NEW CHALLENGES & OPPORTUNITIES IN THE FIELD OF EDUCATION, SCIENCE, MANAGEMENT, COMMERCE, HUMANITIES, AGRICULTURE & TECHNOLOGY IN THE CURRENT SCENARIO

(Book Chapter)

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TABLE OF CONTENTS

THE POWER OF VITAMIN D IN COVID 19 MANAGEMENT: A PATH SIMPLIFIED

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Abstract - Recently lot of articles have been published discussing about the role of Vitamin D in the management of Covid 19 and what precautions should be acquired to reduce the risk of getting infected with Covid 19. There have been many drugs and supplements suggested which tend to reduce the risk of Covid 19, one of them is vitamin D. The search of literature has been made for the same to unravel the role of vitamin D in the said management. Vitamin D as a supplement has always been there in the market advised by the clinicians to the patients for increasing immunity and additional benefits. The principle aim of this review is to critically evaluate the literature outcome of benefits of vitamin D and also the role of vitamin D in prevention and cure of Covid 19.

1 COVID 19- A PANDEMIC

Corona viruses are a positive-sense single-stranded RNA viruses that cause diseases in humans and animals. In 1962 the human corona viruses (HCoVs) were first identified as causes of acute upper respiratory infection (URI). Over the last 20 years, two highly pathogenic human corona viruses were identified, including corona viruses associated with severe acute respiratory syndrome (SARS-CoV-2) and the Middle East respiratory syndrome (MERS-CoV) which emerged in different regions of the world[1]. In Wuhan city, China On December 31, 2019, a new strain of coronavirus was isolated and named as severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2) by the International Committee on Taxonomy of Viruses (ICTV) from patients with pneumonia of unknown etiology[2].

On March 11, 2020, the World Health Organization (WHO) announced that COVID-19 is a 'public-health emergency of international concern'[3]. The basic strategies for the control of ongoing pandemic are dependent on the control measure policies and human behaviour such as surveillance and isolation, contact tracing, movement restrictions, social distancing, hand washing, and increased awareness in the community.[4]

A research study analyzing 1099 laboratory confirmed patients in Wuhan, has found common clinical features characterized as mild and moderate symptoms which includes fever (88.7%), cough (67.8%), fatigue (38.1%), sputum production (33.4%), dyspnea (18.7%), sore throat (13.9%), and headache (13.6%)[5]. However, some of the patients display gastrointestinal symptoms, with diarrhea (3.8%) and vomiting (5.0%).

2 VITAMIN D DEFICIENCY – A PANDEMIC

Up until 1998 vitamin D deficiency was defined as a blood level of 25-hydroxyvitamin D [25(OH)D]; which represents a total concentration of both 25-hydroxyvitamin D2 and 25- hydroxyvitamin D3] of less than 10ng/mL (25nmol/L)[6].Later according to study carried out by Malabanan et al.[7] The definition for vitamin D deficiency was redefined in 1998 as a blood level of 25(OH) D<20ng/mL. The Endocrine society in 2011 defined vitamin D deficiency as a 25(OH) D<20ng/mL, insufficiency as 21–29 ng/mL and sufficiency as at least 30ng/mL for maximum musculoskeletal health[8].

Pregnant women, people of colour (more overly with increased skin melanin pigmentation), obese children and adults and children and adults who practice abstinence from direct sun exposure are at especially high risk. Europe, China, India, Middle East and South America where foods are not fortified with vitamin D showed high prevalence of vitamin D deficiency and insufficiency[9]

It has been estimated that approximately 30% and 60% of children and adults worldwide are vitamin D deficient and insufficient respectively[10]. The major factor for the vitamin D deficiency pandemic is the lack of exposure to sunlight and continues to be the major source of vitamin D for most children and adults[11,12,13]. One of the factors is lack of consumption of food which naturally contain vitamin D such as oily fish such as salmon, mackerel and herring, mushrooms exposed to sunlight or that are sun-dried and cod liver oil.

3 STANDARDIZED TREATMENT PROTOCOL FOR COVID 19

Huge efforts are made to identify effective interventions for the prevention and treatment of covid-19, which have resulted in almost 1800 trials completed or undergoing still evidence for effective treatment remains limited.[14]Doctors, patients, guideline bodies, and government agencies are also facing the challenges of interpreting the results from studies that are being published at a rate never encountered previously[15]. Because these many uncertain results a standard protocol cannot be set and appreciated in such a less amount of time.

According to a study in 2020[15],Glucocorticoids probably reduce mortality and mechanical ventilation in patients with severe covid-19, Remdesivir probably reduces length of hospital stay of Covid-19 patients and Hydroxychloroquine provided intermediate effect from time taken for symptoms resolution. Wang et al through a study conducted suggested that based on the safety profile and efficacy in other viral infections, chloroquine and remdesivir should be tried in human patients suffering from COVID-19 infection[16].

In another study by Pereira M et al[17] it was stated that there is high prevalence of vitamin D deficiency in people with COVID-19, However vitamin D deficiency is not always associated with covid 19 but

there is positive association between vitamin D supplementation and severity of the disease.

According to a RCT published in 2020 by Liu F et al[18] High dose of intravenous vitamin C is expected to improve pulmonary function and reduce mortality for patients with COVID-19. Prevention of the disease transmission also plays a major role. This can be done by social distancing, use of personal protective equipment (PPE), face masks/shields, and hand sanitizers.[19] One of the study by Stasi C et al[20] clinical and survival improvement was found in patients treated with plasma and hyperimmune immunoglobulins. Also, Inflammation inhibitors (in particular anti-IL6, anti-IL1, inhibitors of Janus kinases) are of great help for the treatment of COVID-19 in its advanced stages. Certain more studies are needed for better assessment of drugs used in covid 19.

4 VITAMIN D AND HOST IMMUNE RESPONSE

Skin has 7-dehydrocholesterol which when comes in contact with Sunlight (UV radiation), Vitamin D3 is produced. After this effect Vitamin D3 or oral vitamin D is converted into 25(OH)D in the liver and then further to 1,25 (OH)2D (Calcitriol) which is a hormonal metabolite in kidney and other organs[21].

Vitamin D helps in reducing the risk from microbial infection by mainly by 3 ways: physical barriers, cellular natural immunity, and adaptive immunity[22], as shown in figure 1.

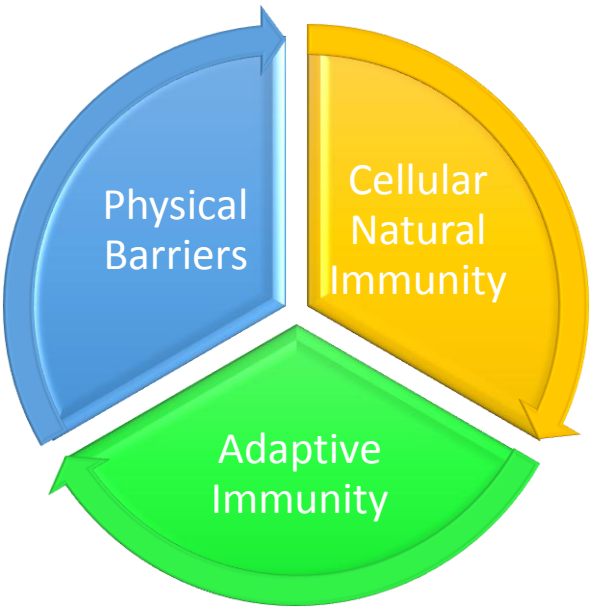

Fig. 1 Ways by which Vitamin D helps in reducing the risk for microbial infections

The physical barriers are maintained by Gap junctions, Tight Junctions and Adherence junctions[23–26]. It is observed that patients with COVID-19 infection show response to viral and bacterial infections by generating both pro-inflammatory and anti-inflammatory cytokines[27]. It is known that Vitamin D may help in reducing the production of pro-inflammatory T helper (T)1 cytokines, (TNF-α and IFN-γ), and increases the expression of anti-inflammatory cytokines by macrophages[28,29]. Serum vitamin D concentrations tend to decrease with age due less time spent in the sun and lower levels of 7-dehydrocholesterol in the skin[30,31]. This becomes a very important factor while treating adult cases with COVID-19. During viral infections vitamin D plays an immune regulatory role by suppression of the adaptive immune responses in respiratory epithelial cells[24,32–36].

Vitamin D reduces the expression of pro-inflammatory cytokines by directly inhibiting the nuclear factor kappa-light-chain-enhancer of activated B cells (NFκB) pathway[37]. Hence, via its opposing actions on cytokine regulation and T cell differentiation, vitamin D plays a complex dual role in immunopathology and hence is assumed to be effective against many Microbial infections[24,32–36].

5 THE CYTOKINE STORM

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infects pulmonary epithelial cells using the angiotensin converting enzyme-2 (ACE-2) receptor[38]. SARS-CoV-2 also infects macrophages and activates them through ACE-2 receptors. Type 2 pneumocyte apoptosis occurs by macrophages, neutrophils, and T cells when they are activated through sustained elevation of cytokines including interleukin (IL)-1, IL-6, and tumor necrosis factor (TNF) alpha, in some patients a path that can eventually lead to acute respiratory distress syndrome (ARDS)[39]. By expression of pro-inflammatory cytokines the host responses are sometimes amplified. This 'cytokine storm' is responsible for some of the serious manifestations of COVID-19 such as ARDS as shown in figure 2[40].

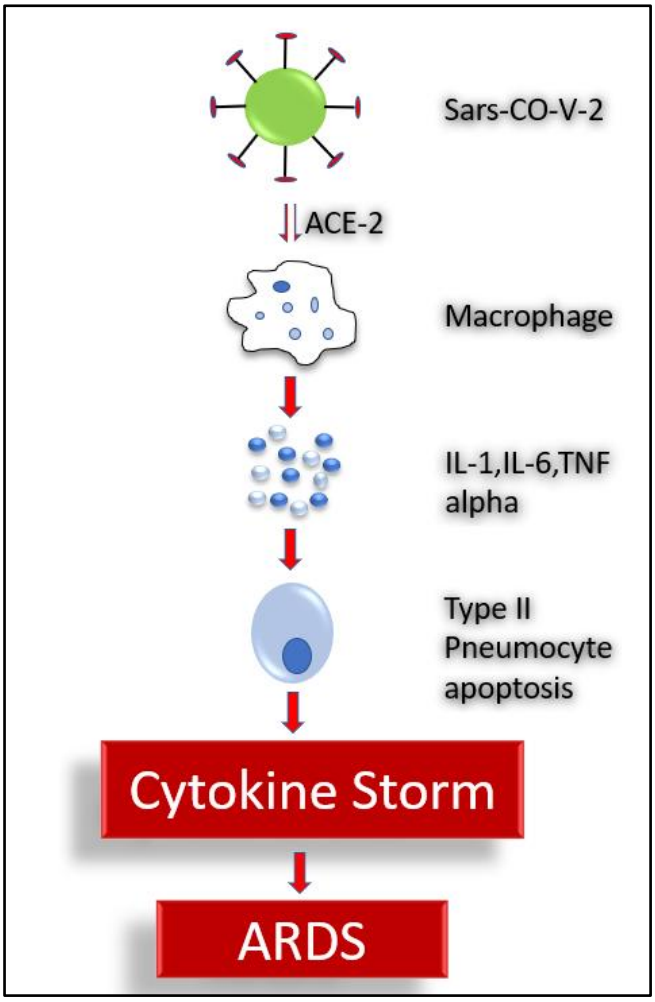

Fig. 2 The cytokine storm and ARDS

6 VITAMIN D AND COVID 19

As the COVID-19 pandemic count continues to rise in many countries including India, it is important to note that in India (approximately >70%) are vitamin D deficient (<20ng/dl)[41]. One of the factors responsible for this deficiency might be improper diet with lack of nutrition. Equally, in Europe, approximately 40% of the population is deficient approximately 24% of U. S. citizens and approximately 37% of Canadians are deficient in vitamin D, but the problem is mostly limited to their non-white communities[42,43].

Meanwhile, a recent systematic review and met analysis has concluded that vitamin D has potential in preventing respiratory infections, especially in those who have high levels of deficiency[44]. On Dec 17, 2020, the National Institute for Health and Care Excellence (NICE), with Public Health England and the Scientific Advisory Committee on Nutrition, published a rapid review of recent studies on vitamin D and COVID-19. They suggested that to maintain the bone and muscle health

vitamin D supplementation is very important[45]. A retrospective, multicentre study has suggested that whilst COVID-19 patients (who were deficient in vitamin D) generally had poor outcomes, those with high levels of vitamin D fared better outcomes[46]. Vitamin D deficiency contributes to acute respiratory distress syndrome and case-fatality rates increasing with age and with chronic disease co morbidity, both of which are associated with a lower 1,25(OH)2D concentration[47]. It is also observed that vitamin D is a negative endocrine renin-angiotensin system (RAS) modulator and inhibits renin expression and generation. Vitamin D can induce ACE2/Ang-(1–7)/MasR axis activity and inhibits renin and the ACE/Ang II/AT1R axis, thereby increasing expression and concentration of ACE2, MasR and Ang-(1–7) and having a potential protective role against acute lung injury/ARDS. Therefore, he suggested that vitamin D may be a potential therapeutic approach to combat COVID-19 and induced ARDS[48,49].

Tregulatory lymphocytes (Tregs) provide a principal defence against uncontrolled inflammation, and against viral infection in general[50]. Treg levels have been reported to be low in group of COVID-19 patients, and 'markedly lower in severe cases' who need more attention[51]. Studies have shown that vitamin D supplementation can increase the Treg levels in the body and can help the patient with the risk of respiratory distress[52,53].

In COVID-19 patients Thrombotic complications are common[54]. In half the patients infected with Covid 19 there is increase in D-dimer levels. Vitamin D has an involvement in thrombotic pathway so reduced level of vitamin D would increase the risk of thrombotic episodes in patient with Covid 19. Patients with obesity and diabetes also carry a higher mortality rate. Also, there is reduction in production of vitamin D in individuals with higher melanin, so it is suggested that there is low level of vitamin D production in black ethnic groups.

In Human immunodeficiency virus infection vitamin D supplementation increases the peripheral CD4+T lymphocyte count[55], and one of the main manifestations of severe COVID-19 infection is lymphopenia hence supplementation of vitamin D could protect the patient against Covid 19 infection.

7 CONCLUSION

In general terms, Vitamin D helps in maturation of macrophages and prevents in secretion of cytokines in large numbers thus, Vitamin D deficiency in patients with COVID 19 could be the factor responsible for cytokine storm and thus may lead to Acute respiratory distress syndrome (ARDS) which may be a main factor for mortality in these patients. Vitamin D supplementation could also increase the Treg levels thus decreasing the risk for Covid 19.

Moreover, Vitamin D supplements are readily available and affordable and can be used as a potential agent to prevent viral infection

and improve the survival outcome. Hence, we hypothesize that proper recommended Vitamin D levels in patients with COVID 19 will provide a better outcome. Moreover, a detailed study is required regarding dosage and severity of the disease for accurate results.

REFERENCES

1. Drosten C, Günther S, Preiser W, van der Werf S, Brodt H-R, Becker S, et al. Identification of a novel coronavirus in patients with severe acute respiratory syndrome. N Engl J Med. 2003 May 15; 348(20):1967–76.
2. Phelan AL, Katz R, Gostin LO. The Novel Coronavirus Originating in Wuhan, China: Challenges for Global Health Governance. JAMA. 2020 Feb 25; 323(8):709–10.
3. Li X, Wang W, Zhao X, Zai J, Zhao Q, Li Y, et al. Transmission dynamics and evolutionary history of 2019-nCoV. J Med Virol. 2020 May; 92(5):501–11.
4. Habas K, Nganwuchu C, Shahzad F, Gopalan R, Haque M, Rahman S, et al. Resolution of coronavirus disease 2019 (COVID-19). Expert Rev Anti Infect Ther. 2020 Dec;18(12):1201–11.
5. Wang W, Tang J, Wei F. Updated understanding of the outbreak of 2019 novel coronavirus (2019-nCoV) in Wuhan, China. J Med Virol. 2020 Apr; 92(4):441–7.
6. Holick MF. Vitamin D deficiency. N Engl J Med. 2007 Jul 19; 357(3):266–81.
7. Malabanan A, Veronikis IE, Holick MF. Redefining vitamin D insufficiency. Lancet. 1998 Mar 14; 351(9105):805–6.
8. Holick MF, Binkley NC, Bischoff-Ferrari HA, Gordon CM, Hanley DA, Heaney RP, et al. Evaluation, treatment, and prevention of vitamin D deficiency: an Endocrine Society clinical practice guideline. J Clin Endocrinol Metab. 2011 Jul; 96(7):1911–30.
9. Holick MF. The vitamin D deficiency pandemic: Approaches for diagnosis, treatment and prevention. Rev Endocr Metab Disord. 2017 Jun;18(2):153–65.
10. Daly RM, Gagnon C, Lu ZX, Magliano DJ, Dunstan DW, Sikaris KA, et al. Prevalence of vitamin D deficiency and its determinants in Australian adults aged 25 years and older: a national, population-based study [Internet]. Vol. 77, Clinical Endocrinology. 2012. p. 26–35. Available from: http://dx.doi.org/10.1111/j.1365-2265.2011.04320.x
11. Looker AC, Johnson CL, Lacher DA, Pfeiffer CM, Schleicher RL, Sempos CT. Vitamin D status: United States, 2001-2006. NCHS Data Brief. 2011 Mar; (59):1–8.
12. Wacker M, Holick MF. Sunlight and Vitamin D: A global perspective for health. Dermatoendocrinol. 2013 Jan 1;5(1):51–108.
13. Holick MF. Biological Effects of Sunlight, Ultraviolet Radiation, Visible Light, Infrared Radiation and Vitamin D for Health. Anticancer Res. 2016 Mar;36(3):1345–56.
14. Website [Internet]. [cited 2021 May 9]. Available from: Cytel. Global Coronavirus COVID-19 Clinical Trial Tracker. 2020 https://www.covid19-trials.org/ accessed May 2, 2020.
15. Drug treatments for covid-19: living systematic review and network meta-analysis. BMJ. 2021 Apr 13; 373: n967.
16. Wang M, Cao R, Zhang L, Yang X, Liu J, Xu M, et al. Remdesivir and chloroquine effectively inhibit the recently emerged novel coronavirus (2019-nCoV) in vitro. Cell Res. 2020 Mar; 30(3):269–71.
17. Pereira M, Dantas Damascena A, Galvão Azevedo LM, de Almeida Oliveira T, da Mota Santana J. Vitamin D deficiency aggravates COVID-19: systematic review and meta-analysis. Crit Rev Food Sci Nutr. 2020 Nov 4;1–9.
18. Liu F, Zhu Y, Zhang J, Li Y, Peng Z. Intravenous high-dose vitamin C for the treatment of severe COVID-19: study protocol for a multicentre randomised controlled trial. BMJ Open. 2020 Jul 8;10(7):e039519.
19. Samudrala PK, Kumar P, Choudhary K, Thakur N, Wadekar GS, Dayaramani R, et al. Virology, pathogenesis, diagnosis and in-line treatment of COVID-19. Eur J Pharmacol. 2020 Sep 15; 883: 173375.
20. Stasi C, Fallani S, Voller F, Silvestri C. Treatment for COVID-19: An overview. Eur J Pharmacol. 2020 Dec 15; 889: 173644.

21. Murdaca G, Pioggia G, Negrini S. Vitamin D and Covid-19: an update on evidence and potential therapeutic implications. Clin Mol Allergy. 2020 Nov 19; 18(1):23.
22. Rondanelli M, Miccono A, Lamburghini S, Avanzato I, Riva A, Allegrini P, et al. Self-Care for Common Colds: The Pivotal Role of Vitamin D, Vitamin C, Zinc, and in Three Main Immune Interactive Clusters (Physical Barriers, Innate and Adaptive Immunity) Involved during an Episode of Common Colds-Practical Advice on Dosages and on the Time to Take These Nutrients/Botanicals in order to Prevent or Treat Common Colds. Evid Based Complement Alternat Med. 2018 Apr 29; 2018: 5813095.
23. Schwalfenberg GK. A review of the critical role of vitamin D in the functioning of the immune system and the clinical implications of vitamin D deficiency. Mol Nutr Food Res. 2011 Jan;55(1):96–108.
24. Liu PT, Stenger S, Li H, Wenzel L, Tan BH, Krutzik SR, et al. Toll-like receptor triggering of a vitamin D-mediated human antimicrobial response. Science. 2006 Mar 24; 311(5768):1770–3.
25. Adams JS, Ren S, Liu PT, Chun RF, Lagishetty V, Gombart AF, et al. Vitamin d-directed rheostatic regulation of monocyte antibacterial responses. J Immunol. 2009 Apr 1; 182(7):4289–95.
26. Laaksi I. Vitamin D and respiratory infection in adults. Proc Nutr Soc. 2012 Feb; 71(1):90–7.
27. Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet. 2020 Feb 15;395(10223):497–506.
28. Sharifi A, Vahedi H, Nedjat S, Rafiei H, Hosseinzadeh-Attar MJ. Effect of single-dose injection of vitamin D on immune cytokines in ulcerative colitis patients: a randomized placebo-controlled trial. APMIS. 2019 Oct; 127(10):681–7.
29. Gombart AF, Pierre A, Maggini S. A Review of Micronutrients and the Immune System-Working in Harmony to Reduce the Risk of Infection. Nutrients [Internet]. 2020 Jan 16;12(1). Available from: http://dx.doi.org/10.3390/nu12010236
30. Vásárhelyi B, Sátori A, Olajos F, Szabó A, Beko G. [Low vitamin D levels among patients at Semmelweis University: retrospective analysis during a one-year period]. Orv Hetil. 2011 Aug 7; 152(32):1272–7.
31. MacLaughlin J, Holick MF. Aging decreases the capacity of human skin to produce vitamin D3. J Clin Invest. 1985 Oct; 76(4):1536–8.
32. Azrielant S, Shoenfeld Y. Vitamin D and the Immune System. Isr Med Assoc J. 2017 Aug; 19(8):510–1.
33. Holick MF. Vitamin D: A millenium perspective. J Cell Biochem. 2003 Feb 1; 88(2): 296–307.
34. Matsuoka LY, Wortsman J, Haddad JG, Kolm P, Hollis BW. Racial pigmentation and the cutaneous synthesis of vitamin D. Arch Dermatol. 1991 Apr; 127(4):536–8.
35. Bikle DD. Vitamin D metabolism, mechanism of action, and clinical applications. Chem Biol. 2014 Mar 20; 21(3):319–29.
36. Greiller CL, Martineau AR. Modulation of the immune response to respiratory viruses by vitamin D. Nutrients. 2015 May 29;7(6):4240–70.
37. Chen Y, Zhang J, Ge X, Du J, Deb DK, Li YC. Vitamin D receptor inhibits nuclear factor κB activation by interacting with IκB kinase β protein. J Biol Chem. 2013 Jul 5;288(27):19450–8.
38. Lu R, Zhao X, Li J, Niu P, Yang B, Wu H, et al. Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. Lancet. 2020 Feb 22; 395(10224):565–74.
39. McGonagle D, Sharif K, O'Regan A, Bridgewood C. The Role of Cytokines including Interleukin-6 in COVID-19 induced Pneumonia and Macrophage Activation Syndrome-Like Disease. Autoimmun Rev. 2020 Jun;19(6):102537.
40. Jose RJ, Manuel A. COVID-19 cytokine storm: the interplay between inflammation and coagulation. Lancet Respir Med. 2020 Jun;8(6):e46–7.
41. Aparna P, Muthathal S, Nongkynrih B, Gupta SK. Vitamin D deficiency in India. J Family Med Prim Care. 2018 Mar; 7(2):324–30.

