and McCubbin (1987), CSs are of great importance in adolescence due to the fact that these youngsters are usually confronted with many life stressors and strains for the first time in their lives and have not yet developed specific cognitive and/or behavioural strategies to reduce or manage different demands. Patterson and McCubbin (1987: 167) concluded that coping is “an active effort that is directed to efficiently manage individual and family related demands. Functional coping results in adaptation, in which the youth achieves a fit within both the family and the community.”

In another study on “stress sources among college students in Taiwan”, Cheng Kai-Wen (2009), described that Adolescence is a stage of human development that occurs between childhood and adulthood. Although there are varying definitions of adolescence, adolescence is generally viewed as a stage where young people experience rapid growth of their body and mentality to full maturity during 12~25 years of age (Liu, 2001). In education system, adolescents are those receiving education in junior high schools, senior high schools, vocational high schools, colleges or universities. Due to fast physical changes and mental development at this stage, students may sometimes experience incompatibility of their mental development with their physical changes or with the social environment and thus suffer from problems arising from inadequate adaptations. These problems may further cause psychological troubles and even induce deviant behaviours. College students are at a critical period where they will enter adulthood. They are expected to be the elites in the society. Thus, they should enhance their stress management abilities so as to live a healthy life after entering the society. According to Department of Statistics, Ministry of Education (2007), there are currently 162 colleges/universities in Taiwan, and more than half of them (93 schools) are institutes or

colleges of technology. For college freshmen, they need to not only adapt themselves to the new life and new environment but also be familiar with many new people, events, and things. The life stress on them is considerable. Therefore, understanding the sources of stress among them and how they can cope with the stress is very important

Adolescence is a critical period of time where young people experience self-organization and role confusion. For them, stress mainly comes from academic tests, interpersonal relations, relationship problems, life changes, and career exploration. Such stress may usually cause psychological, physical, and behavioural problems. According to statistics of 2005~2008, the number of suicide (including self-injury) cases is the highest among college/university students, and female students take a much larger proportion of the suicide (including self-injury) cases. Among the causes of suicide or self-injury, relationship problems are the leading cause, followed by depression and academic stress. Obviously, stress is the primary cause of suicide (or self-injury) among college/university students (Campus Security Report Centre, Ministry of Education, 2009). As the number of college students in Taiwan has drastically increased in recent years, this study focused on college students in Taiwan to explore their stress sources and coping strategies through a questionnaire survey

According to Lazarus & Folkman (1984), stress is a mental or physical phenomenon formed through one's cognitive appraisal of the stimulation and is a result of one's interaction with the environment. The existence of stress depends on the existence of the stressor. Feng (1992) and Volpe (2000) defined stressor as anything that challenges an individual's adaptability or stimulates an individual's body or mentality. Stress can be caused by environmental factors, psychological factors, biological factors, and social factors. It can Journal of Academic and Business Ethics A Study of Stress Sources, be negative or positive to an individual, depending on the strength and persistence of the stress, the individual's personality, cognitive appraisal of the stress, and social support. According to Chang's Dictionary of Psychology Terms, stress is "a state of physical or mental tension that causes emotional distress or even feeling of pains to an individual" (Lai et al., 1996).

The sources of stress that Adolescents are mostly concerned about are : Physical/mental factor(Siegel and Lane,1982; Wang and Ko,1999; Lan , 2003 & Feng (1992), Family factor(Liu and Chen1997, & Liu and Chen, 1997),School factor(Liu and Chen, 1997& Cheng, 1999 &Chiang (1995), Relationship factor(Wang and Ko, 1999), Social factor (Feng, 1992).

Despite current interest in emotional and social adjustment of gifted adolescents, there search addressing CSs adopted by this group is scarce. On the other hand, most of the effort directed at exploring coping skills has primarily relied on typical samples (Bird and Harris, 1990; Copeland and Hess, 1995; Frydenberg and Lewis, 1991, 1997; Patterson and McCubbin, 1987; Plunkett et al., 2000) or gifted samples (e.g. Buescher,1985; Buescher et al., 1987; Tomchin and Callahan, 1996) and has focused on coping with the stigma and social pressure experienced due to the gift (e.g. Cross et al., 1991; Dauber and Benbow, 1990; Swiatek, 1995, 2001; Swiatek and Dorr, 1998)

Research on childhood and adolescent development of the intellectually gifted (hereafter for simplicity referred to as gifted) most often has focused on comparisons between gifted students and their average counterparts on cognitive, social, and

psychological dimensions (Tomchin and Callahan, 1996). Few studies (Preuss and Dubow, 2003; Wertlieb et al., 1987) have tackled the differences between gifted adolescents and those of average intelligence in terms of coping strategies (CSs). In addition, Preuss and Dubow (2003) concluded that most of the research on coping was conducted with typical participants and does not use a comparison group. The research on gifted groups has mostly addressed stressors related to being gifted (Breik, 2004; Swiatek, 1995) rather than being gifted and commonly experiencing stress-related events. Therefore, little or no consistent information has been made available to identify how intellectual ability might interfere with the coping style and to explain how different variables contribute to the tendency among adolescents to adopt specific CSs. Further-more, no empirical investigations have been conducted to assess the CSs adopted by gifted adolescents in Jordan. The focus of a recent study has been directed toward exploring differences in self-concept among gifted and typical adolescents in Jordan (Breik, 2014). According to Patterson and McCubbin (1987), CSs are of great importance in adolescent due to the fact that these youngsters are usually confronted with many life stressors and strains for the first time in their lives and have not yet developed specific cognitive and/or behavioural strategies to reduce or manage different demands. Patterson and McCubbin (1987: 167) concluded that coping is “an active effort that is directed to efficiently manage individual and family related demands. Functional coping results in adaptation, in which the youth achieves a fit within both the family and the community.” Exploring strategies adopted by gifted adolescents in comparison to their non-gifted peers when dealing with stressful situations and challenges improves our understanding of the differences between these two groups and how intellectual abilities interfere with their capacity to manage difficult situations. On the other hand, gender and family size may interfere with the tendency to develop specific types of coping; therefore, investigating CSs that distinguish between adolescents in relation to gender and family size help in determining the factors that should be taken into consideration when offering help to these youngsters. Accordingly, the current study will contribute to the existing research in shedding light on some aspects related to intellectual giftedness and coping. Literature review Research on childhood and adolescent development of the intellectually gifted (here after for simplicity referred to as gifted) most often has focused on comparisons between gifted students and their average counterparts on cognitive, social, and psychological dimensions (Tomchin and Callahan, 1996).

Several studies have been conducted to explore the differences in CSs in relation to gender differences. Some studies indicate that girls were reported to be more likely than boys to cope with stress by engaging in social relationships or seeking social support (Copeland and Hess, 1995; Piko, 2001; Plunkett et al., 2000; Copeland and Hess, 1995 & Piko, 2001). These findings have been supported by several investigators (Feldman et al., 1995; Frydenberg and Lewis, 1991; Santacana et al., 2012; Frydenberg and Lewis, 1991; Halstead et al., 1993; Patterson and McCubbin, 1987 & Bowker and Hymel, 2000).

However, less has been found regarding other Coping strategies. For instance, Miller and Kirsch (1987) as cited in Zeidner and Endler (1996) indicated that men in general tend to use active CSs that alter the external environment (i.e. problem-focused strategies), while women were more likely to use strategies that modify their internal emotional experience (i.e. emotion-focused strategies). The work of other researchers has suggested that this distinction is far less clear, perhaps especially with regard to emotion focused strategies. For instance, some authors (Copeland and Hess, 1995 & Plunkett et al., 2000) have found that

girls are more likely than boys to use catharsis, but others have concluded that boys are particularly more likely to cope through aggressive behaviour and other ventilation strategies (Bird and Harris, 1990; Halstead et al., 1993; Shulman,1993), which can also be viewed as cathartic. Similarly, some researchers have suggested that boys are more likely than girls to engage in stress-reduction activities or diversions (Copeland and Hess, 1995), while others (e.g. Plunkett et al., 2000) have found that girls seek diversions as means of coping. Moreover, accepting the negative incident or its consequences has also been variously found to be more common among boys (Bowker and Hymel, 2000) or among girls (Petersen et al., 1991). In a relatively recent study, Jose and Kilburg (2007) found in a Japanese adolescents sample that girls had reported using isolation and problem-solving coping more often than externalizing coping in comparison to boys.

OBJECTIVE:

To assess the level of adaptation and coping skills of four undergraduate students.

HYPOTHESIS:

It is possible to bridge the gap between a gender's adapting and coping skills& strategy by establishing gender equality. Ensure that adolescents be it a boy or a girl should prioritize education and have equal access to the information, technology and major economic resources.

METHODOLOGY:

Sample

The sample consists of 4 students 2 boys and 2 girls. Belonging to the age group 18-20 years were selected from BJB College Bhubaneswar. The subject were contacted individually and the questionnaire was given in a calm and noise free environment.

Research Tools

The instrument used in this study were (a) 'Adaptation' Questionnaire and (b)'coping' checklist. 'Adaptation' Questionnaire. This questionnaire consist of 20 items, each to be rated on a 4 point scale (Almost never=0; Sometime=1; usually=2; Almost always=4) scale. The subject is asked to read each statement, and circle a number against the statement that best represent his/her adaptation style. The total 'adaptation' score of the subject is obtained by adding all the circled numbers for the 20 items. The higher the score, the higher is the subject's adaptation level. A score of 45 or more indicates that the subject is exceptionally adaptable; a score between 34-44 indicates very good adaptation skills; a score of 25-34 indicates an average level of adaptation; and a score below 25 suggest that the adaptation level is not satisfactory. 'Coping 'checklist. It consist 20 statements each describing a style of coping style of a coping with problem. The subject is asked to mark 'true' or 'false' for each statement depending on whether the statement truly describe or not describes his/her approach to the solution of problems. The total number of item marked as true is the total 'coping' score of the subject. There are 10 items, which describe problem focused coping, while the rest 10 describe emotion focused coping. Two separate scores can be obtained for each subject, one indicating

subject's problem focused coping strategies and other indicating his/her emotion focused coping strategies. The higher the score, the higher subject's coping skills.

RESULTS TABLE

Items	Boys			Girls		
	Sample-1		Sample-2	Sample-1		Sample-2
1	1		1	1		3
2	3		3	3		2
3	3		1	2		2
4	2		2	3		1
5	2		2	2		3
6	1		3	2		2
7	1		3	1		2
8	3		2	2		2
9	3		3	2		3
10	2		3	2		3
11	3		2	1		2
12	3		3	2		3
13	3		3	3		2
14	2		3	3		1
15	2		3	2		3
16	2		3	3		2
17	0		0	0		3
18	1		3	1		2
19	3		3	0		2
20	2		2	2		1
Total	42		48	37		43

Table.1: Showing Item wise scores of Boys and Girls

Gender	Adaptation Skills	Percentage
Boys	90	75%
Girls	80	66.67%

Table No.2 showing Adaptation skills of boys and girls

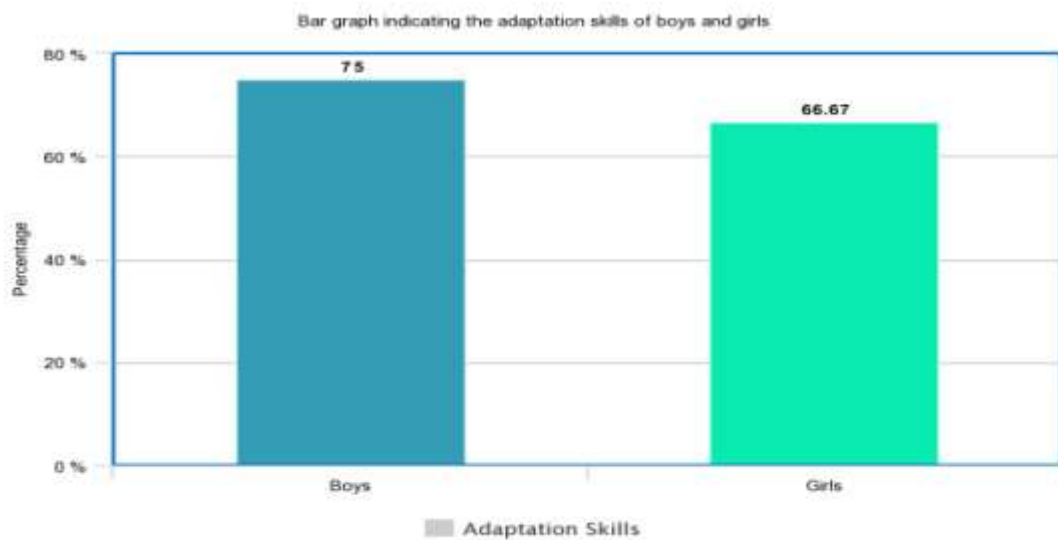


Chart 1 showing Adaptation skills of boys and girls

Gender	Sample	Scores of problem focused	Scores of emotion focused	Total	% Percentage
Boys	Sample-1	8	7	15	75%
	Sample-2	6	8	14	70%
Girls	Sample-3	8	5	13	65%
	Sample-4	8	6	14	75%

Table 3: showing Scores indicating the nature of coping strategy in boys and girls

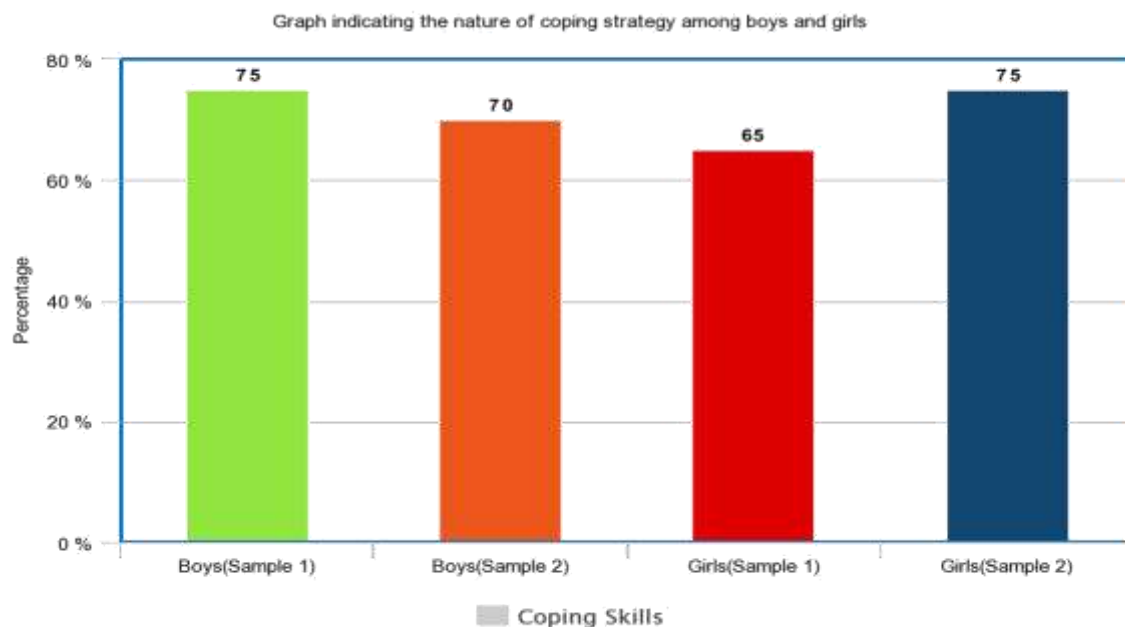


Chart 2: showing Scores indicating the nature of coping strategy in boys and girls

DISCUSSION AND CONCLUSION:

The result of this study showed that there is a difference between boys and girls in adaptation and coping skills. However, based on this study adolescents age group is between 18-20. The objective of this study was to assess the level of adaptation and coping skills of 4 undergraduate students. The early adulthood gives the possibility of self-focused and exploration of self-identity along with the time of instability. Adulthood bring along responsibilities and roles for setting the stage to later adult life. Though the adulthood might affect the mental health, it also comes with the opportunities for a brighter future. People's eventual ability to begin adulthood in a well-adjusted and self-actualizing ways depends in part on their coping on the resources available to them. Coping is defined as the pattern of responses to adverse situations. The coping skills are thus viewed as the characteristics of an individual depending upon their coping styles.

The strategies of coping styles thus differ from individual to individual depending upon the perception of situations. Depending upon the developmental stage people's ability to cope with also varies over time. A certain level of cognitive and emotional maturity is needed to access the situation, recognizing the possible responses and making a decision about how to cope with it. It is observed that the adults have much more choices available for responding to a certain situation as compared to children.

It is observed that adolescents having respectful relationships develop more skills and knowledge to adapt in a situation. A mature and understanding person adapts to a situation much better than others. Providing them with proper opportunities can increase the adaptation skills to much a greater extent. The result Table 1 describes item wise scores of boys and girls. . Table 2 represents the percentage of adaptation skills of boys and girls. From the above table it is observed that the boys had a score of 90 which is 75% of the maximum score whereas the girls had a score of 80 which is 66.67% of the maximum score. This suggests that girls are somewhat less adaptive in nature. Referring to figure 1 in the above graphical representation the x-axis represents the adaptation skills of boys and girls while the y-axis represents the percentage. So it can be concluded that with a score of 75% the boys are more adaptive than girls.

The result table 3 represents the score indicating the nature of strategy among boys and girls. Out of 2 boys and girls we sampled both problem focused and emotion focused scores. The total score of sample 1 was 15 with a percentage of 75; sample 2 had a score of 14 with a percentage of 70; sample 3 had a score of 13 with a percentage of 65 and sample 4 had a score of 14 with a percentage of 70. Figure 2 is a graphical representation of problem focused and emotion focused scores of coping skills among boys and girls as derived from table 3. During adolescence individuals acquire the emotional cognitive and physical resources that will be the foundation of their adult life. Thus it is essential for adolescents to socialize and familiarize with the society to adapt to their situation better and in turn learn to deal with it. Also gender perspectives should be focused in its implementation, monitoring and evaluation of adaptation strategy

Reference

- Bird, G.W. & Harris, R.L. (1990).“A comparison of role strain and coping strategies by gender of family structure among early adolescents’. *Journal of Early Adolescence* 10(2): 141–158.
- Bowker, A. & Hymel, S. (2000).“Coping with daily hassles in the peer group during early adolescence: variation as a function of peer experience”. *Journal of Research on Adolescence* 10(2): 211–244.
- Breik, W. (2004).”Coping strategies used by gifted adolescents to deal with the stigma of giftedness. *Association of Arab Universities*”, *Journal for Education and Psychology* 2(2): 77–116.
- Breik, W. (2014).“Self-concept of gifted and non-gifted students and its relation with age”. *The Educational Journal* 28(11): 325–353.
- Breik, W. D. & Zaza,H.I.(2019). “Coping strategies adoptedly adolescents: A comparative study in relation to gifted status, gender, and family size”, *Gifted Education International* 2019, Vol. 35(1) 3–19 ,journals.sagepub.com/home/gei
- Buescher ,T.M. (1985).‘A framework for understanding the social and emotional development of gifted and talented adolescents”. *Roeper Review* 8(1): 10–15.
- Buescher, T.M., Olszewski, E. & Higham, S.J. (1987).”Influences on strategies adolescents use to cope with their own recognized talents. Paper presented at the Biennial Meetings, Society for Research in Child Development”, Baltimore, MD, 23–26 April 1987, (ERIC Document Reproduction Service No. ED288285).
- Cheng, Kai-Wen .(2009).” A study of stress sources among college students in Taiwan”, *Journal of Academic and Business Ethics*, Page,1-8. <https://www.aabri.com/manuscripts/10471.pdf>.
- Copeland ,E.P.&Hess, R.S. (1995).“Differences in young adolescents’ coping strategies based on gender and ethnicity”. *Journal of Early Adolescence* 15(2): 203–219.
- Cross, T,L, Coleman, L.J.&Terhaar-Yonker,s .M. (1991).“The social cognition of gifted

- adolescents in schools: managing the stigma of giftedness". *Journal for the Education of the Gifted* 15(1): 44–55.
- Dauber ,S.L.&Benbow, C.P. (1990).“Aspects of personality and peer relations of extremely talented adolescents”. *Gifted Child Quarterly* 34(1): 10–14.
- Feng, G. F. (1992). “Management of Stress and Loss”. Taipei: Psychological Publishing Co., Ltd.
- Folkman, S.; Lazarus, R.S. (1988). "Coping as a mediator of emotion". *Journal of Personality and Social Psychology*.54(3): 466–75
- Folkman, S.; Lazarus, R.S. (1988). "Coping as a mediator of emotion". *Journal of Personality and Social Psychology*. 54 (3): 466–75 Albertus, Sargent. "Basic Coping Strategies for Stress". *Stress Treatment*. Retrieved 11 August 2015.
- Frydenberg, E. (1993).“The coping strategies used by capable adolescents. Australian” *Journal of Guidance and Counselling* 3(1): 1–9.
- Frydenberg, E. and Lewis, R. (1991).“Adolescent coping: the different ways in which boys and girls cope”. *Journal of Adolescence* 14(2): 119–133.
- Frydenberg, E. & Lewis, R. (1997).“Coping with stress and concerns during adolescence: A longitudinal study”. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL. (ERIC Document Reproduction Service No. ED407647).
- Halstead, M, Johnson, S. & Cunningham, W. (1993).“Measuring coping in adolescents: an application of the ways of coping checklist”. *Journal of Clinical Psychology* 22(3): 337–344.
- Lazarus, R. S., and Folkman, S. (1984). “Stress, Appraisal, and Coping”. New York: Springer.p. 141.
- Lazarus, R.S. & Folkman, S. (2012). *Stress, Appraisal, and Coping* (1984) p. 141.Santacana MF, Kirchner T, Abad J, et al. “Differences between genders in coping: different coping strategies or different stressors?” *Anuario de Psicología* 42(1): 5–18.
- Patterson, J.M. & McCubbin, H.I. (1987). “Adolescent coping style and behaviours: conceptualization and treatment”. *Journal of Adolescence* 10: 163–186.
- Petersen, A..C, Sarigiani, P.A. & Kennedy, R.E .(1991).“Adolescent depression: Why more girls?” *Journal of Youth and Adolescence* 20(2): 247–271.
- Piko, B. (2001).‘Gender differences and similarities in adolescents’ ways of coping’. *Psychological Record* 15(2): 223–235.
- Plunkett, S.W., Radmacher, K.A. & Moll-Phanara, D. (2000).“Adolescent life events, stress, and coping: a comparison of communities and genders”. *Professional School Counselling* 3(5):356–367.
- Preuss, L.J. & Dubow, E.F. (2003).“A comparison between intellectually gifted and typical

children in their coping responses to a school and a peer stressor". *Roeper Review* 26(2): 105–111.