42. Amrein K, Scherkl M, Hoffmann M, Neuwersch-Sommeregger S, Köstenberger M, Tmava Berisha A, et al. Vitamin D deficiency 2.0: an update on the current status worldwide. Eur J Clin Nutr. 2020 Nov; 74(11):1498–513.
43. Mitchell F. Vitamin-D and COVID-19: do deficient risk a poorer outcome? Lancet Diabetes Endocrinol. 2020 Jul;8(7):570.
44. Martineau AR, Jolliffe DA, Hooper RL, Greenberg L, Aloia JF, Bergman P, et al. Vitamin D supplementation to prevent acute respiratory tract infections: systematic review and meta-analysis of individual participant data. BMJ. 2017 Feb 15; 356: i6583.
45. The Lancet Diabetes Endocrinology. Vitamin D and COVID-19: why the controversy? Lancet Diabetes Endocrinol. 2021 Feb; 9(2):53.
46. Alipio M. Vitamin D supplementation could possibly improve clinical outcomes of patients infected with coronavirus-2019 (COVID-19). 2020.
47. Grant WB, Lahore H, McDonnell SL, Baggerly CA, French CB, Aliano JL, et al. Evidence that Vitamin D Supplementation Could Reduce Risk of Influenza and COVID-19 Infections and Deaths. Nutrients [Internet]. 2020 Apr 2;12(4). Available from: http://dx.doi.org/10.3390/nu12040988
48. Malek Mahdavi A. A brief review of interplay between vitamin D and angiotensin-converting enzyme 2: Implications for a potential treatment for COVID-19. Rev Med Virol. 2020 Sep; 30(5):e2119.
49. Iddir M, Brito A, Dingeo G, Fernandez Del Campo SS, Samouda H, La Frano MR, et al. Strengthening the Immune System and Reducing Inflammation and Oxidative Stress through Diet and Nutrition: Considerations during the COVID-19 Crisis. Nutrients [Internet]. 2020 May 27;12(6). Available from: http://dx.doi.org/10.3390/nu12061562
50. Weir EK, Thenappan T, Bhargava M, Chen Y. Does vitamin D deficiency increase the severity of COVID-19? Clin Med. 2020 Jul; 20(4):e107–8.
51. Chen G, Wu D, Guo W, Cao Y, Huang D, Wang H, et al. Clinical and immunological features of severe and moderate coronavirus disease 2019. J Clin Invest. 2020 May 1; 130(5):2620–9.
52. Fisher SA, Rahimzadeh M, Brierley C, Gration B, Doree C, Kimber CE, et al. The role of vitamin D in increasing circulating T regulatory cell numbers and modulating T regulatory cell phenotypes in patients with inflammatory disease or in healthy volunteers: A systematic review [Internet]. Vol. 14, PLOS ONE. 2019. p. e0222313. Available from: http://dx.doi.org/10.1371/journal.pone.0222313
53. Prietl B, Treiber G, Mader JK, Hoeller E, Wolf M, Pilz S, et al. High-dose cholecalciferol supplementation significantly increases peripheral $CD4^+$ Tregs in healthy adults without negatively affecting the frequency of other immune cells. Eur J Nutr. 2014 Apr; 53(3):751–9.
54. Giannis D, Ziogas IA, Gianni P. Coagulation disorders in coronavirus infected patients: COVID-19, SARS-CoV-1, MERS-CoV and lessons from the past. J Clin Virol. 2020 Jun; 127: 104362.
55. Alvarez N, Aguilar-Jimenez W, Rugeles MT. The Potential Protective Role of Vitamin D Supplementation on HIV-1 Infection. Front Immunol. 2019 Sep 25; 10: 2291.

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COMMERCE EDUCATION: ISSUES AND CHALLENGES RELATED TO DIGITIZATION, SOCIAL MEDIA & SKILL BASED LEARNING IN PUNJAB

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Abstract - The rapid trend of Globalization, Liberalization and Privatization has created challenge and threat for organizations to develop in the competitive world. This has forced the development of skilled education with the rapid change in industrialization and development in Information Technology. In every stream of education, the skill development as per the current scenario is the basic necessity. Commerce education is the core of the country's economic system. Despite of this fact, it is facing with high issues and challenges. This research paper is intended to investigate the issues and challenges of commerce education in Punjab with special reference to Punjab. The paper is an attempt to find out the ICT environment in the colleges, types of Computer training delivered to the students, practical skills of commerce students with reference to skill based learning and digitization, types of skills required in commerce students, types of computer training delivered to commerce students at introductory level, skill set required for commerce students in the industry, challenges that commerce academicians are facing with reference to Commerce education. This study is based on the two online questionnaires designed separately for both Commerce Academicians and Senior Level Managers.
Keywords: Commerce Education, Digitization, Social media, Skill based learning.

1 INTRODUCTION

In the era of globalization, as India becomes more developed and the industries require more talent, the knowledge and skills required by the Commerce students to deal with the global scenario also changes. Therefore, Commerce Education must be integrated with the industrial requirements in order to make overall development of the students, organization, society and the economy. Commerce education is visualized as a systematic education to teach the students for enterprising and managing business proficiently and effectively. The main aim of commerce education is to confer with talented human resource mandatory by the business in variety of sectors.

The speedy enlargement of online transaction in business compels an ever-increasing demand for the students to accept the digitization and

be skilful in the electronic market space. Commerce is interlinked with each and every field like economics, accounting, mathematics, management etc and also each and every activity of human being is concurrent with the commerce.

According to Nelson Mandela, "Education is the most powerful weapon which you can use to change the world." Since commerce is the great subject, it has the power to change & develop the whole world. Commerce education not only results in the development of commercial knowledge which is required as per employment perspective but it also upgrade the entrepreneurial skills among the students and establish their own creative and innovate business. It also advances the problem solving techniques, general management skills, aptitude which is required in job as well as in business.

According to Bill Gates," Technology is just a tool. In terms of getting the student working together and motivating them, teacher is the most important. "This quote suggests that the globalization, digitization, e- commerce are just the terms but the highly qualified and dedicated teachers can lend a hand to the students to face with indefinite challenges.

According to Herbert Spencer, "The great aim of education is not knowledge but action." This saying suggests that only the theoretical approach to education is not at all enough in the present scenario, so more and more focus must be given to integrate the course curriculum with some practical industry interface programmes and training.

2 REVIEW OF LITERATURE

Ranjitha (2016)[1], the faculties should be from excellent academic background with an industry exposure. They should be a special breed of people driven by passion rather money. They need to inspire and motivate the students through right communication skills. They should preferably have industry experience in a reputed organization.

According to Dr. Singh (2016)[2] Commerce Education is facing innumerable problems today. These problems have direct bearing on the course objectives, course content and course conduct. These problems need serious attention and close scrutiny.

Borpatragohain (2016)[3] concluded that the most emerging dimension of the business and commerce education in the twenty-first century is the need for business school to use technology and make it integral part of course contents. The quality of commerce education has become a major marketing issue in the changing environment.

Dr. Jadhav (2014)[4] concluded that Economics deals with industries trade, trade and process from production to distribution are studied in commerce. Different economic processes are analysed in commerce. It includes national trade, export import, bank, insurance, advertisement, accountancy etc. commerce education how good are sold

after production so, commerce and economics are closely related with each other.

According to Aziz (2015)[5] Commerce Education becomes the back bone of a country's economic system. Commerce education plays as a machinery for transformation of human beings into human resources according to the need of the world.

Dr. Dwivedi (2012)[6], If the system of higher education in commerce and management undergoes thorough revision, restructuring of policy matters and evaluation, then it can face the consequences of globalization successfully.

Mahajan and Shah (2000)[7] concluded that global competition and proliferation of business educational institutions across the world possess stiff challenges to the business schools in India to produce quality products that could cater to the needs of corporate world and hold out the expectation of different stakeholders of business education.

3 RESEARCH METHODOLOGY

A. Objectives of the study

1. To study the ICT learning environment in the colleges
2. To study the computer knowledge imparted to Commerce students
3. To highlight the practical skills required in commerce education covering value addition programmes
4. To find out the challenges that the academicians are facing with reference to Commerce Education

B. Target Group & Target Area: Commerce Academicians and Senior Level Managers in Odisha.

C. Sample Size:

1. Commerce Academicians of Punjab: 300
2. Senior Level Managers of Corporate Houses of Punjab:100

D. Sampling Method: Convenience Sampling for both groups(Commerce Academicians and Senior Level Managers)

E. Data Collection Method:

- **Primary Data:**

1. Two separate questionnaires are designed for both Commerce Academicians and Senior Level Managers.
2. Online questionnaire as well as Schedules and Printed Questionnaires are used for data collection from Academicians and Senior Level Managers.
3. Online questionnaire links sent to E-mail Ids of the target groups.
4. In this study, LinkedIn is also used to collect the data as links were sent to the target group straightforwardly.
5. Snowball technique is also used to collect the data.
6. Experience and observation of researchers.

- **Secondary data:** (Journals, Magazines & Internet)

F. Limitation of the study

In a stipulated time period, it has not been possible to explore the requirements of specific industrial houses in context of sect oral learning beyond commerce course curriculum as the study is primarily conducted on overall basis.

4. REVITALIZING COMMERCE EDUCATION

Commerce education is the education which fosters required knowledge, skills and attitudes for dealing and flourishing trade, commerce and industry. The growing capability of telecommunication infrastructures and the popularization of IT applications in India have forced the integration of commerce with digitization.

It is really very significant and the need of the hour to redesign the syllabus and the pattern of commerce education because of the following reasons:

A. The course curriculum of commerce education is mostly based on theoretical and outdated knowledge of the books but the syllabus of the commerce must be based on practical approach. This implies that the commerce education must be integrated with the internship, entrepreneurship and industry interface programmes.
B. Some organizations are recruiting the management students, science students and engineering students even for that jobs which are purely commerce based. This has been a challenging factor to the commerce students.
C. New market dynamics i.e. shift of traditional commerce to e-commerce has changed the variety of aspects like global logistics, data analytics, operation management and customer satisfaction etc.
D. Commerce Education involves a variety of disciplines together. It is heterogeneous in nature. Therefore, it demands specialized courses as Jobs demands specialized skills, knowledge and talent irrespective of the degrees.
E. There are various types of Business Applications which requires the Commerce knowledge. So, the candidates who are well acquainted with commerce knowledge and computers will definitely succeed in the competitive environment. ICT has changed the way.
F. Presently pedagogy of commerce Education in India relies more on outdated Teaching methods.
G. Quality of commerce students are less than the quantity of commerce students.
H. The digitization in business is the key solution to solve the environmental and sustainable issues.

I. A commerce student has lots of responsibilities on the shoulder like to control inflation, to upgrade Indian financial position in the international market, manage foreign direct investment etc in addition to normal accounting knowledge. Without integration of digitization and skill based learning with education, the success of commerce students will be far reachable.

J. The top commerce students desire to have professional Courses like CA, CS, ICWA etc. as the degree of Commerce is not very much attractive from employment perspective.

5. DATA ANALYSIS

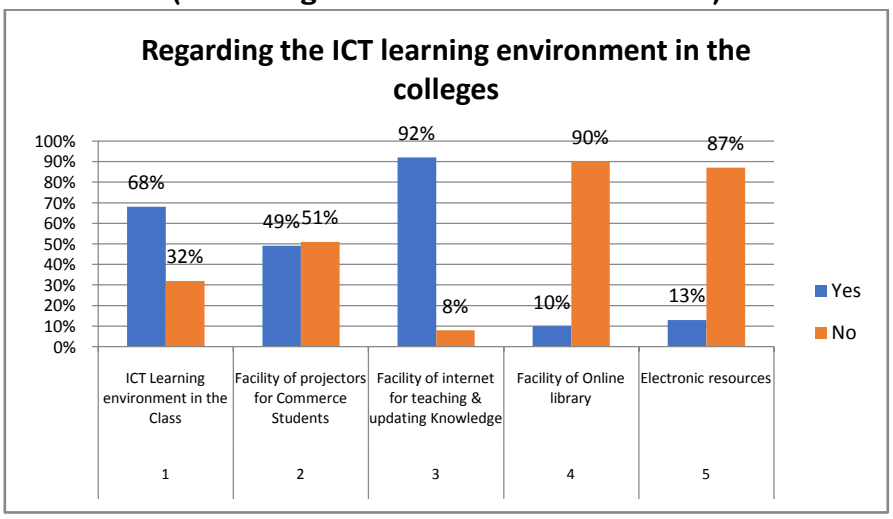
A. Regarding the ICT learning environment in the colleges

Table 5.1 Distribution of ICT learning in the colleges (According to Academicians)

S. No.	Parameters	Yes	No
1	ICT Learning environment in the Class	68%	32%
2	Facility of projectors for Commerce Students	49%	51%
3	Facility of internet for teaching & updating Knowledge	92%	8%
4	Facility of Online library	10%	90%
5	Electronic resources	13%	87%

Table 5.1 represents the distribution of ICT learning in the colleges. It was found that facility of internet in the college is provided to 92% respondents but the online library is provided to only 10% and the electronic resources like EBSCO, Emerald, SPSS, Prowess etc are provided to only 13% respondents.

Figure 5.1 Proportion of ICT learning environment in the Colleges (according to Commerce Academicians)



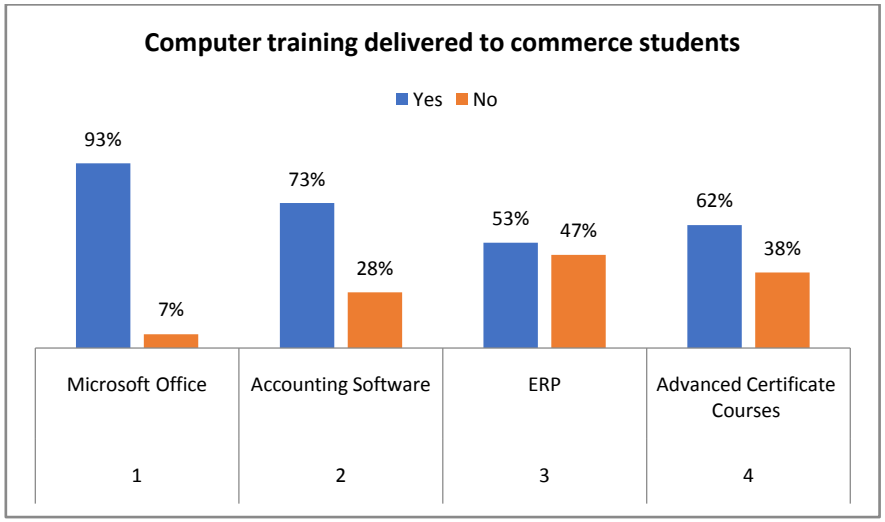
B. Regarding the computer training delivered to Commerce students

Table 5.2 Distribution of Computer training delivered to Commerce Students (According to Commerce Academicians)

S. No.	Computer Training	Yes	No
1	Microsoft Office	93%	7%
2	Accounting Software	73%	28%
3	ERP	53%	47%
4	Advanced Certificate Courses	62%	38%

Table 5.2 shows the kind of Computer training given to the students. 93% respondents agree that the Microsoft Training is delivered to the students in their colleges, 73% respondents agree that the training of accounting software is given to the students, 62% respondents agree that the Advanced Certification Training is delivered to the students and only 53% agree that ERP training is delivered to the students in their colleges.

Figure 5.2 Proportion of Commerce training delivered to the students (According to Academicians)



C. Regarding Skills required in commerce education

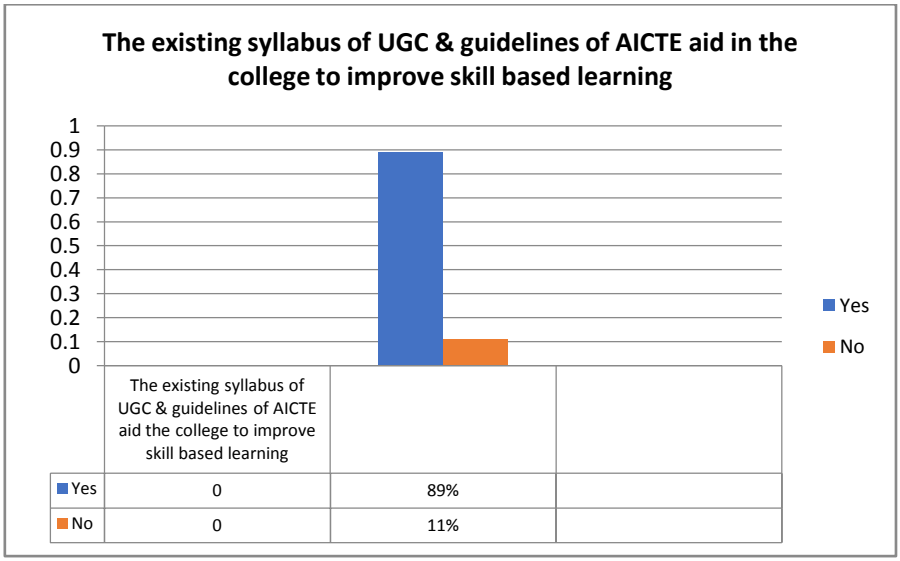
1. **The existing syllabus of UGC & guidelines of AICTE aid the college to improve skill based learning**

Table 5.3 Distribution of respondents regarding the existing syllabus of UGC & guidelines of AICTE aid the college to improve skill based learning (According to Commerce Academicians)

The existing syllabus of UGC & guidelines of AICTE aid the college to improve skill based learning	Yes	No
	89%	11%

Table 5.3 suggests that 89% respondents agree that the existing syllabus of UGC & guidelines of AICTE aid the college to improve skill based learning and the remaining respondents- 11% disagree with this statement.

Figure 5.3 Proportion of respondents regarding the existing syllabus of UGC & guidelines of AICTE aid the college to improve skill based learning (According to Academicians)



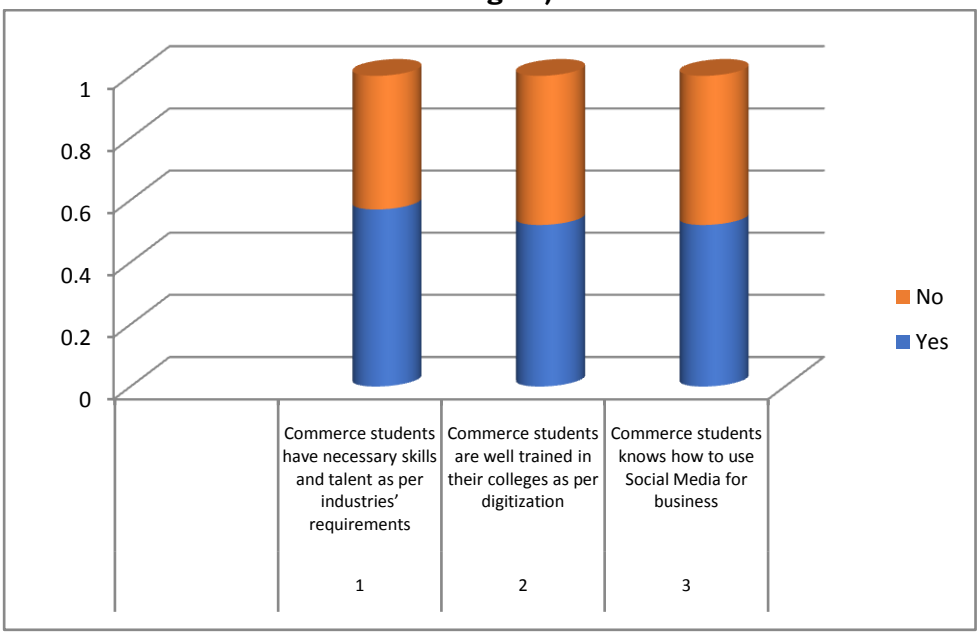
2. Practical skills are according to industrial requirements and digitization.

Table 5.4 Distribution showing practical skills are according to industrial requirements and digitization (According to Senior Level Managers)

S.No.	Perception of Senior Level Managers regarding:	Yes	No
1	Commerce students have necessary skills and talent as per industries' requirements	57%	43%
2	Commerce students are well trained in their colleges as per digitization	52%	48%
3	Commerce students knows how to use Social Media for business	52%	48%

Table 5.4 shows that the 57% Managers agree that theCommerce students have necessary skills and talent as per industries' requirements and others 43% managers disagree to this statement.52% managers agree that the Commerce students are well trained in their colleges as per digitization and 48% disagree to this statement. 52% managers agree that the commerce students know how to use Social media for business and 48% disagree to this statement.

Figure 5.4 Proportion showing practical skills are according to industrial requirements and digitization (According to Senior Level Managers)



3. Practical Skills required in Commerce Students

Table 5.5 Distribution of proportional skills required in Commerce Students (According to Commerce Academicians)

S. No.	Practical Skills required in Commerce Students	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Rank
1	Knowledge of Financial Market	145	50	30	40	35	3.77	4
2	Research & Innovation	80	160	20	20	20	3.87	1
3	Commercial awareness	150	50	30	40	30	3.83	2
4	Entrepreneurial Skills	146	51	29	39	35	3.78	3
5	Office Automation tools & MIS	80	40	120	35	25	3.38	9
6	Internet & E-Commerce Management	55	161	45	15	24	3.69	5
7	Industry internship programmes	80	70	75	50	25	3.43	8
8	Industry interface programmes	95	55	80	45	25	3.50	7
9	Role of social media for business	120	70	30	40	40	3.63	6

Figure 5.6 Practical skills required in Commerce Students (According to Commerce Academicians)

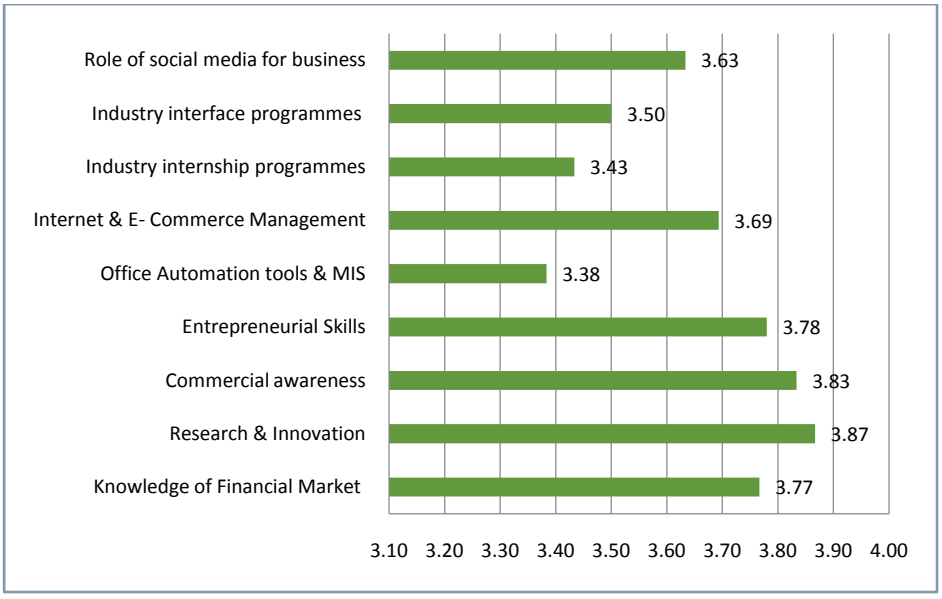


Figure 5.7 Mean Comparison of kinds of practical skills required for Commerce Students

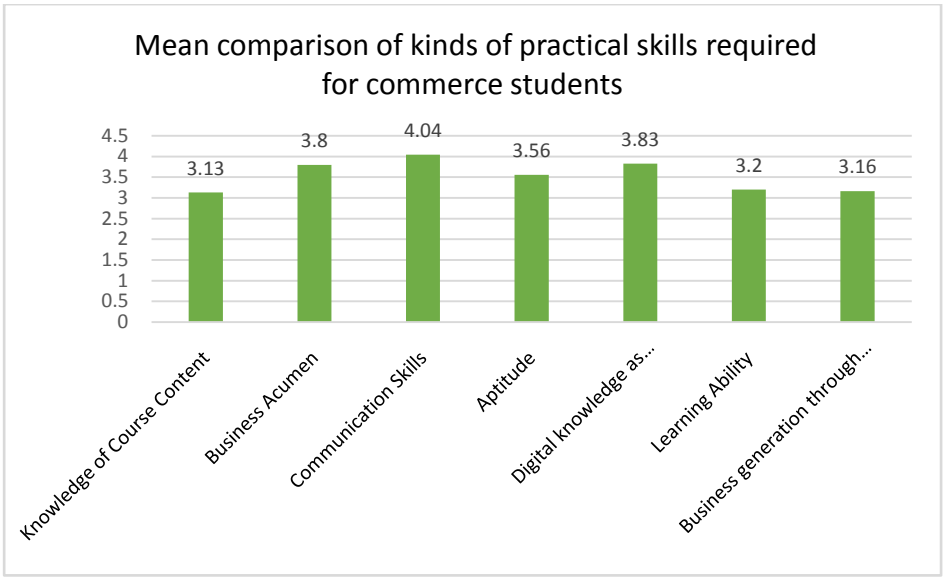


Figure 5.7 describes the mean comparison of various kind of practical skills required in commerce students. The ranks suggested the kinds of training in chronological order:

1. Entrepreneurial Skills
2. Industry Interface programmes
3. Commercial awareness
4. Industry Internship programmes
5. Knowledge of financial market

6. Internet and E-commerce Management
7. Research and Innovation
8. Office Automation Tools & MIS

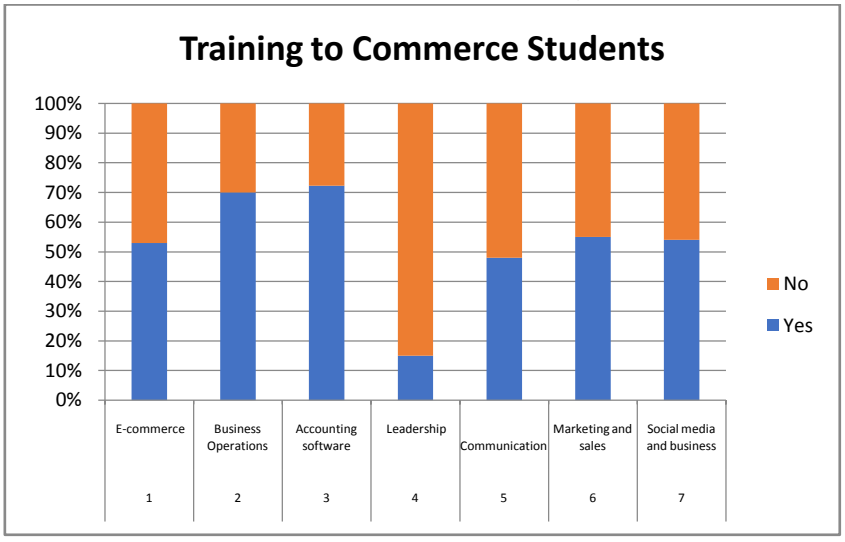
4. Training to Commerce students at introductory level after recruitment in your company are mainly in the following area:

Table 5.6 Distribution of kinds of training at introductory level after recruitment of commerce students in your company (According to Senior level managers)

Sr.No.	Training to Commerce Students	Yes	No
1	E-commerce	53%	47%
2	Business Operations	70%	30%
3	Accounting software	73%	28%
4	Leadership	15%	85%
5	Communication	48%	52%
6	Marketing and sales	55%	45%
7	Social media and business	54%	46%

Table 5.6 represents the type of training delivered to Commerce students. 53% Managers agree that they are delivering E-commerce training,70% agree for Business operations, 73% for Accounting Software, 15% agree for Leadership, 48% agree for Communication skills training, 55% agree for marketing and sales, 54% agree for Social media and business at introductory level after recruitment of commerce students in your company.

Figure 5.7 Proportion of kinds of training at introductory level after recruitment of commerce students in your company (According to Senior Level managers)



5. Skill set as important aspect of recruitment of Commerce Students

Table 5.7 Distribution of skills as an important aspect of recruitment of Commerce Students(According to Senior Level Managers)

S. No.	Skills	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Rank
1	Knowledge of Course Content	21	23	14	32	10	3.13	7
2	Business Acumen	33	30	24	10	3	3.8	3
3	Communication Skills	45	30	12	10	3	4.04	1
4	Aptitude	23	28	35	10	4	3.56	4
5	Digital knowledge as required for your industry	35	34	10	18	6	3.83	2
6	Learning Ability	21	23	22	23	11	3.2	5
7	Business generation through Social media	20	24	18	28	10	3.16	6

Figure 5.8 Mean Comparison of skills as an important aspect of recruitment of Commerce Students (According to Senior Level Managers)

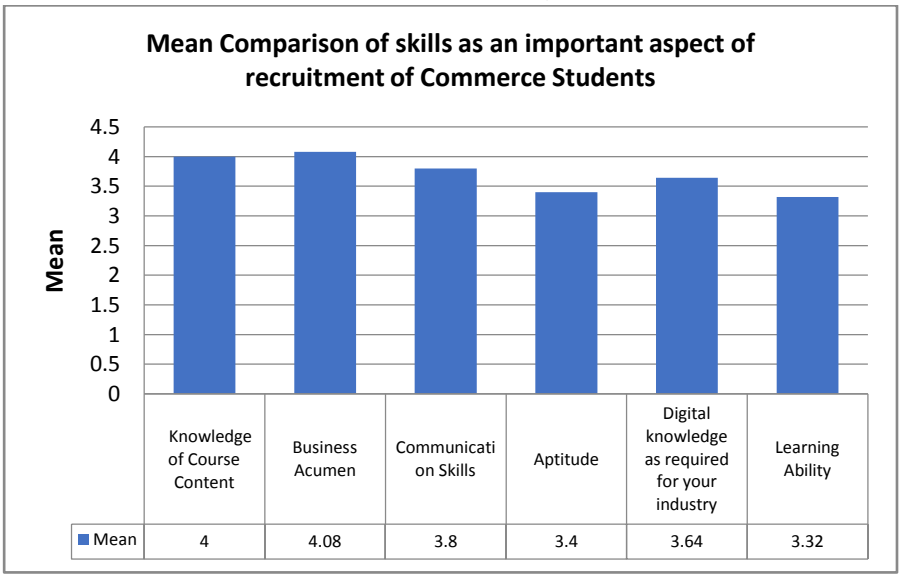


Figure 5.8 represents the mean comparison of skills as an important aspect of recruitment of Commerce Students. The ranks depict the skills of commerce students which are important for recruitment in chronological order:

1. Business Acumen
2. Knowledge of course content
3. Communication skills
4. Digital knowledge as required for the industry
5. Aptitude
6. Learning ability

D. Regarding the challenges that the academicians are facing with reference to Commerce Education

Table 5.8 Distribution of the challenges that the academicians are facing with reference to Commerce Education

S. No.	Challenges	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Rank
1	Lack of infrastructure	122	78	40	35	25	3.79	3
2	Outdated syllabus	40	120	35	45	60	3.12	6
3	Course curriculum is not matching with industries requirements	90	40	110	20	40	3.40	5
4	Lack of seminars, conferences & workshops	160	55	45	25	15	4.07	1
5	Lack of research	95	80	55	45	25	3.58	4
6	Lack of modern tools in teaching	80	140	40	20	20	3.80	2

Figure 5.9 Mean comparisons of the challenges that the academicians are facing with reference to Commerce Education.

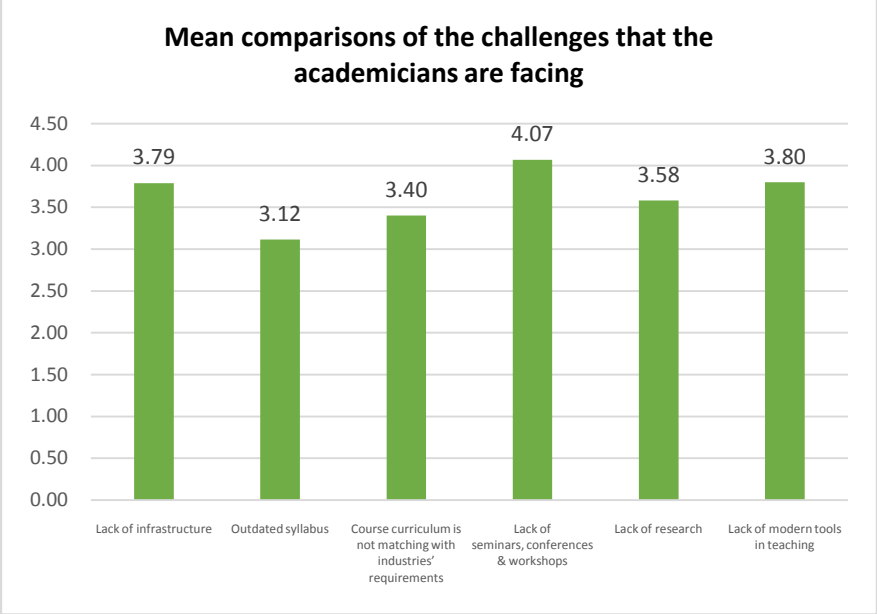


Figure 5.9 shows the challenges that the academicians are facing with reference to Commerce Education. The ranks illustrate the challenges of commerce academicians in chronological order:

1. Course curriculum is not matching with industries' requirements
2. Outdated syllabus
3. Lack of research
4. Lack of seminars, conferences & workshops
5. Lack of modern tools in teaching
6. Lack of infrastructure

6 FINDINGS

The authors' research indicated the following findings:

A. Regarding the ICT learning environment in the colleges

1. Only 10 % Commerce Academicians agree that the online library is provided in their colleges.
2. Only 13 % Commerce Academicians agree that the electronic resources are provided in their colleges.
3. Facility of internet for teaching and learning is provided to 92% Academicians, facility of projectors for Commerce students are provided to 49% Academicians, ICT learning environment is provided to 68% Academicians.

B. Regarding the computer training delivered to Commerce students

Training related to computers are Microsoft training, Accounting software, Advanced Certification like Entrepreneurship Development, Tally, Financial Market, E-commerce, Accounts, Income Tax, Insurance, International Finance, Banking, Auditing etc), ERP training are delivered to the students in the colleges which are agreed by 93%, 73%,53%, 62% respondents respectively.

C. Regarding Skills required in commerce education

1. 89% respondents agree that the existing syllabus of UGC & guidelines of AICTE aid the college to improve skill based learning and the remaining respondents.
2. According to 57% Managers, Commerce Students have necessary skills and talent as per industries' requirements.
3. According to 52% Managers, the Commerce Students are well trained in their colleges as per digitization.
4. According to 52% Managers, the Commerce Students know how to use Social Media for business.
5. There are various types of practical skills which are required in the Commerce students. According to Commerce Academicians, the entrepreneurial skills(Mean:3.78) are the best and the most important skills for Commerce students, then Industry Interface programmes(Mean:3.50), Commercial awareness(Mean:3.83), Industry Internship programmes(Mean:3.43),Knowledge of financial market (Mean: 3.77), Internet & E-commerce Management(Mean: 3.69), Research and Innovation(Mean:3.87),Role of social media for business (Mean:3.63), Office Automation Tools & MIS(Mean:3.38).
6. Table 5.6 represents the type of training delivered to Commerce students. 53% Managers agree that they are delivering E-commerce training, 70% agree for Business operations, 73% for Accounting Software, 15% for Leadership, 48% agree for Communication skills training at introductory level after recruitment of commerce students in your company.

7. Computer training at introductory level after recruitment of commerce students in the company is deliveredin the
    A. Accounting Software by 73% Companies, 28% are not delivering this training at introductory level.
    B. Business operations by 70% Companies, 30% are not delivering this training at introductory level.
    C. E-commerce by 53% Companies, 47% are not delivering this training at introductory level.
    D. Marketing and sales by 55% Companies, 45% are not delivering this training at introductory level.
    E. Communication skills by 48% companies, 52% are not delivering this training at introductory level.
    F. Leadership training by15% Managers, 85% are not delivering this training at introductory level.
    G. Social media and business by 54% Managers, 46% are not delivering this training at introductory level.
8. Certain skills play a great role in the recruitment of commerce students like Business Acumen(Mean: 3.8), Knowledge of course content(Mean: 3.13), Communication skills(Mean: 4.04), Digital knowledge as required for the industry(Mean: 3.83), Aptitude(Mean: 3.56), Business generation through Social Media(Mean:3.16) Learning ability(Mean: 3.2).

D. Regarding the challenges that the academicians are facing with reference to Commerce Education

There are so many challenges that the academicians are facing in commerce education. Like Course curriculum is not matching with industries' requirements(Mean:3.40), Outdated syllabus(Mean:3.12), Lack of research(Mean:3.58), Lack of seminars, conferences & workshops(Mean: 4.97), Lack of modern tools in teaching(Mean:3.80), and Lack of infrastructure(Mean:3.79).

7 RECOMMENDATIONS

1. Commerce education should be a harmonious blend of theoretical knowledge as well as practical understanding of the concepts. This can be ensured by integrating the course curriculum with industry-academic interface programmes and specialized teaching and training pedagogies.
2. Industry experts and corporate practitioners must be actively involved while designing the structure of commerce course curriculum (Course inputs should be relevant as per the industry requirements).
3. E-based learning and application-oriented study should be given first order priority. Emphasis should be given on virtual teams, video conferencing and the like.

4. Commerce students must be imparted Computer mediated training with special focus on ERP, SAP and sister modules, advanced certification software etc.
5. Standardised technological infrastructure and adherence to the state-of-the-art technology can add greater impetus to the learning process.
6. For better delivery of teaching in Commerce, academicians ought to seek Computer assisted Instructions.
7. Specializations like E-commerce, M-commerce etc can facilitate the professionalization of Commerce.
8. Facility of online library must be provided to upgrade the knowledge of the Commerce Academicians.
9. Digitization and technological application should be collaborated with Commerce education massively and prudently as well to boost up the entrepreneurial temper of the younger masses.
10. A ready-to-use access to research-based resources like EBSCO, Emerald, SPSS and Prowess should be provided to students and faculty members.
11. All academic institutions imparting Commerce education should provide ERP/SAP and other practically relevant training programmes for enriching the domain knowledge.
12. Commerce students should be infused with greater zeal and awareness for acquiring diversified technical knowledge through user-friendly technological platforms. This can help them better groomed into promising corporate professionals, Managers and Businessmen. Here, the faculties, facilities and institutional support play a pivotal role.
13. Developing entrepreneurial skills will facilitate our country's economic development as well as formation of new employment opportunities. Commerce Education is really a great platform to develop entrepreneurship traits and necessities like thinking in a creative way, how to start a new business, how to convert idea into an innovative product. Commerce Education is entrepreneurship education. The main objective of commerce and management education must be development of Entrepreneurial characteristics.
14. The focus of Commerce Education must be on vertical sub business like E-accounting, finance, e-commerce, banking, insurance, supply chain management, business integration and diversification, international trade, commerce and business research, trend analysis, statistics, business economics, commercial geography, business application, office management, green management, start up and vertical capital, entrepreneurship, commercial data analysis, macro and micro study, agricultural economy, natural resources economy,

integration of renewable energy with commerce, futuristic/predictive analysis etc.

15. Commerce students have to refer updated print Medias like The Economic Times, Business Standard etc having pink paper base. Special sessions on E-media like BBC News, NDTV Profit, Zee business etc. need to be included in the curriculum.

8 CONCLUSION

The rapid growth of industrialization being witnessed worldwide, it can be inferred that commerce is no longer an infant. The prosperity in Commerceis visualised well. It implies that commerce education must be integrated with skill based learning and digitization in order to make the students competent, skilful and talented. India's education system has to deal with increasing pressures from the internationalized businesses and it can be only possible by revitalizing commerce education and upgrading the knowledge, skills and abilities of the students. In spite of so many challenges that the commerce education is facing, still it has enormous power to transform the society and the economy. Collective endeavours, ideas and initiatives from Academic communities, Resource groups and Industry people can effectively contribute towards the development of the individuals at the micro level and nation at the macro level.

REFERENCES

1. Ranjitha D. S. (2016). Trends, issues and challenges in management education in India. International Journal of Current Research and Modern Education. 1(1).269-272.
2. Dr. Singh P. (2016). Study of industry's perception towards Commerce Education in India. International Journal of Innovations in Engineering & Technology. 6(3).467-475.
3. Borpatragohain A. (2016). Recent Trends in Commerce Education. Journal of Arts and Social Science. 1(1).17-19.
4. Aziz A. (2015). Problems and Challenges of Commerce Education in Darrang District, Assam. IOSR Journal Of Humanities And Social Science. 20(7).14-21.
5. Dr. Jadhav U. D. (2014). Commerce education and its impact on interdisciplinary sectors. Asian Journal of Management Sciences. 2(3).53-55.
6. Diwedi V. (2012). Globalization – Education in India and methodology of teaching commerce & management. International Journal of Commerce, Business and Management (IJCBM). 1(3).109-112.
7. Mahajan K. A. and Shah M. (2000).Service Quality in Business Education. India Journal of Commerce. 59(3).246-256.

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NEUROMARKETING: CHALLENGES AND OPPORTUNITIES IN THE FIELD OF MARKETING

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Abstract - Marketing has been evolving in all its forms. In its present scope, it has metamorphosed from barter system, to production concept, to product concept & so on. Neuromarketing can be considered as another milestone, which is still an evolving process. It can be a powerful tool in market research; where advertising is becoming more scientifically advanced. Todays consumers don't see your advertisement, they FEEL your advertisement.

Neuromarketing applications can throw light on some of the limitations of traditional methods of market research. The paper attempts to understand how even the highest priced or lowest quality products sometimes outsell their competitors, it will look at how some brands that have a devoted cult-like following while others have a zero loyalty, the paper will consider why & how prospects buy products or services even if their choices seem irrational or impractical.

Neuromarketing is a dynamic package of medical knowledge, technology & marketing. It is an emerging branch of neuroscience in which researchers use medical technology to determine consumer reactions to particular brands, slogans & advertisements. Researchers can now predict whether you prefer Surf or Rin; Coke or Pepsi etc. The results will also enable advertisers to be more specific in providing products that consumers want. This has further paved our way towards the term Buyology; which is based on subconscious thoughts, feelings & desires that derive purchasing decisions we make.

The paper attempts to throw light on growing perspective of Neuromarketing in & around. It will involve study of various applications of the concept of Neuromarketing through live case studies of the organizations. It will also analyze the limitations of the concept whether advertisers should probe human minds as means of boosting product sales? In this paper attempt will be made to study whether Neuromarketing will ever be used as a mainstream research method.

1 INTRODUCTION

Did we ever wonder why some brands have a devoted cult-like following while others have a zero loyalty. Why even the highest priced or lowest quality products sometimes outsell their competitors. Why & how prospects buy the products or services they do even if their choices seem irrational or impractical.

Objective of all marketing communication is to induce or enhance purchase. Advertising is one of the major components of promotional mix and that of marketing communications. Every year more than 400 billion dollars are invested in advertising campaigns worldwide. The same dollars bombard consumer's minds with sometimes effective and sometimes otherwise messages.

"Marketers are not concerned with how the consumers process the information and how they perceive the same. The marketers and advertisers communicate what they think is right. They are not concerned about communicating right things in the right manner."

William M. Weilbacher (2003)

Charles Young in his book titled:"The Advertising Research Handbook "says:"This is perhaps the prime reason why the researchers the world over have started questioning the very premises on which 'responsible-for-marketing' communications-people 'base their assumptions, judgments and research."

Marketing researchers have started questioning the premise that a target consumer would reflect 'what he/she really thinks' in response to a question in a questionnaire. If the consumer does not reflect his/her actual feelings to a marketing researcher, how can we assume that the results arrived at after such a research would be reliable.

Remember the pre-poll survey where the results declared that some political party would come to power at centre and actually the opposite happened. The survey was conducted by one of the best research organizations. Sometimes the consumers themselves do not know their real feelings about a given situation. They would act in a particular manner at the spur of the moment. It may also happen that, they know their actual feelings but do not intend the marketing researcher to know the same.

We depend on the principle of marketing research to find out consumer preferences, attitudes, likes and dislikes. We analyze consumer responses and reach certain conclusions. On this basis, marketing and promotional mix is decided. However research has revealed that consumers do not necessarily provide the real answer to researcher. At times they do not even know as to what is that they really think about a given question.

Hence there is some thing over and above all the principles of marketing and advertising which underlie consumer behavior. Gerald Zaltman, the learned Professor at Harvard University has also shown keen interest in the similar area and has authored a book titled: "How customers think: Essential insights in to the mind of the market."Researchers all over the world are trying to find answers to questions on the unfathomable behavior of the target consumers in the fields other than those of consumer behavior, marketing and advertising.

This brings us to neuro-marketing. The field has unprecedented potential of showing the path to those managing brands, marketing communication. Imagine that in a rural fair there are some stalls where the stall owner has three-four guns to shoot small iron balls on a board that contains hundreds of small balloons. If interested, we pay a paltry sum and in turn get few shots. We shoot these shots on the balloons pasted at a distance of about five-six feet. We get satiated only when we burst the balloons with every shot that we fire. There are two ways of firing the shots. Either we fire after taking the exact aim or we fire otherwise. We would definitely burst more balloons if we are aiming for it. Consequently, we would be getting more satiated. Not even the best marksman would be able to hit the shots without first exactly aiming at them. Conversely, even an average one would be able to hit more shots by just exactly aiming at the same. Neuromarketing would definitely enable us to hit more balloons and therefore would make us definitely more satiated. We know that we are not the best. Even if we are average Neuromarketing has all the potential to satiate us. It implies that if we knew as to how advertising stimuli are received and stored by brain and how they influence the choice of brands in future; we would improve the advertising policy.

2 WHAT IS NEUROMARKETING-WHERE BRAIN SCIENCE AND MARKETING MEET

In very simple terms, Neuromarketing is medical knowledge, technology and marketing. Neuromarketing is a new field of marketing that studies the consumer's response to marketing stimuli. Neuromarketing is the application of neuroscience to marketing. Neuromarketing includes the direct use of brain imaging, scanning, or other brain activity measurement technology to measure a subject's response to specific products, packaging, advertising, or other marketing elements. In some cases, the brain responses measured by these techniques may not be consciously perceived by the subject; hence, this data may be more revealing than self-reporting on surveys, in focus groups, etc.

This concept was developed by psychologists at Harvard University in 1990.The word Neuromarketing was coined by Ale Smidts in 2002.It is an emerging branch of neuro science in which researchers use medical technology to determine consumer reactions to particular brands, slogans and advertisements. The first ever Neuromarketing conference was held in 2004 at Baylor College of Medicine in Houston. The base of Neuromarketing is "meme". Meme is a unit of information stored in the brain. These units are effective influencing human who is making choices and decisions within 2.6 seconds. If mem is chosen properly we remember the good, joke or song and would share it. Memes stay in our memory and are affected by marketers. Examples of memes-aroma of fresh bread, biscuits, sweets, characters in fairy tales, stories of grandmother.

This, Neuromarketing is a promising and emerging field with tremendous potential for application in the functional areas of marketing, brand management and advertising. It has emerged after bringing together applicable concepts from the field of neural-science, psychology, human neuro-physiology and even neuro-chemistry.

2.1 Following are certain quotes by research scholars in the context of Neuromarketing:

"The task of the neural science is to explain behavior in terms of the activities of the brain. How does the brain marshall its millions of individual nerve cells to produce behavior and how are these cells influenced by the environment which includes the actions of the other people."

-By Dr. Eric R. Kandel, James H. Schwartz and Thomas M. Jassell (2000)

"We believe that the brain-based approach is revolutionary rather than brand equity methodologies are premised on what we call the standard model of choice and brain scientists have recently shown this model to be deeply flawed."

-Steven Quartz and Annette ASP (2005)

"The task of neural science is to understand the mental processes by which we perceive, act, learn and remember."

- By Dr. Eric R. Kandel, James H. Schwartz and Thomas M. Jassell (2000)

2.2 Introduction of the Buying Brain:

"*Understanding the human mind in biological terms has emerged as the central challenge of science in the twenty-first century."*

-By Dr. Eric Kandel, Neuroscientist and winner of the Nobel Prize for Physiology or Medicine

Millions of people in our global economy have jobs that depend on communicating with and persuading the human brain. So it is vital for us to understand how the human brain really works, what is attractive to it, how it decides what it likes or dislikes or how they decide to buy or not buy the infinite variety of products and services.

"We have learned more about the brain in the last five years than in all human history combined".

-By Charlie Rose

The basic lesson is that human brains process much of their sensory input subconsciously. Most of the works our brains are doing day and night are below our personal consciousness. Our senses are taking in about 11 million bits of information every second. Most of that comes through our eyes but all other senses are contributing-hearing,

touch, smell, taste. Research has shown that our conscious brain can process at best 40 bits of information per second. All the other is processed subconsciously. That is why our brain appears to be a mystery.

This has really widened the scope of Neuromarketing. The concepts of Neuromarketing provide a real competitive advantage in a crowded and cluttered market. The languages of consumers change from country to country and culture to culture, however the language of human brain is the same i.e. universal. Thus, Neuromarketing has greatly affected products, brands, packaging, and advertising as well.

2.3 Importance of Brain to Marketing:

To polish the concepts of Neuromarketing, it is vital for us to know anatomical structure-function relationship of human brain. It is very interesting to understand, how the human brain actually works while performing certain functions or carrying out our daily routine activities. In medical science, this area of information is termed as neurophysiology. This understanding the structure and function of human brain is not only interesting but fascinating as well. It is interesting to know that not a single area in our brain facilitates our speech. It is supposed to be a combination of different areas where each part performs its own little role ultimately enabling us to communicate. The extraordinary prowess of human brain has a lot to offer to brand, marketing and advertising professionals. The information on human brain would go a long way in providing us with a solution to create better brands. We as marketing professionals should clearly understand that our objective is not to impress only the sense organs of our target consumers but much more. Our aim is to ensure that our target consumers actually know our brands. It is only when our customers know our brand well they would remember thus leading to increase in sales, market share of the organization and profit. This would only happen when we know what happens in the brains of our target consumers.