Shulman, S. (1993). "Close relationships and coping behaviour in adolescence". *Journal of Adolescence* 16(3): 267–283.

Swiatek, M.A. (1995). "An empirical investigation of the social coping strategies used by gifted adolescents". *Gifted Child Quarterly* 39(3): 154–160.

Swiatek, M.A. (2001). "Social coping among gifted high school students and its relation to self-concept". *Journal of Youth and Adolescence* 30(1): 19–39.

Swiatek, M.A. and Dorr, R.M. (1998). "Revision of the social coping questionnaire: Replication and extension of previous findings". *Journal of Secondary Gifted Education* 10(1): 252–258.

Tomchin, E.M. & Callahan, C.M. (1996). "Coping and self-concept: adjustment patterns in gifted adolescents". *Journal of Secondary Gifted Education* 8(1): 16–27.

Zeidner, M. & Endler, N.S. (editors) (1996). *Handbook of Coping: Theory, Research, Applications*. New York: John Wiley. Washburn-Ormachea, Jill M.; Hillman, Stephen B.; Sawilowsky, Shlomo S. (2004). "Gender and Gender-Role Orientation Differences on Adolescents' Coping with Peer Stressors". *Journal of Youth and Adolescence*. 33 (1): 31–40.

COVID -19 AND FEAR PSYCHOSIS : AN OVERVIEW

*Prof Santa Misra

Abstract

This paper is an analytical revelation of present day situation resulting due to the outbreak of pandemic Covid - 19. Keeping in view the neuro biological, neuro psychological and socio cultural standpoint, an exploration is made on development of fear psychosis among the people after observing the traumatic consequences of Corona virus. An attempt has been made to think upon the cause and effect relationship of fear psychosis, how to manage the situation and how to control the outburst at an extreme end.

Key Words: Covid-19, Fear Psychosis, Neuro-psychotic syndrome, psychoanalytic theory.

INTRODUCTION

“A transference neurosis corresponds to a conflict between ego and id, a narcissistic neurosis corresponds to that between ego and super-ego, and a psychosis to that between Ego and outer world.”

— Sigmund Freud

One of the Neuro-psychotic syndromes is fear psychosis that can have its origin from biological / genetic, psychological and socio-cultural points of view. In the present scenario, behavioural issues have been reported as challenging as per the outbreak of Corona pandemic, compelling to analyse the neuro scientific analysis of fear psychosis to its manifestation. Almost all people throughout the globe are in worry for the continuous outbursts of the Corona spread. And the most crucial point of the manifestation is when it leads to neuro- biological and neuro -psychotic syndromes.

As per Freud's psychoanalytic theory, fear, anger and jealousy are three basic emotions which are found in each and every organism. But when fear becomes acute, critical, morbid and beyond somebody's mental control, it takes the shape of fear psychosis. The recent spread of the Corona virus is creating such psychotic fear among the people due to lack of vaccine, medicine and other scientific medical care .Gradual increase of Covid count and death rate is also making the situations worse.

The Corona Virus Disease 2019 (COVID-19) outbreak started in China in December 2019 and by March 2020 had spread across the globe. As per the advice of WHO, due to lack of vaccine and medicine, the spread over is tried to be controlled and managed by quarantine , self-isolation of people potentially exposed to the virus and social distancing (more accurately termed 'physical distancing') of the general population and use of masks. While physical distancing may be the most effective way of preventing the spread of the virus (Center for Disease Control et al., 2003), this measure may be associated with a range of adverse psychological effects including fear, anxiety, and worry (Brooks et al., 2020 and Gardner & Moallef, 2015), in addition to the physical effects of decreased motor activity, changes to diet, and exposure to sunlight (Lippi et al., 2020).

* Visiting Prof in Psychology, International Institute of Rehabilitation Sciences and Research, Bhubaneswar, ODISHA, (INDIA). Email:dr.santamisra@gmail.com

The lock down and shut down in the cities and villages to prohibit the spread of corona virus also create hindrances in normal life leading processes in many other ways dealing with physical and mental (i.e., mental wave length connectivity) communicative processes.

Impact of Covid-19 pandemic also can have psycho-somatic, psycho-pathological, and neuro-psychotic outlets. Clinicians working in mental health services have given anecdotal reports of increased paranoia around contamination from being in close contact with other people. The association between psychosis and a range of psychosocial factors, including stressful life events, has been extensively explored, suggesting as an important risk factor for both the onset and exacerbation of symptoms (Fusar-Poli et al., 2017).

The medium and long term social effects of COVID-19 may disproportionately impact people with psychosis or at risk of psychotic disorder. For example, social isolation, unemployment, homelessness, relationship breakdown (divorce/separation), domestic violence and worsening physical health, may affect people with psychosis in addition to their vulnerability to social determinants of health (Anglin et al., 2020). Again, the direction of this impact is not known as there is a potential for pandemics to strengthen social inequities and thus impact associated risk factors. There is also potentiality for an increase in the number of people with psychosis who suicide or attempt suicide, with some evidence of more suicides occurring after previous pandemics (Chan et al., 2006).

Treatment of Covid-19 may be another factor explaining the interaction between psychosis and Covid-19 that involves the use of high doses of steroids to modulate the inflammatory response (Russell et al., 2020 and Wada et al., 2001).

Similarly some specific psychosocial factors associated with an epidemic or pandemic, that can generate psychosis among people who are using health services, are unlikely to be well understood by policymakers or clinicians who are not having previous experiences or have not worked through such an outbreak. But it can be learned from other virus outbreaks like SARS (Severe Acute Respiratory Syndrome), MERS (Middle East Respiratory Syndrome) and Ebola epidemics.

Suicide is one of the outcomes of neuro-psychological imbalance of mind and can be also an outcome of fear psychosis. Often it happens when the person concern cannot but commit suicide as a result of mental imbalance, lack of management of situation, lack of self-confidence and lack of getting a near and dear one with whom he/she can share emotional challenges.

Recently many cases have come to notice where numbers of people have committed suicide driven by fear psychosis. One can take the example of a teenage girl committing suicide after death of Indian movie star Sushant Singh Rajput in Mumbai, India, the example of parents who committed suicide in Berhampur of Odisha after their son succumbed to Corona, the example of a Delhi couple where the wife committed suicide after her husband died of corona, the case of a young boy of Nayagarh district of Odisha who, after being detected corona positive, went to the forest and committed suicide. There are many more cases in India which may be linked to the cause. It is not possible to analyse all the case histories but it cannot be denied that these outcomes are the outbursts of a single moment of fear psychosis when they lost their mental balance, felt totally helpless and alone as nobody could help them, and thought that there was no other solution to their problems than putting an end to their own life. Even they lost their faith on the Almighty as well as on humanity and committed such acts. There may be some

other causes too but the particular moment is the manifestation of their fear psychosis for some definite strong harassment Causal factors.

Whatever may be the cause, these suicides can be linked to fear of inability to tackle the situation of the horrific consequences of Corona, like the helplessness of Government, the uncontrollable situations in hospitals, the death of the medical and non-medical Covid warriors (doctors, nurses, caretakers, hospital administrators, other para medical staff), police, bankers, all of which are affecting the people's mind seriously. Even many of those who did not commit suicide are dying of heart attacks, brain strokes, and other ailments.

In a study on "The potential impact of COVID-19 on psychosis: A rapid review of contemporary epidemic and pandemic research", Brown, et.al., (2020), concluded that there is moderate (if low quality) evidence to suggest a small but *important* number of patients will develop coronavirus related psychosis that is likely associated with steroid or viral exposure, pre-existing vulnerability and psychosocial stress. Psychosis in patients with coronavirus may present a major challenge by way of potential infection control risk to clinical teams. Furthermore, patients with existing psychosis may be less likely to comply with physical distancing and personal hygiene requirements to be followed during an outbreak of an infectious disease, representing a potential risk to the community and mental health clinicians. The current Covid-19 pandemic offers a global opportunity to explore the findings of this rapid review in greater depth and quality. There is much to speculate upon the consequences of the Covid -19 pandemic on individuals with psychosis. The review highlights that, within the current literature at least, minimal consideration has been given to this disadvantaged population and proactive research is required.

Psychosis is one mental health condition that requires specific attention. In one study by Kępińska et al., (2020) the association between influenza infection and psychosis has been reported since the Spanish Flu pandemic in the eighteenth century and subsequent acute "psychoses of influenza" have been documented during multiple pandemics.

Research review entitled "Brief Psychotic Disorder Triggered by Fear of Coronavirus" by Martin (2020), where he has referred his study of 2015, indicated that the psychological warfare waged by this corona virus has been overwhelming, both for patients and for health care providers. Patients are afraid of contacting and transmitting the virus. But health care workers, especially those used to a degree of predictability, seem to be susceptible to the stress of uncertainty and loss of control engendered by the Covid -19 pandemic. Citing three case studies of "Dr Smith" (40 years, a practicing physician and administrator at a medical center), "Ms Rogers" (who is a nurse in her mid-40s) and "Ms Greene" (a hospital custodian ,in her 40s) he concluded that although this is a small series of patients from a single community hospital, it can be anticipated that as this crisis unfolds and as people are more socially isolated, there will be an increase in these brief psychotic reactions. What is otherwise striking is the commonality of all three above mentioned patients working in hospitals at the frontline of the current crisis can cause its spread to others.

Zulkifli et al., 2020 identified a single case report from Malaysia, of an acute episode of psychosis seemingly precipitated by fear and distress associated with Covid -19 .The 31-year-old male patient had no previous history of mental disorder and did not use illicit substances. He responded well to a low dose antipsychotic. However, causality cannot be implied, as there are

usually several aetiological factors that lead to the development of a psychotic disorder and the anxiety that precipitated the episode may have just been the most proximal factor. Furthermore, Hu (2020) and Zulkifili(2020) postulated that frequent media reporting of Covid-19, particularly potentially sensational news found on social media platforms, may amplify psychosocial stress in novel and potentially more damaging ways among the people, having fear psychotic symptoms.

According to Severance et al., (2011) there are many cases of psychotic manifestations associated with a virus which were reported by several observational studies (Kim et al., 2018; Lee et al., 2004; Mak et al., 2009 & Sheng et al., 2005). For example SARS (Lee et al., 2004; Mak et al., 2009; Sheng et al., 2005), MERS (Kim et al., 2018), H1N1 (Chang et al., 2015) and Corona Virus Immune Reactivity (CVIR).

In a cross-sectional survey, the association between four coronaviruses (229E, HKU1, NL63 and OC43) and psychosis was examined involving 106 people with onset of psychosis and 196 non-psychiatric control (Severance et al., 2011). All four coronaviruses were more common in people with psychosis compared to controls. After adjusting for confounding variables (age, gender, socioeconomic status and smoking status), the odds of the HKU1 and NL63 coronavirus were associated with a 32% and 142% increase in the odds of psychosis suggesting that corona virus may be important risk factors for psychosis.

In one study Iancu et al., (2005) examined that the SARS epidemic caused anxiety and worry in 30 in-patients with a diagnosis of schizophrenia compared to a control group of 30 staff members in Israel where the virus was not pandemic. Most patients were aware of the SARS epidemic. Compared to the control group, patients reported they were more protected from SARS in hospital, perceived that staff did all they could to protect them, and believed that there would be no SARS cases in Israel. Patients were also more likely to accept psychotic explanations for the SARS virus, such as it is a punishment, a sign the world is coming to an end, and a sign for humankind.

Similarly, Maguire et. al. (2018) reported that in case of patients with schizophrenia tendencies the ailment has a role in fear perception of swine flu infection that provokes them frequently to adhere with protective and preventive measures.

One recent evidence on fear psychosis can be cited here. In spite of adequate precautions, the in-patients of Acharya Harihara Cancer Institute of Cuttack, Odisha, were found positive of Covid -19. When they were being shifted to the Covid hospital suddenly there was an outburst by the patients and they ran out of the bus furiously, giving the slogan like “let us touch all”. However, with much difficulties the situation was controlled by the police. The cancer in-patients, who were already in a panic stage due to the effects of cancer, got into a shocking state of mind that compelled them to show such types of psychotic reactions.

Rationale of the study

Based on the facts cited above, the present crisis of Covid -19 and its bad manifestation upon the individual throughout the globe, needs analysis, prediction, control, prohibition, prevention, and management of the pandemic at an emergency level. It is now high time to create awareness among each individuals, after observing the chaotic situations dealing with bio-psychological and psycho- social factors, as an outcome of corona virus attacks, not to panic so that it does not lead to more fatal state of psychosis.

Objective

Thus the objective of the study is:

- To focus on fear psychosis, as an outcome of Covid -19 pandemic, among the individuals throughout the world, to protect , prohibit , and manage themselves from the contaminations , so as to lead a healthy and peaceful life .
- Also an attempt has been made to create awareness on Covid – 19 and to think upon the *cause and effect* relationship of fear psychosis, how to manage the situation and how to control the outburst at an extreme end.

Analysis and Discussion

While it is a fact that both the Govt. of India as well as the various state governments of India have tried their best to manage Covid - 19 crisis in the country, the situation, however, seems to have worsened. Due to rapid rise in the number of people being affected by the virus during the last three months (May, June, July' 2020), a general consensus had developed about new psycho-social issues of the Covid -19 patient in particular and the people in general.

Globally, there is also media speculation about how Covid-19 will impact global mental health. Brooks et al., (2020) have predicted that there can be increase in common mental disorders such as depression and anxiety and PTSD (Post Traumatic Stress Disorder). Consequently, it is anticipated that there will be an increase in the number of people who die by suicide, with evidence from the MERS and SARS outbreaks (Barbisch et al., 2015 & Chan et al., 2006). There is an urgency to anticipate and analyse the impact of Covid -19 pandemic on those, experiencing more severe and enduring mental illnesses, such as psychosis, as these are vulnerable individuals being at the highest risk (Misra, 2020).

The essential factors, as observed, should focus on clinical management of infection control (Iancu et al., 2005 and Pang, 2004) , clinical management of patients with virus induced psychosis (Hu et al., 2020 & Zulkifli et al., 2020) and scaling back of community services(Alvarez-Jimenez et al., 2014 & Firth et al., 2015). Similarly, the people with existing fear psychosis should be advised for the protective measures of pandemic Corona to prevent them from its infections without fear. Then only they can have accumulation of strength in body, mind and soul, which will boost their physical and mental immunity power to effectively fight against the virus.

In one recent analysis it is stated that the number of deaths in the world during April to June, 2020, are 314,687 due to Corona virus whereas 369,602 people died of Common cold, 340,584 people died of Malaria; 353,696 people died of suicide; 393,479 people died of road accidents; 240,950 people died of HIV; 558,471 people died from alcohol intake; 1,816,498 people died of smoking and 1,167,714 people died of Cancer. As per the report from website up to 30th July 2020, Worldwide, Corona virus spread cases have crossed the 16.62 million. India has recorded more than 1.58 million cases of the coronavirus and 34,968 deaths, according to the Union Health Ministry's latest update. Of these, 0.52 million are active cases while 1.02 million have recovered. In Odisha, total affected cases were 33,479 out of which active cases are 12,736 recovered cases are 20,518 and death number is 187. So the people should keep patience and take necessary steps to prevent themselves from the virus.

Research findings indicate that (Wikipedia) global pandemics and epidemics have occurred from time to time, since 541 BC in the history of mankind. Covid -19 seems to have a higher fatality rate than deadlier viruses like SARS, Swine-FLU, Cholera, Plague, Bubonic plague, Smallpox, Diphtheria, Dengue fever, Malaria, Encephalitis lethargica, Influenza A virus (subtype H1N1 and subtype H3N2), Ebola, Chikungunya virus, Hepatitis A & B, etc. All these pandemics were overcome by the mankind after inventing appropriate medicine and vaccines etc. Similarly Covid -19 will also be definitely overcome.

The first Covid patient of Odisha, in Bhubaneswar, on his return to home after being cured in a hospital, told on various TV channels that the doctors and nurses were always advising him: “Be positive. Have faith in God. We are here to help you. You will be definitely cured and certainly go home. So don’t be in grief about corona. Do not be fearful, always be cheerful”. He concluded that these inspiring words made him courageous so that he could overcome corona and return home safe.

Therefore, people should not be unduly worried about Covid attack. Rather people should take care to improve their immune system, maintain proper hygiene and should not live in fear. And it is recommended not to develop any fear psychosis. People should develop courage and strong mentality to fight corona and consider it as temporary phenomenon which will pass before long.

CONCLUSION

The paper focuses on exploring the effects of Covid-19 pandemic on people experiencing, or at the risk of experiencing, the trauma and the challenges to face it. No doubt, at this moment there is no perfect vaccine and medicine to control or eradicate the disease. But researches are continuing in full speed in various parts of the world for inventing effective vaccine and medicines for it. Until that time people should have patience and take appropriate steps to prevent themselves from being infected by this virus. People may practise the guidances like SMS (social distancing, mask and sanitisation), ‘stay home – stay safe’, IBA (immunity boosting activities) like yoga, meditation and physical exercises (Misra,2020). Certainly, sooner than later, vaccine and medicine for this virus will be available and people will be safe.

It may be mentioned that while the various guidances as well as restrictions (like shut down and lock down) imposed by the Govt. of India as well as various other countries do affect the normal life of the individuals. It must be appreciated that these are the temporary unavoidable impositions intended to protect and save our lives. Hence, such restrictions should be positively viewed and not negatively perceived as it can lead to fear psychosis.

The psychologists, psychiatrists, physicians, Government personnel, NGO sectors and the Covid warriors must be watchful of pre-existing vulnerability and psychosocial stress of fear psychosis that can spread among the people regarding the disease and should take necessary steps accordingly.

The evidences cited above, although bearing a small sample size, are important facts in view of the nature of the pandemic and, therefore, necessitate more and more scientific researches on corona virus related fear psychosis. Psychotic manifestations in patients with coronavirus may present a major challenge to mankind and potential infection control risk to clinical teams. The current Covid-19 pandemic, thus, requires a rapid review in greater depth and quality on the

consequences of the disease on individuals with psychosis in particular and the mental manifestations of the people in general.

IMPLICATION

- The study has a great implication in individual level, suggesting different counselling, orientation and training programme at Govt. and Non Govt. levels in order to create awareness among the people not to panic.
- It has also its objective to make the administrative personnel conscious about the careful and tactful handling of the grave situation and to take appropriate steps to manage and control the fear psychosis of people which is becoming more traumatic for them than the spread of the disease.
- Inviting more and more research in neuro scientific ways the study provokes the scientists, psychologists, psychiatrists, counsellors, and the corona warriors to do the needful urgently and at the earliest so as to save the mankind from the devastating spread of Covid – 19.

SUGGESTION

This review is an attempt to create awareness among the scientists , clinicians, physicians, social scientists ,medico-scientists, and the stakeholder of the society about the horrific consequences of Corona virus and the urgent need to find a way to overcome the pandemic.

In suggestion, the idea of Nikunj Dalmia, (the eminent social scientists) can be cited here. Dalmia (2020) published a paper in E Markets, entitled “Covid-19 is no plague or cancer; fear psychosis unnecessary: Big Bull”, where he opined that covid -19 has been blown out of proportion, which created an unnecessary fear psychosis. After all, it is a flu, it is not a plague or cancer. He explained that every year we lose about 220,000 lives in accidents, are we not going by car? So it is not a big crisis”. His viewpoints can be summarised as: if a new virus is found, we have to take immediate steps and we have to create health infrastructure at whatever cost needed to deal with such kind of situations

Again to cite the version of Sigmund Freud, the father of psychology, “We can postulate that there must be diseases founded on a conflict between ego and super-ego. Analysis gives us the right to infer that melancholia is the model of this group, and then we should put in a claim for the name of "narcissistic psychoneuroses" for these disorders.”

It will be appropriate to quote Paramhansa Prajnanananda, the great Kriya Yogi , who said, “We are the architects of our own lives. What we are now is the result of past actions, and the future depends on what we are doing now and how well we maintain it.” The thoughts can be followed because the life is precious. We should keep, maintain, manage and lead our valuable lives in a proper manner, then only the inner and outer conflicts will vanish. And we can be far away from psychosis, psycho neurosis and other traumatic disorders.

In this context, in Indian philosophy there are a lot of ideologies, ethics and epics, like Gita, Bhagabata, Veda, Upanisadas, Sankhya darsana(Figure: 1) etc., can lead KINDLY LIGHT to all about that Super Natural Power which will give the mankind - faith, mental strength and

confidence to fight against Corona pandemic attacks by taking appropriate steps in a calm and cool mind.

Indian Philosophy on TPR



Fig 1 : Presented by the author in Indian Science Congress 2020 , on “Thought Process Re-engineering (TPR) and Indian Philosophy”

(A presentation on how Bhagabat Gita, Veda , Upanisada, Bramhasutra , Sankhya philosophy, & Nirbikalpa Samadhi, have effects on human body, mind, heart and soul creating layers of Aura ..)

Similarly, Great Kriya Yogi ‘Samarpanananda’ ,in his versions, has emphasised on the role of Covid -19 in recalling and recognising the lost part of Indian philosophy of ‘Yama’, ‘Niyama’ and ‘Saucha’. According to him, “Covid – 19 has created a situation as good as a 3rd World War. The first and the Second World Wars were fought in different battle grounds by different sets of warriors belonging to different countries. It was to indicate international issues of that time. But Covid -19 is a global war affecting everyone where the warriors are doctors, nurses, and paramedical staff with the administrators related to it. It is not only affecting the physical wellbeing but the consciousness of the individual as well. It refreshes our memory to be conscious of ‘Yama,’ ‘Niyama’, ‘Soucha’ that conveys the concept of purification and cleanliness preached and practised by our ancestors as a part of Yoga. People of India and the whole world had forgotten the concept of Patanjali Yoga sutras. This pandemic helps us in so far as it reminds us of the lost part of our prosperous Indian philosophy to keep ourselves clean in physical and mental level. Slogan is: ‘Keep yourself clean and let others be clean’. This should be practised as a daily worship including cleaning the physical and metaphysical environment

around you. The lock down and shut down are concepts to keep yourselves in isolation to practise meditation and prayer which are not a practice of the modern era. Similarly, social distancing helps us to cultivate a sense of detachment. Hence, Covid -19 can be presented as reconsideration of the lost paradise of ‘Yoga Sutras’ of Indian philosophy.”

A strong body with a strong mind can be a wild fighter, not a timid fighter .It will conquer coronavirus rather than be conquered by the same.