2.4 Structure of Human Brain:

Human brain is made up of billions of cells. These cells are called neurons. The neurons can communicate with one another through small junctions. These junctions are called synapses. When a neuron is active, it sends an electrical impulse to its own terminal or end. The impulse generates a sequence of physic-chemical events leading to the release of a chemical molecule. This chemical molecule is called a neurotransmitter and serves as a messenger. This neurotransmitter forms a bridge between the two neurons and the impulse gets transferred. Once a neuron is activated it is described as ‘a neuron has fired’. A single neuron connects with 600 to 1500 other neurons. Neurons form circuits, circuits form networks, networks form systems, systems form super systems and the super systems are equivalent to galaxies.

"Neurons are the basic working units of the brain and the central nervous system, designed to transmit information to other nerve, muscle or gland cells."

By Dr. A.K. Pradeep Founder and CEO, Neurofocus Inc.

Neurons consist of a cell body, dendrites and an axon. The cell body contains the nucleus and cytoplasm of the cell. The electrically charged axon extends from the cell body to the target and often gives rise to many smaller branches called dendrites. These dendrites extend from the neuron cell body and receive messages from other neurons. Synapses are the contact points where one neuron communicates with one another. Neurons connect with each other and with muscles and gland cells. These connections form specific patterns that grow and migrate over the course of our lives. This neuron specification as well as migration begins in the human embryo where the right types of neurons must form in significant numbers to complete their tasks and then must migrate to the appropriate places to functional units that make up the brain. Once they have reached their destination the neurons extend axons and dendrites to connect to each other.

It is really very interesting to know how a neuron is born. Four weeks after conception, the ridges on the flat plane of the embryo fold and fuse to form the hollow neural tube. This structure grows and further evolves with the fetal brain producing millions of new neurons every day. Neurons collect together to from each of the brain structures. After its spectacular period of growth in the fetus, the neural network is pared back to create a more efficient system. Every neuron has a specific target as they start migrating throughout the body.

2.5 Our brain is a part of central nervous system which has following parts:

- **Spinal cord:** it is the lower part of the central nervous system.
- Brain stem consists of medulla, pons and midbrain. It conveys information from spinal cord to brain and vice-versa
- **Medulla oblongata:** It is above the spinal cord and controls functions like digestion, breathing, senses of taste and control of heart rate.
- **Pons:** It is situated above the medulla oblongata and controls respiration and sleep
- **Cerebellum:** This lies behind the pons. It is a vital area for marketing and advertising professionals as this area of brain is into language as well as thinking functions.
- **Midbrain:** It lies above the pons and the smallest part of brain stem. This area is responsible for eye movements as well as co-ordination of visual and auditory reflexes.
- **Diencephalon:** It lies above the mid brain and consists of thalamus and hypothalamus. Thalamus transfers information that comes

from our sense organs to the main parts of the brain. Hypothalamus controls vital functions like eating, drinking, and growth.

- **Cerebral hemispheres:** These form the largest region of human brain. They perform vital functions of controlling the movement of human body and cognitive functions which include memory and emotions.
- **VMFL (Ventro-medial Frontal Lobe):** This is the most advanced part of the brain responsible for decision making.

Area of Brain	Function	Importance
Spinal cord	Sending message from nerves to different parts of the body	0
Medulla oblongata	Respiration, controls blood pressure, senses of taste and hearing	1
Pons	Controls movement, respiration and sleep	0.5
Cerebellum	Maintains postures, controls head and eye movements, muscle movements, language as well as cognitive functions	1.5
Midbrain	Co-ordination of visual and auditory reflexes	0.5
Thalamus	Taste,smell,touch	2
Hypothalamus	Eating, drinking, growth, motivation	3
VMFL	Decision-making	4

Value range 0 to 5

(Source: Neuromarketing a Peep into Customer`s minds by J.K. Sharma, Deepali Singh, K. K. Deepak, D. P. Agarwal)

3 BRAIN LATERALITY

Human brain can be divided into two hemispheres: Right and left. The left one is supposed to be logical while the right one is creative. It is very interesting to note that the left hemisphere receives inputs better from the right side and vice-versa. This can be a very vital input to print advertisers, OOH (out of home) media and banners on the internet. The visual matter should be placed towards the left while the text on the right. Similar application to packaging which acts like a silent salesman for the product which is on the shelf.

Modern techniques for examining the effect of communication on human brain:

- EEG
- fMRI
- GSR

3.1 EEG:

EEG stands for electroencephalography in which activity in the brain tissue is recorded. This is a passive technology in which sensors are used to capture minute electrical signals that brainwave activity produces. The output is generated in the form of waves which are of four types:

- Beta waves-these are the fastest of all with low amplitude. Beta waves are generated when brain is actively engaged in some mental process. Example: delivering a lecture, in meeting
- Alpha waves-these are generated when our brain is at rest. Their frequency is lower than that of beta waves. Example: person taking rest after completion of any job
- Theta waves-The amplitude of these waves is greater while their frequency is lesser. Theta waves represent a person who is performing some leisure activity.
- Delta waves- They have the highest amplitude with lowest frequency. Example: a person in deep sleep

  Dr. Hans Berger was the pioneer in application of EEG in 1920`s.This is the only method that measures the electrical activity of the brain. On March 21, 2011 Neuro Focus the Neuromarketing arm of Neilson announced Mynd™ world`s first dry, wireless Full-brain EEG measurement headset.

3.2 fMRI:

fMRI is functional magnetic resonance imaging wherein the person is scanned by making him/her lie down in a long, narrow tube made up of very powerful magnets. When these magnets become active electrical fields are produced. fMRI depends upon the blood flow to brain. More the flow of blood more is the neural activity.

3.3 GSR:

GSR stands for Galvanic Skin Reaction which provides us with information to determine the extent of subject's involvement in an external stimulus. Human skin is a good conductor of electricity. Example of External stimulus: audio, visual.

3.4 Success stories of the applications of Neuromarketing:

Campbell`s Soup: The emotional quotient of soup shopping

After decades of producing America's favorite soup, Campbell's Soup Co. thought of a makeover. Although the condensed soups generate more than $1 billion in sales, Campbell wanted to generate a 2% increase in sales without raising the prices. The company decided to employ Neuromarketing in combination with a deeper interviewing process in order to receive conscious and unconscious feedback on consumer preferences, decision making, and emotional responses to soup can labels and in-store aisle displays. In nerscope Research Inc., a Boston, MA, based company with a biometric monitoring and reporting system was hired to help conduct research. It is not easy to know what prompts people to buy soup except to have something warm on a frosty day. For two years researchers studied changes in heart rate, skin moisture and other biometrics to find out how consumers react to the packing design, logo, creative used and many other aspects.

3.5 Following are the changes in the labeling based on Neuromarketing experiments:

- The studies showed that when logo was placed at the top with red background it drew too much attention so the new label suggested had logo at the bottom of the can so that all labels look similar.
- The bowl was updated while the spoon in earlier packing design showed very less emotional connects to the consumers. As a result the new creative was without the spoon.
- The steam was added in the creative of the soup to give a feeling of warmth as well as to increase the consumers emotional connect.
- The different varieties of soup were colour coded for easy identification to the consumers

4 FUTURE OF NEUROMARKETING

There is no element of doubt that Neuromarketing will enable advertisers to be very specific in providing products that the consumers really want. The more senses you trigger about your products and service you can influence the buying behavior. Still Neuromarketing is in ones infancy and not free from critics as well as issues.

The basic aspect of Neuromarketing is that it is an artificial method of research which it has to overcome. Brain activity in a lab may not equate to brain behavior in the mall. The application of Neuromarketing studies cannot be extended to B2B area where the buying process is lengthy and involves too many people. The cost factor also should be taken into consideration as it requires very large investment which may prohibit many companies. There should be proper legislation in case of any dispute for safe application.

In spite of all these issues Neuromarketing is here to stay .All advertising campaigns are not commercial as many focus on changing the behavior of the people. For example to convince people not to smoke, don't drink and drive or talk on a cell phone while driving.

REFERENCES

1. Neuromarketing A peep in to Customer`s Minds by J.K. Sharma, Deepali Singh, K. K. Deepak and D. P. Agarwal.
2. The Buying Brain- Secrets of Selling to the Subconscious Mind by Dr. A.K. Pradeep Founder & CEO, Neuro Focus, Inc.
3. Neuromarketing Hope and Hype: 5 Brands conducting Brain research by Kevin Randal September 15th, 2009.
4. Neuromarketing: The New science of Consumer Behavior by Christophe Morin January 14th, 2011.
5. Science Sells Soup by Nelson, Jacqueline 2010 Canadian Business Volume 83,Issue 7 Page 22.
6. Ad Experts not so quick to buy into 'Buy logy' by Miley, Marissa Advertising Age 2008, Volume 79,Issue 40,Page 4 to 30.
7. Automakers Tap Consumer Brains by Britt, Bill Automotive News Europe, 2004, Volume 9, Issue 1,Page 1 to 22.
8. Market Researchers make increasing use of brain imaging by David Lewis and Darren Bridger Nature Neuroscience Volume 17,July 2004.

9. Neuromarketing: Who decides what you buy? By Vicky Phan The Triple Helix 2010.
10. The Emotional Quotient of Soup Shopping by Ilan Brat Media and Marketing February 2010.
11. Neuromarketing Eye tracking helps Campbell March 9, 2010.

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EDUCATIONAL SCENARIO IN INDIA DURING PANDEMIC: CHALLENGES AND OPPORTUNITIES

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Abstract - Education as a holistic approach addresses students' learning, social and emotional needs- is fundamental, more than anything in current pandemic situation. The current (COVID-19) pandemic is affecting people not only clinically, but also how one learns, works and lives. Many challenges are created by this pandemic, the most important one is how to change already build educational system around physical schools. This pandemic has hard-pressed the world to radically look for the ways of coping with the 'new normal'. The most effective response to the crisis that could be there was to go digital. Continuity in learning is offered by developing robust online platforms. In a developing country like India with vast diversity in socio-economic backgrounds of students and the quality of educational institutions, the shift from offline to online platforms has not been easy. The digital divide has been further increasing the gap, and needs urgent attention from stakeholders of both public and private sector. Competent teachers, improved curricula and effective tools will ensure students stay involved and active in the learning process. Post-covid times could see a blend of e-learning and mainstream face-to-face teaching. However, while online pedagogy when combined with offline education does a great job, it can never serve as the later's replacement. In a developing economy such as India, it holds true. More ever, such expectations could take time to come into effect. This article highlights some of the challenges faced by educational sector and potential opportunities for improvement in the areas of curricula, students, teachers and educational environments. It also discusses about some digital platforms that witnessed a boom in their usage.

1 INTRODUCTION

As per UNESCO most governments around the world have temporarily closed educational institutions to contain the spread of the COVID-19 pandemic. These nationwide lockdowns are impacting over 60% of the world's student population. With the ongoing pandemic led lockdown, there are multiple challenges in education, for students, teachers and parents as well. As the educational institutions are closed during the lockdown, approximately 1.72 billion learners have been affected worldwide, and around 32 crores in India alone, this has resulted into high socio-economic costs for education stakeholders. Therefore a deep reflection on our education system is needed in light of this unprecedented crisis. COVID 19 has changed substantially, the way of learning. In "live with COVID" era, many alternatives are forced to develop to substitute the old style of knowledge delivery.

The pandemic has severely highlighted the fragility of our education systems, even those which were considered relatively stable. It is therefore fundamental that the innovation and creativity enthused by this crisis be leveraged to make education systems more just, inclusive and flexible. Challenges that need to be addressed:

The new crisis that the mankind is facing today has taken us to the big question. What will be the response of complex Indian education system to the emerging situation? Avoiding the question is of no option.

- **Learning for all**

In this situation, the role of a teacher is challenging. While teaching online, they also have to support students to complete the assessments and tests. They need to stay in constant touch with parents about the progress of their ward's through WhatsApp groups, and other virtual parent-teacher meetings. This mixing of professional and personal boundaries is complex but they have also got the opportunity to gain more knowledge and skills. Parents also invest in seamless Wi-Fi connectivity and ensure that their children pay attention to classes. In some cases, they had to buy new gadgets as well. However, students are quick to adapt to online classes and, even if they miss a session, teachers share recorded sessions. Thus, it has become possible to navigate independently through the world of online learning.

- **Curriculum Limitations**

Although some students continued their education, many of them were deprived of adequate opportunities to do so and often lack essential services and tools such as technological equipment or learning support services. It therefore becomes necessary to establish specific priorities and emphasize some subjects more than others in school curricula.

- **The great digital divide**

There exists a huge digital divide in urban and rural schools. In a recent survey, over 75 % of students are impacted due to the lockdown as they found hard to study online, over 80 % students said they need support to shift from offline to online and over 25 % said they need proper training to pursue education through online. Most of the parents in India cannot afford OTT platforms for their children to study. These are still a dream for them. Till now, most ed-tech products catered to tier 1 cities and children from the high-income segment, ignoring the majority of students who come from tier 2, 3 cities and rural areas. With more students from tier 2 and 3 cities, the crisis presents a perfect playground for various companies to modify products, adapt and contextualize them as per the needs of different customers. Digital platforms should therefore utilise this crisis to build the best possible learning outcomes.

- **Quality of content**

The quality of content is a bigger issue. The quality of content provided by the platforms to students is not checked by any means. This might be a major take for ed-tech firms.

- **Vernacular content**

There are bigger problems to solve. Online education is easily adapted by English medium students and teachers due to the readily available content or tools. The situation is opposite in scenario of Indian schools where vernacular languages dominate. Only a few ed-tech firms provide vernacular content.

- **Inequitable Access**

India is infamous for its wealth gap; a 2020 Oxfam report highlighted how the country's richest 10% own almost three-fourths (74%) of its wealth. This means that, of the 320 million learners c do not have the same access to digital facilities as their more privileged peers do.

2 OPPORTUNITIES

Every challenge opens up a new opportunity!

The Covid-19 pandemic situation created a lot of challenges for every aspect of life, especially for Indian education system. At such tough times, understanding these challenges is only key to solve them for better crisis management in field of education. The post-covid implementation plan should be focused on quality, flexible and sustainable learning options and include the following characteristics:

- Readiness for e-learning
- Professional development of teachers (Digital literacy)
- Designing 21st-century technologies that are based upon synchronous and asynchronous instruction.
- Conducting creative online assessments.
- Well being of students, teachers and parents emotionally

The present pandemic has lead to innovations in the education sector. Most of these innovations involve digitization. Educational institutions have moved from physical classes to online classes. In many subjects, these classes have been fruitful also.

- **Flexibility in Indian education system**

This pandemic has some positive effect too for educational sector. Flexibility of the curriculum that needed to cater the dynamic needs of the learner, was missing from our system, has gained momentum. Pandemic told us about uncertainty in life. This is a very good opportunity for the Indian education sector to fulfill this objective and become a global education centre. Indian institutions were late in adopting technology. Pandemic has given a pace to Indian education stakeholders to adopt technology in all possible manners. India is focusing highly on "Atma Nirbhar Bharat". Developing the much needed skills in mankind will help India to achieve this objective.

- **Improving curricula**

There is always a need for improvement in curriculum. But, these tough times have made it mandate to update our recent curriculum according

to the current scenario. The updates curriculum should not only include the ongoing components but also the ways require dealing with pandemic situation by all stakeholders.

- **Learning outside the classroom**

While the extended school closures in schools since 2020 has definitely been a huge disruption in the school year, it has also shown that learning can continue even without students' physical presence in schools through distance education, especially by digital means. These challenges can affect various aspects of education, including the student-teacher relationship that is so crucial for students' success. Even the best technologies cannot completely eliminate this distance between teacher and student. In-class education is no doubt necessary, but this must be adapted to the current ongoing situation. Indoor classes can never be completely replaced by their outdoor counterparts but the pandemic has opened up an opportunity for exploration.

- **Enhancing digital skills of teachers**

It is evident that distance education is primarily based on the use of digital technologies such as email, online courses and document-sharing platforms; the crisis has significantly highlighted the need to develop teachers' digital literacy. While the use of digital tools is an integral part of the teacher training curriculum, many teachers still lack the required knowledge, skills and tools to design learning material. Similarly, many students cannot independently use technologies. As a result, teachers during the crisis have had to play the dual role of training students *about* technologies *with* technologies. In order to address short-term needs during the school closures while awaiting the eventual development of this type of training, they also need to be trained on how to effectively use these tools for student engagement and learning.

- **Blended learning**

Various educational institutions and educational technology companies are enhancing the use of online classes, live classes, recorded lectures which later on published on you tube channels. All these increases the interest of students with more concept clarity due to interactive study material consist of different videos, graphs and animation. As per the current situation significant planning will be required after the lockdown. It is necessary to re-evaluate all the school activities and come forward with new system as a new normal situation. It is imperative to re-evaluate every school activity and emerge with new systems, which will become the 'new normal'. Parents may choose home schooling, if things worsen. While this strategy might not end in finishing the quarterly curriculum, it'll a minimum of reduce the training gap that students are likely to experience if schools still remain shut.

Blended learning may even be ulterior traditional. Faculties will explore tutoring platforms with video conference facilities, bespoken modules, and assessments exploitation technology and information which can facilitate to analyse what students like, their learning patterns, and their understanding of the ideas. TPACK is one amongst the instance.

TPACK stands for Technological Pedagogical Content Knowledge. It makes an attempt to identify the character of information needed by academics for technology integration in their teaching, whereas addressing the advanced, many-sided and located nature of teacher information. At the center of the TPACK framework, is that the advanced interaction of 3 primary styles of knowledge: Content (CK), Pedagogy (PK), and Technology (TK).

With the challenges and gaps associated with digital learning, the launch of a replacement education policy (NEP 2020) may operate the first step for Indian education to transition into the digital sphere.

The ed-tech corporations have witnessed 10-fold rise in registration for trial or free work, inside the last 2 months.

In India, state governments are the foremost necessary suppliers of education. However, they are affected by many challenges together with massive college student ratios, infrastructure and lack of quality coaching amongst academics. Personal faculties too face a tangle with teacher coaching.

- **Use of technology which is able to bring modification**

The Ed-tech companies can modify the method by which lecturers teach and students learn. In place of the conventional chalk and speak schoolroom, schools can witness the rise of 'flipped classrooms', wherever students watch video lectures and do their 'homework' in class. It offers a chance to urge out of boring categories and offers real-life learning opportunities and diminish the gap between what is being educated among the lecture rooms and thus the real-life workplace needs.

Bharat web is connecting all the villages with high-speed broadband network. An area of the project connecting remote areas in North-East Republic of India is already complete and ensuring connectivity among different users easily.

Some digital platforms that witnessed a rise in the usage:

- **Conferencing Apps**

Conferencing apps like Google Meet, Google room, Zoom and Webex area unit are most favored apps used for conducting interactive sessions. Although these are very popular, these systems have to be compelled to handle video content as they need high information measure for uninterrupted flow.

- **On-line RADIO**

Online radio is one novel manner of unidirectional communication. Several channels already webcasting well-liked categories on varied

subjects. This is often one among the most cost effective ways that of on-line categories. The downside is that this medium doesn't have video contents.

- **Terrestrial Radio Channels**

All Asian nation Radio is broadcasting course of study primarily based academic contents daily in its VIDHYABHYASA RANGAM program. Governments and universities will utilize this terribly effectively. Most state governments and also the central government area units are already utilizing these.

- **TV Channels**

Television channels will reach resolute students in an exceedingly higher manner since they will telecast video, transmission contents and audio at the same time. for instance, PADASHAALA, associate test primarily based program recently telecast in Doordarshan. DD contains a footprint over eighty five geographic region of India and might be viewed with no additional price. TV channels particularly Doordarshan play a significant role in spreading distance education. Doordarshan together with government of Bihar started a program named 'MERA DOORDARSHAN MERA VIDHYALAY'. This program could be a massive hit in a state wherever education facilities within the rural areas are very less.

- **Diksha**

This is a project by the Ministry of human resources development (MHRD), Government of India to empower lecturers within the digital surroundings. This is often a digital infrastructure for data sharing. It conducts numerous courses for lecturers for his or her systematic progression in their noble profession. Teaching aids viz. idea videos, lessons, plans etc. is accessed from DIKSHA and lecturers will simply transfer academic resources created by them, for the utilization ofothers.

- **National Repository of Open Academic Resources (NROER) Advancement (NESTA)**

This is an efficient program to coach the Heads of the faculties, resource persons and lecturers at the primary school level. This is often a capacity-building program.

- **SWAYAM**

SWAYAM, a program initiated by the govt. of India aimed toward providing everybody, quick access to high-quality digital aides and resources. Premier government organizations host this program. It offers free of cost subject-specific courses to the learners. It also manages primary and secondary education through NIOS and NCERT.

- **SWAYAM Prabha**

This is a bunch of satellite channels in DTH that uses GSAT15 satellite. At present, there are unit thirty two channels geared toward secondary, senior secondary, graduate and postgraduate education. Recently government of India beneath declared COVID 19 package that twelve SWAYAM PRABHA channels to market digital learning for classes one to twelve. i.e., one channel dedicated to at least one class.

- **Youtube**

One can access an outsized volume of digital resources from YouTube and alternative social media platforms. YouTube is that the largest supply of digital learning materials. Several institutes are conducting classes and even a person, be it a teacher or anyone can teach content online to a vast size of population.

3 CONCLUSION

The COVID-19 pandemic has highlighted lots of challenges and opportunities in education. Prioritizing opportunities for providing authentic education through the program, learning priorities and therefore the learning environments projected by education specialists exposed a future direction for education which will be more explored once learners come back to high school. Whereas students currently ought to find out how to figure things independently, academics ought to acquire skills for effective use of technological tools needed for quality teaching. The absence of students and teachers from classrooms inspired ed-tech platforms to be utilized by institutions and in response, academicians and students also, are fast to adapt and implement new instructional pedagogy — learning through digital infrastructure. Government is additionally improvising its policy through NEP2020 to deal with this pandemic and leaving no stone unturned. Several initiatives by Indian government are still in progress. To form digital education effective, the academics should be equipped with sensible delivery models. The issues arises here is that students are more tech-savvy than their teachers. Teacher community needs to keep pace with their Inter-Net generation students, however there's a minority who still hesitates to venture into the digital platforms. The promptness of the teaching community in acquiring digital skills would establish the positive results about when they would be able to cater the needs of the learners. When schools re-open, they need to control with reduced schoolroom strength, to check social distancing. It means that the scope for schoolroom education can stay curtailed and e-learning should fill the gap within the education sector. With integrated learning as potential solutions for schools, e-learning can still dominate the arena for an extended amount.

REFERENCES

1. Jena, Pravat. (2020). Impact of Pandemic COVID-19 on Education in India. International Journal of Current Research. 12. 12582-12586. 10.24941/ijcr.39209.07.2020. retrieved at: http://matt-koehler.com/tpack2/wp-content/uploads/2013/08/TPACK-new.png
2. Konikkal (4 jul 2020).Education in Covid 19 scenario - Challenges and opportunities. *Mathrubhumi.* Retrived at: https://english.mathrubhumi.com/education/articles/education-in-covid-19-scenario-challenges-and-opportunities-1.4880403
3. Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A new framework for teacher knowledge. *Teachers College Record,* 108(6), 1017-1054.retrived at: http://jgu.edu.in/blog/2020/06/29/impact-of-covid-19-on-higher-education-challenges-opportunities.

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A COMPARATIVE STUDY OF EFFECTIVENESS OF C.A.I. PROGRAMME AND CONVENTIONAL CLASSROOM TEACHING IN MATHEMATICS AT D.T.Ed. LEVEL

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Abstract - This paper analyzes the comparative effectiveness of using Computer-Assisted Instruction (CAI) method and traditional teaching method in mathematics on DTEd. students. DTEd stands for Diploma in teacher education. These students are would be primary teachers and they have a subject as "Teaching methods of Mathematics" in first year of course. A purposive random sample consists of 60 students from 1st year of DTEd course were chosen for this study in Pune, Maharashtra. The students were divided into two groups consist 30 students in each. The students of the experimental group learnt the topic "Volume of Cube and Cuboid" using CAI, which included graphics with 2D animation and a song whereas the students in the control group learnt the same topic through the traditional method of teaching. The research design chosen has been the pretest-post test equivalent groups design. All instruments (the pre-test, the post test) contained the questions belonging to four different cognitive domains: knowledge, understanding, application and skills. The data has been analyzed using **mean, S.D and Test of significance 't' and analysis of variance for testing significance of difference between statistics especially between means.** Findings of the study clearly point out that significant increase in the mean gain scores has been found in the post test scores of the experimental group. Significant differences have been found between the control group and experimental group on post test gain scores. The experimental group, which has been taught using the CAI showed better performance in learning and also the CAI is an effective medium of instruction for teaching mathematics at DTEd. level.