“To lose patience is to lose the battle”

References:

- Alvarez-Jimenez, M., Alcazar-Corcoles, M.A., González-Blanch, C., Bendall, S., McGorry, P.D., & Gleeson, J.F.(2014). “ Online, social media and mobile technologies for psychosis treatment: a systematic review on novel user-led interventions”. *Schizophr. Res.* 2014;156(1):96–106.
- Anglin D.M., Galea S.,& Bachman P.(2020). “ Going upstream to advance psychosis prevention and improve public health”. *JAMA Psychiatry.* 2020 doi: 10.1001/jamapsychiatry.2020.0142.
- Barbisch, D., Koenig, K.L., & Shih F.-Y.(2015). “Is there a case for quarantine? Perspectives from SARS to Ebola”. *Disaster medicine and public health preparedness.* 2015;9(5):547–553.
- Brooks, S.K., Webster, R.K., Smith, L.E., Woodland, L., Wessely, S., Greenberg, N.,& Rubin, G.J.(2020). “ The psychological impact of quarantine and how to reduce it: rapid review of the evidence”. *Lancet.* 2020;395(10227):912–920.
- Chan, S.M.S., Chiu, F.K.H., Lam, C.W.L., Leung, P.Y.V., & Conwell, Y. (2006). “Elderly suicide and the 2003 SARS epidemic in Hong Kong”. *International Journal of Geriatric Psychiatry: A journal of the psychiatry of late life and allied sciences.* 2006;21(2):113–118.
- Chang, C.-H., Chang, Y.-C., & Tzang, R.-F. (2015). “Childhood psychosis after H1N1 influenza”. *The Journal of neuropsychiatry and clinical neurosciences.* 2015;27(1):e87–e89.
- Cheng, S.K.-W., Tsang, J.S.-K., Ku, K.-H., Wong, C.-W.,& Ng, Y.-K. (2004) . “Psychiatric complications in patients with severe acute respiratory syndrome (SARS) during the acute treatment phase: a series of 10 cases”. *Br. J. Psychiatry.* 2004;184(4):359–360.
- Dalmia,N.(2020).https://economictimes.indiatimes.com/markets/expert-view/covid-19-is-no-plague-or-cancerfearpsychosisunnecessarybigbull/articleshow/76257588.cmsutm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
- Druss, B.G.(2020). “ Addressing the COVID-19 pandemic in populations with serious mental illness”. *JAMA Psychiatry.* 2020 doi: 10.1001/jamapsychiatry.2020.0894.

- Firth, J., Cotter, J., Torous, J., Bucci, S., Firth, J.A., & Yung, A.R. (2015). “Mobile phone ownership and endorsement of “mHealth” among people with psychosis: a meta-analysis of cross-sectional studies”. *Schizophr. Bull.* 2015;42(2):448–455.
- Fransen, K., Haslam ,S.A., Steffens, N.K., Vanbeselaere, N., De Cuyper, B., & Boen F. 92015). “Believing in “us”: exploring leaders’ capacity to enhance team confidence and performance by building a sense of shared social identity”. *J. Exp. Psychol. Appl.* 2015;21(1):89. [[PubMed](#)] [[Google Scholar](#)]
- Fusar-Poli, P., Tantardini, M., De Simone, S., Ramella-Cravaro, V., Oliver, D., Kingdon, J., Kotlicka-Antczak, M., Valmaggia, L., Lee ,J., & Millan, M. (2017). “Deconstructing vulnerability for psychosis: meta-analysis of environmental risk factors for psychosis in subjects at ultra high-risk”. *European Psychiatry.* 2017;40:65–75.
- Gardner, P.J., & Moallef, P.(2015). “ Psychological impact on SARS survivors: critical review of the English language literature”,*Canadian Psychology/Psychologie canadienne.* 2015;56(1):123.
- Gray, R., Brewin, E., Noak, J., Wyke-Joseph, J.,& Sonik, B. (2002). “A review of the literature on HIV infection and schizophrenia: implications for research, policy and clinical practice”,*J. Psychiatr. Ment. Health Nurs.* 2002;9(4):405–409.
- Hu, W., Su, L., Qiao, J., Zhu, J.,& Zhou, Y.(2020).” COVID-19 outbreak increased risk of schizophrenia in aged adults”. 2020. [Chinaxiv.org](#)
- Iancu, I., Strous, R., Poreh, A., Kotler, M.,& Chelben, Y.(2015). “ Psychiatric inpatients’ reactions to the SARS epidemic: an Israeli survey”. *The Israel journal of psychiatry and related sciences.* 2005;42(4):258.
- Kamara, S., Walder, A., Duncan, J., Kabbedijk, A., Hughes, P., & Muana, A.(2017). “ Mental health care during the Ebola virus disease outbreak in Sierra Leone. *Bull*”. *World Health Organ.* 2017;95(12):842–847.
- Kępińska, A.P., Iyegbe ,C.O., Vernon, A.C., Yolken, R., Murray, R.M., & Pollak T.A. (2020).Schizophrenia and influenza at the centenary of the 1918–1919 Spanish influenza pandemic: mechanisms of psychosis risk. *Frontiers in Psychiatry.* 2020;11(72)
- Kim, H.-C., Yoo, S.-Y., Lee, B.-H., Lee, S.H., & Shin, H.-S.(2018). Psychiatric findings in suspected and confirmed Middle East respiratory syndrome patients quarantined in hospital: a retrospective chart analysis. *Psychiatry Investig.* 2018;15(4):355–360.
- Lee,D.T., Wing, Y., Leung, H.C., Sung J.J., Ng, Y., Yiu, G., Chen, R.Y., & Chiu, H.F.(2004) “ Factors associated with psychosis among patients with severe acute respiratory syndrome: a case-control study”. *Clin. Infect. Dis.* 2004;39(8):1247–1249.
- Lippi, G., Henry, B.M., &Sanchis-Gomar, F.(2020). “ Physical inactivity and cardiovascular disease at the time of coronavirus disease 2019 (COVID-19)”,*Eur. J. Prev. Cardiol.* 2020 doi: 10.1177/2047487320916823.
- Maguire, P.A., Reay, R.E., &Looi J.C.L.(2018).” Nothing to sneeze at – uptake of protective measures against an influenza pandemic by people with schizophrenia: willingness and perceived barriers”. *Australasian Psychiatry.* 2018;27(2):171–178.

- Maguire, P.A., Reay, R.E., & Looi, J.C.(2019). “ A sense of dread: affect and risk perception in people with schizophrenia during an influenza pandemic. *Australasian Psychiatry*”. 2019;27(5):450–455.
- Mak I.W.C., Chu C.M., Pan P.C., Yiu M.G.C., Chan V.L. Long-term psychiatric morbidities among SARS survivors. *Gen. Hosp. Psychiatry*. 2009;31(4):318–326. & Chant, D. (2004). “A systematic review of the incidence of schizophrenia: the distribution of rates and the influence of sex, urbanicity, migrant status and methodology”. *BMC Med*. 2004;2(1):13.
- Osmond,M.(2020),https://www.brainyquote.com/topics/psychosis_quotes Researchers warn G7 leaders on disease preparedness. University of Oxford. June 3, 2015. <http://www.ox.ac.uk/news/2015-06-03-researchers-warn-g7-leaders-disease-preparedness-0>. Accessed March 25, 2020
- Pang, P.-F. ,(2004).’The impact of SARS on psychiatric services: report from Hong Kong”. *Psychiatr. Times*. 2004;(4):108.
- Rothstein, M.A., Alcalde, M.G., Elster, N.R., & Majumder, M.A.,(2003) Palmer L.I., Stone T.H., Hoffman R.E.(2003). “Quarantine and Isolation: Lessons Learned From SARS”.University of Louisville School of Medicine, Institute for Bioethics, Health ...; 2003.
- Russell, B., Moss, C., Rigg, A., &Van Hemelrijck, M.(2020). “ COVID-19 and treatment with NSAIDs and corticosteroids: should we be limiting their use in the clinical setting?”, *Ecanermedicalscience*. 2020;14:1023. [[PMC free article](#)]
- Severance, E.G., Dickerson, F.B., Viscidi, R.P., Bossis, I., Stallings, C.R., Origoni, A.E., Sullens, A., & Yolken,R.H.(2011). “Coronavirus immunoreactivity in individuals with a recent onset of psychotic symptoms”. *Schizophr. Bull*. 2011;37(1):101–107.
- Sheng, B., Cheng, S.K.W., Lau, K.K., Li ,H.L.,& Chan, E.L.Y.(2005).“The effects of disease severity, use of corticosteroids and social factors on neuropsychiatric complaints in severe acute respiratory syndrome (SARS) patients at acute and convalescent phases”. *European psychiatry*. 2005;20(3):236–242.
- Stastny, P.(2012). “Introducing peer support work in Latin American mental health services”. *Cadernos Saúde Coletiva*. 2012;20(4):473–481.
- Thomas, B., Ciliska, D., Dobbins, M.,& Micucci S. A.(2004). “ process for systematically reviewing the literature: providing the research evidence for public health nursing interventions”. *Worldviews Evid.-Based Nurs*. 2004;1(3):176–184.
- Tricco, A.C., Langlois, E.V., & Straus, S.E. (2017). “Rapid Reviews to Strengthen Health Policy and Systems: A Practical Guide”. World Health Organization Geneva; 2017.
- Validity, S.,(2004). “Comprehensive Handbook of Psychological Assessment, Volume 2: Personality Assessment. vol. 2. 2004. The structured clinical interview for DSM-IV axis I disorders (SCID-I) and the structured clinical interview for DSM-IV axis II disorders (SCID-II)” p. 134.

- Wada, K., Yamada, N., Sato, T., Suzuki, H., Miki ,M., Le,e Y., Akiyama, K.,& Kuroda, S.(2001). Corticosteroid-induced psychotic and mood disorders: diagnosis defined by DSM-IV and clinical pictures. *Psychosomatics*. 2001;42(6):461–466.
- Wang, Y., Xu, B., Zhao, G., Cao, R., He, X., &Fu S. (2011). “ Is quarantine related to immediate negative psychological consequences during the 2009 H1N1 epidemic?” *Gen. Hosp. Psychiatry*. 2011;33(1):75–77.
- World Health Organization . (2020). *Coronavirus Disease 2019 (COVID-19): Situation Report*; p. 72.
- Xia, J., Merinder, L.B., Belgamwar, M.R.(2011). “ Psychoeducation for schizophrenia. *Cochrane Database Syst*”. Rev. ;2011(6):CD002831.
- Yung ,A.R., Phillip,s L.J., Yuen, H.P., McGorry, P.D.(2004)” Risk factors for psychosis in an ultra high-risk group: psychopathology and clinical features”. *Schizophr. Res*. 2004;67(2–3):131–142.
- Zhou, X., Snoswell, C.L., Harding, L.E., Bambling, M., Edirippulige, S., Bai X., & Smith A.C. (2020). The role of telehealth in reducing the mental health burden from COVID-19. *Telemedicine and e-Health*. 2020 doi: 10.1089/tmj.2020.0068.
- Zulkifli N.A., Sivapatham S., Guan N.C.(2020). “Brief psychotic disorder in relation to coronavirus, COVID-19 outbreaks: a case report”. *Malays. J. Psychiatry*. 2020;29(1) .

INDIGENOUS PSYCHOLOGIES OF INDIA

* Late Prof. Adhikari Srikanta Dash,

Abstract

This paper is a condensation of an earlier paper by Prof. A. S. Dash, presented in the 14th Annual Convention of National Academy of Psychology (NAOP) held at IIT, Kharagpur from February 26 to 28, 2004. As an honor to him it is placed in this issue. The genius soul, the progressive stand point of mind, generous spirituality and advance attitude of Prof Dash will keep him immortal as long as psychology as a subject in this earth. On behalf of all the students and all the near and dear ones who were around him till his last breath, I owe my heartfelt 'pranam' to my teacher, Prof Adhikari Srikant Dash. This paper presents two examples of indigenous psychologies of India Yoga and Vedanta, as the greatest contributions of the classical psychologies of India to the world. Very well he has compared the different layers of brain with different yogic techniques that uplifts the aura to reach the universal self. Explaining the classical psychology of India, he tried to specify here.

INTRODUCTION

“Yoga Psychology: The Gem of Indian Psychology”.

Discontentment and disillusionment with the self-proclaimed universal, hegemonic, Western scientific psychology gave rise to the indigenous psychologies. The mainstream Indian academic psychology is the imported and transplanted Euro-American psychology. Indigenous psychologies of India are the products of the Indian intellectual and cultural traditions and represent the systems of psychological knowledge, attitudes, and practices prevalent in Indian culture. This paper presents two examples of indigenous psychologies of India. The paper discusses Yoga and Vedanta as the greatest contributions of the classical psychologies of India.

During the recent decades, a number of Asian, African, Russian and South American psychologists started challenging and rejecting the dominance of the self-proclaimed universal, hegemonic, Euro-American or Western academic scientific psychology. Similar views have been expressed against the mainstream Indian academic psychology, which is actually the imported, transplanted, and marginally adapted Western psychology. The growing dissatisfaction with the radical behaviorist, purely empirical and exclusive natural science tradition prompted the search for alternative paradigms. The decolonized minds of the indigenous peoples of the freed nations, striving to rediscover their past, reanalyze their history, and reaffirm their national, cultural and intellectual identities, supported this movement. The rediscovery, emergence and development of indigenous psychologies, representing systems of psychological thoughts, attitudes, and practices that are rooted and prevalent in a particular national/ cultural tradition, are the results of this disillusionment and discontentment. Indigenous psychologies derive their contents, principles, laws, theories and methodological assumptions from the intellectual and cultural heritage of the peoples of the land.

*Utkal University, Vanivihar, Bhubaneswar, Odisha, India

In India, *Psychology* is known as *Manastattwa*, *Manovijnana*, *Manovidya*, and/or *Manas-Shastra*. The synthetic and comprehensive Indian psycho-spiritual world-view, derived from the *Vedas*, *Upanishads*, and the diverse Indian intellectual traditions, held that “Mind is Brahman, the whole universe is in the mind only, mind is all, mind is everything, mind is all-powerful, know the mind, control the mind, conquer the mind, and transcend the mind, etc.” More than a hundred years back, *Swami Vivekananda* wrote: “The greatest science is the science of the mind, the science of psychology. ... In the study and analysis of the mind, there are no data, no facts acquired from without. The mind is analyzed by itself. ... Psychology is the science of sciences, without which all sciences and all other knowledge are worthless.” The Western psychological sciences have known much about the behaviours of animals and humans, but next to nothing about human mind and its interrelation with the spirit or soul on the one hand, and the body or brain, on the other. Even though *D. O. Hebb*, a staunch behaviorist, in his key-note address in the 1973 annual convention of the American Psychology declared that “Psychology is about the mind: the central issue, the great mystery, the toughest problem of all. Mind is the capacity for thought and thought is the integrative activity of the brain”; no American textbook defines psychology as the study of the mind. Many leading American psychologists freely use the words ‘mind’ and ‘mental’, without bothering to study, understand and/or define the mind. On the other hand, Russian psychologists have accepted psychology as the study of facts, law-like regularities, and mechanisms of the mind as an image of reality evolving in the brain.

Late *Prof. Durgananda Sinha* (1988, 1994) rejecting the dominance of Western psychology, characterized it as completely isolated from the Indian tradition, alien to the local intellectual soil, and leading to endless repetitions of foreign studies. Lamenting that ‘Indian Psychology has remained tied to the apron strings of the Western Psychology without displaying any sign of maturing’, Sinha has argued in favour of the development of a psychology that matches the socio-cultural realities of one’s own society. Three distinct streams of Indian psychology deserve to be called indigenous psychologies of India. *First*, the **Vedas, Upanishads, Puranas, Shastras, Sutras, Gitas, Darsanas, Ayurveda, Tantra, Jyotisha, and Kavyas** provide the foundation, and intuition as the method, for the **classical Indian psychologies**. *Second*, the millennia-old collective experiential knowledge-base underlying the diverse mores and folkways, life-styles, rituals and customs, attitudes, values, beliefs, totems and taboos, the folk-literature (stories, songs, proverbs, etc.) and folk-arts (music, dance, drama, sculpture, etc.) of the peoples of India provide the foundation for the **Indian folk psychologies**. *Third*, the **indigenized academic psychology** consists of importing the empirical Euro-American psychological concepts, theories and methods; and replicating, adapting, standardizing and modifying them to fit to the local cultural contexts.

THE CLASSICAL PSYCHOLOGIES OF INDIA

Sources:

The ‘*classical psychologies of India*’ derive their concepts, contents and theories from the *Vedas*, *Upanishads*, *Puranas* and *Upa-Puranas*, *Shastras* (Dharma, Niti, Artha Shastras, etc.), *Sutras* (Brahma Sutra, Yoga Sutra, Kama Sutra, etc.), *Gitas* (Bhagavad, Astavakra, Avadhoota, etc.), *Ayurveda*, *Jyotisha*, *Tantra*, the texts of the major and minor schools of Indian thought (e.g. Vedanta, Mimamsa, Samkhya, Nyaya, Vaisheshika, Yoga, Charvaka/ Lokayata,

Buddhist, Jain, Shaiva, Shakta, Vaishnava, Sikh, Sufi, etc.), and the *Maha-Kavyas* and *Kavyas* of all major Indian languages. Their literatures are still studied and their teachings are practiced today; which prove the *continuity* (it is *Sanatana*) and *invulnerability* (it has withstood many an invasions, assaults and conflicts) of the Indian civilization and culture. This vast and rich literature contains extremely important and useful psychological theories, concepts and practical techniques that need study and research. These are deeply ingrained into the psyche of Indian peoples and provide the culturally shared foundations of Indian Psychology. These accumulated wisdoms provide the most comprehensive psycho-spiritual world-view.

METHODS:

The different schools of Indian psychology (see **Abhedananda, 1946, 1952; Akhilananda, 1948, 1952; Bhattacharya, 1975; Kuppaswamy, 1985; Rhys Davids, 1936; Safaya, 1976; J. Sinha, 1933, 1958, 1965**) recognized the following tests of truth. (1) Correspondence (**Yatharthya**), i.e., agreement or harmony of ideas, judgments, or conclusions with facts. (2) Coherence or non-contradiction (**Abadhitatwa**) is logical and factual consistency, having empirical reality. (3) Workability or practical utility (**Pravrittisamarthya**), implying that a judgment or conclusion is true, if it has capacity for prompting fruitful practical activity. (4) Novelty (**Nutanatwa**) implies that a truth or valid knowledge must apprehend something new, which was not known before. Indian scientists also realized that empirical or experimental scientific method is just one of the many ways of arriving at the useful, acceptable, reliable and valid psychological knowledge. Therefore, they accepted the following sources of valid knowledge or methods of study in order to arrive at and realize the psychological truths. (1) **Pratyaksha** is of two types: (a) Objective, empirical/ scientific observation involving the organs of perception which leads to **Jnana** and **Vijnana**, i.e., empirical knowledge; (b) Subjective observation or extra-sensory/ supernormal perception through the mind only which leads to **Prajnana** (wisdom). The psychology of intuition flourished remarkably in ancient India. The *Vedanta School* called it **Para Vidya** or just **Vidya** (intuitive knowledge). Intuition was variously known as **Pratibha-jnana** (flash of intuition), **Arsajnana** (intuition of sages), **Siddhadarsana** (occult perception), **Yogipratyaksha** (Yogic perception), **Muktajnana** (omniscience), and **Sambodhi** in Buddhist psychology. Sambodhi is not logical thinking, but only a higher consciousness or bodhi which resolves the contradictions in which the lower thought, bound up with the activities of the senses, is hopelessly involved. Findings of recent neuropsychological studies show that the two hemispheres of the brain not only look different, but also their functions are entirely varied. The left-brain appears grey and is analytical, mathematical, logical, verbal, sequential, organized, structured and deductive.

The right-brain appears white and is holistic, intuitive, reflective, emotional, creative, visual, musical, lateral, unorganized and spontaneous. (2) **Anumana** is logical inference involving both inductive and deductive reasoning. (3) **Agama** (previously documented scriptural source) or **Sabda** (words of an authority) or **Aptavachana** (testimony of the Guru or other realized souls such as the **Buddha, Jesus, Ramakrishna, etc.**). (4) **Upamana** means analogy or inference by comparison. (5) **Arthapatti** (presumption) consists in making an assumption or hypothesis to reconcile inconsistent facts. (6) **Anupalabdhi** (non-apprehension) is the method to apprehend non-existence of an object, which is not present. The afore-said methods of study encompass and complement the Western scientific methods.

1. ***Yoga Psychology: The Gem of Indian Psychology***

Yoga means union, concord, harmonious integration, balance, or equilibrium. Technically, it refers to the communion of the petty individual self (Atman/ Jivatman or the microcosm) with the higher universal collective self (Brahman/ Paramatman or the macrocosm). Yoga is one of the most unique contributions of classical Indian Psychology to the humankind. Yoga Psychology has been instrumental in producing millions of Yogis, thousands of books and articles in various Indian and foreign languages, and hundreds of Yoga research, education and treatment centres involving billions of dollars of business in the international market.

There are innumerable references to Yoga in the **Vedas** and **Upanishads**. **Patanjali's Yoga Sutra** or Yoga aphorisms belong to a distinct school of thinking and are considered to be the most authoritative, scientific, and practical system of Yoga. Yoga psychology has been claimed as the Indian practical psychology, as it not only enunciates the laws and principles of controlling the divergent modifications of the mind, but also teaches how to translate them into action. **Yoga Sutra** has been instrumental in the development of a number of schools of Yoga having unique approaches and methods. The main teaching of these schools of Yoga is that true knowledge can be attained only by suppressing all forms of mental activity that darken knowledge. **Swami Abhedananda** wrote, "True psychology has been taught in India from very ancient times, but that true psychology has not been taught in the West. ... So, by studying the **Oriental psychology**, especially **Hindu Psychology**, we get a clear idea of *what true psychology is*". **Patanjali** divided the **Yoga Sutra** into four parts/chapters: **Samadhi Pada** relating to concentration and spiritual absorption, **Sadhana Pada** relating to means of practice and attainment, **Bibhuti Pada** relating to accomplishment of super-normal powers, and **Kaivalya Pada** relating to emancipation through isolation; consisting of 51, 55, 55, and 34 statements, respectively. According to Patanjali, "**Yoga chittah-vritti nirodha**", Yoga is the process of restraining of the mental operations or fluctuations. The **Patanjala Yoga** is also known as **Ashtanga Yoga** or **Raja Yoga**. It deals with the psychic and mystical way of analysing, dissecting and inhibiting the constituents and modifications of the mind-stuff or chitta; thus enabling the human being to overcome its tyrannies and comprehend her/his position in relation to the universal spirit. The eight **Angas** or limbs or hierarchically graded steps are Yama (social conduct), Niyama (self regulation and control), Asana (physical exercises), Pranayama (regulating the breathing process), Pratyahara (introversive withdrawal of sensory processes), Dharana (concentration), Dhyana (meditation), and Samadhi (intuitive self-realisation).