Keywords: DTEd., Computer Assisted instructions ,Traditional Teaching. Teaching Methods, Mathematics Instruction, Primary school teachers, Comparative Analysis, Graphics, 2 D Animation, instructional Effectiveness, Pre tests, Post tests, Scores.

1 INTRODUCTION

In India now, there is a revolutionary concern for improving the educational system and making it realistic and relevant to the life of learners. Industrial revolution has brought out tremendous progress in the field of science land technology. Technological changes and curricular development are constantly bringing forth new problems and opportunities for research. Perhaps more than ever before educational innovation are being advocated in the classroom organization, in teaching

materials and procedures and in the use of technical devices and equipment.

Such innovations as a Computer Assisted Instruction. Programmed Instruction, team teaching need now days to be evaluated through research process. This is an age of computers. In the field of Education, computers can find tremendous use as tool, tutor and tutee. Computer technology has advanced to an extent where teachers can easily use computers for classroom teaching. An attempt has been made in the present research to explore where the computer Assisted instruction can be more effective as compared to traditional classroom teaching.

The researcher has been prepared a Computer Assisted Instructional (CAI) program on unit in Mathematics for DTEd. Students and a comparative study has been conducted.

1.1 Computer Technology and Education:

Though most of us may not realize it, Computers have become an integral part of life today. It is difficult to find a single aspect of life, which is not touched by this technology.

We Indians have proved ourselves for our excellence in software Industry. Yet, the teacher who shape the young minds have shield away from computer technology. There are various reasons some of these are as follows.

- Lack of Easy access to computers.
- Lack of adequate training.
- Cyber phobia in same.
- Unavailability of adequate number of Computers for teaching.
- Lack of software, carefully tailored to the teachers need.

So, “Only when teachers become comfortable with the technology will students reap the benefits.” (Armstrong et.al. 1996, p.81).

Computer technology can be a powerful tool in the teaching learning process.

It can act as a powerful teaching tool due to the following capabilities.

1. It helps as a motivation factor for student.
2. The content can be presented in suitable steps and proper sequence.
3. Lessons presented on computers can be planned in conjunction with the use of positive aspects of various methods like discussions, Lectures, Project etc.
4. Education can be more students centred. Every student can be provided material to suit his level of understanding. Thus extra and enriched information can be provided to gifted Children While those who are lagging behind can be provided the lacking pre-

requisite information, Which can lead to better understanding of the new material.

5. Students can use computers to develop portfolios. On various units or to complete various assignments.
6. CAI can make use of multimedia i.e. Play voice integrate graphics. Use Corel – Draw, Photoshop for making diagram which can completely change the mood of the classroom.
7. The lessons that normally seems boring to the students can be presented in lively and interesting manner.

Taking into Consideration the various, strengths of CAI in the teaching learning process, Educators have begun to look at Computer Assisted Instruction as an alternative or support to traditional classroom teaching.

2 NATURE OF MATHEMATICS

Many questions have been raised by the teachers and researchers about the nature of mathematical knowledge, but no simple answer is available. Many mathematics educators think mathematics activity as a timely discovering of the truth and totally independent of the culture and disciplines. They are pointing towards the numeration or learning of the basic arithmetic skills (+, -, ×, ÷). Ernest (1994) has also reported the same fact about discovery learning saying that discovery learning assumes that mathematical knowledge is pre-existing. Researchers of the present era are more focused towards the use of constructivism, especially in teaching of science and Mathematics. The mathematics learner should be allowed to construct knowledge in their own cultural and social context. Many studies have highlighted that in India the teachers are following traditional teaching method that is Chalk and Board method. This method is appropriate while teaching the basic operations and facts. The frequent use of computers for teaching of mathematics demands development of new software that may be embedded in the local context. Therefore there is a need to provide enough knowledge and skills to the teachers that consequently help to develop a more positive attitude towards the use of technology for teaching.

2.1 Importance of Mathematics Teaching

Mathematics is an important subject in school curriculum. It is more closely related to our daily life as compared to other subjects. Except our mother tongue there is no other subject which is more closely related to our daily life as Mathematics. Mathematics is considered as father of science in present days mathematics has been given an important place in school curriculum. In order to give an important place in curriculum a particular subject must possess the following views.

1) Utility of particular subject in daily life.
2) Whether the subject is helpful in the development of mental discipline or not.
3) The social and cultural importance of particular subject.

2.2 Statements of the Research Problem:

To study the effectiveness of computer assisted instruction program and traditional class room teaching.

2.3 Operational Definition:

Computer Assisted Instruction: (CAI)

When Computer is used as a sophisticated instructional device which presents the subject matter to the learner and provides meanings to his responses. This we call as computer assisted instruction.

2.4 Mathematics:

A compulsory subject from – primary level to Secondary level.

2.5 DTEd. (Diploma in Teacher Education)

Two years professional course designed to credit professionally trained primary teachers.

2.6 Assumption:

1) Computers provide meaningful experience to students to achieve aims.
2) Computers assist in the formation of realistic goals.
3) Students learn easily with CAI.
4) Mathematical concepts are better understand by CAI to students.
5) CAI is an effective method of teaching as students like it.

2.7 Objectives of the Study

1) To test the previous knowledge of student teachers.
2) To prepare the program by traditional method.
3) To prepare computer assisted program.
4) To execute the program by traditional method.
5) To execute the program by computer assisted instruction.
6) To compare the effeteness of CAI program and traditional classroom teaching in terms of achievements.

3 HYPOTHESIS:

The researcher has been taken efforts and used several principles of learning to prepare the CAI presentation. So, it was expected to be better than traditional classroom teaching and lead to higher achievements than traditional classroom teaching. Moreover, review of related researches shows that CAI proves to be more effective than traditional classroom teaching, In such cases a directional hypothesis would been

most appropriate, However researcher selected put forth null hypothesis for following 3 resources.

a) The researcher has prepared CAI presentation for first time. Its effectiveness has to be tested.
b) Traditional classroom teaching was done by a very experienced teacher, which could also effect the results.
c) The researcher wanted to avoid any kind of bias.

3.1 Variables of Research Study

Independent Variables

In present research, research methodology (traditional method and CAI) are independent variables.

3.2 Dependent Variables

Students achievement is the dependent variable in present research.

3.3 Confounding Variables:

Power point presentation, Use of Internet, Video Clips may be confounding variables in the present research.

3.4 Null Hypothesis:

There will be no significant difference at 0.05 level of significance in the achievement in the unit taught through computer assisted instructional program and through traditional classroom teaching.

3.5 Population and Sample:

The sample is incidental cum purposive consisting of DTEd. First year students from "Meenatai Thakare D.Ed. College, Pune".

Sample Size: 30 students in Experimental group and 30 students in control group.

3.6 Tools of Data Collection:

Achievements test on the selected unit in Mathematics both as pre-test and post test.

3.7 Treatment of Data:

To test the significance of difference between means "t" test was used.

3.8 Scope and Limitations:

1) The study is restricted to student teachers of only one DTED College from Pune City.
2) The CAI program has been prepared only one unit of Mathematics of Std. VII text book.
3) The study is restricted to English medium students, only, as the program has been prepared in English.

4 RESEARCH METHODOLOGY:

To check and compare the effectiveness of the presentation program, the research has been selected experimental method for research study.

4.1 Analysis of Data:

Quantitative analysis had been carried out using "t" test.

4.2 Statistical Methods of Analysis:

1) Test of significance „t" and analysis of variance for testing significance of difference between statistics especially between means.
2) Factorial analysis for the purpose of analyzing the composition of certain complex phenomena.

M1=Mean of control group M2=Mean of experimental group

M1= 12.83 M2 = 17.93

4.3 Analysis:

1) Mean of post test in control group was 12.83 and Mean of post test in Experimental Group was 17.93
2) Mean in post test has increased from 12.83 to 17.93, in Experimental group there is gain of 5.1 score points.

From Above three we can conclude that there is significant improvement in students achievement in experimental group.

1) Mean of Scores (Experimental & Control):

$$\text{Group I} = \frac{\Sigma X}{N} = \frac{385}{30} = M_1 = 12.83$$

3) $$\text{Group II} = \frac{\Sigma Y}{N} = \frac{538}{30} = M_2 = 17.93$$

2) Standard Deviation of Difference

$$\delta_1 = \sqrt{2.313}$$

S.D. or δ_2 $\quad \delta_2 = 2.048$

1) S.D. in control group is 2.313.
2) S.D. in Experimental group is 2.048
3) S.D. in Experimental group has come down from 2.313 to 2.048. There is reduction of 0.265 points.
4) So from above references researcher has been concluded that, experimental group is more homogeneous as compared to control group.

3) Standard Error in the Difference of Mean:
δM1 = 0.422 δM2 = 0.374

4) Correlation Coefficient (Product Moment Method):

$$r = \sqrt{\quad} - 0.354$$

5) Standard Error of Difference Mean
δD = 0.654

6) Difference of Means Between Two Group:
D = M2 - M1
D = 17.93 – 12.83
D = 5.1

7) 't' Value

$$t = \frac{D}{\delta D}$$

$$t = \frac{5.1}{0.654}$$

$$\mathbf{t = 7.80}$$

8) Degree of Freedom:

$$df = N - 1$$

$$= 30 - 1$$

$$\mathbf{df = 29}$$

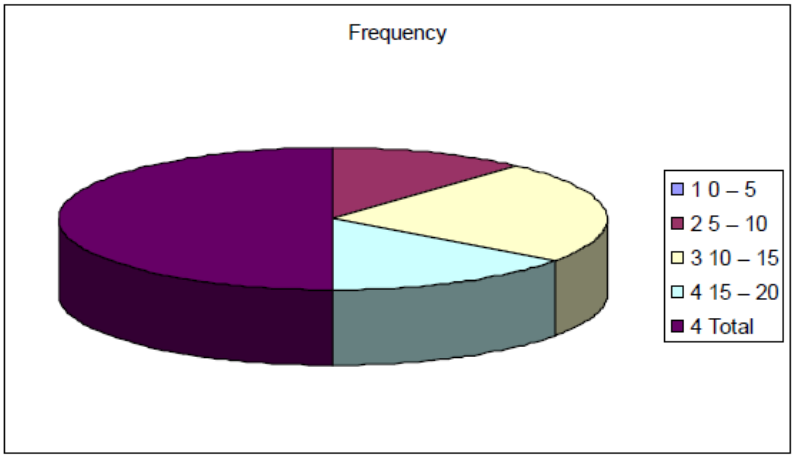
0.05 level = 2.04 (Sample t value)
(Actual t value) = 7.80

5 CONCLUSION:

1) Researcher has been selected 0.05 level of significance to text the validity of hypothesis.
2) Value of df is 29 on 0.05 level of significance is (t = 2.04).
3) Actual t value t = 7.80 is greater than sample (2.04) and as this mean difference is significance at 0.05 level, it can be said that the difference is not due to differentiation between sample, and significance is real.
4) From above references, researcher has been concluded that there is a significant difference between D.T.Ed. student Teachers in control

and experimental group post test scores, and Null hypothesis is rejected at 0.05 level.

5.1 Marks Distribution of Control Group



5.2 Importance of Present Research

1) Researcher has used educational technology to compare the effectiveness, which encourages students and teachers to adopt. New technologies in daily teaching – learning process.
2) Though Mathematics is a subject, which is felt difficult by students, present research will definitely help to create interest about Mathematics among students and teachers.
3) Present researcher is useful to the teaches to know the technique of CAI in effective manner.
4) Researcher has given an effective treatment to the students to reduce their problem regarding mathematics subject.
5) Researcher has been examined that when we use scientific technology in our day to day teaching students take active participation in teaching learning process.

Present research will benefit following people.

1) **Principal:** Present research will help the principals of School and colleges to create awareness the use of computers in education. Principals can arrange orientation programme and workshops for their teachers.
2) **Teachers:** Present research will help to expand widen the scope of knowledge of teachers, New methods and techniques of teaching can be used instead of only lecture method. Teacher can make this subject interesting and favourite subject of the students.
3) **Students:** Present research will help the students to make their concepts clear and will make their learning interesting. It will help in fixation of the concepts in the minds of the students.

4) **Society:** The study of mathematics help in creating the mathematical outlook in the students and concern people. This research will help to develop good citizens having scientific and mathematical outlook.
5) **In Syllabus and Curriculum Formation:** Present research will help to add such topics in the curriculum which can be taught effectively by CAI.

6 SUGGESTIONS

Though teaching is an art and there are very few born teachers a majority of teacher, who have no inherent flair for teaching and are unable to arouse that much interest in the students to learn, can improve upon by practice so it is essential that.

1. Every teacher should be acquired with different methods of teaching.
2. The teacher should use variety of methods according to the demands of the content.
3. The method should be made flexible to suit variety of circumstances.
4. The teaching should be pupil centered rather than teacher centered
5. Teaching – learning process should be co-operative endeavor of teacher and students.
6. Teaching should be included rapid feedback to the students for their response.
7. Teaching should be taken into consideration the interest of students and try to motivate them to learn.
8. CAI can be used by teacher to covert the lecture to more of a demonstration.
9. The use of CAI can be made to show diagrams, charts, graphs, several categories of learning in Mathematics.
10. Verbal information, concept formation, problem solving and attitude formation which are an essential part in Mathematics and can be fulfilled by CAI.
11. Last but not the least, Computers can be used for revision of difficult topics, remedial teaching, for slow learners and finally to bridge the gap between slow learners and bright learners.

6.1 Recommendation for Further Study:

1) A comparative study can be done for effective use of program learning.
2) The investigation of different methods adopted for teaching Mathematics in Marathi Medium D.Ed. Colleges can be done.
3) A comparative study can be done for effective use of multimedia projector.

REFERENCES

Books:

1. Best W. J. & Kohn J.V., “Research in Education” prentice hall of India Pvt. Ltd. New Delhi, 2003.
2. Kaul L, “Methodology of research in Education, M. B. Buch, “Vol. – 4 & Vol. - 5” Sterling Publisher Pvt. Ltd. New Delhi, 1979.”
3. Alba, A. (September 1997). Fundamentally MATH, The Mathematics Teacher, Volume 90, Number 6. P. 495.
4. Bailey, R. 0. (May 1995). Fundamentally MATH, Teaching Children Mathematics , Volume 1, Number 9, p. 586.
5. Baker, E. L. (1999). Technology: How Do We Know It Works? The Secretary's Conference on Educational Technology-1999, U.S. Department of Education, www.ed.gov/Technology/TechConf/1999/whitepapers/paper5.
6. Birman, B. F. (January 1997), The Effectiveness of Using technology in K-Education: A Preliminary Framework and Review, Washington, DC: American Institutes for Research.
7. Coley, R. J., Cradler, J. and Engel, P. K. (1997). Computers and Classrooms: The Status of Technology in U.S. Schools, Policy Information Center, Educational Testing Service, Princeton, NJ. Davis, S. J. H. (November 1997), How Mastering Technology Can Transform Math Class, Educational Leadership, Volume 55, Number 3, pp. 49-51.
8. Evans, J. (1965). Programming in Mathematics and Logic, in Robert Glaser.

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AN ANALYTICAL STUDY ON CRM IN PUBLIC AND PRIVATE BANKS FOR CUSTOMER RETENTION

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Abstract - Banking sector is developing every day, it is making focus on customer satisfaction. Presently many new private players are entering so it become mandatory for public sector to develop proper understanding of the customers' needs and expectations. Understanding of customers and changing demand is must consider in whole management with a prompt response. CRM is very essential in this context and an organized way to develop customers understanding. The customer targetis broadening day by day. And to cope up and fight the competition marketers have been equipped with a mantra that is CRM which enables marketers to manage their presence. Resent trend in banking sector of India is expected to continue for everlasting, and it is attracting huge attention of customers. Attitudinal shift of the Indian consumer and the emergence of ICT have transformed the face of banking sector in India. It has been perceived as a key opportunity area. Present study provides detailed information about the growth of banking industry in India. The study has selected 100 customers for their perception towards customer retention strategies in public and private banking sector in Indore city. This study is a comparative in lieu of different attributes of CRM.

Keywords: Banking Sector, CRM (customer relationship management), Customer retention.

1 INTRODUCTION

In present scenario banking sector is considered as one of the vital contributors to the economic development of a country. It is serves as the central economic activities. The banking industry in India taking fundamental changes post- independence. The opening up of the Indian economy in the 1990s and the government's made decision to privatize banks by reduction in state ownership culminated in the banking reforms based on the recommendations of the Narasimham Committee. Madhok and Zaveri have stated that banking industry has witnessed a sea change since colonial times when profit was the basic consideration. It then moved to the socialist era of 70sand 80s were serving the poor in the remotest areas of India was the only target. During this era, nationalized banks have started function with so many people as possible. Bank policies were solely directed towards achieving the social objectives of employment generation and social welfare of general public. Profit motive took a back seat at that time.

Banking Sector in India passed through a creativity and challenging phase. The reforms in the Indian financial sector have led the Indian Banking to undergo essential changes through the creation and

diversification of products/ service portfolio, entry of new Private Sector and foreign banks, institutional changes, adoption of modern technology, globalization of banking activities etc. The system has expanded continuo sly after nationalization in 1969 and 1980. The banking sectors and its services that were mostly confined to urban areas are now expanded to rural areas also. Since 1990s the government has been implemented many banking sector aspects, rules and regulations which have completely changed the pace, face and character of Indian banking sector.

With the current change and its new functional orientations of banks, the entire objective of banking has been rechanged. Therefore, the banking sector has passed through economies and accept challenges and India is no exception. As per our studies, following are the key challenges of change in the banking industry:

- Changing customer needs, demands and expectations;
- Implementation of technology;
- Competition among the public and private banks from MNCs in the financial sector;

1. In banking sectors basic key factor is accountability towards the government, stakeholders and customers. The present study has been taken up to observation these challenges and needs. The main Focus was on three important variables of banking industry that were—
    1. client satisfaction
    2. working environment
    3. employee satisfaction

In competitive era of banking sector, the successful implementation of CRM requires companywide, cross-functional, customer-oriented business process re-engineering. The organizations, in that really manage customer relationships, and made all essentials for primarily develop a culture, motivating employees at all levels towards learning and facilitating them in capturing, selecting, using, and sharing knowledge by providing the means and the technology need to do so. Also, in whole process the Top management support is an important aspect for the performance of CRM implementation. Top management support not only helps to transform the organization structure and culture, but also ensures that CRM-projects that experience unforeseen temporary setbacks continue. Finally, after making grooming aspects firms often consider CRM-software the key to success in CRM implementation. Although a substantial part of the CRM budget is allocated to software, managers should not fall in the trap of a myopic focus on software. CRM software should primarily result in cost reductions, easy and improved customer interactions. If a CRM-implementation program can survive the scrutiny of these issues then a CRM-program has a larger possibility of success in banking sector.

Customer Relationship Management is the basically implemented for development, maintenance and optimization of long-term mutually valuable relationships between consumers and the organizations of banking sector. Successful customer relationship management targeted on understanding the needs, demands and desires of the customers and is achieved by placing these needs at the heart of the business by integrating them with the organization's strategy and new commencing aspects, people, technology and business processes. At the heart of a perfect CRM strategy is the creation of moral and ethical value for all the parties involved in the business process. Through CRM a sustainable competitive advantage is build and develop understanding, communicating, and delivering, and developing existing and newly introduce customer relationships in addition to creating and keeping prospects and maintain customers satisfaction. So, the concept of product life cycle is giving way to the concept of customer life cycle focusing on the development of products and services that focused on the future need of the existing customers and creating additional services that extend existing customer relationships beyond transactions.

CRM is a comprehensive approach for creating, maintaining, developing and expanding customer relationship. It provides co-ordination between customer service, marketing, information technology and other customer related functions in organizations. It integrates people, process and technology to maximize relationships with all the customers. It does not aim to build closer relationship with all customers, but it recommends that organizations take initiative to identify the most valuable customers by looking for their life time value. CRM means building an interdependent relationship with the customer in whom each relies on the other for business solutions and successes.

2 LITERATURE REVIEW

Caroline and Elizabeth (2014) examined determinants of customer retention in commercial banks in Tanzania. Four specific objectives were developed related to latent variables: customer service, quality of the products provided by banks, pricing of bank products as well as services and customer satisfaction. The variables' relationships were established through explanatory studies under positivism paradigm. The study discovered that academics need to incorporate quality of products provided by the banks together with pricing of banks products in customer retention models. For Bank of Tanzania, there is a need to expand monitoring and include quality of the products provided by banks to determine the sustainability of banking industry.

Benjamin et. al. (2014) focused on the important factors as determinants of customer satisfaction for better performance of the banks. The factors identified are Quick services delivery, Productivity, clearly defined customer policy, Communication, Responsiveness, being friendly and approachable, Creativity, Access, Honor promise

Competence. The research has recommended that the Banks should try to maintain customer by giving those good products or services should have appropriate customer perception and improve the services delivery to all customers.

Boohene et. al. (2013) examined the impact of retention factors that influence consumers' decisions to stay with Ghana Commercial Bank within the Agona Swedru Municipal area. Correlation and regression techniques were used to examine the relationships between customer satisfaction, service quality, customer trust, customer commitment, switching barrier factors and customer retention. The results revealed that on the whole, switching barrier emerged as the most significant factor influencing customer retention. This was followed by customer commitment and customer trust. The study recommends that management of the bank should pay attention to customer commitment by investing more into customer relationship marketing strategies that can increase customers' dependency and inhibit switching.

Ouma et., al (2013). Their study set to examine evaluate customers' retention strategies on customer satisfaction in the banking sector in Kenya case of Equity bank Thika branch, The study result found that the quality of services offered by the bank has a great effect on customers' retention. However, customers' demographic factors like age, gender, level of formal education and marital status had no influence on customers' retention. Further, the study found that the bank stability, reliability and involvement in community work will influence customers' retention. This study therefore recommended that banks should strive to ensure good quality service so that they ensure high customer retention. This can be achieved by improving their opening hours and closing hours, speed of service, and degree of responsiveness to enquires, time taken to get service and good communication with the bank staff. Further, banks should market themselves but, in their marketing, they should emphasize their uniqueness especially on their services and products offered.

2.1 Objective

Theobjective of the study is CRM Practices on Public and Private Banks for retaining the customers.

3 RESEARCH METHODOLOGY

Research Design: Descriptive study.

Sampling units- Sample consists of customers of banks.

Sample size- 100 (50 of Public Banks (SBI &PNB) and 50 of private Banks (ICICI & HDFC))

Sampling technique-convenient sampling

Tools for data collection- Primary data, being the most significant is collected through self structured questionnaire based on 5-point Likert Scale. The

questionnaire total 20 questions were self designed and also tested the reliability and validity which was .932.

3.1 Hypothesis Results and Discussions

H_{01}: There is no significant difference in the view of customers towards CRM practices in public sector and Private sector banks of India.

Group Statistics

	BANK	N	Mean	Std. Deviation	Std. Error Mean
CRM	Public	50	3.0931	1.68700	.09906
	Private	50	3.4000	1.74773	.12060

The above table. present the mean on the perception of customers towards CRM practices in public sector and Private sector banks of India, the result revealed that the mean of public banks is 3.09 and the mean of private banks is 3.4 which is more than the mean of public banks.

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	3.064	.303	-1.978	498	.009	-.30690	.15519	-.61181	-.00198
Equal variances not assumed			-1.966	440.987	.050	-.30690	.15607	-.61364	-.00015

From the table no—the p-value 0.009 is less than 0.05 and so the stated null hypothesis is rejected. This implies that the customers' perception towards CRM Practicesis significantly different between the two banks viz. Public and Private Banks.

4 CONCLUSION

The findings concludes that CRM Practices are an essential and very important aspects for any type of banks as in today's scenario those bankers who follow these practices for the benefit of customers, definitely they win. To conclude, the growth of banking sector is basically based on the systematic segmentation of the customer expectations which can be done with respect to their demands, needs, desire, expenditure patterns.

To integrate these supportive strategies banks are suggested to accumulate and implement new modern technologies in terms of the

database and data mining to have most updated customer database for their objectives.