Kriya Yoga, Hatha Yoga, Kundalini Yoga, Laya Yoga, Dhyana Yoga, etc. are based on the **Patanjala Yoga**. The **Bhagavad Gita**, which claims itself as a **Yoga Shastra**, presents an integrative synthesis of **Jnana Yoga** (the philosophical technique of using the rational and scientific intellect in unraveling the secrets of nature and living a life of harmony, wisdom, truth and justice), **Karma Yoga** (the principles of unattached action), and **Bhakti Yoga** (the techniques of self-less affection and devotion). Several other varieties of Yoga such as **Vipasyana Yoga, Svara Yoga, Nada Yoga, Mantra Yoga, Tantra Yoga, Japa Yoga, Sahaja Yoga, Buddhist Mahayana Yoga, Jain Yoga, Tibetan Yoga, Chinese/ Taoist Yoga, Japanese/ Zen Yoga** have been developed since then. The relevance and practical applications of Yoga in the different fields/ branches of psychology are tremendous and need to be studied by psychologists.

Consensus is growing that one needs to integrate the intuitive and synthetic, the analytic and scientific, and the experiential and commonsense or folkways of thinking and methods of study to

comprehend the functions of the human mind (Dash, 2001; Kao & Sinha, 1997). Only then we can realize the truth underlying **Swami Vivekananda**'s statement: "*The greatest science is the science of the mind, the science of psychology.*" The possibility of psychology playing an important and large role in the 21st century depends very much on its ability to innovate methods and strategies of enquiry, which are suitable and relevant to the socio-cultural context. While the methods of other sciences may be useful to some extent, the unique problems of psychology can be studied and understood only through its own methods of study and strategy. No doubt, psychologists have shown a lot of ingenuity in adopting and imitating what goes on in other sciences; but imitation cannot make psychology '*the greatest science*'. One certainly needs to be imaginative and innovative. Study of **Patanjali's Yoga Sutra**, regular practice of Yoga, and strict observance of its teachings are essential for controlling and training the mind. Unless the mind is controlled and trained, development of intuitive and de-centric thinking and true knowledge are not possible. "*Psychology is the science of sciences, without which all sciences and all other knowledge are worthless,*" Said **Vivekananda**. The prevalent child-rearing practices and educational methods emphasize the training of the left hemispheric functions only. As a result, by the time the average student passes through high school, her/his creativity, sensitivity, sense of artistry, and yes, spirituality, are at a discount. A human being needs the help of the logical and rational left-brain as much as the intuitive and creative right-brain. Therefore, the emphasis should be on the development of the '*whole person*'.

2. Vedantic Psychology of Integral Living

The concept of three, i. e., trichotomous categorization of beings and things, concepts and dimensions, and principles and persons, is a very important feature of the Indian way of thinking. Its use is pervasive and comprehensive. The underlying objective, however, has been to balance, integrate, harmonise and transcend. The **Srimad Bhagavad Gita** is the earliest and the most important of the more than half-a-dozen **Gitas** (such as, **Ashtavakra Gita**, **Avadhuta Gita**, etc.) that have been found in different parts of India over the centuries so far; which has very lucidly presented the Vedantic theory of the *Nature of Nature*, that is, the nature, cause, and effects of the three **Gunas** : **Sattwa**, **Rajas**, and **Tamas** (referring to essence, activity, and inertia - corresponding to the proton, electron, and neutron of the atom), that are the primary constituents of every thing/being's **Swabhava/Prakriti/ Maya/ Pradhana/ Prapancha**, i.e. basic, phenomenal nature. **Sattwa**, **Rajas**, and **Tamas** - these three qualities born of nature tie down the imperishable spirit to the body. The perishable and the imperishable - these are the two kinds of **Purushas** in this world. Of these, the bodies of all beings are perishable; while the **Jivatman** or the embodied soul or spirit or consciousness-as-self is called imperishable. However, the Supreme Person is yet other than these, who, having entered all the three worlds, upholds and maintains all, and has been spoken of as the imperishable **Ishwara**, the Supreme Spirit, the master/ controller of **Maya**. This **Tri-gunatmika Prakriti or Maya** is ever present in consciousness. Therefore, excluding only the **Ishwara**, there is no being on earth or in the middle region or even among the gods or anywhere else, which is free from these three **Gunas** born of **Prakriti**. **Sattwa** is said to be responsible for control of the mind and senses, fortitude, discrimination, devotion to duty, truthfulness, compassion, circumspection, contentment, generosity, dispassion, faith, shame, charity, brightness, purity, placidity, and taking pleasure in the Self. It makes the body intrepid, the senses subdued, and the mind cheerful and

unattached. When light and discernment dawn in the body as well as in the mind and senses, then one should know that *Sattwa* is predominant.

Rajas is said to be responsible for desire, activity, pride, covetousness, haughtiness, praying for comforts, seeing of differences, sense-pleasure, a militant disposition due to pride, love of fame, making fun of or snubbing others, display of powers, and aggressive enterprises. With the preponderance of *Rajas*, greed, inactivity, undertaking of action with an interested motive, restlessness and a thirst for enjoyment make their appearance; the sense organs become restless, the organs of action in a frenzy go berserk, the intellect goes hither and thither, and the mind wanders.

Tamas is said to be responsible for anger, greed, falsehood, cruelty, begging, simulation of piety, fatigue, quarrel, grief, infatuation, dejection, a miserable feeling, sleep, expectation, fear, and inertia. With the growth of *Tamas* appear obtuseness of the mind and senses, disinclination to perform one's obligatory duties, frivolity and stupor. The mind, being fatigued, is unable to reflect the Self, droops, and is vacant; and there are ignorance and dejection. Wisdom follows from *Sattwa*, greed from *Rajas*, and obstinate, error, stupor and ignorance follow from *Tamas*. *Sattwa* drives an individual to joy and *Rajas* to action; while *Tamas*, clouding wisdom, incites one to error as well as sleep and sloth. The mixture of the *Gunas* produce (a) *Ahamkara* or ego-sense producing ideas of "I" and "mine"; (b) all sorts of intercourse with the sense-objects through the sense-organs, *Pranas*, and the mind; (c) obligation to perform duties, to acquire wealth, and to satisfy needs and desires - which contribute respectively to faith, to riches, and to attachment; and (d) attachment to a course of action or thinking leading to material prosperity. All things that are regulated by *Purusha and Prakriti* - whatever is seen, heard, or thought by the intellect- are modifications of the *Gunas*. Things, places, fruits, time, knowledge, work, agents, faith, state, form, and goal- all these verily fall within the range of the *Gunas*.

Overpowering *Rajas and Tamas*, *Sattwa* prevails; overpowering *Sattva and Tamas*, *Rajas* Prevails; even so, overpowering *Sattva and Rajas*, *Tamas* prevails. When *Sattwa*, dominates/overcomes *Rajas and Tamas*, then a person is endowed with happiness, virtue, knowledge, etc. When *Rajas*, which is characterised by attachment, differentiation, and activity, overcomes *Tamas and Sattwa*, then the person gets work, fame, opulence, pain, etc. When *Tamas*, which is characterised by infatuation, ignorance, and dullness, overcomes *Rajas and Sattwa*, the person is stricken with grief, infatuation, sleep, cruelty, and expectation. The *gunas* create and manifest themselves in the individual's mind and body, serve to bind her/him by attaching her/him to material objects. Prevailing in the mind, they tie down the imperishable soul/ spirit to the body. *Sattva*, being immaculate, is illuminating, and flawless binds through identification with joy and wisdom. *Rajas*, which is of the nature of passion, as born of cupidity and attachment binds the soul through attachment to actions and their fruits/ consequences. *Tamas*, born of ignorance, is the deluder of all those who look upon the body as their own self; and it binds the soul through error, sloth, and sleep.

In the branch of learning known by the name of *Sankhya*, which prescribes means for neutralizing all actions, the following five factors have been mentioned as operating towards and contributory to the accomplishment of all action : the seat of action, the agent, the organs of different kinds, the separate movements of divergent types; and the *Daiva* or destiny. These five are the contributory causes of whatever actions, right or wrong, man performs with the mind, speech and body. Notwithstanding this, however, he who, having an impure mind, regards the absolute,

taintless Self alone as the doer, that man of perverse understanding does not view aright. He whose mind is free from the sense of doership, and whose reason is not tainted by worldly objects and activities, does not really slay, even having slaughtered all these creatures, nor is bound by sin. The Knower, knowledge, and the object of knowledge- these three motivate action. Even so the doer, the organs, and the activity - these are the three constituents of action. Knowledge, action, and the doer have been declared to be of three kinds according to the Guna which predominates in each.

Of the states of consciousness, from *Sattwa* one should expect wakefulness, from *Rajas* dreams, and from *Tamas* sleep. The fourth super-conscious state persists through all the three. By the *Sattwika* knowledge a person perceives one imperishable divine existence as undivided and equally present in all individual beings. Because of *Rajasika* knowledge a person cognizes many existences of various kinds as apart from one another in all beings. That knowledge which clings to one body as if it were the whole, and which is irrational, has no real objects and is trivial has been declared as *Tamasika*. The *Buddhi* or intellect which correctly determines the paths of activity and renunciation, what ought to be done and what should not be done, what is fear and what is fearlessness, and what is bondage and what is liberation, that intellect is *Sattwika*. The intellect, by which man does not truly perceive what is *Dharma* and what is *Adharma*, what ought to be done and what should not be done - that intellect is *Rajasika*. The intellect which imagines even *Adharma* to be *Dharma*, and sees all other things upside-down, wrapped in ignorance, that intellect is *Tamasika*. *Sattwika Dhriti* or firmness is that unwavering firmness, by which man controls through the Yoga of meditation the functions of the mind, the vital airs, and the senses. That *Dhriti* is *Rajasika* by which the person seeking a reward for his actions clutches with extreme fondness to virtues, earthly possessions, and worldly enjoyments. The firmness, by which an evil-minded person refuses to shake of i.e. clings to sleep, fear, anxiety, sorrow and vanity as well, that firmness is *Tamasika*. *Shraddha* or devotion through selfish-motiveless works indicates *Sattwika* temperament; through works for some definite purpose indicates *Rajasika* temperament; and through works that cause injury to others indicates *Tamasika* temperament. Faith in the Self is *Sattwika*, faith in work is *Rajasa*, and faith in irreligion is *Tamasa*. Joy which springs from the Self is *Sattwika*, that from the sense-objects is *Rajasa*, and the joy due to ignorance and misery is *Tamasa*. That joy in which the striver finds enjoyment through practice of adoration, meditation, and service to others, etc., and whereby he reaches the end of sorrow - such a joy, though appearing as poison in the beginning, tastes like nectar in the end; hence that joy, born as it is of the placidity of mind brought about by meditation, has been declared as *Sattwika*. The delight which follows from the contact of the senses with their objects is eventually poison - like, though appearing at first as nectar; hence it has been spoken of as *Rajasika*. That joy which stupefies the self during its enjoyment as well as in the end - derived from sleep, indolence, and obstinate error; such delight has been called *Tamasika*. The non-attached agent is called *Sattwika*; one blinded by attachment is *Rajasa*; and the one who never consider the pros and cons of an act, is *Tamasa*. A *Sattwika* doer is one who is free from attachment, unegotistic, endowed with firmness and vigour, and unswayed by success and failure. The doer who is full of attachment, greedy, oppressive by nature, of impure conduct, affected by joy and sorrow, and seeks the fruit of actions, has been called *Rajasika*. Lacking piety and self-control, uncultured, arrogant, deceitful, inclined to rob others of their livelihood, slothful, down-hearted and procrastinating; such a doer is called *Tamasika*.

That action which is ordained by the scriptures and is not accompanied by the sense of doership, and has been done without any partiality or prejudice by one who seeks no return, is called

Sattwika. That action which involves much strain and is performed by one who seeks enjoyments or by a man full of egotism, has been spoken of as **Rajasika**. That action which is undertaken through sheer ignorance, without counting the upshot, loss to oneself, injury to others and one's own capacity, is declared as **Tamasika**. One's works/ duties done for their own sake without any desire for fruits, are **Sattwika**; work done with a desire for fruits is **Rajasika**; and that attended with cruelty etc. is **Tamasika**. The reward of a righteous act, they say, is **Sattwika** and faultless (in the shape of joy, wisdom and dispassion etc.); sorrow is declared to be the fruit of a **Rajasika** act, and ignorance, the fruit of a **Tamasika** act. **Tyaga** or acts of sacrifice such as, charity and penance must be performed, for these are purifiers of wise men, and so, are not worth giving up; has also been declared to be of three kinds. Prohibited acts and those that are motivated by desire should no doubt be given up. But it is not advisable to abandon a prescribed duty. Its abandonment through ignorance has been declared as **Tamasika**. Should anyone give up his duties for fear of physical strain, thinking that all action is verily of the nature of discomfort, - practising such **Rajasika** form of renunciation, he reaps not the fruit of renunciation. A prescribed duty which is performed simply because it has to be performed, giving up attachment and fruit, that alone has been recognized as the **Sattwika** form of renunciation. At the **gunatita** is the person who shrinks not from action which does not bring lasting happiness, nor gets attached to that which is conducive to blessedness, - imbued with the quality of goodness, he has all his doubts resolved, is intelligent and a man of true renunciation. Since all actions cannot be given up in their entirety by anyone possessing a body, he alone who renounces the fruit of actions is called a man of renunciation. Welcome, unwelcome and mixed - threefold, indeed, is the fruit that accrues hereafter from the actions of the unrenouncing. But there is none ever for those who have renounced.

Food which is wholesome, pure and easily available is termed **Sattwika**, that which is merely palatable is **Rajasa**, and that which is injurious to health and impure is **Tamasa**. The duties of the **Brahmins**, the **Ksatriyas**, the **Vaisyas**, and the **Sudras** have been divided according to their inborn qualities - their **gunas**, which also largely determine their actions/ vocations - their **karmas**. Subjugation of the mind and senses, enduring hardships for the discharge of one's sacred obligations, external and internal purity, forgiving the faults of others, straightness of mind, senses and behaviour, belief in the **Vedas** and other Scriptures, God and life after death etc., study and teaching of the **Vedas** and other scriptures and realization of the truth relating to God - all these constitute the natural duties of a **Brahmin**. Exhibition of valour, fearlessness, firmness, cleverness and steadiness in battle, bestowing gifts, and lordliness - all these constitute the natural duty of a **Ksatriya**. Agriculture, rearing of cows and honest exchange of merchandise - these constitute the natural duty of a **Vaisya** (a member of the trading class). And service of the other classes is the natural duty even of a **Sudra** (a member of the labouring class). Man attains the highest perfection by worshipping through his own natural duties Him from whom the tide of creation has streamed forth and by whom all this universe is pervaded. Better is one's own duty, though devoid of merit, than the duty of another well- performed; for performing the duty ordained by his own nature man does not incur sin. Therefore, one should not abandon one's innate duty, even though it may be tainted with blemish; for even as fire is enveloped in smoke, all undertaking are clouded with demerit. What are the marks of the person who has risen above the three **Gunas**, and what her/his conduct ? And how, does s/he rise above the three **Gunas** ?

The **Brahman/ Ishwara/ Parama-atman**, i.e., the universal supreme spirit, is not affected by the **Gunas**; but remaining aloof/ unattached, controls, balances, and witnesses these **gunas**. But

the **Jiva-atman** or individual self/ spirit, i.e., a creature of Nature/ **Prakriti** is controlled, influenced, and transformed by them. The **Gunatita** person, who has risen above and gone beyond, hates not light (which is born of *Sattwa*) and activity (which is born of *Rajas*), and not even stupor (which is born of *Tamas*), when prevalent, not longs for them when they have ceased. Sitting knowing that the *Gunas* alone move among the *Gunas*, remains established in identity with the absolute, universal spirit, and never falls off from that state. He who is ever established in the Self, takes woe and joy alike, regards a clod of earth, a stone and a piece of gold as equal in value, is possessed of wisdom, receives the pleasant as well as the unpleasant in the same spirit, and views censure and praise alike. He who is indifferent to honour and ignominy, is alike, to the cause of a friend as well as to that of an enemy, and has renounced the sense of doership in all undertakings, is said to have risen above the three **Gunas**. Also, through the **Yoga** of exclusive devotion, one can transcend these three **Gunas**, and attain/ realise the **Brahman**, which is the ground of the imperishable, of immortality, of the eternal virtue, and of unending immutable bliss. When the seer perceives no agent other than the three **Gunas** and realises the supreme Spirit standing entirely beyond these **Gunas**, s/he is said to be established in him/her Self. Having transcended the aforesaid three **Gunas**, which have caused the body, and freed from birth, death, old age and all kinds of sorrow, her/his soul attains supreme bliss. He whose intellect is unattached everywhere, whose thirst for enjoyment has altogether disappeared and who has subdued his mind, reaches through **Samkhyayoga** (the path of Knowledge) the consummation of actionlessness. Endowed with an untarnished intellect and partaking of a light, **Sattwika** and regulated diet, living in a lonely and undefiled place having rejected sound and other objects of sense, having controlled the mind, speech and body by restraining the mind and sense through firmness of a **Sattwika** type, taking resolute stand on dispassion, after having completely got rid of attraction and aversion and remaining ever devoted to the Yoga of meditation having given up egotism, violence, arrogance, lust, anger and luxuries, devoid of the feeling of meum and tranquil of heart,-such a man becomes qualified for oneness with **Brahman**, who is Truth, Consciousness and Bliss. Established in identity with **Brahman** and cheerful in mind, the **Samkhyayogi** no longer grieves nor craves for anything.

CONCLUSION:

The essence of the topic is to display the great Indian thought among the readers to upgrade their spirituality , intelligence, cognition and analysis of the self, and by this process of floating to merge themselves with the universal self, that is considered to be the ultimate end of one's own life

References

- Abhedananda, S. (1946). *True Psychology*; (1952). *Yoga Psychology*. Calcutta: Ramakrishna Vedanta Math.
- Akhilananda, S. (1948). *Hindu Psychology: Its meaning for the West*; (1952). *Mental Health and Hindu Psychology*. London: George Allen and Unwin.
- Bhattacharya, H. (1953). *Yoga Psychology*. In H. Bhattacharya (Ed.), *The Cultural Heritage of India, III*, Calcutta: The Ramakrishna Institute of Culture.
- Dash, A.S. (2001). *Integrating Psychological Knowledge: Ancient and Modern and Indian and*

Western. *Proceedings of the National Seminar on Psychology in India: Past, Present and Future*, 84-94. Kollam, Kerala: F.M.N. College.

Kao, H.S.R. & Sinha, D. (1997). *Asian Perspectives on Psychology*. New Delhi: Sage.

Kuppuswamy, B. (1985). *Elements of Ancient Indian Psychology*. New Delhi: Vikash Publishing House.

Nanda, G.K. & Dash, A.S. (1996). *Disadvantage, Schooling, Competence, and Invulnerability*. Bhubaneswar: Panchajanya.

Raju, P.T. (1953). Nature of mind and its activities (Pp. 507-519); Indian Psychology (Pp. 581-607). In H. Bhattacharya (Ed.), *The Cultural Heritage of India, III*, Calcutta: The Ramakrishna Institute of Culture.

Rhys Davids, C.A.F. (1936). *Buddhist Psychology*. New Delh: Munsiram Manoharlal.

Safaya, R. (1976). *Indian Psychology*. New Delh: Munsiram Manoharlal.

Sinha, D. (1988). Indigenization of Psychology in India and its relevance. *Indian Journal of Social Science*, 1 (1), 79-91.

Sinha, D. (1994). Origin and development of psychology in India: Outgrowing the alien framework. *International Journal of Psychology*, 29, 695-706.

Sinha, J. (1933, 1958, 1965). *Indian Psychology (I, II, III)*. Delhi: Motilal Banarasidass.

Sivananda, S. (1935). *Mind: Its Mysteries and Control*; (1962). *Conquest of Mind*. Sivanandanagar, Rishikesh: The Divine Life Society.

Vivekananda, Swami. (1989). *The Complete Works of Swami Vivekananda: Vol. 6*, 28-32. Mayavati, The Himalayas, India : Advaita Ashram.

ELEMENTARY EDUCATION THE NEED OF THE 'DAY'

***Dr. Nutan Kumari**

Abstract

This paper is a part of PhD research work entitled "A Study of current status of Elementary Education in the district of Muzaffarpur". Keeping in view of importance of elementary education in academia, attempts have been made to analyse the pros and cons of Government policies on educational sectors and accordingly to provide real pictures of the implementations of primary education program in the society.

In order to have a healthy society with healthy mind primary education should be taken care of properly. By studying the district primary education program and its activities, research works are coming up to find out the important facts and figures about the Justification of various Govt. programme, like, D.P.E.P., Sarva-Shiksha Abhiyan (SSA) etc. and their relationship with the objectives of its achievements. Thus this study aims at providing valuable information on the issue, like, the effects, the wastage, the stagnation as well as in minimizing the hurdles faced, during the work out of the program, that can be useful to the administrators, researchers, teachers, and those who are working in the field of elementary education and particularly in primary education program, so that the real knowledge can be transplanted in the mind of the children from the grass-root level.

INTRODUCTION

"Education is not the filling of a pail, but the lighting of a fire."

A human being is a positive asset and a precious national resource which needs to be cherished, nurtured and developed with tenderness and care, coupled with dynamism. According to Bertrand Russell the chief aim of education is the "formation of character." Each individual's growth presents a different range of problems and requirements at every stage from the womb to the tomb. The catalytic action of education in this complex and dynamic growth process needs to be planned meticulously and executed with great sensitivity (exhorts NPE, 1986). Elementary Education is considered as the base of the educational pyramid system. It is the elementary education which lays strong foundation for the child's physical, intellectual, emotional and social development. Elementary education covers the primary (6-11 years) and upper primary (11-14 years) age group, in Indian context generally up to Class VIII. The essence of the goal is for every 14-year old to have acquired foundation skills such as the ability to read and write with fluency, numeracy, comprehension, analysis, reasoning and social skills such as teamwork. Equally, elementary education should *instil* in children courage, confidence, curiosity, independence, resourcefulness, resilience, patience and understanding.

Elementary Education refers to the first formal stage of education from class I-VIII or the age group of 6-14. As per Right to Education Act 2009 "Elementary education means the education from first class to eighth class".

***Principal, JM, Teachers' Training College, BRA. Bihar University, Muzaffarpur..**
e mail: nutankrmuz@gmail.com

REVIEW OF RELATED LITERATURE

Research plays an important role in assessing and monitoring the progress in education. Historical Development of Elementary Education in India basically the Primary Education established, in the year of 1854, before independent India, a board of directors issued a charter education of which **Charles wood** was chief of the charter dispatch, and it gave the new direction to education in India. Dispatch recommended the knowledge of Sanskrit, Arabic and Persian should be included in curriculum along with English and western literature and science. Dispatch also recommended that along with English, Indian Languages should also be accepted as media of Instruction. Dispatch has an important issue that, it was centered to the universal education of masses which could be possible only through Indian languages and that English was necessary for acquiring high order of knowledge.

Progress of Education from 1854 to 1882 indicates, on the basis of declaration of 1854 it was suggested that the responsibility of primary education should rest on administrative officers. In 1959 it was decided that provinces are free to adopt its own policy for primary education. Gradually Development of Primary Education increased and during 1905-1920, the number of schools especially primary school was doubled with its effect. During the year of 1921-25 primary education was declared free and compulsory in most of the provinces due to the efforts of Gokhale & other thinkers. Elementary Education after Independence, the Govt. setup various committees and commissions to go through the area of primary education at every level from primary to higher education. The recommendations of Kothari commission report got the important place as such.

National policy on education 1986 viewed the dimensions of primary education. Policy also put stress on free and compulsory education. National policy on education 1986 focused on learning by experiences and joyful learning. It strongly advocated the compulsory education for weaker society like scheduled caste, scheduled tribes, other backward classes, minorities and girls. Policy on education 1986, recommended that every school must have minimum facilities needed for quality learning. Janardan Reddy committee 1992, made its observations on universalization of primary education in the country. In the series of programs and actions, Govt. of India launched a scheme for quantitative and qualitative improvement in the sector of primary education which has been entitled as District Primary Education Program (DPEP). The present investigation is specially focused on the DPEP. Therefore brief description of DPEP is an essential in order to understand the problem. Creation of a sound primary education system appears to be a basic component of any strategy for social, political and economic development of a country. In fact, it is primary education, which develops the basic innate abilities of a person to live a full personal life as an individual and as a member of a family and an economically productive as a worker and a socially useful life as a citizen (Haq and Haq, 1998).

Education at this stage moves the children into a coherent moral, intellectual and effective universe (Faure, 1972) creates awareness among them about their past and helps in developing a conception of the future. Education at the primary level acquires special importance and it provides an opportunity for capturing and nurturing talents at the early stage of growth, thereby contributing to the development of a national pool of ability (Islam, 1992).

Many studies regarding the role of schooling in economic development have shown that primary education plays a vital role in national economic development in developed as well as developing countries. Further, Schultz (1963) points out that primary schooling since it entails the lowest cost per year of schooling. The education at this level has a pervasive value in reducing cost and in improving the productivity of the economy, as the rate of return is higher in this stage than in any alternative investment. It would be more appropriate in the context of the situation in the developing countries to say that more and better elementary schooling should be relevant to the needs and realities of life in the country, where the rate of illiteracy is very high and the per capita income is low. In a country in which the level of economy is low if the level of schooling is raised substantially and rapidly, it becomes a substantial source of growth assuming of course, that the education provided is of the type and quality most relevant to development and growth of the nation. It is seen that primary education contributes to the productivity of the labour force, and at the same time, it creates in enlightened and responsible citizens. The value of primary education as an instrument of social change lies in its capacity to contribute towards equalization and expression of economic opportunities in promoting educational and social mobility in creating social concern and civic responsibility, and in inculcating cultural and moral values.

Elementary education is the basic foundation of all higher education. In this stage, an individual first learns to read, write and do mathematical calculation. We can expect the future progress of our country only from a well-planned and implemented primary education. At this stage child's cultural, emotional, ethical, intellectual, moral, physical, social and spiritual development also takes place. Elementary education empowers the individual to become self-reliant and enables them to participate in the process of national development. It develops the human efficiency and competency and contributes to the overall economic growth and development. Primary education raises the productivity and earning potential of a population, gender role (Bandyopadhyay&Subrahmanian, 2008) and improves the quality of lives (Poulos, 1993). It is the indicator directly associated with economic development and indirectly with poverty alleviation and population growth. Widespread illiteracy among people has hindered their access to information. Without basic literacy, it is much more difficult to promote better understanding of our changing social scenario. The knowledge of primary education can produce a literate and numerate population who can deal more or less satisfactorily with their problems encountered in daily life and serves as a basis on which a society is to be restructured and further education planned. It can bring a positive effect on the productive capacity of a society according to their own ability.

Recent research by Birdi, (1992) confirms that there is a high correlation between country levels of income inequality and inequality in the distribution of literacy. Thus, primary education advances human capability, economic opportunity and political participation. It fructifies multiple dimensions of freedom from fear and want, it generates self confidence, and supports orientation towards future, offers coping mechanism in terms of crisis (Amartya Sen). Without a quantitative and adequate development of primary education, the process of development of the country will come to a grinding halt. It is in this context that universal primary education is viewed as an imperative factor in preparing the future citizens for the task of national development. So, at least with regard to primary education, one can safely say that it should be made universal as early as possible and that no stone should be left unturned to achieve this goal.

In fact, at the level of government policy, educational planners throughout the world have been giving a high priority to the achievement of universal primary education. This is well in line with the directive Article 26 of the United Nations Universal Declaration of Human Rights'. It has been proclaimed in the article that "Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory". It may be observed that most of the developed countries like, U.K., Soviet Russia, U.S.A., and Japan have already attained a high level of schooling. It is also true that developing countries in general have not succeeded in their efforts to bring each and every child to school. However, it is important to mention that most of the countries irrespective of their economic status and ideologies have taken the provision of universal primary education in the form of a constitutional guarantee.

Education being one of the most important factors responsible to shape the personality of an individual has manifold functions. It is the potent source of material and human development. Quality is the most cherished goal in human endeavor and especially in the field of education. The right to education has been well recognized by the United Nations General Assembly. According to the Probe Report, "education is treated as an investment" (Probe report 1999). Moreover, as Pandey (2006) suggests, teachers are better able to relate to students with whom they share a common first language and cultural understandings, and to be able to effectively facilitate communication in class and to incorporate students' experiences into classroom practice. It is also argued that teacher's lack of knowledge of students' languages, cultures and communities might inhibit the development of close relationship with students (Pandey, 2006). A study of drop-out was conducted by Gupta and Voll (1999). They concluded from their study that the overall dropout rate at the primary stage was more than 60% in the state of Andhra Pradesh, Bihar, Jammu & Kashmir and West Bengal, whereas in Assam, Orissa, Rajasthan and Uttar Pradesh it was less than 50% and in the case of Madhya Pradesh it was around 58 %. The dropout rate among SC as well as ST pupils was higher than that of the pupils of all communities in all the states except in Jammu & Kashmir.

In a culturally diverse society such as India, it may not always be possible to have a teacher with a similar background to his or her students, so it is important that the teachers be sensitized, educated and trained to acknowledge and be respectful of the various diversities among students. Issues related to teachers and their training also cannot be considered in isolation from the curriculum they teach in schools. Batra's (2005) reflection on the voice and agency of teachers in relation to the National Curriculum Framework (NCF) suggests that there are two major gaps in relation to teacher education. First, it views teachers as people who need 'to be persuaded and trained... oriented to the perspective...(and) Should have the skills to teach...' (Batra 2005), as opposed to those who need to be empowered to evolve pedagogies that foster critical thinking within a consciously created democratic environment of learning for all children irrespective of caste, religion, region, community and gender (Nawani, 2008). Secondly, it assumes teachers exist in isolation from the socio-political contexts that actively discriminate between people from different backgrounds; and that teachers can be 'oriented' successfully to 'implement' the articulated new perspective of the NCF (Batra, 2005). The National Sample Survey 52nd Round concluded that, 'drop out is a serious phenomenon in our educational system' (GoI, 1998: 32).

The situation continues to be serious. Reasons for dropping out of school were explored in the NFHS-2 (IIPS and ORC Macro, 2000). It was found that the predominant reason mentioned both in rural and urban areas was children not being interested in studying. Children being engaged in wage labor and home-based work was another major reason. The 61st NSS (2004-2005) GoI, 2006b) shows the problem of drop outs continues. Data shows physical access to school is only a minor reason for dropping out. A substantial number of children were found to be dropping out because education was not considered necessary, they had to support household income (especially urban boys) or they had to attend to domestic chores (girls in particular). Dropout rates among Scheduled Caste (SC) and Scheduled Tribe (ST) girls continued to be higher than that of the SC and ST boys (with the exception of ST girls in 2004- 2005). Similarly, the dropout rates of SC/ST girls in particular is higher than dropout rates of non-SC/ST children. Even with substantial reductions in dropout rates, the situation with respect to SC/ST children is alarming. Indeed, less than two thirds of SC children enrolled at school complete five years of primary education. The situation is worse for ST children. Recent figures (2004-2005) show the survival rate among ST children is around 58% at the lower primary stage and only around 30% survive to reach the upper primary cycle. There is, however, no significant difference in the dropout rates for boys and girls among ST children. Hirisave, Uma and Shanti, (2002) Investigated behavioral problems in children with scholastic skill difficulties. Analysis of the behavior problems revealed that the children with difficulties in scholastic skills were found to be more impulsive, threw more temper tantrums, were more nervous, restless, stubborn, disobedient and had great difficulty in concentrating on academic and non-academic tasks.

The rationale behind elementary education was largely and clearly understood by the educational planners, politicians and parents. Even those who are in favour of universal elementary education are not fully aware of the importance of this social goal. Creation of a sound primary education system appears to be a basic component of any strategy for social, political and economic development of a country. In fact, it is primary education, which develops the basic innate abilities of a person to live a full personal life as an individual and as a member of a family and an economically productive as a worker and a socially useful life as a citizen (Haq, 1975). Education at this stage moves the children into a coherent moral, intellectual and effective universe (Faure, 1972), creates awareness among them about their past and helps in developing a conception of the future.

Education at the primary level acquires special importance and it provides an opportunity for capturing and nurturing talents at the early stage of growth, thereby contributing to the development of a national pool of ability (Islam, 1975). Many studies regarding the role of schooling in economic development have shown that primary education plays a vital role in national economic development in developed as well as developing countries. Further, Schultz (1963) points out that primary schooling since it entails the lowest cost per year of schooling. The education at this level has a pervasive value in reducing cost and in improving the productivity of the economy, as the rate of return is higher in this stage than in any alternative investment. It would be more appropriate in the context of the situation in the developing countries to say that more and better elementary schooling should be relevant to the needs and realities of life in the country, where the rate of illiteracy is very high and the per capita income is low. Elementary education is the basic foundation of all higher education. At this stage child's cultural, emotional, ethical, intellectual, moral, physical, social and spiritual development also

takes place. Elementary education empowers the individual to become self-reliant and enables them to participate in the process of national development. It develops the human efficiency and competency and contributes to the overall economic growth and development. Primary education raises the productivity and earning potential of a population and improves the quality of lives (Psachoro Poulos, 1993, world Bank, 1993, Barrow, 1991).

RATIONALE OF THE STUDY

Keeping in view of the above facts it can be concluded that strong elementary education system plays a pivotal role in improving the intellectual, academic and socio-economic condition of the person concern as well as of the nation as a whole.

OBJECTIVES OF THE STUDY-

Thus this study was undertaken to survey and investigate the factors related and affecting the elementary education in the district of Muzaffarpur in the state of Bihar. Following objectives were selected for this study.

- i. To find out the rate of Enrolment, irregular attendance and dropouts of children-
- ii. To explore the Functioning of schools
- iii. To observe the Efficiency of teaching personnel, their job satisfaction, absenteeism, their training and development of teaching learning material
- iv. To assess the process of Evaluation of incentive schemes such as free Post-hakYojana, waiver of tuition fee, scholarship and Mid-day meal scheme.

Research Design

The study was conducted by using normative research method with survey test procedure since the prevailing status of elementary education in district of Muzzafarpur was to be assessed.

Population and Sample

All schools of elementary education of Muzaffarpur district were selected as population of the study. To conduct the present study ten percent of the total primary schools of the every block were selected for the sampling purpose. The selection of the school is done from every Nyayapanchayat of each Block so that it may reflect the complete reflection of the population. The number of such schools taken for study is 200 .Near about 350 Teachers/Shikshamitra /shikshaacharyas in these schools are selected by random sampling method and 50% member of Block Education Committee and all the members of Village Education committee are also taken as the sample of study. Students of selected schools were also selected as sample for collecting data according to objectives of the study.

Preparation of the Schedule:-

The Preparation of the schedule involved several steps.

- The study of available relevant literature, particularly the reports of the N.G.Os, NCERT etc, to identify the major and more significant aspects of the status which ought to be studied.
- A list of these sub-variables were prepared.
- This was followed by a few visits to the rural primary schools in a few nearby blocks to have an overview of what and where how things existed.
- Taking all these material the researcher decided the relevance of collected and identified indicators of the status of primary schools.

Description of tool used in the study-

A school level data capture format was developed for collection of school level data base from all the states of India. It consists of eight parts seeking to collect information regarding the following heads:

1. School Information-
2. Enrolment-
3. Re-admission-
4. Extra facilities-
5. Other indicators- This includes information about the results of the previous academic session.

Delimitations of the study-

- (1) The present study is delimited to Primary schools of Muzaffarpur District.
- (2) The study is delimited to: -
 - Schools-related indicators of primary schools of Muzaffarpur district.
 - Facilities of the primary schools of Muzaffarpur district.
 - Enrolment in the primary schools of Muzaffarpur district.
 - Drop-out of primary schools of Muzaffarpur district.
 - Mid-day meal program of Primary schools of Muzaffarpur district.
- (3) Only 250 elementary schools selected as sample.
- (4) Only 350 school teachers working in elementary schools selected for data collection.

ASSUMPTIONS:

The study had to be conducted under following assumptions-

- It is assumed that the rate of enrolment in primary schools remain unchanged
- If changed then what is the rate for last three years before and after launching DPEP in Muzaffarpur District.
- There has been no change in dropout rate of children under schools of DPEP for the last three years in reference to different social classes.
- The opinion of teachers working under DPEP has been normally positive towards the district primary education program.
- The perception of teachers regarding the participation and cooperation of community in the development of primary education seems to be normal irrespective areas.

- The role of new primary school, alternative education centres proved to be positive for the development of primary education under DPEP in terms of enrolment.
- As per opinion of community (members) the district primary education program does have an effective and useful role in the growth and development of primary education.

CONDUCTION

This entire research includes findings related to infrastructure of schools, facilities available, enrolment, dropouts, mid-daymeal system, toilet facilities etc. of elementary schools of Muzaffarpur district (Bihar). But in this paper focus is on analysis of rates and reasons of drop outs in these schools.

RATE OF DROP OUT

Dropouts a big obstacle in elementary education. In this research following rates of drop out were found out from the schools.

- 17.6% students were not attending their schools because of persistent disease or sickness.
- 14.8% were dropped school because of their physical disability.
- Due to poverty 43.5% children were out of reach of schools.
- 32.4% students dropped their schools because of failing in examinations.
- Unawareness about education 54.4% students did not attend schools.
- This is also due to their parent's unawareness.
- Due to poverty and large families 64.0% were actively engaged in house hold chores that is why they dropped their schools.
- 53.3% of children were dropped their schools just because of playing.
- 35.0% children admitted that they did not cope up themselves with the class room teaching so they dropped the schools.
- 52.9% students were feared of corporal punishment so they leave their schools.
- 31.6% students did not attend their schools because of hard reaching or distance.
- 45.3% students found unable themselves to complete the homework. Being punished for this they choose to drop the school.

REASONS FOR DROP-OUT:

The Problem of drop-out has been continually a great challenge for the primary education system along with school buildings, teachers, salaries, equipment, and textbooks and so on. It also included deficiencies in the organization of the primary education system. The subject of dropout or wastage had been studied in India and other countries over the past 65 years and many of the reasons for this educational malady are not known. However, it is not easy to deal with the malady because its origin lies partly within the system itself which to some extent has been created by scholars, Politicians and administrators. Their intention may be beyond reproach but the major lacuna in their policies and decisions has been the absence of a comprehensive dialogue with the people to understand their perception of education and of the place of the child

in the family. This is the reason why several developing countries are now reorganizing the primary education system so as to make it people oriented, instead of government oriented.

Drop-out of students at various levels of primary education has been in the past a critical problem. On the basis of the responses collected under this research quite a large number of reasons for this have emerged.

The following are the percentage of drop-out reason wise:

- Persistent sickness (17.6%)
- Being physically disabled (14.8%)
- Poverty (43.5%)
- Failing to pass examination (32.4%)
- Failing to realize the importance of education (54.4%)
- Being engaged in other homework (64.0%)
- For just to play and enjoy (53.3%)
- Being unable to follow classroom teaching (35.0%)
- For fear of being punished (52.9%)
- The school being far away (31.6%)
- Being unable to complete homework (43.5%)

The above data reveals the idea that seem being unable to realize the importance of education, being engaged in other necessary home works, to play & enjoy and for fear of being punished are the most important reasons for drop-outs.

SUMMARY OF THE RESEARCH

The District primary education program (DPEP) initiated by the MHRD in 1993 was a pioneering approach for achieving the goal of universalization of elementary education (UEE) though education for all the 2000 A.D planning of UEE had been mainly at the National and State level. These units were too heterogeneous for effective planning because they did not provide for contextually which required local area based planning with disaggregated target and decentralized planning and management. The whole approach was top-heavy and thus failed to provide the desired result (Ved Prakesh 1997). Clearly according to him the planning should have been from grass root level to the top; in other words from the village upwards. He emphasized "A beginning has to be made with district as the unit of planning." Motivated by the foregoing idea it was considered important that prior to reaching the stage of district level of planning for improving the status of elementary education, data must be made available as to what exactly the situation is at district level. For this it was considered necessary to make district level survey of the current status of elementary education. A baseline assessment study may be considered essential at each district level for implanting and evaluating the effectiveness of DPEP programs. The study proposed to be conducted by this researcher emerges from this background. To be specific, it is proposed to make a survey of the current status of primary education in the district of Muzaffarpur in Bihar state.

CONCLUSION

From the above analysis it can be concluded that home environment certainly plays an important role on the drop out of the pupils from the schools. Especially the unawareness of parents, lack of encouragement from the school as well as the family problems indirectly influence the school dropouts. It is also observed that many dropouts found in slum area and among the students live in houses without electricity, drinking water facilities, etc.

IMPLICATIONS

As it is understood from the study, the reasons of their drop-out were (i) being engaged in other homework, (ii) Not realizing the importance of education, (iii) just to play and enjoy, (iv) fear of being punished, (v) unable to complete home work, and to some extent (vi) poverty also.

And all these factors leading to drop-out are within the control of parents and school administration. Underlying all these hindrances, there seems the lack of awareness and motivation on the part of the parents. They need to be sensitized to the gravity of the situation by way of making them realize about the importance of education in their personal, social and national progress of life leading process. The district elementary education programme (DPEP) must undertake this as a challenge. They can organize village level talks and mass counseling Programmes, awareness programme, orientation programme for the school teacher in the village level and also in district level, thereby impressing upon them that they should also make efforts on checking their children's drop-out. A wide spread awakening and awareness in needs to be registered as the mission of the communication and the officials should be take care of this objective.

This finding has far reaching implications for the government, administrative officers and the local community. Greater attention needs to be paid to this aspect of elementary education in this district. There is the need to find out what causes this poor quality of elementary school education in this district.

SUGGESTIONS

The problem of drop-out and quality of elementary education are two major issues. How to curtail the rate of drop-out and upgrade the quality need to be understood more accurately. The present study has only touched the boundary lines of these problems. In future these may be studied more comprehensively.

References:

- Bandyopadhyay, M. and Subrahmanian, R. (2008) Gender Equity in Education: A Review of Trends and Factors. CREATE Pathways to Access Research Monograph No. 18. New Delhi/Falmer: CREATE and NUEPA.
- Batra, P. (2005) Voice and Agency of Teachers: Missing Link in National Curriculum Framework 2005. Economic and Political Weekly, October 1- 7, 40(40): pp. 4347-4356.
- Birdi, (1992): A study of the growth and development of the primary education in Punjab from

1947 to 1987, Birdi, Bimlesh Ph.D, Edu. Punjabi Univ.

Faure, (1972). Revisiting the Faure Report (1972) and the Delors Report (1996): Why was UNESCO's Utopian Vision of Lifelong Learning an "Unfailure"?

GoI. (1998) Attending an Educational Institution in India: Its Level, Nature and Cost. NSS 52nd Round (1995-1996), Report No. 439. Page | 191 New Delhi: National Sample Survey Organization, Ministry of Statistics and Program Implementation.

Gupta, M. and Voll, K. (1999) Child Labor in India: An Exemplary Case Study. In K. Voll (ed.), *Against Child Labor: Indian and International Dimensions and Strategies*. New Delhi: Mosaic Books and Third Millennium Transparency, pp. 85-96.

Haq, M and K Haq (1998): *Human Development in South Asia*, Oxford: Oxford University Press

Islam, H. (1992), Textbooks with primary grade children. Independent study Patna, Hassan Arif, A.N. Sinha Institute of social studies, Patna.

Nawani, D. (forthcoming) Pedagogy and Pedagogue: Factors Impacting Access, Equity and Transition of Elementary School Children. CREATE Pathways to Access Research Monograph No. 37. New Delhi/Falmer: CREATE and NUEPA.

Pandey, S. (2006) Para Teacher Scheme and Quality Education for All in India: The Policy Perspectives and Challenges For School Effectiveness. New Delhi: NCERT.

Poulos, HG (1993). An Approximate Numerical Analysis of Pile Raft Interaction. Int. Jnl. Num. Anal. Meths. In Geomechs., 18, 73-92.

Schultz, (1963). *"The Economic Value of Education"*, New York: Columbia University Press.

Uma, H. and Shanti, K. (2002) Scholastic difficulties with behavioural problems, *The Indian Journal of Pediatrics* volume 69, pages 963–964 (2002)

IDEA TO SUBLIMATE BALLET INTO PREVENTIVE MEDICINE FOR KNEE PAIN

*Dr. Chiiho Sano.