5 SUGGESTIONS

The present study has suggested some measured for the banking sector. These are as follows:

- CRM strategies should be mainly concerned with the customers' need and demand.
- Services should be structured according to the customization.
- Measurable objectives for each plan element should be designed and monitored by the banks.
- The bank should develop a culture of diversity.
- The bank should provide wealth management and portfolio management services to privileged customers satisfaction.
- Technology for customers' interactions should be encouraged

REFERENCES

1. Barrack OtienoOuma et al (2013). "Organizational Customers' Retention Strategies on Customer Satisfaction: Case of Equity Bank Thika Branch, Kenya", *Research Journal of Finance and Accounting*, Vol.4, No.10, 2013 pp. 8-16.
2. Benjamin M., Israel A., Ranga P. (2014). "A Study on Customer Care Management Factors in Banking Sector of Haryana State India", *International Journal of Management and International Business Studies*, Volume 4, Number 1 (2014), pp. 117-122.
3. Bharadwaj S., Varadarajan, P Fahy (1993). "Sustainable Competitive Advantage in Service Industries: A Conceptual Model and Research Propositions", *Journal of Marketing,* 57(October), pp. 83-99.
4. Caroline M. and Elizabeth M. (2014). "Determinants of Customer Retention in Commercial Banks in Tanzania Journal of Finance and Bank Management", March 2014, Vol. 2, No. 1, pp. 09-30
5. Dawkins, P. M Reichheld F. F. (1990)." Customer Retention as a Competitive Weapon", Directors and Boards, 14(4)
6. Gronroos, C. (1983). Strategic management and marketing in the service sector. Chartwell-m Bratt Ltd, UK
7. Gurjeet Kaur, R D Sharma, and Neha Mahajan (2014) Vikalpa. Volume 39, No, 4, pp.45-56.
8. Harwood, M. (2002). Branding on a Budget: Building the Community Bank's Image. Community Banker, 11(4), April, pp. 24-28.
9. Ioanna, P. D. (2002). The Role of Employee Development in Customer Relations: The Case of UK Retail Banks. Corporate Communication, 7(1), pp. 62-77.
10. Maharaj, A. (2008). Awareness, perceptions and effects of customer loyalty programmes within the retail sector of the Durban Metropolitan area. Johannesburg: Graduate School of Business Leadership University. (Thesis – MBL). Mangin,
11. Peppers & Rogers Group. (2011). A Customer-Based Approach to Maximising the Value of Your Business. [Web:] http://www.peppersandrogersgroup.com Date of access: 24 Apr. 2012.
12. Sabir R. I., Ghafoor O., Akhtar N., Hafeez I. and Rehman A. U. (2014). "Factors Affecting Customer Satisfaction in Banking Sector of Pakistan", *International Review of Management and Business Research,* Vol. 3, Issue.2, pp/1015-1025.

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IMPACT OF ARTIFICIAL INTELLIGENCE IN TEACHING AND LEARNING PROCESS AT HIGHER EDUCATION

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Abstract- This chapter represents the impact of the development of the use of artificial intelligence in teaching and learning processin higher education specially in universities. It explores educational suggestions of latest technologies how students can easily learn and how institutions teach and evolve through Artificial Intelligence (AI) module. Current technological developments and the growing speed of accepting new technologies in higher education are discovered in order to mention the current status of AI-based teaching learning module in higher education and also forecast the future nature of higher education globally where AI-based teaching learning module is an integral part of our universities. This chapter also focus on some challenges for institutions of higher education and student learning in the acceptance of AI-based technologies for teaching, learning, student support, and automated administration in view of future development of higher education.
Keywords*:* Artificial intelligence, higher education, teaching learning methods, Automated administration, student support system, automated grading system, feedback system.
Learning objectives: The learning objectives of this chapter is to provide basic knowledge about the role of artificial intelligence in teaching & learning process in higher education and educate how teaching learning process of higher education can be made more interesting, beneficial & acceptable with the help of Artificial intelligence for student as well as professionals.
Learning out comes: After completion of this chapter the student can be able to learn smart study material, way of teaching. intelligent support for collaborative learning, intelligent virtual reality, automated grading, and feedback system. This chapter also explores assessment of student understanding, teaching evaluation and adaptation and customization systems. The reader also can understand the pedagogical implications of AI for teaching and learning in HE, Strategic or institutional lagging other areas of AI and finally teaching and learning applications of AI.

1 INTRODUCTION

In present scenario people engrossed in a society that is progressively concerned towards the procedure of frame technification. Every time all the sectors are adapting others advances of technology in according to their level of development reached. The educations sector is one of them which is also going through this ineluctable tendency of edition to the new societies of scientific collaboration. The physical reception of such a novel and dizzying restriction requires a progressively powerful applications expansion, impartial as nearby is an intensification of inconsistencies and doubts that rise from the application of artificial intelligence (AI).

Currently, development of technologies and unrestrained anticipation of students from higher education imposes higher education institutions to support teaching and learning method with advanced technologies in

order to improve quality of higher education .To attain the progressive current requirements , there are a number of educational technologies like cloud technologies, mobile technologies, virtual reality and classroom, audio and video, artificial intelligence (AI) are included. AI largely contracts with the use of skill to make devices behave like human beings. It is the capability of computers to act as human to perform jobs. In this context computers and other machines with algorithms and approaches to pretend human understanding and decision-making performs to absolutely complete activities associated to teaching and learning can be discussed as AI. AI have potentials to change drastically the way higher education work, and improve student learning in numerous disciplines and at any level. If there is genuine attentiveness to ensure extensive and successful execution of AI by higher authority, lecturers and students, it has vast role for higher educational institutions. To follow the full reimbursements and understand the influence of AI systems and skills, higher education needs further efforts. In this chapter we focus on basics of smart study material, way of teaching. intelligent support for collaborative learning, intelligent virtual reality, automated grading, and feedback system. This chapter also explores assessment of student understanding, teaching evaluation and adaptation and customization systems. Finally, this chapter provides the idea about the pedagogical implications of AI for teaching and learning in HE, Strategic or institutional lagging other areas of AI and finally teaching and learning applications of AI.

2. AI BASED TEACHING LEARNING IMPLEMENTATION FRAMEWORK IN HIGHER EDUCATION

To contrivance AI based teaching and learning development in higher education, it should be based on the prevailing knowledge of computer technology and the future development of AI technologies. By encompassing these considerations, the following AI based teaching learning implementation framework is more effectives in higher education.

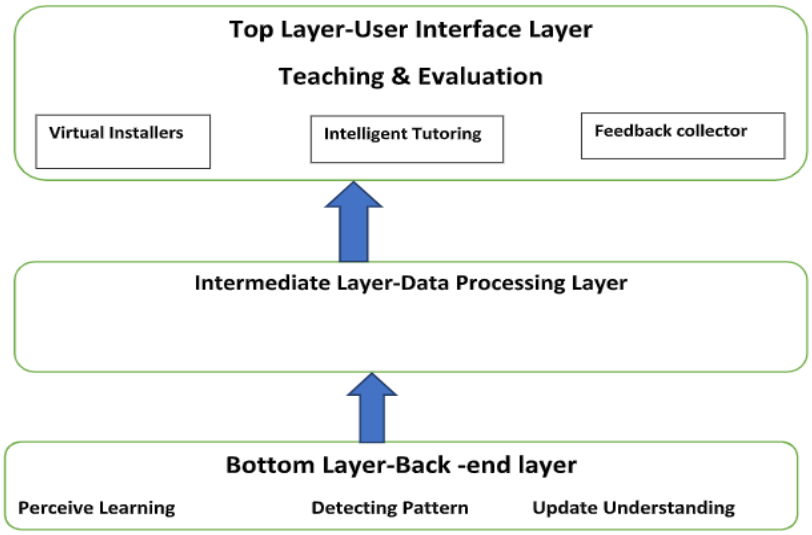

Fig. 1: Layer model of Higher Education Framework

2.1 The User Interface (UI) Layer

The user interface layer (UI) is one of the important layers in Artificial Intelligence system which is used to interface in between user and collect actual input & past data from student behaviour that can be used to model the learner. Generally, the UI layer contains interfaces to interact with AI system for educators and learners. It contains three sub unit like(a) Virtual initiators: it is to assist students by answering their requests quickly and accurately and Also used to provide turning smart material, (b) Feedback collector: It is AI based User interface to collect and evaluate students' feelings, ideas and assessments iteratively and predict information for improving quality of education. In this purpose, chatbot and teacherbot can be used to collect the students' feelings via dialog interface and apply the concept of Natural Language Processing, Machine Learning and Deep Learning for evaluating and updating understanding of student's behaviours. (c) Intelligent tutoring: It is AI based User interface to deliver authentic tutoring for students in higher education. In this stage there will be gap identification by finding student's preference and understanding will be accomplished and lastly evaluation of students learning using different ways like by chatbot application will be done for improvement. This is help us to improve the learning environment, quality of teachers and helping out to decide what content is preferable for which type of students.

2.2 Data Processing Layer

The data processing layer is the intermediate layer for framework of higher education. The primary operation of this layer is to process the input data, then add component that will support the learning requirements and user's workflows by formatting the input data to feed AI component in different format like file format mapping, input data size reduction, etc. and analysing user settings to enable changed behaviours. Lastly, after calculation is completed and output is produced, post-processing the output to deliver a user-friendly version of the results which is help full for the students in higher education. A standard software development is required to pre and post processing parts received data, scripting or compiled machine learning code.

2.3 The Back End Layer

The back -End Layer is the bottom layer of this frame-work and it is the main AI layer which consists of multiple repetition of the three processes like (a) Empathetic the learning environment, (b) sensing educational patters and (c) apprising understanding and creating output or forecast component to the data processing layer. If the back end didn't understand the request from the learning environment and educational patters, the procedures will be recurrent until it grows and comprehends the correct information to send for data processing layer. To perform such processes, there will different AI algorithms and applications are used min this layer.

3 ARTIFICIAL INTELLIGENCE BASED SMART E LEARNING AND MATERIAL

Electronic Learning or eLearning is the transfer of learning and training through digital platform. Basically, it is based on dignified learning which is provided through electronic equipment like mobile phone, computers,

tablets and even cellular phones which are connected to the internet. There are two types of eLearning process are available. One is Synchronous eLearning where the learners and the instructor interact with each other in real time mode from different locations and other one is Asynchronous eLearning where learners comprehensive self-paced online exercise but here, the learner and the instructor are not online at the same time.

The e study material is defined as digital study material which can be easily readout through computer or other electronics display or easily send as softcopy through internet. This type of study material can be made more versatile and intelligent with the help of Artificial intelligence. In this context we need to feed the course curriculum, teachers' expectation, modern trends and student demands. Then all the inputs are refined or cleaning. Then we apply some algorithms and make an intelligent model that can provide us the smart e study materials which may be acceptable for all. But the performance of the models completely depends on data, data refining process & suitable algorithms. The prediction of Artificial Intelligence models not only help us for creation of smart learning material in the form of digitized guides of textbooks to customizable learning digital edges but also used to design a digital & industry-oriented curriculum with maximization.

All information present in the Internet in an online educational platform are HTML form like syllabus, course outcomes, program outcomes, objectives of the chapter, lecture notes, assignments, or answers to chapter questions. In spite of these the audio or video lessons, interactive sessions or exams related documents are providing links to other Web sites. Each and every contains can be made more efficient with the help of artificial intelligence model.

4 ARTIFICIAL INTELLIGENCE BASED SMART/INTELLIGENT TUTORING SYSTEMS

Conventionally, an intelligent tutoring system (ITS) is a computer based system that objectives is to deliver instant and modified teaching or feedback to learners, usually without demanding involvement from a physical presence of a teacher.

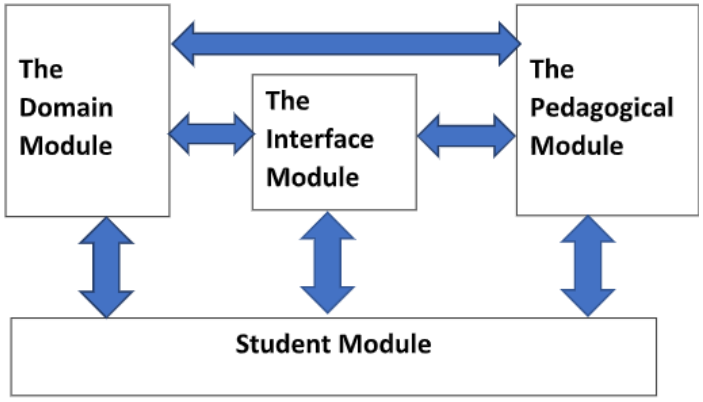

Fig. 2: Architecture of Smart Intelligent Tutorial System

ITS is composed of three main components like Domain module, pedagogical models and student module. The domain module is basically treated as expert or knowledge of that particular segment. It contain two

sub unit known as knowledge base and interface engine. The knowledge base contains facts & rules of specific subject and interface module is for interfacing with others units. Module. The pedagogical domain contains two subunit which are known as pedagogy knowledge and interface subunit. The intelligent pedagogy mainly works based on the five major approaches which are known as Constructivist, Collaborative, Integrative, Reflective and Inquiry Based Learning. The student module mainly designs based on student requirements, willingness, and their feedback. The central interface unit basically coordinate the entire job and finally interface with users specially the students who are main stack holders in ITS. Theylearn from an intelligent system primarily by solving problems and provides feedback accordingly. Artificial Intelligence has the capability to makes ITS more conceivable for model to learn from previous experience, adjust to different as well as modified input, and complete human-like responsibilities. With the help of AI the study lecture becomes more than abbreviate into flash card and clever study materials can be made easily that address a student based on the problems. AI also help to make unique class notes. Artificial Intelligence will solve student problem without any tiredness. The step by step tutorials for individual student possible provided with the help of Intelligent Tutorial System by using interactive smart technologies like natural language processing (NPL) systems.

5 INTELLIGENT SUPPORT FOR COLLABORATIVE LEARNING

In modern educational system the "Collaborative learning" process plays an important role where the different types of educational approaches connecting combined knowledgeable effort by students, or both (students and teachers). Generally, students are discussing in groups contain two or more members, for understanding and explore the solutions of developed items. The example of collaborative learning is when Students take a minute to create a difficult question cantered on the speech content up to that goal or group discussions for matching, sorting, and ranking.

The benefits of collaborative learning include the development of higher-level thinking, oral communication, self-management, and leadership skills, Upgrade of student-faculty interaction, Growth in student preservation, self-approval, and accountability, introduction to and an increase in considerate of miscellaneous out looks.

The Artificial Intelligence based collaborative learning may improve each student's communication and interpersonal skills, which can be extremely useful in their career. The main aims at improving future techniques where humans and artificial systems work together, doingseparatetasks based on optimum way. It requires expansion of techniques, methods and components which empower people and AI systems to work jointly successfully.

Key enabler for Collaborative learning with AI

(i) Group Information
(ii) Collaborative abilities for evaluation
(iii) Virtual Agents
(iv) Moderation
(v) Learning gaps

5.1 Intelligent virtual reality:

The artificial intelligence (AI) has great effects on virtual reality and make it more intelligent. The AI-empowered learning system makes classrooms comprehensible to all student as well as learner, including those stay in different country. The AI enable virtual classroom can be extremely helpful to those students who are unable to attend school due to an illness or want to study a different course from the one available in their school.

Like mobile technology is being settled with the help of different Artificial Intelligence based algorithms the Virtual reality also uses advancement of AI technology especially in higher education. Based on real time or imaginary environment the interactions between student and teacher can efficiently be performed through computer along with internet in the form of Virtual reality. In this context different algorithm of AI are implemented.

The applications of Virtual Reality (VR) are expected to expand rapidly in higher education. Presently, hundreds of colleges and universities are already offer campus tours with the help of virtual reality. Not only campus tour, but the virtual reality also has great impact on online learning programs offers in universities especially in terms of cost. In current scenario as the cost to attend higher studies continues to increase. In this situation virtual reality provide us to make bridge in between teacher and student. In case of Distance learning software can placed teacher and students together in the same platform with digital representations of themselves. The teachers can teleport into the virtual reality world and guide students through their experiences.

Finally, Virtual Reality and Artificial Intelligence are all useful and important tools for the corporeal or virtual classroom as they can deliver an additional immersive and collaborating experience. It is not depending on the subject being taught, it can engage and educate students more efficiently in real time mode.

5.2 Automated Grading

In manual grading system, it takes large amount of time for evaluation and it is an expensive method. Hence it is required to find out an alternative process, which is more efficient and cost effectives. As per the researcher's views, the Automated grading system is may be the alternatives of manual grading system. Because the automated grading system not only reduce the evaluation times but also provides realistic outcomes.

Generally automated grading is defined as an evaluation or scoring process which is automatically performed through a machine. To design or model this type of automated grading machine, the different algorithms of Artificial Intelligence are widely used to make the system more efficient and reliable. The well-known AI based software like AI paper grader is a highly efficient software that can instantly grades the student's answer scripts and research papers. This AI paper grader software is combining with product of machine learning algorithm and human understanding. In this software the machine learning algorithms are used to model the metrics and the grading is performed by teacher's module or processor.

The following are the features of an AI based automated Grading System.

(i) By using voice processing or manually, the teachers can enter the raw marks of students directly into the software tools.
(ii) Easily export or import the required data in the form of excel sheets for the better suitability of the users.
(iii) Different task can be allotted for multiple student directly through the AI based tools.
(iv) Different task like grade dropping, grade readjust, value assignment for task can be easily performed.
(v) In this system the report card easily printed and shared with parents through email or text massage.
(vi) The AI based automated system can predict the possible way of improving the grade of the student through grade analysing technique.

Advantages of AI based automated grading system:

(i) Automated grading perform the Tedious grading Task very easily without any bias.
(ii) Automated Grading Systems are Accurate
(iii) It reduces execution or evaluation Time and also save Cost of evaluation.
(iv) Elimination of External Manipulations
(v) Provide an Automated Solution

5.3 AI Based Feedback System

Student performance could change from year to year and across course, depending on way of teaching, lecture notes or study materials, student support system, student demand, personal motivations, and student feedback. But the traditional student feedback system is still stuck in a legacy era. From different studies it is shown that 80% of universities need to align student performance management system with other optimized parameters. In this context the Artificial Intelligence and data analytics can develop a unified source of confidence for student to extract valuable insights in higher education.

Artificial Intelligence able to explore the opportunity for designing computerized real-time feedback systems accomplished of just in a few seconds for different complex problem related to the student. It is widely accepted in higher educations like colleges or universities. Regularly, a bias will creep in without the teacher being consciously aware of its impact. By providing objective performance feedback, AI helps authority of higher education to optimize the assessment process while also instilling confidence among the student.

Additionally, the head of the authority in higher education always have not satisfactory anticipation to synchronize performance feedback based on previous data to future pathways. In this context the intervention of Artificial Intelligence is required. The predictive capability of AI can take data collected from various student to predict a higher education career trajectory and determine appraisal figures. A handful of universities are already implementing AI-based student feedback system and it has led to several important benefits.

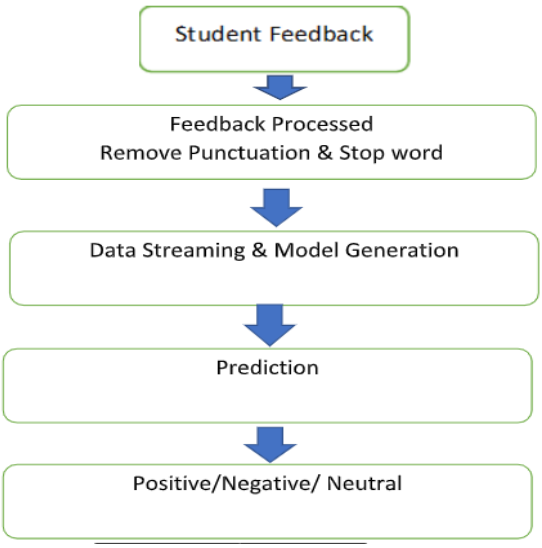

Fig. 3: Architectural block diagram of student feedback system used in higher education

Artificial Intelligence can improve the performance of student feedback system. The three main benefits are as follows,

(i) AI could enable predictive appraisals:
(ii) Bias-free performance reviews:
(iii) Initiate immediate course correction.

5.4 Artificial Intelligence based teaching evaluation:

Conventionally the word Teaching Evaluation is defined as a process of the collection, analysis and interpretation of information about any aspect of a teacher or educator or training. It is a part of a recognised process of mediating its effectiveness, efficiency and any other outcomes which can motivate the student. There are many types of evaluations method are there like process, impact, outcome and summative evaluation. The technique of Measuring Teacher Effectiveness includes analysis of classroom artifacts, teacher self-reports of practice, interviews and student ratings of teacher performance.

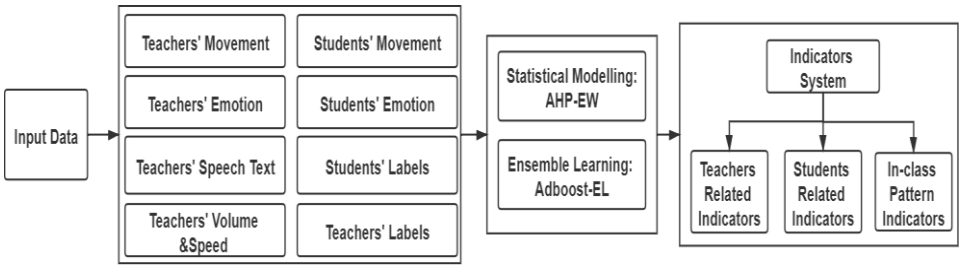

Fig. 4: Artificial Intelligence based Class evaluation frame work

The teaching evaluation, which is operated to evaluate the progression and effect of both teachers' teaching and students' learning in a classroom atmosphere, plays a progressively vital role in superintendence and encouraging education excellence. With the fast growth of artificial intelligence (AI), the concept of smart education has been continuously enhanced and progressively entered into all features of educational

application. Considering the leading position of classroom teaching in uncomplicated and undergraduate education, the overview of AI technology into in-class teaching evaluation has become an important flashpoint.

The artificial Intelligence(AI)can effectively use for teaching evaluation process. In AI based class evaluation methods inertially multidimensional speech and movement of teachers, student's response are received and then develop an AI based model after analysing the received data. This model can able to overcome the partiality and pragmatic requirement of outdated estimation to a confident extent. As per the performance analysis, the proposed inclusive model combined with the sophisticated guide system has been demonstrated to be effective for Artificial Intelligence enable teaching evaluation.

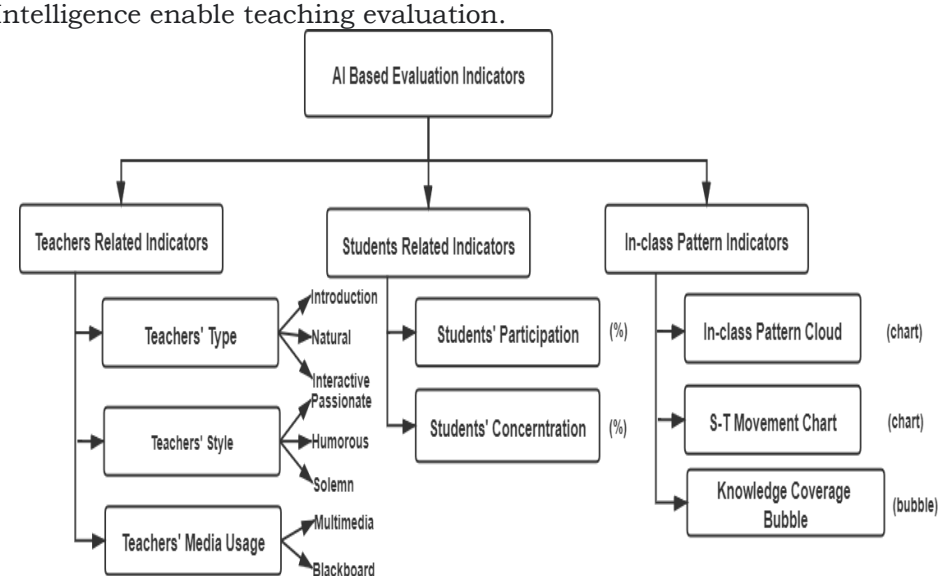

Fig. 5: AI based teaching evaluation model with indicator

5.5 Artificial Intelligence based adaptation and customization systems

Artificial Intelligence has a great impact on adaptation and customization systems used in higher education. AI has many applications that are varying the way we learn, making education more accessible to students with computers or smart devices if they are unable to make it to class. Students aren't the only benefited as AI but also helping to mechanize and speed up organizational tasks, helping organizations decrease the time spent on tedious tasks and increasing the amount of time spent on each individual student .