Abstract

Ballet is still unfamiliar in India, but is a traditional art with a history in the West. For everyone, the benefits of ballet are immeasurable. Why? Ballet is a performing art that pursues beauty, while at the same time developing the ability to delicately control the human body. As a result, ballet is now an increasingly popular cross-training activity in the sports world. Athletes from all fields, from amateurs to professionals, realize the great benefits of ballet.

And the biggest advantage that ballet brings to Indians is that many people can prevent knee pain or prevent it from developing. Joint pain is no longer a disorder that only affects elders today. Knee pain can occur to anyone, from children to the elderly. Almost every one suffers from these problems in life either because of unhealthy lifestyle or some disease. Therefore, it is very important to know how to prevent knee pain when you grow up. We believe that providing such a method through ballet exercises will help preventive medicine.

In this paper, we propose a new ballet fitness with the theme of knee pain that also serves the purpose of preventive medicine created by the logic of ballet.

Key word: Ballet, Knee (Joint) Pain, Alignment Preventive Healthcare (medicine)

INTRODUCTION

- As a preventive medical treatment using ballet, we propose new ballet fitness with the theme of knee brace -

Lessons learned from COVID-19: the importance of putting health and research first. As the old adage goes, "Prevention is better than cure", individuals should take necessary steps to stay healthy and also keep diseases in check. Today, bad lifestyle habits have a direct effect on one's health. Obesity is killing a huge number of humans. New kind of problem, COVID-19 have emerged.

If COVID-19 has taught us anything, it is that, as a society, we should be prepared to tackle the health problems we are facing now or in the future. In such challenging times, health is the one true asset. And one must take preventive as well as reactive measures to keep one's health in prime condition. Diseases do not, indeed, know borders. This is now more vital to understand and recognize than ever. Millions of people are searching for answers, treatments, improvements and care in their daily lives.

CONCEPT OF PREVENTIVE HEALTHCARE (MEDICINE)

Medical Definition of Preventive Healthcare (medicine) is as follows; Preventive medicine: Medical practices that are designed to avert and avoid disease.

*Researcher, Ballet Dancer, Ballet teacher, Choreographer. e mail :chilho49@gmail.com

Medical research has come a long way, and as a result, people live much longer than they used to. While no one can argue that expanding the average person's lifespan is good, many folks are not enjoying the quality of life that we would hope as they get older. Especially, many of the elderly have chronic conditions that overwhelm their daily activities or they get diseases repeatedly, which ultimately raises health insurance premiums. Learning about and practicing preventive healthcare, i.e. maintaining your body and good health throughout your entire lifetime, is properly the best method to prevent disease from happening in the first place. Preventive healthcare means the measures taken to prevent diseases rather than treating them. Preventive health care is an important determinant of health since prevention means avoiding or slowing the course of a disease which is essential for a good quality of life.

Preventive health care must be planned and executed ahead of time, even when illness is absent. You must build healthy habits even when it's not convenient. You must believe that maintaining a healthy lifestyle is important enough to make a few sacrifices. Eating right, getting exercise and avoiding destructive substances like tobacco, alcohol and excessive amounts of sugar and salt are crucial, as is getting enough sleep each night. Healthy habits are an "automatic" defense against most illnesses and can provide us a long, healthy, and thus happy life.

Another aspect of preventive healthcare is finding and treating disease as soon as possible. The fact is that the chances of getting cured or being able to manage a condition successfully are much lesser after being diagnosed with a disease. Some sort of illness hits everyone eventually, but many, many diseases when caught early can be nipped in the bud and full health returned quickly.

The preventive health check-up lets one know what's going on inside the body, and what needs to be worked upon and what doesn't. Based on this information, a person can make a few simple lifestyle and nutrition changes. Not having to deal with uncomfortable or painful symptoms, feeling more energetic and just being able to fully enjoy your daily activities.

For us, the choice regarding our health is simple: Either invest a relatively small amount in order to stay in good health, or pay a huge amount later to treat the disease that is bound to eventually hit us. Since major medical expenses could easily exceed our maximum insurance coverage, this second choice could cause us financial ruin as well.

Important Aspects about Preventive Healthcare in India

Due to hectic schedules, stressful and unhealthy lifestyles, healthcare takes a backseat for many people and it has led to a significant increase in the incidence of diseases like hypertension, diabetes and knee pain. As a result, more than 90% of overall healthcare expenses go into treating diseases and their complications amounting to more than Rs 3.6 lakh crore per year. And unfortunately, according to "the National Health Accounts, 2013-14", in our country, a disappointing 9.6% of the overall healthcare expenditure is spent on preventive healthcare.

India has witnessed an increase in the population between the ages of 15-59 years and is expected to rise to 63 per cent by 2021 from 60 per cent in 2011. Medical expenses are increasing. Also, government of India has also lately realized the significance of wellness programs to reduce healthcare expenditure and encourage healthy living. Initiatives like International Yoga Day and the formation of the Ministry of AYUSH speaks out loud the government's intention to promote traditional health practices such as Ayurveda, Siddha, Unani and Yoga, Naturopathy and Homoeopathy.

Preventive healthcare is no longer just an option. Preventive healthcare is becoming an area of focus in most countries, and India is no different. One must take preventive as well as reactive measures to keep one's health in prime condition. Now gradually, the whole focus has shifted on preventive healthcare and the industry is growing.

According to a report by Redseer titled "Indian Habit of Being Healthy", the preventive healthcare segment is expected to touch \$100 billion by 2022, growing from \$55 billion in 2018 at a CAGR of 18 per cent, outpacing the healthcare and consumer space. This means that among Indians, health awareness and lifestyle management have increased more than expected. Healthy consumption at 30 per cent, followed by fitness at 27 per cent has the largest share of this pie. Mega sectors of the preventive healthcare segment such as recreational sports, wellness therapies, fitness wearable devices and healthy meal delivery have grown substantially and are the key drivers of the growth of the industry.

Increasing awareness and concern about healthy living and the consumption of preventive healthcare services are gaining momentum among mostly among urban Indians. 80 per cent of affluent urban Indians are very driven when it comes to integrating physical fitness, mental wellness, nutrition filled food to everyday lifestyle. With parents beginning to take fitness and healthy eating habits seriously, children at a very young age have now started to become very health conscious and therefore getting accustomed to the preventive healthcare culture.

Millennial and Healthcare Benefits

A 2017 study found that millennials strive for a higher level of perfectionism compared to older generations. Research shows that they care more about health benefits and other perks than Baby Boomers and Generation X. Millennials are more proactive and health conscious than their parents and grandparents. They're more willing to spend money on fitness, healthy food, and self-care. Baby boomers and even older millennials grew up with the idea that trust should be established between two people when transacting a service. Whether it was at the bank with a teller and customer, or with a doctor and patient, there was a face-to-face relationship. That is no longer the case. They're growing up, they're making decisions, and they're looking for health care with the speed, convenience, and personalized experiences they were raised with.

Generation Z patients are bringing a whole new set of expectations to healthcare. Gen Z are the first generation to be born into a world with the internet, smart devices and apps. As the first generation to grow up with social media and other consumer-centric technology, these "digital natives" have a completely different outlook on what it means to obtain a health care service. In fact, 74% say that they'd rather see a doctor through telemedicine. And when a situation calls for more than a video chat, they tend to avoid their primary care doctor, opting for specialists and alternative solutions to solve the problem. While older generations see PCPs as the point guard for their care, millennials see them as an extra step to getting the care they really need.

Whether they like it or not, Gen Z will come to their physician and provider armed with data, information and knowledge unlike in generations past. There is no question that technology continues to impact healthcare, altering how patients receive care, communicate with providers and stay informed about their own health. And convenience is paramount for this new generation so much so that they are often willing to forgo a personal relationship with their healthcare provider. While younger generations want convenience with their healthcare, they also want a trusted adviser who can guide them toward holistic health and wellness. Younger generations don't want the "old school" style of medicine where they have no input in decision-making. These individuals want to be armed with information from a trusted expert

who can guide them toward the right decision. Younger generations also have more awareness of whole-person wellness not just their acute medical condition but how it interplays with nutrition, fitness, sleep and stress management. This is something the healthcare industry has historically not touched.

Now, the healthcare industry in India is at a very important juncture. It is poised on the brink of a transformation, as it adopts new approaches, including technology, to help consumers manage their health in a better manner. And, the market is offering a tremendous opportunity for the healthcare players.

Knee pain problem in modern Indians

Seeking convenience and speed, and relying on technology have resulted in an inactive or sedentary lifestyle, which has created a problem for young people. One of them is knee pain. Joint pain is no longer a disorder that only affects elders today.

The young adults in their 20s to 40s are increasingly falling prey to joint-related ailments and are known to suffer from acute pain in their joints, especially in shoulder, elbow, wrist, knee, ankle, feet and toe joints. What was once considered as age-related diseases, joint pain is now slowly taking the shape of an epidemic, resulting in impaired mobility and flexibility in youngsters and middle-age group. It is one of the leading medical concerns in India.

Now more than 15 crore Indians suffer from knee problems, out of which four crores need a total knee replacement, imposing a considerable health burden on the society and country. Worse, the incidence of knee arthritis among Indians is believed to be up to 15 times higher than that found in Western nations.

In the next decade or so, knee arthritis is expected to emerge as the fourth most common cause of physical disability in India. It will be difficult for the country to tackle this huge healthcare burden due to a shortage of healthcare infrastructure and orthopedic specialists. This is because of the genetic predisposition of Indians towards knee arthritis, life expectancy in India has doubled since Independence, and a lifestyle that results in overuse of the knee joints. In particular, Indian traditional lifestyle affects knee health. For example, ground sitting habits further exacerbate any existing knee pain. Activities like squatting, sitting cross-legged, use of Indian toilets, and not using proper footwear while walking result in overuse and straining of the knee joint.

Causes of Knee Pain and knee-pain-remedies

The knee joint is the largest joint of the human body and is designed to support the entire weight of the body, enabling us to walk, run or dance. But all these unique activities are possible due to complex but excellent structure of the knee joint that is gifted to humans by nature. Unfortunately, present generation has abused this marvelous gift instead of making a good use of it. The knee abuse and the knee neglect is the root cause of increased incidences of knee joint pains in the present generation.

Many people think that knee pain is due to age-related weakness, obesity, and cartilage abrasion, but it is not the underlying cause. There are various reasons and areas of pain, but the mechanism that causes pain is roughly the same. Most of the problems, except for congenital bone structure problems and injuries such as fractures, are due to misalignment due to misuse or daily habits.

This misalignment refers to the misalignment of the thigh (thigh) and shin (lower leg) (technically called lower leg external rotation). As a result, stress is applied to the entire knee,

causing pain in various places. And if you frequently perform daily activities such as standing up and walking in this state, you will feel chronic pain in your knees and ankles. Of course, this is not the only reason. However, there are many cases where the cause of pain comes from the misalignment.

In addition, when doing sports or dancing, you will continue to use it in a bad state with the knee joints displaced, which increases the probability of injury. Also, women, in particular, have weaker muscles than men and are more likely to strain the knees in terms of skeletal aspects (external rotation of the lower leg), and even if they are not injured, they tend to hurt their knees. So if this is the cause, the problem will not be resolved unless you remove the underlying cause. In other words, correct alignment eliminates many problems.

So what is important and what kind of exercise is needed to improve the condition of the knee? In many cases, the treatment for knee pain is mainly therapy, medicine, rest, exercise and nutrition. Of these, physical activity is one of the best preventive measures for joint pain. If your knees hurt, moving can be a hassle and fewer opportunities to go out. Still, your body is doing well, so you'll find pleasure in eating and gain weight. On the other hand, it does not move, so muscle strength declines and knee pain increases, creating a vicious circle. In order to prevent this, it is important to continue exercising so that the muscles of the legs are not weakened. Exercise will not only give your bones and joints strength, but also improve flexibility and range of motion.

However, one thing to keep in mind here is that if exercise is not done properly, there is a risk of exacerbating knee pain. What you should be careful about at exercise is to take the right posture. People often tend to choose postures that are comfortable for them. However, if you continue to be in a comfortable position, one may sprain their joints or it can increase the chances of joint pain. But many people practice their discipline without a proper coach or a guide. Sometimes the coach or the guide himself is not properly trained or qualified. Playing or working under half trained guide or without a guide puts our knees at a great risk. A well trained coach is always aware what type of body movements can lead to what type of injury and what to do in case of any injury to the knee. Same is the scenario for well-trained ballet teacher.

They must understand the bodily mechanism and correct alignment before taking a 'preventive' course of action. And in order to finally reduce the pain in the knee, it is necessary to adjust the position (alignment) of the knee joint.

Conditioning proceeds in three stages.

Stage 1: Adjust the positional relationship of the knee joint

Stage 2: Training weak muscles (not fully functioning)

Stage 3: Re-learning the correct usage of the body (coordination training)

Many people skip this part and work on the exercise, in which case the more exercise they do, the worse the pain. However correctly adjusting joints(conditioning) is a difficult task. Special skills are required to make this joint adjustment. This paper is an introduction that ballet is an alternative to this conditioning.

Ballet helps prevent knee pain

It's well known that ballet dancers are super coordinated people - that's because every exercise in a ballet class demands coordination of the entire body. Barre exercises are often gentle on the joints and can be an excellent choice if you have arthritis or joint problems.

But unfortunately, injuries in ballet are concentrated in the lower limbs. One of them is knee pain. The biggest cause of this knee pain other than overuse is incorrect use. In other words, ballet faces this problem if used incorrectly. However, if used properly, you can continue your dance life without injury or pain. Incorrect usage is, in other words, incorrect leg alignment. This means one thing. Indian feet are the same lines that result from the wrong use in ballet.

From this, the following can be said. “Knowing how to use your body properly through ballet” = “Prevent knee pain in the future”

Therefore, with this in mind, taking ballet lessons can be expected to reduce the chance of knee pain in the future, especially for children. The cause of this knee pain is the same. From this fact, "By knowing how to use your body properly through ballet, you can prevent knee pain." So, with this in mind, by taking ballet lessons and knowing how to use your body correctly, you can reduce the chance of knee pain in the future.

In addition, ballet offers many other benefits. All of us experience different physical limitations in life, but we can always work on improving our current condition. Ballet, specifically, offers students an enlightened awareness of their bodies, their posture, body alignment, and a refined sense of movement. And the benefits of improved posture extend well beyond the years spent on such activities. Ballet exercise shows up much later in life, when a person gets older and might otherwise start experiencing back pain, which is directly linked to posture. Ballet posture becomes a matter of habit. It's a part of who you are and how you move. It's a health benefit you don't realize until much later, and people around you are having mobility problems. Also, the awareness dancer's gain of their bodies makes it easier for them to understand what they're experiencing and how to fix it. Obviously, the benefits of learning ballet are numerous, and they are far-reaching, extending well beyond the actual dancing experience.

And there is another important idea that ballet can help preventive medicine. Collect knee data from everyone who came to the lesson and observe what happens to the knee. Checking your knee data will tell you what's happening in your body, what you need to work on, and what isn't. Based on this information, you can make simple lifestyle and nutritional changes. In addition, doing the necessary exercises at that time will prevent problems before they become serious. As a result, it often reduces the need to go to the hospital. At the same time, we think that we can contribute to preventive medicine by using children's data for future knee pain prevention.

CONCLUSION

Ballet offers a tremendous learning experience for all age's people. But ballet is just a trigger for a healthy “entrance”.

Of course, it is important to have a medical examination for preventive medicine. However, fundamentally, I would like to exert a great influence on the behavior of each person, including the improvement of lifestyle habits. As a result, for the first time, we believe that people and society will be healthy.

Only after becoming sick can human beings realize the value of their health and the importance of preventive action. For a healthy person, the benefits of taking preventive action against a disease are often difficult to understand. Healthy habits are an “automatic” defense against most illnesses and can provide us a long, healthy and thus happy life.

Even if you don't become a professional dancer and you don't recognize it as a preventive action, ballet offers purely various benefits. And, as a result, it becomes preventive action against the disease. Few people see ballet on the axis of "solving social issues". That is why we can expect to open up that path. Ideally, ballet has a great positive impact on society and on the future of Indians.

Through ballet, India has an unprecedented opportunity to become a healthy nation with the ability to take the right preventive steps.

References

- Andrea Lasner, D.P.T."Common Dance Injuries and Prevention Tips", The Johns Hopkins University, <https://www.hopkinsmedicine.org/>.
- Baussano,I., Sankaranarayanan,R. & Weiderpass,E. (2020), "Prevention is life- and cost-saving", *Prev Med.* 2020 Sep; 138: 106150., Published online 2020 May 27. doi: 10.1016/j.ypmed.2020.106150
- Clarke, E. A. (1974), "What is Preventive Medicine?", *Can Fam Physician.* 1974 Nov; 20(11): 65–68., PMID: PMC2274388
- Clarivate Analytics Journal Citation Reports, (2020), *PREVENTIVE MEDICINE*, 2019: 3.788. DOI:<https://doi.org/10.4065/75.2.165>, REVIEW| VOLUME 75, ISSUE 2, P165-172, FEBRUARY 01, (2000)"Healthy People 2000: National Health Promotion and Disease Prevention Objectives.", US Government Printing Office, Washington, DC1991 (Publication PHS 91-50212.).
- EH News Bureau, (2019), "Why personalised preventive healthcare should be an integral part of healthcare management?", *The Indian Express Pvt. Ltd.* <https://www.expresshealthcare.in/>"Re-engineering Indian healthcare 2.0" Tailoring for inclusion, true care and trust, 2019-08
- Han P.K.J. (1998), "Historical changes in the objectives of the periodic health examination.", *Ann Intern Med.* 1998; 127: 910-917
- "Healthy People" (2000) Review. US Dept of Health and Human Services, Public Health Service.", Centers for Disease Control and Prevention, National Center for Health Statistics, Hyattsville, Md1993 (2013-03-02), "Preventive Medicine Clinics in Hospitals of India: An Opportunity Missed", *International Journal of Medicine and Public Health*,2013,3,2,115-116.DOI:10.4103/22308598.115184,Published:April 2013, Type:Brief Communication.
- Hensrud, D. D. (2000). "Clinical Preventive Medicine in Primary Care: Background and Practice: 1. Rationale and Current Preventive Practices", MD, MPH
- Kakar,P. (2012). "Preventive Medicine in the Older Patient: A United Kingdom Perspective", *Int J Prev Med.* 2012 Jun; 3(6): 379–385., PMID: PMC3389434

Kasasa, (2020). "Boomers, Gen X, Gen Y, and Gen Z Explained", <https://www.kasasa.com/>

Kumar,A.; Mishra,V.; Anand,R.; Kabra,M. & Rao,R. (2018-09), "Indian Habit Of Being Healthy", Redseer.

MannoJun,O. (2019), "The 3 Best Exercises to Help Dancers Prevent Knee Injuries", Dance Spirit, <https://www.dancespirit.com/>

Narain,J.P. (2016). "Public Health Challenges in India: Seizing the Opportunities", Indian J Community Med. 2016 Apr-Jun; 41(2): 85–88., doi: 10.4103/0970-0218.177507, PMID: 27051080

National Health Accounts, (2013-14), "Estimates for India" National Health Accounts Technical Secretariat (NHATS).

National Health Policy ,(2017) .MOFHW, India"The 2018 India Report card on Physical activity for Children and Youth", Madras Diabetics Research Foundation"Ayushman Bharat: Comprehensive Primary Healthcare through Health and Wellness Centers" by NHSRC, September (2018).EY-FICCI Reports: "Universal Health Cover for India" Evolving a framework for healthcare reimbursement methodologies", 2013; "Universal Health Cover for India: Demystifying financing needs", 2012; "Fostering Quality Care for All", 2008

Pal,C.P.; Singh,P.; Chaturvedi,S.;Pruthi,K.K.&Vij,A.(2016), "Epidemiology of knee osteoarthritis in India and related factors", Indian J Orthop. 2016 Sep; 50(5): 518–522., doi: 10.4103/0019-5413.189608, PMID: 27746495.

Parker, K . & Igielnik,R. (2020). "On the Cusp of Adulthood and Facing an Uncertain Future: What We Know About Gen Z So Far", Pew Research Center, <https://www.pewsocialtrends.org/>

Rock,E. (2019). "Industry Voices—Survey shows 83% of patients want virtual health, but there's a problem", Questex LLC., <https://www.fiercehealthcare.com/>

Renfrow,J. (2019). "Social media influencers in healthcare you should know in 2020", Questex LLC., <https://www.fiercehealthcare.com/>.

Sushil. (2017), "Rising trends in preventive healthcare", ETHealthworld.com, <https://health.economictimes.indiatimes.com/>

Tracy Francis and Fernanda Hoefe, (2018), "'True Ge': Generation Z and its implications for companies", McKinsey & Company, November 12, 2018 | Article.

Vaishya,R. (2019), "India facing knee arthritis epidemic", Bennett, Coleman & Co. Ltd, <https://timesofindia.indiatimes.com/>

TEACHERS' PERCEPTION OF NEED FOR SPIRITUALLY HEALTHY LIFESTYLES

*Bina Kumari

**Cyma Anjum

Abstract

The present study revealed that Healthy life styles are earned through conscious, planned and sustainable efforts all through the life. The adult population is the current human resource which contributes to the construction of the nation. A right set of healthy life-styles and a well-aligned value system help teachers to effectively navigate through the best and worst of times. Family plays the most important role in this, as also educational institution, society, religious institutions and organizations. Our aim in education is to produce an efficient, highly trained, disciplined, hardworking, and an ambitious person who will perform his work well in the society and be successful, and hopefully, will also be a leader whenever required. Our educational institutions are trying to create such a human being.

INTRODUCTION

The erosion of values, in almost every aspect of human life, is a matter of universal anxiety and concern. The roots of such value erosion could be traced from multiple contexts. The pattern of social change, modernization and development that had taken place, under the impact of westernization of education, brought in its wake, a general decline of values in public life. This manifested in forms such as low level of tolerance, violence, disruptions in the family life, value conflicts, corruption, atrocities on women and children, terrorism, social tension, social discriminations and pathology of various kinds such as suicide, murder, theft, etc. Negligence of ethical and moral aspects of life in society's world over has caused severe imbalances in human development. The situation has become deplorable and explosive due to inequity on sharing of resources, poverty, over population, ill-health, child labour, crime, violence and degradation of physical environment. We live in a shrinking world in which the maligned heritage of conflict and competition will have to make way for a new culture of convergence and co-operation. In the modern world order 'interdependence' and 'complementarities' are to be the central features of human relations.