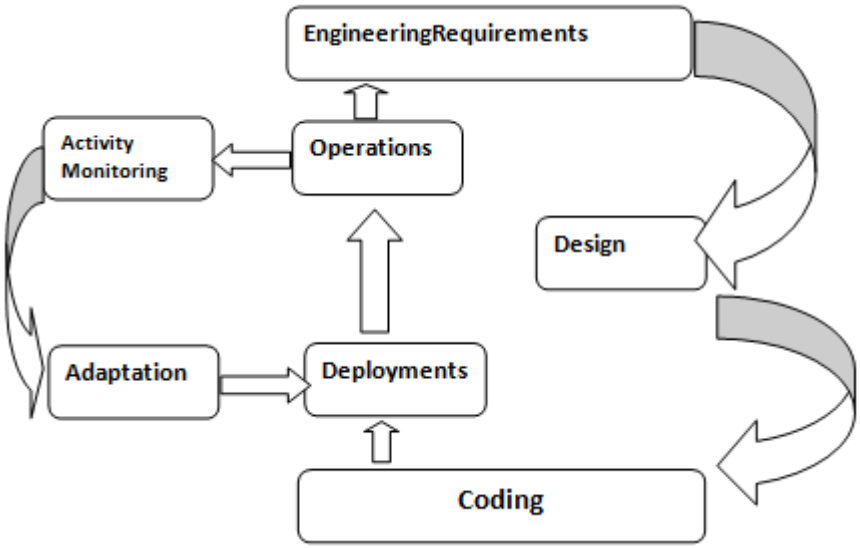

Fig. 6: AI Based Adaptation and customization system

5.6 Pedagogical Implications of AI for Teaching and Learning in HE

Commonly the process or approaches of teaching is known as pedagogy or pedagogical approaches. This approaches compose of the theory and practice of learning. It also explores the idea that how the student community is influenced by the social, cultural, economic and the political factors. The five main approaches of pedagogy are Constructivist, Collaborative, Integrative, Reflective and Inquiry Based Learning (2C-2I-1R).

In pedagogical implication the Artificial Intelligence plays an important role. It allows for personalized or multi-dimensional education. Because of Artificial Intelligence based module, can also learn as per our requirements. AI based model of pedagogy can predict the suitable approaches for higher education student by collecting data through different apps or online movements. The AI based model also predicts the student's response after the implementation of different pedagogy approaches.

Artificial Intelligence will also help by empowering connected knowledges to realise their higher educational potential, including virtual and augmented reality. In this context the advance natural language processing helps us a lot and can give us back frictionless discourse. In Higher education the students can profit from using AI based pedagogy model to make some learning tasks easier. Decoding languages in real time, makes information more available for students internationally. It also helps fast-trackunder standing for students learning process in a separate platform.

5.7 Artificial Intelligence based institutional Approaches:

In current scenario the AI based learning analytics Technology deals with student related big data, statistics and machine learning, deep learning which are used to challenge the problems of student selection, dropout and group behaviour tendencies, and analyse student-oriented data as a means of forecasting and ultimately conveying policies for future students in higher education. A large numbers of research papers are available in

this domain, but most of this research has been done by computer scientists without the mapping of educationist views and have not yet been fully implemented in higher educations. Hence it is expected that this area will raise in importance in higher education institutions in future.

6 ADVANTAGES OF ARTIFICIAL INTELLIGENCE IN HIGHER EDUCATION

In present scenario the application of Artificial intelligence in higher education is the current needs of students as well as educators and the AI base teaching learning model can give a revolutionary impact on higher education. The possible gift of AI based model in higher education can be explore in the following ways.

(A) AI makes Administrative Tasks Easy and Cost-Effective

The AI based model for teaching learning in higher education has the ability to perform various complex administrative tasks for both academic institutes and teachers and professors in multi-dimensional mode.AI based model can easily grade homework, evaluating essays and giving value to responses of the students in a very short time with a lot of satisfaction. AI can also automate classification of paper works and it is believed to bring more value than human being. In other way the Software developers are searching various way to written responses and essays which will reduce overall cost of the system.

(b) AI based Digital Curriculum: The various reliable platform like digital lectures, video conferences and digital class room are the valuable gifts from AI Based model in higher education. With the help of robotics AI can able to empower their grammatical asset and create digital content& it is widely acceptable in higher education and this digital content easily reach to the smart class room.AI based model also can help digitize textbooks or create customized learning interfaces that is applicable in all age group and rank of students in higher education. In this context "Cram 101" is widely popular and with the help of this system we can produce digital content through chapter summaries, practice tests and flashcards. Similarly, another platform like "Netex" Learning helps lecturers and professors to outline a digital curriculum across video, audio and an online assistant in higher education.

C) AI based model makes a Bridge Between Students and the Teachers: If AI based model is implement in higher education than it becomes very easy methods for interaction in between teachers or professors and students beyond class hours. In conventional learning process the students generally cannot reach their tutors beyond classroom hours or emails. However, automated smart tutoring systems custom information from a particular student or a group of students in order to effort with them directly and stretch them satisfied feedback. However, this type of AI application is still in its promising stage. As per the views of different researchers that AI based teaching learning module becomes more effectives and it will possibly work as a full-mature digital professor and help students with their educational needs without any hassle. AI based teaching learning module will also help professors or educators to develop new ideas and problem-solving technique.

D) AI based Virtual Learning system: By rapid technological growth and impact of AI based system force the researcher to believe that the original lecturer in the classroom will no longer presence of physical teacher or

professor or human being and very soon it is replaced by AI based module or robots. It is also urged that augmented reality will be part of the smart classroom. Many universities are already developing a more digital teaching learning environment and a large numbers of universities uses AI, 3D gaming and computer simulation techniques to create student teacher interactions.

7 LIMITATIONS OF ARTIFICIAL INTELLIGENCE IN HIGHER EDUCATION

There are a large numbers of limitation are there for implementation of AI in higher education. One of the main drawback of artificial intelligence is it decreases teacher – student interaction in education. Some-times it is happened that artificial intelligence has the ability to make decisions and working itself without consent of student or teacher who are the main steak holder of higher education. But in some situations, the education life of the students needs interactions with teacher for better understanding. Other limitations are the higher education in India is facing is decreasing teaching quality, Financing condition, bad effect of Privatization, Quota Scheme(SC/ST/OBC/Others), different Political issues, Moral Issues, Gap in Supply and Demand and Growing of bellow quality Institutes.

Although the intelligent software helps people to cooperate and deal with the gradually digital world and the huge amounts of data this generates. This also appears to hold true in higher education. Another cause for little impact of AI on teaching and learning in higher education is that education inclines generally to delay behind where new skills are worried. Lack of willingness to take risks, or to adopt new novelties, and lack of funding for anything different from traditional methods of teaching influence against the acceptance of new technologies in all sectors of education, learning and development. Finally, most of the AI based module for teaching and learning today are mainly focused on content presentation and testing for understanding and comprehension. In particular, Zawacki-Richter et al. make the point that most of the research or most AI developments for teaching and learning are prepared by computer scientists or computer engineers, not educators. Hence most of the AI teaching learning model based on different algorithm or computer networks. As a result, all such AI based teaching learning model and their applications tend to accept a very behaviourist model of learning.

Different Risks of Artificial Intelligence in Higher education

(i) Data related Risk: Learning limitations and Data quality.
(ii) AI/ML Attacks: Data privacy ,training data poisoning, adversarial input & model extraction
(iii) Testing and trust: Incorrect output, lack of transparency and bias.
(iv) Bad data Algorithmic bias.
(v) inequality of Socioeconomic.
(vi) Weapons automatization.
(vii) Compliance: Policy of non-compliance

Fig. 7: Different risk factors involve in AI Based Higher education

"If AI is going to benefit education, it will require strengthening the connection between AI developers and experts in the learning sciences. Otherwise, AI will simply 'discover' new ways to teach poorly and perpetuate erroneous ideas about teaching and learning. Comprehension and understanding are indeed important foundational skills, but AI so far is not helping with the development of higher order skills in learners of critical thinking, problem-solving, creativity and knowledge management."

……Lynch (2017)

8 REQUIRED ACTIVITY FOR MAKING AI MORE RELEVANT TO TEACHING AND LEARNING IN HIGHER EDUCATION

In present scenario the applications of AI in higher education is in primary stage due to the lack of demands in higher educations. The conversion of classical education to AI based education is more critically disruptive and it requires more specific, comprehensive and diverse understanding among the students and teachers in higher education. Variety of viewpoints is still one of the most powerful methods for imminent the trials and chances that untruth gaining. A lot of researchers have claimed that the growth of artificial intelligence has extra possible to modify higher education than any other technological advance. As for examples, Klutka et al. (2018) has explored that use of AI in higher education increase outcomes , access, retention at low cost in short duration. To make Artificial Intelligence more relevant to higher education following measures need to be taken.

(A) Multidisciplinary research towards AI widely encourage in higher education.

(B) Educators need to be more involved in research on Artificial intelligence.

(C) The synchronization in between current AI applications and modern Theory of education

There is robust research indication (Garrison, 2007) that this interpersonal aspect of learning can be accomplished similarly well online and face-to-face, but it needs computer support for communication as well as transporting and testing proof attainment. Chatbots which is widely used in higher education, are the unique example of combine application for Artificial Intelligence, machine learning and deep learning

9 CONCLUSIONS

Artificial Intelligence gradually penetrate in all sphere of higher education and it has transported uprising in the education industry, by providing maximum accessibility and user-friendly platform for both student as well as educators.AI based learning model not only makes learning process more personalized and convenient for students but also It helps in increasing the amount of study time spent on each and individual student.AI provides platform to all the people the possibility to pursue their educational objectives from any corner of the world. There is no restriction in time and space in AI based learning system. By blessing of AI, the student can learn anytime, anywhere as per their requirements and also regulate the learning method to their requirements and atmosphere.

But there are some dark portions are in AI based teaching learning model, One of the most important negative effects of artificial intelligence is it reduces student teacher interaction in education, which is very essential proper mentoring. As we have already discussed before that artificial intelligence has the capability to make decisions and working itself without human interaction but in reality, in some condition, especially the educational life cycle of the students needs teacher's interactions.

Latest Technologies are attainment gradually progressed to the next higher level and the mindsets of students and teachers are changing gradually. The users of AI based learning materials have to be very serious and careful because a large number of learning materials related Artificial Intelligence applications are developed for students and educators. However, as per the track record of a foreign education consultant and visa consultant, it is explored that in education field might be a bit slower to the acceptance of artificial intelligence but I hope that the immense impact of AI based learning model will be shown in higher education very soon and I also looking for it.

"AI is likely to be either the best or worst thing to happen to humanity,"
----------scientist Stephen Hawking.

REFERENCES

1. Andrews, S, Bare, L, Bentley, P, Goedegebuure, L, Pugsley, C, Rance, B (2016). Contingent academic employment in Australian universities. Melbourne: LH Martin Institute. http://www.lhmartininstitute.edu.au/documents/publications/2016-contingent-academic-employment-in-australian-universities-updatedapr16.pdf. Accessed 26 Aug 2017.
2. Bayne, S. (2015). Teacherbot: interventions in automated teaching. Teaching in Higher Education, 20(4). doi:10.1080/13562517.2015.1020783.
3. Bostrom, N, & Yudkowsky, E (2011). The ethics of artificial intelligence. In K Frankish, WM Ransey (Eds.), Cambridge handbook of artificial intelligence, (pp. 316–334). Cambridge, UK: Cambridge University Press.
4. Chen, X, Wang, Y, Nakanishi, M, Gao, X, Jung, TP, Gao, S. (2015). High-speed spelling with a noninvasive brain–computer interface. Proceedings of the National Academy of Sciences, 112(44), E6058–E6067.
5. Deakin University (2014). IBM Watson now powering Deakin. A new partnership that aims to exceed students' needs. http://archive.li/kEnXm. Accessed 30 Oct 2016.
6. Gallagher, P. (2015). The University of Warwick launches new department to employ all temporary or fixed-term teaching staff. The Independent, 24 September 2015. http://www.independent.co.uk/news/education/education-news/the-

university-of-warwick-launches-new-department-to-employ-all-temporary-or-fixed-term-teaching-10160384.html. Accessed 1 May 2017.
7. González, VM, Robbes, R, Góngora, G, Medina, S (2015). Measuring concentration while programming with low-cost BCI devices: differences between debugging and creativity tasks. In Foundations of augmented cognition, (pp. 605–615). Los Angeles, CA: Springer International Publishing.
8. Neven, H. (2013). Launching the quantum artificial intelligence lab. Google Research Blog, December 8, 2015. http://googleresearch.blogspot.com.au/2013/05/launching-quantum-artificial.html. Accessed 30 Dec 2016.
9. Tsur, O., Davidov, D. and Rappoport, A. (2010). Semi-supervised recognition of sarcastic sentences in Twitter and Amazon. Proceedings of the Fourteenth Conference on Computational Natural Language Learning, pp. 107-116. Uppsala: Association for Computational Linguistics.
10. U.S. National Science and Technology Council (2016). National Artificial Intelligence Research and development strategic plan. Washington DC: Networking and Information Technology Research and Development Subcommittee.

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"AN ANALYTICAL STUDY ON EFFECTIVENESS OF MARKETING TECHNIQUES IMPLEMENTED BY PRIVATE BANKS TO INCREASE SALES VOLUME OF INSURANCE PRODUCTS" (WITH SPECIAL REFERENCE OF INDUSIND BANK)

Dr. Lalit Kumar Dubey
Associate Professor, (AIMSR Indore)

Abstract- In today's scenario different kind of Marketing techniques are used by the Businessman to enhance sales volume of their product in the consumer market .Research shows here, A customer mainly ignores the advertisement, SMS , E-mail ,and many other marketing offers made by the companies to sale Insurance products in India that opinion of insurance customers and Managerial persons who are utilizing above said marketing techniques to enhance sales volume of Insurance products is not same. The analysis shows that, customer mainly influenced by Face to Face Interaction with them as compared to another techniques where as manager's opinion is that all the Direct Marketing Technique are useful equally. So finally it can be concluded that opinion of the customers may be deemed as more reliable as compare to Managerial persons.

Keywords: Marketing Techniques, Insurance Products, Consumer Perception.

1 RATIONALE OF THE STUDY

Study is related with the process of applying direct marketing techniques for selling of Insurance Products in the market and perception of customer toward these techniques.

1.1 Objectives of The Study:

The main objectives behind the study are follows:

1. To study & assess the Impact of direct marketing techniques on sales volume of Insurance Product among customer in Barwani region.
2. To analyze and evaluate techniques used to attract customer toward their insurance product.
3. To recommend to Insurers to provide better after sale services to customer.

2 RESEARCH METHODOLOGY

Personal interview method has been applied for data collection from the respondents in Barwani with the help of an interview schedule and the use of structured questionnaire and Information from business analysts and customers of IndusInd Bank situated at District Barwani through direct conversation with them.60 customers of IndusInd Bank randomly have been selected and information regarding Impact of direct marketing

techniques collected through structured questionnaires. The Information also collected from the managerial persons of this bank. Secondary data have been collected through the use of various books, magazines, library, internet and marketing journals. The statistical tools for analyzing data so collected by the use of questionnaire by applying percentage analysis and according to requirement of study the formulated hypothesis have been tested by applying the chi-square test.

Formation of Hypothesis on the basis of Customers Point of view by giving the equal importance to each option of each attribute in the questionnaire.

1. Direct Phone Call

H0 = Each option of Attribute Direct Phone Call to customer is equally responded.

H1= Each option of Attribute Direct Phone Call to customer is not equally responded.

2. SMS to a Person

H0 = Each option of Attribute SMS to a Person to customer is equally responded.

H1= Each option of Attribute SMS to a Person to customer is not equally responded.

3. Face to Face Interaction

H0 = Each option of Attribute Face to a Face Interaction to customer is equally responded.

H1= Each option of Attribute Face to a Face Interaction to customer is not equally responded.

4. E-Mail

H0 = Each option of Attribute E-Mail to customer is equally responded.

H1= Each option of Attribute E-Mail to customer is not equally responded.

5. Telemarketing

H0 = Each option of Attribute Telemarketing to customer is equally responded.

H1= Each option of Attribute Telemarketing to customer is not equally responded.

6. Social Media

H0 = Each option of Attribute Social Media to customer is equally responded.

H1= Each option of Attribute Social Media to customer is not equally responded.

7. Newspaper

H0 = Each option of Attribute Newspaper to customer is equally responded.

H1= Each option of Attribute Newspaper to customer is not equally responded.

8. Coupon

H0 = Each option of Attribute Coupon to customer is equally responded.

H1= Each option of Attribute Coupon to customer is not equally responded.

9. Direct Response

H0 = Each option of Attribute Direct Response to customer is equally responded.

H1= Each option of Attribute Direct Response to customer is not equally responded.

10. Promotional Material

H0 = Each option of Attribute Promotional Material to customer is equally responded.

H1= Each option of Attribute Promotional Material to customer is not equally responded.

2.1 Formation of Hypothesis on the basis of Managers Point of view

1. Direct Phone Call

H0 = Each option of Attribute Direct Phone Call to customer is equally responded.

H1= Each option of Attribute Direct Phone Call to customer is not equally responded.

2. SMS to a Person

H0 = Each option of Attribute SMS to a Person to customer is equally responded.

H1= Each option of Attribute SMS to a Person to customer is not equally responded.

3. Face to Face Interaction

H0 = Each option of Attribute Face to a Face Interaction to customer is equally responded.

H1= Each option of Attribute Face to a Face Interaction to customer is not equally responded.

4. E-Mail

H0 = Each option of Attribute E-Mail to customer is equally responded.

H1= Each option of Attribute E-Mail to customer is not equally responded.

5. Telemarketing

H0 = Each option of Attribute Telemarketing to customer is equally responded.

H1= Each option of Attribute Telemarketing to customer is not equally responded.

6. Social Media

H0 = Each option of Attribute Social Media to customer is equally responded.

H1= Each option of Attribute Social Media to customer is not equally responded.

7. Newspaper

H0 = Each option of Attribute Newspaper to customer is equally responded.

H1= Each option of Attribute Newspaper to customer is not equally responded.

8. Coupon

H0 = Each option of Attribute Coupon to customer is equally responded.

H1= Each option of Attribute Coupon to customer is not equally responded.

9. Direct Response

H0 = Each option of Attribute Direct Response to customer is equally responded.

H1= Each option of Attribute Direct Response to customer is not equally responded.

10. Promotional Material

H0 = Each option of Attribute Promotional Material to customer is equally responded.

H1= Each option of Attribute Promotional Material to customer is not equally responded.

2.2 Percentage Analysis (Customers' Response)

S No.	Very Low Influence	Low Influence	Moderate Influence	High Influence	Very High Influence
Direct Phone Call	3%	37%	60%	0%	0%
SMS to a Person	30%	63%	7%	0%	0%
Face to Face Interaction	0%	0%	0%	30%	70%
E-Mail	53%	33%	14%	0%	0%
Telemarketing	23%	54%	23%	0%	0%
Social Media	77%	20%	3%	0%	0%
Newspaper	10%	56%	34%	3%	0%
Coupon	63%	34%	3%	0%	0%
Direct Response	0%	0%	0%	43%	57%
Promotional Material	0%	0%	23%	77%	0%

2.3 Percentage Analysis (Managers' Response)

S No.	Very Low Influence	Low Influence	Moderate Influence	High Influence	Very High Influence
Direct Phone Call	60%	40%	0%	0%	0%
SMS to a Person	10%	50%	10%	30%	0%
Face to Face Interaction	0%	0%	30%	40%	30%
E-Mail	40%	20%	40%	0%	0%
Telemarketing	10%	30%	50%	10%	0%
Social Media	10%	50%	20%	20%	0%
Newspaper	10%	20%	20%	40%	10%
Coupon	10%	30%	50%	10%	0%
Direct Response	10%	20%	0%	40%	30%
Promotional Material	0%	0%	0%	30%	70%

2.4 Chi-Square Test done to test the Hypothesis (Customer's point of view)

Descriptive Statistics

Attributes	N	Mean	Std. Deviation	Minimum	Maximum
Direct Phone call	60	2.57	.568	1	3
SMS to a Person	60	1.77	.568	1	3
Face to Face	60	4.70	.466	4	5
E-Mail	60	1.60	.724	1	3
Telemarketing	60	2.00	.695	1	3
Social Media	60	1.27	.521	1	3
Newspaper	60	2.30	.702	1	4
Coupon	60	1.40	.563	1	3
Direct Response	60	4.57	.504	4	5
Promotional Material	60	4.00	.599	3	5

Test Statistics

	Direct Phone call	SMS to a Person	Face to Face	E-Mail	Telemarketing	Social Media	Newspaper	Coupon	Direct Response	Promotional Material
Chi-Square	14.600[a]	14.600[a]	4.800[b]	7.200[a]	5.400[a]	26.600[a]	18.800[c]	16.200[a]	.533[b]	18.050[d]
df	2	2	1	2	2	2	3	2	1	2
Asymp. Sig.	.001	.001	.028	.027	.067	.000	.000	.000	.465	.000

3 TESTING OF HYPOTHESIS (CUSTOMER POINT OF VIEW)

3.1 Direct Phone Call:-

Signification value of Chi in respected column shown is (0.001) which is much shorter than considered P value (0.05), hence H0 is rejected and H1 is accepted. Each option of Attribute Direct Phone Call to customer is not equally responded.

3.2 SMS to A Person

Signification value of Chi in respected column shown is (0.001) which is much shorter than considered P value (0.05), hence H0 is rejected and H1 is accepted. Each option of Attribute SMS to a Person to customer is not equally responded.

3.3 Face to Face Interaction

Signification value of Chi in respected column shown is (0.028) which is much shorter than considered P value (0.05), hence H0 is rejected and H1 is accepted. Each option of Attribute Face to Face Interaction to customer is not equally responded.

3.4 Email

Signification value of Chi in respected column shown is (0.027) which is much shorter than considered P value (0.05), hence H0 is rejected and H1 is accepted. Each option of Attribute E-Mail to customer is not equally responded.

3.5 Telemarketing

Signification value of Chi in respected column shown is (0.067) which is greater than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Telemarketing to customer is equally responded.

3.6 Social Media

Signification value of Chi in respected column shown is (0.000) which is much shorter than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Telemarketing to customer is not equally responded.

3.7 Newspaper

Signification value of Chi in respected column shown is (0.000) which is much shorter than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Telemarketing to customer is not equally responded.

3.8 Coupon

Signification value of Chi in respected column shown is (0.000) which is much shorter than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Telemarketing to customer is not equally responded.

3.9 Direct Response

Signification value of Chi in respected column shown is (0.465) which is greater than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Telemarketing to customer is equally responded.

3.10 Promotional Material

Signification value of Chi in respected column shown is (0.000) which is much shorter than considered P value (0.05), hence H0 is accepted and

H1 is rejected. Each option of Attribute Telemarketing to customer is not equally responded.

3.11 Chi-Square Test done to test the Hypothesis (manager's point of view)

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Direct Phone call	10	1.40	.516	1	2
SMS to a Person	10	2.40	.843	1	4
Face to Face	10	4.00	.816	3	5
E-Mail	10	2.00	.943	1	3
Telemarketing	10	2.60	.843	1	4
Social Media	10	2.50	.972	1	4
Newspaper	10	3.20	1.229	1	5
Coupon	10	2.60	.843	1	4
Direct Response	10	3.60	1.430	1	5
Promotional Material	10	4.70	.483	4	5

Test Statistics

	Direct Phone call	SMS to a Person	Face to Face	E-Mail	Telemarketing	Social Media	Newspaper	Coupon	Direct Response	Promotional Material
Chi-square	.400[a]	4.400[b]	.200[c]	.800[c]	4.400[b]	3.600[b]	3.000[d]	4.400[b]	2.000[b]	1.600[a]
df	1	3	2	2	3	3	4	3	3	1
Asym. Sig.	.527	.221	.905	.670	.221	.308	.558	.221	.572	.206

4 TESTING OF HYPOTHESIS (MANAGERS POINT OF VIEW)

4.1 Direct Phone Call:-

Signification value of Chi in respected column shown is (0.527) which is greater than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Direct Phone Call to customer is equally responded.

4.2 SMS to A Person

Signification value of Chi in respected column shown is (0.221) which is greater than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Direct Phone Call to customer is equally responded.

4.3 Face to Face Interaction

Signification value of Chi in respected column shown is (0.905) which is greater than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Direct Phone Call to customer is equally responded.

4.4 Email

Signification value of Chi in respected column shown is (0.670) which is greater than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Direct Phone Call to customer is equally responded.

4.5 Telemarketing

Signification value of Chi in respected column shown is (0.221) which is greater than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Direct Phone Call to customer is equally responded.