Society is suffering from suppression of the facts exposed by the genuine investigators out of ignorance, or out of fear of loss of security given by the non fact, thereby seeking security by belonging to caste-groups, religious-groups, racial-groups, political- groups or any identified groups causing terror, torture, violence and suffering.

* Principal, RGMTTC, Digwadih, BBM University, DHANBAD

E mail : bina.bbct@gmail.com

** Asst.Professor, LNMCBM (Edu.Prog) BRA Bihar University, Muzaffarpur. email: cypinhs@gmail.com

This is leading to lack of care, concern and gratitude towards people and nature. Subsequently, man has developed a narrow view in terms of mere economic development, and exploitation of the weak or meek. Thus the entanglement of humanity in innumerable problems is not due to lack of knowledge but due to lack of concern and action.

The social crisis throughout the present-day world is compounded by a moral crisis and the spread of violence and crime. The modern generation seems to be carried away by the world of things and cannot give thought to serious things. The pleasure of excitement, the pleasure of self interest, power, status, asserting one's own will, the pleasure of sex are found to be the dominant interests in life. The humanity seems to have become insane in pursuit of pleasure. Speaking lies has become a part of everyday life. Hypocrisy in social relations and dishonesty are on the increase. Various expressions in literature, in morality, in aesthetics are

greatly deteriorating. The mind of an average being is troubled because it is caught in the routine, caught in entertainment, pleasure, richness, family ties, and in the world of things and lost sight of the broader field of life. Killings have become the only language of the violent groups. Games, drugs, sex, making a name, good or bad, for oneself or aggressive action or throwing up the whole thing in despair or leading a riotous life are on the increase.

Though there are studies in different areas of life and in combinations of those areas, the unhealthy practices, attitudes and tendencies of people who have to conserve the environment for healthy, happy and peaceful living are not investigated. Moreover, the teachers who are to lay the foundations for such a life, by educating generations of students, are expected to understand the day to day living conditions. Teachers' great strength lies in the example they set, of curiosity, open-mindedness, willingness to put their assumptions to the test and to acknowledge mistakes. Over and above, the teachers must be in a position to suggest the healthy life-styles, hence the present study to survey the present-day conditions and the ways of rectifying.

Spiritual awakening is the transformation of one's consciousness which means moving from a lower self as the centre to a higher cosmic consciousness. It is truth that transforms, not the immediate action; it is only the discovery of truth by each one that will bring about happiness and peace in the world.

Kiran Kumar (2006), while exploring Indian perspective of spirituality, identifies two aspects, one is experiencing paranormal or supernatural also stated as altered states of consciousness and the other is leading a value based or "Dharmic" life style.

According to Latha and Yuvaraj (2007), 'Spirituality is the highest state of being and individuals strive to progress from sensual experience to complete transcendence. The inner most substratum of existence is pure knowledge per se, and not knowledge of something; it is pure consciousness or awareness. Accessing this, or realizing and communion with this core is the spiritual journey. One is supposed to derive energy from this source to nurture all the other dimensions of life (p. 223).

Unfortunately, spiritual consciousness is often conceived as a denial of material life and concerns of collective life. To become conscious of psychic being and to live a psychic life, we must abolish all egoism, but to live a spiritual life, we must no longer have an ego.

It is to perceive whether there is any need for healthy family relations, social life, emotional life, spiritual life as well as in environmental and political aspects of life.

OBJECTIVES OF THE STUDY:

On the basis of the above materials and facts with regard to the Teacher perception of need for spiritually healthy life style the following objectives were set to examine:

- To find out the teachers' perception of the need for Spiritually healthy life styles apart from Emotional, Environmental, Political & Cultural areas.
- To find out whether the teachers' perception of the need for spiritually healthy life styles differ with respect to the following variables e.g. Gender, habitation, Types of School, Trained / Untrained & teaching Experience.

Hypotheses of the Study:

Following hypotheses were framed on the basis of the relevant literature and available materials to analyse and interpret data for the finding the results:

- There would be no significant difference between male and female teachers in their perception of the need for spiritually healthy life styles.
- There would be no significant difference between urban and rural teachers in their perception of the need for spiritually healthy life-styles.
- There would be no significant difference between government and private school teachers in their perception of the need for spiritually healthy life-styles.
- There would be no significant difference between the trained and untrained teachers in their perception of the need for spiritually healthy life-style.

METHODOLOGY:

This study was conducted in Senior Secondary Schools of both Private & Government in Tirhut commissionerary on 200 Teachers by applying survey method on an standardised Questionnaire framed for this purpose.

Appropriate statistics were applied in the analysis and treatment of data and on the basis of analysis of data the following results were obtained.

Findings:

- a. The sample of teachers was found to have moderate perceptions of need for the healthy life styles and the group was found to be heterogeneous in its perception of the need for healthy life styles.
- b. Among the total group, 51% of the sample of teachers was found to have moderate extent of perception; 21% of the sample was found to have the perception to the more extent and

4% to the most extent. 21% of the sample of teachers' perception of the need for healthy life styles was found to have the less extent and 3% to the least extent.

c. More than half of the sample of teachers was found to be moderate and heterogeneous in their perceptions of the need for healthy life styles in all the areas like family, social, moral, emotional, environmental, political and spiritual.

d. The analysis shows that the teachers' perception of the need for healthy life styles comparatively is the best in Environmental area followed by Political, Emotional, Spiritual, Moral, Social and Family areas.

e. The locality of the school, type of management of the school, gender of the teacher, training received and teaching experience did not make any difference in their perceptions of the need for healthy life styles.

f. The locality of the school, type of management, gender of the teacher, training received; teaching experience did not influence their perception of need for healthy life styles in spiritual area.

Spiritual Area:

- Spirituality has to be inculcated from the childhood through education and parents also have to inculcate that sort of an interest in the children.
- Everyone should lead a righteous life from childhood and that is spirituality.
- Love and affection are to be shown to everybody.
- People have to read the scriptures and live accordingly.
- Human relations develop when the festivals are celebrated. Hence, this should be encouraged.
- To leave 'me' and 'mine', but feel 'we' and 'ours'.
- Not to have superstitious belief and not to propagate narrow ideas about God.
- To lead the life rationally on one side and spiritually on the other side.
- Religious preachers have to direct the public properly.
- Spirituality develops good human relations, unselfishness and goodness.
- Religion should not be an escape.
- Humanity flowers when the search for truth and God begins at individual level but not through the traditional way of devotion.

CONCLUSION:

Spiritual life has become a routine ritual; an escape in times of problems; an entertainment for many in the form of celebrations. As a result, religious dogma, religious fanaticisms are on the rise giving no place for spiritual development or search for truth. Thus man has turned materialistic that has deprived him of sense of beauty, love and compassion for the fellow beings and a sense of gratitude to the divine gifts of God.

BIBLIOGRAPHY:

- Gupta, M. and Voll, K. (1999) Child Labor in India: An Exemplary Case Study. In K. Voll (ed.), *Against Child Labor: Indian and International Dimensions and Strategies*. New Delhi: Mosaic Books and Third Millennium Transparency, pp. 85-96.
- Arora. G. L. & Ravi Kanta Chopra. (2004). Professional Ethics for Teachers. *Encyclopaedia of Indian education*. Vol. II New Delhi, NCERT. PP1383.
- Bhattacharjee, D.K. (2004). Value Education. J.S.Rajput (Gen Editor). *Encyclopaedia of Indian education*, Vol. II New Delhi, NCERT. PP1792-1800.
- Biddle, B.J. (1987). Teacher Roles. *The International Encyclopaedia of Teacher and Teacher Education*. PP 625- 634.
- Chamberlain Kindred. (1954). *The Teacher and School Organisation*, Newyork, USA: Prentice Hall, Inc.
- Das, R.C. (2004). Teacher Effectiveness. *Encyclopaedia of Indian education*, Vol. II New Delhi, NCERT. p1676-1679.
- Dash, B. N. (2004). *Teacher and Education in Emerging Indian Society*. Vol.2. Hyderabad: Neel kamal publications. P506.
- Daulatbhai, B. Desai. (1990). *Becoming a Happy Teacher*. Bombay: Western Indian House.
- Subba Rao, Ch. (2008). *The Vision of Morality*. (46th Publication of the author). Machilipatnam: Chandrakala press. p1-16.

JOURNALS:

- Akhtar Siddiqui. M. (2004). Teacher and Value Education. *Anweshika. Indian Journal of Teacher Education*. New Delhi: National Council for Teacher Education. Dec 2004. Vol. 1. No:2.
- Arali. G & Ratna Prabha. (2004). Influence of family environment on emotional competence of adolescents. July 2004. *Journal of Community Guidance and Research*. Vol 21. No.2. P213-221.
- Jagadisan, S.(2002). Education, Academic and Spiritual. *Edutracks*. Vol.1. No.6. March 2002. P29-30.
- Latha & Yuvaraj.T. (2007) Spirituality – An Exploration of Factor Structure. *Psychological Studies. Journal of the National Academy of Psychology* (July 2007). India. Vol.52. No.3. P223-224.
- Sam Thomas Joy. (2010). *Spiritual Intelligence - Need of the Hour. Developmental Challenges and Educational Determinism*. Centre of Advanced study in Education M.S. University of Baroda 2010. Vadodara. P. 116-121.

AUTISM SPECTRUM DISORDER: ANALYSIS OF A CASE STUDY

*Santwana Mohanty
**Swagatika Panda

Abstract

This paper is an analysis of case study on Attention-deficit hyperactivity disorder (a neurological disorder that develops during childhood and can persist upto adulthood), more specifically the Autism Spectrum Disorder (genetically and biologically based neurodevelopmental disorder), a condition of ADHD related to brain development that impacts how a person perceives and socializes with others. Attempts is made to explore the cause, symptoms, prevention and suggestion of Autism Spectrum Disorder (ASD) on the basis of analyzing the case history of a child named 'Ritwik' of 'learning clinic of Prof J P DAS', Bhubaneswar, Odisha. As observed, by using "The Das-Naglieri Cognitive Assessment System (DN: CAS), as a theory-driven assessment kit, was explored based on Planning, Attention, Simultaneous, and Successive Theory (PASS)". he is an over active, self talkative, imaginative and Hyper active, but a co-operative child, responded well at the time of all activities in his training sessions.

By administering the Cognitive Assessment test (CAS) and Seguin Form Board Test (SFBT), it is found that his total CAS score was 88 which is below average standard (Planning -85, imultaneous-120, Attention-77, and Sucessive-78). The finding advocates that his mental is seven years and he is lacking behind by nine months from the chronological age. It is suggested - Early diagnosis and treatment can make a big difference in outcome. Although the treatment won't cure ASD, it can help a great deal with symptoms. Treatment typically involves medications psychosocial treatments that target specific behaviours and behavioral interventions. Recent neuro -technological approaches, such as BCI, may be especially applicable to this population. Avenues for future research in ASD needs domains of preclinical models, experimental therapeutics, early identification and intervention, psychiatric comorbidities and dimensional phenotypes, ecological momentary assessment, neuro technology, and to explore the under explored factors associated with it.

Key words : ADHD ASD, SFBT, DSM, PDD-NOS, BCI CPT, NEURO-TECHNOLOGY, CASE STUDY,

INTRODUCTION

"It seems that for success in science or art, a dash of autism is essential."

-Hans Asperger

Attention-deficit hyperactivity disorder (ADHD) is a chronic condition that affects millions of children and often continues into adulthood. ADHD includes a combination of persistent problems, such as difficulty sustaining attention, hyperactivity and impulsive behavior. Children with ADHD may also struggle with low self-esteem, troubled relationships and poor performance in school. Symptoms sometimes lessen with age. However, some people never completely outgrow their ADHD symptoms.

* Lecturer in Psychology, SSS College Bhubaneswar, Odisha, India,

email: kuni.mohanty@gmail.com

**Graduate research scholar.email :pandabbsr98@gmail.com

But they can learn strategies to be successful. A neuro development disorder that causes social, communication and behavioral challenges. It is a very common and complex disorder (More than 3 million cases per year in US).

ADHD doesn't cause other psychological or developmental problems. However, children with ADHD are more likely than others to also have conditions such as:

- **Oppositional defiant disorder (ODD)**, generally defined as a pattern of negative, defiant and hostile behavior toward authority figures
- **Conduct disorder**, marked by antisocial behavior such as stealing, fighting, destroying property, and harming people or animals
- **Disruptive mood dysregulation disorder**, characterized by irritability and problems tolerating frustration
- **Learning disabilities**, including problems with reading, writing, understanding and communicating
- **Substance use disorders**, including drugs, alcohol and smoking
- **Anxiety disorders**, which may cause overwhelming worry and nervousness, and include obsessive compulsive disorder (OCD)
- **Mood disorders**, including depression and bipolar disorder, which includes depression as well as manic behavior
- **Autism spectrum disorder**, a condition related to brain development that impacts how a person perceives and socializes with others
- **Tic disorder or Tourette syndrome**, disorders that involve repetitive movements or unwanted sounds (tics) that can't be easily controlled

There are three subtypes of ADHD:

- **Predominantly inattentive.** The majority of symptoms fall under inattention.
- **Predominantly hyperactive/impulsive.** The majority of symptoms are hyperactive and impulsive.
- **Combined.** This is a mix of inattentive symptoms and hyperactive/impulsive symptoms.

From among all these types, in this paper, only focus is upon Autism spectrum disorders (ASD) that includes social, communication, and behavioral challenges. These problems can be mild, severe, or somewhere in between.

Recently, experts opined about different types of autism, such as autistic disorder, Asperger's syndrome, pervasive developmental disorder not otherwise specified (PDD-NOS), are all called now as "Autism spectrum disorders"

In an analysis on "Future directions for research on ASD", Damiano, et.al. (2013), stated that, the pace of autism spectrum disorder (ASD) research has increased dramatically in recent years. In 2003, approximately 800 peer-reviewed journal articles were published on the topic of ASD. In 2013, this number had increased to over 3400 articles published in a 12-month period. This remarkable increase has paralleled rapidly rising ASD prevalence estimates, which have escalated from approximately 30/10,000 to 60/10,000 a

decade ago (Fombonne, 2003) to the most current Center for Disease Control (CDC) estimates of 1 in 68 children in the United States (Frieden, Jaffe, Cono, Richards, & Iademarco, 2014).

ASD is currently defined on the basis of core deficits in social communication and repetitive and stereotyped behaviours and sensory symptoms, but deficits are far-reaching and pervasive, including impairments in emotional functioning, irritability, aggression, self-injury, anxiety, and impulsivity (Lecavalier, 2006). Present from very early in development, ASD presents as a complex array of psychological and biomedical symptoms. As such, ASD research requires a multidisciplinary perspective, including clinical psychology, developmental pediatrics, translational psychiatry, basic developmental neuroscience, cognitive neuroscience, and genetics. Similarly, the comprehensive treatment of individuals with ASD requires interventions for not only the core social communicative symptoms associated with ASD, but also a number of related impairments, including behavior and emotion regulation, gastrointestinal problems, sleep difficulties, and epilepsy (Coury et al., 2014).

ASD is also a highly heterogeneous disorder, including individuals with a wide range of symptom severity and intellectual and adaptive functioning. Finally, in more than 50% of cases, ASD presents in the context of a comorbid psychiatric condition, including internalizing disorders (e.g., anxiety, depression, bipolar disorder, and obsessive compulsive disorder) and externalizing disorders (e.g., ADHD, oppositional defiant disorder) (Mazefsky et al., 2012). The breadth and depth of the challenges associated with ASD have impeded progress towards the development of research-informed and person-specific novel interventions.

Despite the seemingly intractable nature of ASD etiology, the past two decades have witnessed remarkable progress towards understanding the pathophysiology of ASD. Progress has been rapid in the area of neuroimaging in particular (see Anagnostou & Taylor, 2011; Ecker & Murphy, 2014; Minshew & Keller, 2010, for reviews). Although neuroimaging findings in ASD are somewhat inconsistent due to different study methodologies, heterogeneity of participant samples, and other confounding factors (Salmond, Vargha-Khadem, Gadian, de Haan, & Baldeweg, 2007; Toal et al., 2010), a number of consistent patterns have emerged. Major findings in structural brain imaging have included a pattern of early brain overgrowth in ASD (Hazlett et al., 2011; Redcay & Courchesne, 2005), volumetric differences in frontal, limbic, and cerebellar regions (Amaral, Schumann, & Nordahl, 2008), reduced white matter volume (Ecker et al., 2012), and atypical development and greater disorganization of white matter tracts (Aoki, Abe, Nippashi, & Yamasue, 2013; Wolff et al., 2012).

Neuropathological studies have found atypicalities in cortical organization in ASD, particularly decreased pruning of prefrontal neurons (Courchesne et al., 2011), abnormal structure and organization of cortical mini-columns (Casanova, Buxhoeveden, Switala, & Roy, 2002), attenuated differentiation of temporal and frontal cortical cells (Voineagu et al., 2011), and atypical axonal development (Zikopoulos & Barbas, 2010). Functional neuroimaging studies have revealed decreased neural specialization for social information processing (e.g., processing of faces, biological motion, and theory of mind tasks) (McPartland, Coffman, & Pelphrey, 2011; Pelphrey, Shultz, Hudac, & Vander Wyk, 2011), attenuated prefrontal activation during executive function tasks (Philip et al., 2012), aberrant processing of auditory and language stimuli (Gomot, Belmonte, Bullmore, Bernard, & Baron-Cohen, 2008; Redcay & Courchesne, 2008) including reduced left-lateralization for the processing of

language (Kleinmans, Müller, Cohen, & Courchesne, 2008; Knaus, Silver, Lindgren, Hadjikhani, & Tager-Flusberg, 2008; Redcay & Courchesne, 2008) and underconnectivity among brain systems both at rest and across a range of functional tasks (Kennedy & Courchesne, 2008; Minshew & Williams, 2007). More generally, functional neuroimaging studies have revealed a pattern of enhanced activation in lower-order motor and sensory brain regions and attenuated activation of higher-order regions related to social cognition and executive function during complex tasks (Di Martino et al., 2009) and more unreliable or variable cortical responses (Dinstein et al., 2012; Müller, Kleinmans, Kemmotsu, Pierce, & Courchesne, 2003).

Research in ASD genetics has identified a number of genes that confer increased ASD risk (see Geschwind, 2011; State & Levitt, 2011, for review). The genetics of several Mendelian syndromes associated with ASD (including fragile X syndrome, Rett syndrome, and tuberous sclerosis) have been identified and genes contributing to the etiology of ASD can now be detected in up to 25% of cases (Abrahams & Geschwind, 2008; Jeste & Geschwind, 2014; Miles, 2011). Molecular pathways upon which these ASD risk genes converge have been identified, including proteins involved in cell-cell interaction (NRXN1, CNTNAP2), proteins with activity-dependent expression (MET, PTEN), and proteins modulating neuronal activity (UBE3A, SCN2A) (Berg & Geschwind, 2012).



Figure 1 -“I am different, not less”-Dr. Temple Grandin

The above reviews thus suggested that , there is no known cause but genetics and environmental factors may play a role on ASD:

- Genetics: Certain gene mutations (genetic changes) might cause ASD. Some genetic mutations could be inherited. Genetic disorders such as Rett syndrome or fragile X syndrome could also be a cause. Few genes may affect development of brain cells
- Environmental factors: Researchers are evaluating whether air pollutants, medication, viral infection or complication during pregnancy lead to this disorder

Clinical research has aided in the refinement of effective tools for the phenotypic characterization of ASD. ASD is now generally conceptualized as a dimensional rather than a categorical disorder (Lord & Jones, 2012) with two major symptom domains - social/communication and repetitive behaviors - rather than three (Gotham, Risi, Pickles, &

Lord, 2007; Lord et al., 2006). In addition, developmental trajectories of ASD traits from infancy into adulthood in ASD have been identified (Anderson, Liang, & Lord, 2013; Landa, Gross, Stuart, & Bauman, 2012; McGovern & Sigman, 2005), and recent work has begun to characterize the characteristics of individuals who lose their ASD diagnosis over time (often referred to as ‘optimal outcomes’) (Anderson et al., 2013; Fein et al., 2013). A number of effective psychosocial interventions have been developed and empirically validated to treat core and associated symptoms of ASD throughout the lifespan, including early behavioral intervention programs (Dawson et al., 2010; Warren et al., 2011), social skills training groups (Reichow, Steiner, & Volkmar, 2013), vocational intervention (Taylor et al., 2012), parent training programs (Kaminski, Valle, Filene, & Boyle, 2008; McConachie & Diggle, 2007; Virues-Ortega, Julio, & Pastor-Barriuso, 2013), and applied behavioral analysis (ABA) (Lovaas, 1987; Virués-Ortega, 2010).

The diffuse etiology and pervasive impairments seen in ASD may be the primary reason why neuro technological approaches, such as BCI, may be especially applicable to this population. Psychosocial treatments that target specific behaviors may prove less effective in the long-term than approaches that target more central and proximal processes from which multiple symptoms may emerge environment.

Thus the Symptoms are classified into two categories, social communication and interaction and patterns of behavior.

Social communication and interaction:

- Poor eye contact and lack of facial expressions
- Flat affect
- Delayed speech or does not speak
- Does not understand questions and directions
- Gets aggressive or disruptive
- Does not respond to his or her name
- Repeats phrases or words
- Resists cuddling and holding

Patterns of behavior:

- Repetitive movements like hand shaking, spinning or rocking
- Difficulty in body movement coordination
- Sensitive to light, sound or touch
- Self - harming activities such as head-banging
- Specific food preferences or food pattern

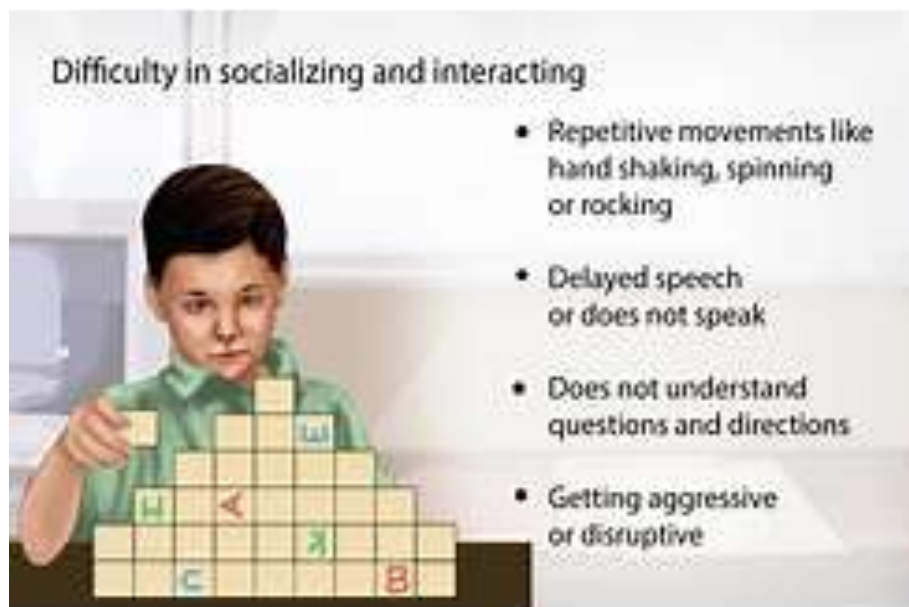


Figure 2 – Learning program is going on

Prevention

There is not any possible way to actually prevent ASD. Yet, early diagnosis and deep observation is advised.

- Parents should look for early symptoms in the child
- If it runs in the family, a specialist should be consulted before pregnancy

Caring for the autistic child can be stressful for the family members. Early diagnosis and observational tests done by parents, family members, child psychiatrist, pediatric neurologist, learning disability specialist, social worker or occupational therapist with expertise in and few genetic tests will ascertain the condition.

Common tests & procedures for this can be :

- Physical Observation : -Observe the daily habits, listening and speaking ability and behavioral patterns of the child. -The specialist will ask to keep a track on the activities of child.
- Genetic test : Genetic Disorder Testing for Rett Syndrome or Fragile X Syndrome might be done.

ASD is a neuro-developmental disorder characterized by attention deficit, hyperactivity, emotional impulses and difficulty with cognitive functions . The American Academy of Child & Adolescent Psychiatry noted that the assessments for ASD may include structured diagnostic interviews, parent and teacher report behavior rating scales, direct observations by doctor and cognitive tests. As cognitive neuroscience advances, most studies seem to demonstrate that the impairment of cognitive function is an important manifestation in ASD . Barkley constructed a theoretical model indicating that ADHD may be linked to four executive neuropsychological function impairments in 1997 . These theories provided the basis for clinical diagnosis of ASD and many cognitive assessment tools were used to evaluate the clinical symptoms of ASD such as CPT test, Stroop test and Go/No Go task.

The Das-Naglieri cognitive assessment system (DN: CAS), as a theory-driven assessment kit, was explored based on PASS theory by JP. Das, which was applied to assess the cognitive function. PASS theory has reconceptualized intelligence as a process-driven understanding of cognitive abilities based on the following four cognitive processes: Planning, Attention, Simultaneous and Successive processing . This theory has been linked to Luria's three functional units of the brain. Attention has been linked to the first structural unit, i.e. brain stem, midbrain and the brain; Simultaneous and Successive processing have been linked to the second structural unit, i.e. occipital, temporal, and parietal lobes; Planning has been linked with the third structural unit, i.e. the frontal lobe, and especially the prefrontal lobe in the same direction . In his study, McCrea has reported on three patients with unilateral focalized stroke lesions that were examined longitudinally on the DN: CAS, suggesting that the DN: CAS subtests are not only unique but also sensitive and specific to focalized cortical lesions .

PASS theory, which is similar to Barkley's execution function defect theory, proposes that children with ADHD may be more impulsive in cognitive processing, which in turn can influence planning processing. Attention difficulties are expected to negatively affect attention processing. Some studies have demonstrated that children with ADHD assessed by DN: CAS have the lowest performance on Planning and Attention scores, whereas their Simultaneous and Successive processing scores appear normal , DN: CAS has been standardized in different languages including Chinese .

The treatment can help the child to manage his/her routine activities and improve social, communication and behavioral skills. Medications may be prescribed depending on the requirement to control extreme behaviors like hyperactivity or anxiety.

Rationale and objective:

Observing the above view points, the objective of this paper is to analyses a case study as an example to do the needful for the diagnosis, prevention, treatment and prohibition of ASD among children and adults.

Tools used for the test:

- The Das-Naglieri cognitive assessment system (DN: CAS), as a theory-driven assessment kit, was explored based on PASS theory by Prof. J.P. Das, which was applied to assess the cognitive function. PASS theory has conceptualized intelligence as a process-driven understanding of cognitive abilities based on the following four cognitive processes: Planning, Attention, Simultaneous and Successive processing . This theory has been linked to Luria's three functional units of the brain. Attention has been linked to the first structural unit, i.e. brain stem, midbrain and the brain; Simultaneous and Successive processing have been linked to the second structural unit, i.e. occipital, temporal, and parietal lobes; Planning has been linked with the third structural unit, i.e. the frontal lobe, and especially the prefrontal lobe in the same direction .
- seguin form board test (SFBT) :The SFBT is based on the single factor theory of intelligence, measures speed and accuracy. It is useful in evaluating a child's eye-hand co-ordination, shape-concept, visual perception and cognitive ability. The test primarily used to

assess visuo-motor skills. It includes Gesell figures where in the child is asked to copy ten geometrical figures to evaluate visuo-motor ability.

Test materials consist of ten differently shaped wooden blocks and a large form board with recessed corresponding shapes.

Analysis of the case study

The Background information of the sample:-

The name of the boy is Ritwik. He is the only child of his parents (Age =7).As reported by his parents all the developmental milestones were delayed and speech was much delayed. He started uttering words at the age of 4 years. His sensory integration (SI) therapy was started from last 1.6 yrs. He was born in Karnataka and stayed there for 11 months. At the age of near about one year he came to Bhubaneswar and stayed with his parents and grandparents till date. He has no interest to play with the children but loves to speak a lot with himself.

Observation in the clinic:-

Ritwik visited Teaching Learning Center of Prof J P Das, Bhubaneswar with his parents for remedial class of reading, writing and cognitive class as developed by Prof . J.P. Das. As observed he is an overactive, self – talkative, imaginative and Hyperactive child. But he followed the instructions, responded well to the activities of the trainers and very cooperative with all activities provided by the centers. His behavior shows he is an extremely pampered child by his grandparents and suffering mentally for the maximum restriction by his mother..

The findings of the Test administered are as follows:-

From the Cognitive Assessment test it is found that his scores of planning-85 (Low average), Simultaneous-120(average), Attention 77(below average), Successive -78(below average). The Full scale score –88, which is found to be low average. His strength is in simultaneous score, but due to low planning and attention he is a very restless, hyperactive and inattentive child. For which he is poor in academics. But his behavioral problems of planning and attention can be modified and improved by giving Dr. J.P Das' cogent modules and cognitive remedies modules.

The Seguin form board result shows the lowest time taken by him is 28 seconds and the total time taken for three trials are 80 seconds, that proves - his mental level is of 7 years and he is lagging behind by 9 months from the chronological age.

DISCUSSION AND CONCLUSIONS

Studies indicate that ASD children performed significantly worse in FSIQ, exhibited Planning defects in CAS assessment, matching numbers, planned codes, planned connections, attention including expressive attention, number detection and receptive attention. Many scholars have tried to find an effective tool for diagnosis of ASD, and from 1998, continuous performance tests (CPT) have been widely used in the diagnosis of ASD. The CPT is used to

assess attention and control ability. Meanwhile, Go/No task is another test tool, commonly used for ADHD diagnosis, which focuses on executive function but without assessing other cognitive functions .

The diagnosis of the subject here is mainly based on three categories of clinical symptoms, i.e. attention deficit, hyperactivity and impulsivity.

The DN: CAS, a well-admissible theory-driven assessment kit consisting of four independent factors, which include Planning, Attention, Simultaneous and Successive processing in the PASS model, have been used to assess neuro-developmental disorder in 5–17 year old children. In case of Ritwik planning and attention assessment of DN: CAS had high sensitivity.

Keeping in view the challenges faced by the patients with ASD require more than upward extension of effective researches and services for children with ASD. Billstedt, Gillberg, & Gillberg (2011), opined that Caregivers of children with ASD are typically their greatest advocates, and many of the treatment continue till adulthood. such as communication, daily living skills, and social interaction, may still require attention upto adulthood. Besides group home and structured employment programs are also essential for these types of patients. Efforts towards teaching self-advocacy as a form of treatment also emphasises on strength-building and awareness concepts, that may apply across levels of cognitive ability. Hence future research in this area should focus on developing coping strategies, strength-building, and societal adaptation and acceptance. The best suggestion will be to think ASD children as follows.

“Children with Autism are Angels who lost their way to heaven and fell down on earth”

ABBREVIATIONS

ADHD: attention deficit hyperactivity disorder

ASD: Autism Spectrum Disorder

APA: American Psychiatric Association criteria

CPT: continuous performance tests

DN: CAS: Das-Naglieri cognitive assessment system

DSM-5: Diagnostic and statistical manual of mental disorders 5th edition

FSIQ: Full Scale IQ

PASS: Planning, Attention, Simultaneous, and Successive Theory

REFERENCES

Abrahams BS, Geschwind DH. Advances in autism genetics: on the threshold of a new neurobiology. *Nature Reviews Genetics*. 2008;9(5):341–355. [PMC free article] [PubMed] [Google Scholar]

Amaral DG, Schumann CM, Nordahl CW. Neuroanatomy of autism. *Trends in Neurosciences*. 2008;31(3):137–145. [PubMed] [Google Scholar]

Anagnostou E, Taylor MJ. Review of neuroimaging in autism spectrum disorders: what have we learned and where we go from here. *Molecular Autism*. 2011;2(4):1–9. [PMC free article] [PubMed] [Google Scholar]

Anderson DK, Liang JW, Lord C. Predicting young adult outcome among more and less

- cognitively able individuals with autism spectrum disorders. *Journal of Child Psychology and Psychiatry*. 2013;55(5):485–494. [PMC free article] [PubMed] [Google Scholar]
- Aoki Y, Abe O, Nippashi Y, Yamasue H. Comparison of white matter integrity between autism spectrum disorder subjects and typically developing individuals: a meta-analysis of diffusion tensor imaging tractography studies. *Molecular Autism*. 2013;22(4):25. [PMC free article] [PubMed] [Google Scholar]
- Berg JM, Geschwind DH. Autism genetics: searching for specificity and convergence. *Genome Biology*. 2012;13(7):247. [PMC free article] [PubMed] [Google Scholar]
- Casanova MF, Buxhoeveden DP, Switala AE, Roy E. Minicolumnar pathology in autism. *Neurology*. 2002;58(3):428–432. [PubMed] [Google Scholar]
- Dawson G, Jones EJ, Merkle K, Venema K, Lowy R, Faja S, Winter J. Early behavioral intervention is associated with normalized brain activity in young children with autism. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2012;51(11):1150–1159. [PMC free article] [PubMed] [Google Scholar]
- Dietz, P.M, Rose, C.E, McArthur, D., & Maenner, M. (2020). National and State Estimates of Adults with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*. 2020 [epub ahead of print].
- Di Martino A, Ross K, Uddin LQ, Sklar AB, Castellanos FX, Milham MP. Functional brain correlates of social and nonsocial processes in autism spectrum disorders: an activation likelihood estimation meta-analysis. *Biological Psychiatry*. 2009;65(1):63–74. [PMC free article] [PubMed] [Google Scholar]
- Dinstein I, Heeger DJ, Lorenzi L, Minshew NJ, Malach R, Behrmann M. Unreliable evoked responses in autism. *Neuron*. 2012;75(6):981–991. [PMC free article] [PubMed] [Google Scholar]
- Ecker C, Murphy D. Neuroimaging in autism—from basic science to translational research. *Nature Reviews Neurology*. 2014; 10:82–91. [PubMed] [Google Scholar]
- Ecker C, Suckling J, Deoni SC, Lombardo MV, Bullmore ET, Baron-Cohen S, Bailey AJ. Brain anatomy and its relationship to behavior in adults with autism spectrum disorder: a multicenter magnetic resonance imaging study. *Archives of General Psychiatry*. 2012;69(2):195–209. [PubMed] [Google Scholar]
- Fombonne E. Epidemiological surveys of autism and other pervasive developmental disorders: an update. *Journal of Autism and Developmental Disorders*. 2003;33(4):365–382. [PubMed] [Google Scholar]
- Frieden TR, Jaffe HW, Cono J, Richards CL, Iademarco MF. Prevalence of autism spectrum disorder among children aged 8 years — Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2010. *Morbidity and Mortality Weekly Report (MMWR)* 2014; 63:1–21. [PubMed] [Google Scholar]
- Gomot M, Belmonte MK, Bullmore ET, Bernard FA, Baron-Cohen S. Brain hyper-reactivity to auditory novel targets in children with high-functioning autism. *Brain*. 2008;131(9):2479–2488. [PubMed] [Google Scholar]

- Gotham K, Risi S, Pickles A, Lord C. The Autism Diagnostic Observation Schedule: revised algorithms for improved diagnostic validity. *Journal of Autism and Developmental Disorders*. 2007;37(4):613–627. [PubMed] [Google Scholar]
- Hazlett HC, Poe MD, Gerig G, Styner M, Chappell C, Smith RG, Piven J. Early brain overgrowth in autism associated with an increase in cortical surface area before age 2 years. *Archives of General Psychiatry*. 2011;68(5):467–476. [PMC free article] [PubMed] [Google Scholar]
- Kaminski JW, Valle LA, Filene JH, Boyle CL. A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology*. 2008;36(4):567–589. [PubMed] [Google Scholar]
- Kennedy DP, Courchesne E. Functional abnormalities of the default network during self-and other-reflection in autism. *Social Cognitive and Affective Neuroscience*. 2008;3(2):177–190. [PMC free article] [PubMed] [Google Scholar]
- Knaus TA, Silver AM, Lindgren KA, Hadjikhani N, Tager-Flusberg H. fMRI activation during a language task in adolescents with ASD. *Journal of the International Neuropsychological Society*. 2008;14(06):967–979. [PMC free article] [PubMed] [Google Scholar]
- Lecavalier L. Behavioral and emotional problems in young people with pervasive developmental disorders: relative prevalence, effects of subject characteristics, and empirical classification. *Journal of Autism and Developmental Disorders*. 2006;36(8):1101–1114. [PubMed] [Google Scholar]
- Lord C, Jones RM. Annual Research Review: Re-thinking the classification of autism spectrum disorders. *Journal of Child Psychology and Psychiatry*. 2012;53(5):490–509. [PMC free article] [PubMed] [Google Scholar]
- Lovaas OI. Behavioral treatment and normal educational and intellectual functioning in young autistic children. *Journal of Consulting and Clinical Psychology*. 1987;55(1):3. [PubMed] [Google Scholar]
- Mazefsky CA, Oswald DP, Day TN, Eack SM, Minshew NJ, Lainhart JE. ASD, a psychiatric disorder, or both? Psychiatric diagnoses in adolescents with high-functioning ASD. *Journal of Clinical Child and Adolescent Psychology*. 2012;41(4):516–523. [PMC free article] [PubMed] [Google Scholar]
- McPartland JC, Coffman M, Pelphrey KA. Recent advances in understanding the neural bases of autism spectrum disorder. *Current Opinion in Pediatrics*. 2011;23(6):628–632. [PMC free article] [PubMed] [Google Scholar]
- Pelphrey KA, Shultz S, Hudac CM, Vander Wyk BC. Research review: constraining heterogeneity: the social brain and its development in autism spectrum disorder. *Journal of Child Psychology and Psychiatry*. 2011;52(6):631–644. [PMC free article] [PubMed] [Google Scholar]
- Philip R, Dauvermann MR, Whalley HC, Baynham K, Lawrie SM, Stanfield AC. A systematic review and meta-analysis of the fMRI investigation of autism spectrum disorders. *Neuroscience & Bio behavioural Reviews*. 2012;36(2):901–942. [PubMed] [Google Scholar]

- Redcay E, Courchesne E. When is the brain enlarged in autism? A meta-analysis of all brain size reports. *Biological Psychiatry*. 2005;58(1):1–9. [PubMed] [Google Scholar]
- Redcay E, Courchesne E. Deviant functional magnetic resonance imaging patterns of brain activity to speech in 2–3-year-old children with autism spectrum disorder. *Biological Psychiatry*. 2008;64(7):589–598. [PMC free article] [PubMed] [Google Scholar]
- Salmond CH, Vargha-Khadem F, Gadian DG, de Haan M, Baldeweg T. Heterogeneity in the patterns of neural abnormality in autistic spectrum disorders: evidence from ERP and MRI. *Cortex*. 2007;43(6):686–699. [PubMed] [Google Scholar]
- State MW, Levitt P. The conundrums of understanding genetic risks for autism spectrum disorders. *Nature Neuroscience*. 2011;14(12):1499–1506. [PMC free article] [PubMed] [Google Scholar]
- Toal F, Daly E, Page L, Deeley Q, Hallahan B, Bloemen O, Robertson D. Clinical and anatomical heterogeneity in autistic spectrum disorder: a structural MRI study. *Psychological Medicine*. 2010;40(07):1171–1181. [PubMed] [Google Scholar]
- Virues-Ortega J, Julio FM, Pastor-Barriuso R. The TEACCH program for children and adults with autism: A meta-analysis of intervention studies. *Clinical Psychology Review*. 2013;33(8):940–953. [PubMed] [Google Scholar]
- Voineagu I, Wang X, Johnston P, Lowe JK, Tian Y, Horvath S, Geschwind DH. Transcriptomic analysis of autistic brain reveals convergent molecular pathology. *Nature*. 2011;474(7351):380–384. [PMC free article] [PubMed] [Google Scholar]
- Warren Z, McPheeters ML, Sathe N, Foss-Feig JH, Glasser A, Veenstra-VanderWeele J. A systematic review of early intensive intervention for autism spectrum disorders. *Pediatrics*. 2011;127(5):e1303–e1311. [PubMed] [Google Scholar]
- Zikopoulos B, Barbas H. Changes in prefrontal axons may disrupt the network in autism. *The Journal of Neuroscience*. 2010;30(44):14595–14609. [PMC free article] [PubMed] [Google Scholar]
-

GENERAL INFORMATION AND INSTRUCTION TO AUTHORS

Odisha Journal of Social Science is a self-financing, blind referred and peer-reviewed bi-annual (preferably, in January and July of every year) journal with inter disciplinary approach.

1. The articles are invited for the Journal with soft copy/print or hardcopy (type material)
2. The font style should be TIMES NEW ROMAN with size 12 and Auto spacing.
3. All articles must be accompanied by an abstract. Begin the abstract on a separate page. Type the abstract as a single paragraph without paragraph identification. An abstract for an empirical paper should be 200-250 words.
4. All articles must follow the style and format as suggested by the publication manual of the American Psychological Association.
5. The title should be in 15 words or less in length. The running head (within 60 letters) must appear on the title page. The running head is a shortened title to be used for the printed article.
6. Figures and tables must appear on separate sheets of papers. These should be of professional quality and must not exceed 22-28cm. Figures must be drawn on tracing Papers.
7. The length of the manuscript must be within 20 typed pages including tables, figures and references.
8. Must include all references except personal communications in the reference list. Mention personal communications only in the text. In reference list, place the year of publication in parentheses immediately after the author's name.

Reprints

Authors of papers published in the journal will receive free of charge 10 off prints of their paper.

Subscription Rates

One Issue : \$50.00 (foreign); Rs.500.00 (Inland) Subscription are to be sent by Bank Draft of Money Order only to Bhubaneswar Mohapatra, 2624/3484, Baragada Canal Colony, At/Po. BJB Nagar, Bhubaneswar -751014, ODISHA (INDIA)

Correspondence

All correspondence should be made to : Dr. Santa Misra

Chief Editor : Odisha Journal of Social Science

2624/3484, Baragada Canal Colony, At/Po. BJB Nagar, Bhubaneswar - 751014, ODISHA (INDIA)

e.mail: santaamisraaftediffmail.com,

Mob. : 9457211371 Web: www.jssodisha.com



OJSS Membership form 2014

Surname:..... First Name:.....

Mailing Address:City:..... State-

Postal Code:..... Country:.....

Email.....Date Submitted:

Would you like to receive the publications [] electronically or [] paper

Person you are sponsoring (if applicable):

Surname:First Name:

Mailing Address:.....City:.....

State- Postal Code:.....Country:.....

E-mail.....Date Submitted:

Would she/he like to receive the publications [] electronically or [] paper.

Payment Summary

Category of Membership

PATRON	Rs. 10,000 (ONE TIME)
CORPORATE MEMBER	Rs. 9000 (10YEARS VALIDITY)
FELLOW	Rs. 8000 (ONE TIME)
LIFE MEMBER	Rs. 10,000(10 YEARS VALIDITY)
ASSOCIATE	Rs. 5,000
MEMBER	Rs. 3,000 (PER ANNUM)
STUDENT MEMBER	Rs. 1,000 (PER ANUM)

Membership Fee for _____ Category .TOTAL PAYMENT: _____

The amount may be deposited in the account number - 30753198829 , IFSC NO. SBIN 0003341
OUAT, Bhubaneswar, Odisha, to the treasurer, B Mohapatra, against OJSS. 134

**NATIONAL INSTITUTE OF
SCIENCE COMMUNICATION AND
INFORMATION RESOURCES**



(Council of Scientific and Industrial Research)
14, Satsang Vihar Marg, New Delhi 110 067 &
Dr. K. S. Krishnan Marg (Near Pusa Gate) - 110 012

Ms. V. V. Lakshmi, Head, National Science

Library Phone: 91-11-2686 3759 E-mail:

vvlakhmi@niscair.res.in website: niscair.res.in

NSL/ISSN/INF/2013/1158 Dated: May 22, 2013

Head,

Dept. of Psychology,

Sri Satya Sai College for Women,

Bhubaneswar— 751030

Odisha

Dear Sir/ Madam.

We are happy to Inform you that the following serial(s) published by you has been registered and assigned ISSN(Print) ISSN 2321-3493 Odisha Journal of Social Science. It is important that the ISSN should be printed on every issue preferably at the right hand top corner of the cover page. The Indian National Centre will be responsible for monitoring the use of ISSN assigned to Indian Serials and for supplying up to-date data of the same to the International Centre for ISSN, Paris. For this purpose we request you to send us the forth coming issue of your serial on complimentary basis.

We solicit your co-operation in this regard.

Yours sincerely

(V.V.Lakshmi)

Head National Science Library

Please don't forget to send a sample Issue of the journal /URL with ISSN printed on it Contact :
Ms. Shobhna Vij e-mail : issn.india@niscair.res.in phone : 011.26516672



Indexed with : Council of Scientific and Industrial Research
14, Satsang Vihar Marg, New Delhi -110 067 &
Dr. K.S.Krishnan Marg (Near Pusha Gate) - 110 012
email: wlakshmi@niscair.res.in
Website : www.niscair.res.in

₹ Rs 500