4.6 Social Media

Signification value of Chi in respected column shown is (0.308) which is greater than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Direct Phone Call to customer is equally responded.

4.7 Newspaper

Signification value of Chi in respected column shown is (0.558) which is greater than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Direct Phone Call to customer is equally responded.

4.8 Coupon

Signification value of Chi in respected column shown is (0.221) which is greater than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Direct Phone Call to customer is equally responded.

4.9 Direct Response

Signification value of Chi in respected column shown is (0.572) which is greater than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Direct Phone Call to customer is equally responded.

4.10 Promotional Material

Signification value of Chi in respected column shown is (0.206) which is greater than considered P value (0.05), hence H0 is accepted and H1 is rejected. Each option of Attribute Direct Phone Call to customer is equally responded.

4.11 Main Findings

To study & assess the Impact of marketing techniques on sales volume of Insurance Product among customer in Barwani region. It has been found that customer mainly influenced by Face to Face Interaction where as

manager's opinion is that all the Direct Marketing Techniques are useful equally. The customers mainly as far as the insurance concerned don't trust on indirect communication with an unknown persons. The managerial persons' equally response toward all the attributes may be due to not making clear about their most effective technique due to fear of their competitors.

5 CONCLUSION

The Chi Square Test and Percentage analysis of collected data are presenting a clear cut picture, that opinion of insurance customers and Managerial persons who are utilizing above said marketing techniques to enhance sales volume of Insurance products is not same. The analysis shows that, customer mainly influenced by Face to Face Interaction with them as compared to an other techniques where as manager's opinion is that all the Direct Marketing Technique are useful equally. So finally it can be concluded that opinion of the customers may be deemed as more reliable as compare to Managerial persons.

BIBLIOGRAPHY/REFERENCES

1. K. Suresh (2005) Marketing-Research (Approaches And Techniques)
2. Nirmal Singh and Devendra Thakur (First Edition 1991) Marketing Principle & Techniques.
3. Ranjan Saxena (Third Edition 2007) Marketing Management.
4. Michel J. Etzel, Bruce J. Walker, William J. Stantin, Ajay Pandit (13th Edition 2006) Marketing Concept & case.
5. A Mukund, Sanjib Dutta (First Edition 2003) Marketing Management.
6. Walker Mullins Boyd Larreche (5th Edition 2006) Marketing Strategy.
7. Naresh K. Malhotra (5th Edition 2007) Marketing-Research

- http://en.wikipedia.org/wiki/Direct_marketing
- http://www.thefreedictionary.com/direct+marketing
- http://blog.neolane.com/direct-marketing-2/definition-direct-marketing/
- http://www.indusind.com/indusind/wcms/en/home/personal-banking/index.html
- http://www.indusind.com/indusind/wcms/en/home/personal-ng/insurance/index.html
- http://www.indusind.com/indusind/banking/insurance/motor-insurance/index.html
- http://www.indusind.com/indusind/wcms//insurance/home-insurance/index.html
- http://www.indusind.com/ipersonal-banking/insurance/travel-insurance/index.html
- http://www.indusind.com/indusind/wcms/en/home/personalbanking/insurance

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PERSPECTIVES & ISSUES FOR MANAGING THE HUMAN RESOURCE IN INDUSTRY

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This section presents an expansive outline of the current situation of human asset the board (HRM) in India, the public establishments that help the HRM structure and the difficulties that the HR calling and organizations in India face. To give the necessary setting, this segment gives a short outline of some pertinent segment subtleties of the Indian economy and society.

India is a republic in South Asia; and is additionally the biggest popular government on the planet. It has the second most elevated populace on the planet after China, which according to the 2011 Census has contacted 1.21 Billion individuals living in 640 areas of 28 states and 7 Union Territories. The education rate among the populace for a very long time or more for the nation remains at 74%; the relating figures for guys and females are 82.12 and 65.46 percent individually. The thickness of populace (per sq. km) is 382 and the sex proportion (females per 1,000 guys) is 940.

India is administered by a Constitution that came into power on 26 January, 1950. It accomplished freedom from the British on August 15, 1947. The nation has 179 dialects and 544 lingos (Saini, 2011). The Constitution perceives 22 dialects, 'Hindi' and English being the two authority dialects. India has one of the biggest English talking populaces in the Asia-Pacific district (Budhwar, 2003), which is likewise its significant benefit in the quick globalizing world.

1 HISTORICAL DEVELOPMENTS IN HRM

One of the principal organizations to have embraced formal worry for work in India is the Tata Iron and Steel Manufacturing Company Ltd (presently known as Tata Steel; as of now, this organization is additionally the main Indian global organization). The development of the staff work in India is ascribed to the arrangement interestingly of work government assistance officials by this organization in 1920; others went with the same pattern a lot later. Curiously, arrangements like those given by the Cadbury in Britain were given by the Tata bunch in India in around this time. (See Budhwar and Khatri, 2001). One of the soonest work enactment in the nation arose as the Trade Unions Act of 1926, which gave formal acknowledgment to the laborers' all in all correct to shape associations. The Royal Commission of Labor 1931 suggested the arrangement of work government assistance officials, and the Factories Act of 1948 made that compulsory in all processing plants utilizing at least 500 specialists. Around when India got freedom in 1947 and following that various bits of work and modern enactment were

established which prompted dealing with the work enactment as a significant space of action for faculty directors. The Industrial Disputes Act 1947 (IDA) shaped quite possibly the main spaces of work enactment, which imagines an assuagement mediation intervention model of modern questions settlement. It accommodates mandatory arbitration of mechanical debates - the two rights and interest. However necessary settling framework was a subsequent World-War legitimate instrument utilized by the British to contain modern clash during the conflict time, it was formalized by the British Indian government by fusing this idea in the IDA, in April, 1947. Regardless of much discussion and contentions in post-freedom India, the framework actually endures even in goal of interest questions; and there are no indications of its substitution by a less-managed aggregate dealing system of the western sort.

After freedom, during the 1950s, two expert bodies identified with the staff work arose. The Indian Institute of Personnel Management (IIPM), a partner of the Institute of Personnel Management in the United Kingdom, was shaped at Calcutta and the National Institute of Labor Management (NILM) at Bombay. Since 1960s onwards, gigantic case law on work enactment arose which added significant legitimate intricacy to the staff the board work. In 1960s, the faculty work additionally started to grow past the government assistance angle with three spaces of work government assistance, mechanical relations and staff organization creating as the constituent jobs for the arising calling. In 1970s, the push of faculty work moved towards more prominent hierarchical 'effectiveness', and by 1980s it started to utilize and zero in on terms like authoritative turn of events (OD) and human asset advancement (HRD). The two expert bodies for example IIPM and NILM converged in 1980 to frame the National Institute of Personnel Management (NIPM) at Bombay.

In nineteen nineties and later, HRD turned into the principle focal point of the staff work separated from the current spotlight on IR particularly in bigger organizations. In any case, this was seen primarily as a device for further developing business execution. The vivacious endeavors by certain scholastics helped in promoting the idea of HRD both among scholastics and specialists. Projects of HRD and authoritative turn of events (OD) at the individual endeavor level out in the open just as private areas are being taken on. The development of "The National HRD Network" in 1985 was a milestone even throughout the entire existence of HR advancement in the country. In February 2012 it had an enrollment of 12500 individuals that included HR and different supervisors just as scholastics. It is the biggest discussion of discussing HR mediations that has unquestionably honed capacities of HR experts, as additionally benchmarking the best HR rehearses by various firms. On the above date, there were 30 provincial sections of HRD Network in various pieces of India. Indeed, even as this discussion has been named HRD Network for verifiable reasons, for all reasons its exercises incorporate all spaces of HRM including mechanical relations. Since

nineteen nineties can likewise be seen height in the situation with staff administrators to the board level; however just in expertly oversaw associations. There has likewise been a huge upsurge in re-naming the title of work force troughs to HRD administrators or HR chiefs, and faculty division as HRD or HR office. All the while, because of the reception of globalization as additionally the reception of new innovation impressive scaling down occurred somewhat recently of the twentieth century. This brought about the requirement for the estimation of HR execution. The idea of HRD scorecard is being utilized and presently a few measurements are being utilized as gadgets to quantify adequacy of human advancement exercises.

2 NATIONAL CULTURE AND HRM

The long guideline of the British in the nation advanced feudalism, disparity and order among the metropolitan just as non-metropolitan Indian populace. The position framework in the nation also has likewise assumed a contributory part in advancing chain of importance and imbalance. The family-claimed business houses utilized the teaching of these cultural qualities in rehearsing a sort of neo-feudalism in industry. This is reflected in the hierarchical constructions and social relations which reflect progressive system, status awareness, power distance and low independence. These qualities have reinforced progressive prevalent subordinate relationship which goes about as a sort of a system of social control on the representative. Studies have shown that Indian chiefs characteristic high need to the significance of social suspicions which guide their representatives' discernments and authoritative reasoning. It is additionally uncovered that the normal Indian qualities, standards of conduct and customs practice significant impact on their HRM strategies and practices (Budhwar, 2001). Indian social and social climate puts power on solid family ties that weaken independence, bringing about more prominent reliance on others. This features the significance of relational relations in individuals the executives in India, more than the significance given to it in different social orders. The center bases of the administration framework in friendly and family connections would then be able to be ascribed to different variables including a solid position framework, agrarian based society, high rate of ignorance, neediness and apathy of the state framework to the necessities of the individual (Budhwar, 1999).

Kanungo and Mendonca (1994) have shown critical social contrasts among India and western nations based on Hofstede's (1991) four starting social elements of force distance, vulnerability evasion, independence and manliness. India stands moderately high on vulnerability aversion and force distance and somewhat low on independence and manliness measurements. Moderately high vulnerability aversion suggests a reluctance to face challenges and acknowledge authoritative change. The overall low independence suggests

that family and gathering accomplishments outweigh work results. The general high force distance infers that chiefs and subordinates acknowledge their overall situations in the authoritative chain of command and work from these decent positions. Submission is worked with by the as far as anyone knows predominant authority of the position holder and not on any normal premise. This is just by righteousness of the position intrinsic in that status. The general low manliness infers that representatives' direction is towards customized connections instead of towards execution (Kanungo and Mendonca, 1994: 450). On the fifth component of long haul versus transient direction, generally, India is known as a drawn out arranged country (see Tripathi 1990). Nonetheless, consequences of a new exploration (see Budhwar and Sparrow, 2002b) propose that because of the extreme pressing factor made by the progression of financial arrangements and the presence of unfamiliar administrators in Indian associations, the subject of quick endurance has gotten more significant. This clarifies a new shift of accentuation towards short-termism. Notwithstanding, one ought to be mindful in summing up based on any such investigation.

3 NATIONAL INSTITUTIONS SUPPORTING HRM FRAMEWORK

3.1 The IR Framework

The sign of the Indian IR is monstrous state presence in it through the Industrial Disputes Act, 1947 (IDA). This Act enables the "proper Government", in its circumspection, to allude a mechanical question for mediation either on disappointment of appeasement or even with no retreat to mollification. Aside from the IDA, two different laws structure part of the IR law in the nation for example the Trade Unions Act 1926 (TUA) and the Industrial Employment (Standing Orders) Act 1946 (IESOA). The TUA gives on laborers opportunity of affiliation and gives to associations resistance against common and criminal risk for intrigue in making a mechanical move. The IESOA looks to guarantee normalization of the terms of business and their affirmation by a Government official, who is obliged to fulfill himself that they are simply and reasonable. These arrangement of laws were planned to work with acknowledgment of individual and aggregate privileges of laborers.

Advancing mechanical development with social equity has projectedly directed the IR strategy of the Indian government. Towards this end, aside from giving a facilitative lawful structure, the Central Government has successfully utilized a foundation called consultative three sided gathering for advancing modern harmony. This is known as the Indian Labor Conference (ILC) that unites agents of businesses, work and government to its gatherings that are held yearly since 1940. Quite possibly the most outstanding non-administrative drives in IR came from the Government in 1958 because of the thoughts at this gathering as the Code of Discipline and the Joint Management Councils. These instruments were to be utilized as a proper reason for acknowledgment of

associations and help of aggregate bartering. Be that as it may, the effect of these bodies was only brief (Johri, 1998: 49); and they have now nearly diminished with the progression of time. Legitimate means and intercessions kept on ruling the IR scene in the nation; however recently, aggregate interest questions once in a while precede the arbitration apparatus because of significant dread in the working people of the rising administrative privileges in the neo-liberal world. Work is currently more inclined to tolerating the one-sided choices of the businesses in regards to pay and advantages, particularly in the private area.

3.2 Unions

Being a majority rules system, India has somewhere around an apparently association cordial lawful structure of IR. The necessary arbitration arrangement of the IDA has kept the associations powerless (Saini, 1999). The initial twenty years after the autonomy saw quick unionization of the coordinated area in the country (both private and public). Be that as it may, unionization in India began declining after the popular Bombay Textile Strike which endured over a year and has not been authoritatively removed till today (Venkata Ratnam, 2001). This has brought an ocean change in the idea of aggregate haggling, which is not so great less on industry premise and more on unit premise.

Participation of associations that are submitting returns is still low; according to the most recent evaluations it is scarcely 4% of the absolute labor force; the all out worker's guild enrollment according to the most recent appraisals is around 20 million in a total labor force of around 500 million of every 2011. This is notwithstanding the way that during the 1970s and 80s the legal executive conveyed a few decisions in the space of modern relations and other work laws which mirrored its demeanor of outrageous compassion for the functioning individuals and less to the fundamental standards of mechanical association. Be that as it may, in the present monetary climate a few parts of the current legitimate structure is needed to change its solid favorable to work position. Of late, a portion of the new work decisions mirror the conviction that the legal executive is more thoughtful with the businesses and understands the requirement for proficiency, discipline and usefulness in the new climate. As of now, there is diminished laborers' protection from businesses' change drives, notwithstanding patches of common accomplishment in opposing the individualization of IR through HRM. Strangely, as opposed to public firms, the effect of associations on the HRM approaches and practices of MNCs working in India is insignificant (see Budhwar and Bjorkman, 2003), however there are many instances of association achievement incorporating through grave viciousness in the two cases talked about by Saini (2006 and 2012). In general, notwithstanding, laborers' position is gradually changing and turning out to be more helpful towards their bosses.

4 CONCLUSION

This part has zeroed in on the current situation with HRM in India that has arisen through its authentic development, the institutional structure that upholds the current HR worldview in the country, the difficulties that Indian HR as of now faces, and the future goals that HR chiefs need to take care of. It has featured that there is an amazing advancement in the professionalization of HRM in the country in the coordinated area. Endeavors towards more prominent polished methodology can be ascribed somewhat to the reformist strategies brought along and sought after by the MNCs and the expertly overseen Indian associations including a portion of the public area undertakings. The mentality towards business practice overall is changing, and individuals are acknowledging how far they need to change in order to adapt to the change needs. Among others, the key issues that have unfavorably impacted the administration of HR in India include: the issue of expertise and ability advancement, the inflexibility brought about by the work law structure, shortage of ability to expect positions of authority, the pecking order driven outlooks of managers, low worker commitment by and large, HR experts who can play the essential accomplice's job, dynamic Government's uncertainty in issue of privatization and dis-speculation, and delicacy of political alliances that antagonistically influences government's eagerness to take intense choices.

REFERENCES

1. Adams, S. and Krishnan, P. (2003) “Documentation of the Consultative Workshop on the Project SCEC” under the programme: Restructuring and Strengthening the National Vocational Training System (NVTS). Proceeding of a two-day workshop organized by GTZ (Germany) and DGET, Ministry of Labour, Government of India, India International Centre, New Delhi, 16-17 January 2003
2. Budhwar, P. (2003) “Culture and Management in India” in M. Warner (Ed.) *Culture and management in Asia.* London: Routledge, 66-81.
3. Budhwar, P. (2001), “Human resource management in India” in Budhwar, P. and Yaw A. Debrah (Eds.) *Human Resource Management in Developing Countries.* London: Routledge, 75-90.
4. Budhwar, P. (1999) “Indian Management style and HRM” in M. Tyab (ed.) *International Business Text.* London : Pitman, 534-540.
5. Budhwar, P. and Khatri, N. (2001) “Comparative Human Resource Management in Britain and India: An Empirical Study. *International Journal of Human Resource Management.* 13 (5), 800-826.
6. Budhwar, P. and Sparrow, P. (2002a) “An Integrative Framework for Determining Cross-National Human Resource Management Practices” *Human Resource Management Review.* 12 (3), 377-403.
7. Budhwar, P. and Sparrow, P. (2002b) “Strategic HRM Through the Cultural Looking Glass: Mapping Cognitions of British and Indian HRM Managers”, *Organization Studies.* 23 (4), 599-638.
8. Budhwar, P. and Sparrow, P. (1998) “National Factors Determining Indian and British HRM Practices: An Empirical study”, *Management International Review*, 38 (special issue 2), 105–121.
9. Budhwar, P. and Sparrow, P. (1997), “Evaluating Levels of Strategic Integration and Development of Human Resource Management in India”, *The International Journal of Human Resource Management*, 8: 476-494

10. Budhwar, L., Reeves, D. and Farrell, P. (2000) "Life Goals as a Function of Social Class and Child Rearing Practices: A Study of India", *International Journal of Intercultural Relations,* 24: 227-245.
11. Budhwar, P. and Verma, A. (2011) "Emerging HR management trends in India and the way forward," Organization Dynamics, 40 (4), 317-325.
12. Cooke, Fang and Saini, Debi (2010), "Diversity management in India: A study of organizations in different ownership forms and industrial sectors," *Human Resource Management,* 49:3, pp. 377-400.
13. Cooke, Fang and Saini, Debi (2010a), '(How) does the HR strategy support an innovation-oriented business strategy? An investigation of institutional context and organizational practices in Indian firm,' *Human Resource Management,* 49:3, pp. 477-500.
14. Economic Times (2011), "Skill Shortages present hurdle to India's growth: World Bank," *Economic Times*, June 5.
15. Government of India (2009) *Report on Conditions of Work and Promotion of Livelihoods in the Unorganized Sector*, National Commission for Enterprises in the Unorganized Sector (NCEUS) New Delhi.

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TAKING PART COUNTS: ADOLESCENTS EXPERIENCES OF THE TRANSITION FROM INACTIVITY TO ACTIVE PARTICIPATION IN SCHOOL-BASED PHYSICAL EDUCATION

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Abstract- Identifying ways to increase and sustain active living among young people represents a priority for health promotion interventions. This qualitative study explored the experiences of adolescent boys and girls in the United Kingdom (aged 14–15 years) who had made the transition from inactivity to active participation in physical education (PE). The setting was a secondary school that had modified the PE programme, with the aim of increasing participation rates. Thirty-one, self-identified, formerly 'PE adverse' students were interviewed in focus groups in the school setting. Previously, respondents felt that they had been constructed as physically marginal individuals. Having a physically 'marginal body' was perceived as being detrimental to emotional health. The new PE resulted in respondents possessing a performing and achieving physical identity. Boys gained a sense of security in their physical identity and cultural change had removed the aggression from interacting with other physically active peers. Girls spoke of increased self-confidence, including acquiring the psychological resources to participate in community-based activities. Effective health promotion interventions for inactive adolescents are likely to move beyond solely endorsing the benefits of physical activity or increasing choice and instead address the potential emotional risks and value of participation from the adolescents' perspective.

1. INTRODUCTION

Despite active lifestyles having an array of positive health and social benefits for young people, decreasing levels of physical activity among children and adolescents is rapidly becoming a global phenomenon [1–3]. Recent data show that among UK 13- to 15-year olds, 30–40% of boys and 50–60% of girls do not undertake the recommended 1 h of moderate physical activity per day [4, 5]. Identifying ways to increase and sustain active living by children and adolescents currently represents a priority area for health promotion interventions [6]. The root cause of inactivity has frequently been associated with an increase in sedentary activities such as computer games [7], coupled with a reduction in participation in school sports. Increasing the levels of physical education (PE) in schools has been perceived as one way of getting young people involved in physical activity [8].

Although PE has been squeezed in the curriculum, reduced participation levels in general cannot be simply equated with reduced

availability of PE in school. As participation in physical activity moves from an adult structured and managed activity (either by schools or by parents) to a choice activity, participation rates fall dramatically [9–11]. This decline is particularly evidenced in adolescent girls [12–14]. Work concerned with adolescent activity rates has identified facilitators and barriers to activity in adolescence as shaped by a complex interrelationship between personal identity and goals on the one hand and the degree of support from the social environment on the other [15, 16].

Although attention has tended to focus on identifying adolescents as either active or inactive [17, 18], less is known about the perspectives and experiences of the adolescent who has successfully moved from inactivity to activity. Consideration of the views of adolescents, who have made the transition away from inactivity, provides a means of exploring the contribution of school-based PE as a health promotion strategy for young people. The possibility of adolescent-centred strategies for supporting participation in physical activity within schools has been reflected in recent policy developments from the United Kingdom, that have highlighted the need for flexible, inclusive provision that provides a variety of activities [8, 19].

In terms of the strategies that educators and health promotion specialists might use in practice to evaluate and change PE delivery there are very few programmes that appear to consider the perspectives of the adolescent and involve young people in the implementation process. Although there are some exceptions, for example, the Jumpstart Teen programme in the United States offers lesson plans that detail how to aid adolescents to understand their feelings about physical activity.

2. BACKGROUND AND THEORETICAL FRAMEWORK

Feminist work on sports participation and the new social studies of childhood both offer theoretical frameworks for understanding participation in physical activity during adolescence. The new social studies of childhood commences with the definition of the child as an active social actor who has the ability to make sense of their own life, and employ those meanings to negotiate with and resist the surrounding adult world; including resisting being moulded towards the 'end goal of adult society.'

Consequently, how young people understand health behaviour and undertake practices of health maintenance may be shaped by different interpretations and priorities to those of the adults in their lives. Viewing the child as a social actor and the attendant rejection of them as 'cultural dupes' has implications for the development of health promotion strategies and the public health agenda in relation to the improvement of physical activity levels and the linked aims of a reduction in childhood obesity. In particular, a rejection of the simplistic view that the cause of increasing inactivity is caused solely by young peoples' problematic

lifestyles, as being too focused around adult defined damaging behaviours, such as computer game playing.

Instead, a more complex relationship needs to be considered, one where sedentary behaviours can compete with participation in physical activity, but can equally coexist. Children are also embodied social actors, learning that part of their social value is conveyed through having bodies that are socially valued. The regimen of the school requires children not only to acquire 'docile bodies', but also to display performing, athletic, bodies during PE. Consequently, the way PE is experienced by young people may have profound implications for their identity and sense of embodied selves.

Moreover, adolescent identities cannot be assumed to be fixed as either active or inactive, but instead are open to change as the young person negotiates and responds to alterations in activity provision and their social environment. Feminist work has been particularly important for shifting concern away from girls as problem non-participants who do not wish to develop athletic bodies, to providing a critique of the gendered character and pedagogy of PE provision. Aspects of the PE curriculum have been shown to reinforce the construction of negative physical identities for adolescent girls through less access and choice, hostile responses from boys and the dominance of a competitive discourse in pedagogy that did not support the development of their skills.

2.1 The Study

The location of the study was a secondary school that had in the past 18 months made alterations in the delivery of PE. The school was located in a sub-ward of significant deprivation and poor health status. The index of multiple deprivation rated the ward with a high score of 28.06, and with a poor health domain score of +0.33 (a score >0.10 is considered to constitute a poor health area). The ethnic composition of the area was primarily white in origin. The adolescents who participated in the research all defined themselves as having been previously either actively resistant to participation in PE lessons or having had an intense dislike of school PE, even if they attended lessons.

The specific aim of the new programme introduced in the school was to encourage greater participation in PE lessons. Teachers felt that they had successfully moved from a situation of almost non-existent participation in PE across the year group to a situation where only three to four students remained as non-participants in the group. Modifications to the PE provision had been initiated after a new head of PE was appointed, who had been concerned about the low numbers of participants in PE lessons, especially among the girls. The changed programme involved the entire PE department plus any student teachers on placement, support was also provided by the head and deputy head teachers.

Additional resources were provided for the employment of a part-time dance teacher, following requests from students. The development of the new PE programme involved consultation with the year group (then in Year 8). The programme of change was initially devised by the teaching team who drew from the critiques of PE outlined by their students, especially girls. The changes to the PE provision initially involved Year 8 (Year 9 at the time of the research) and were subsequently rolled out to the whole school. Explicit attempts were made to change both the form of provision (types of activities and extent of choice) and the culture (e.g. staff approaches to competitiveness) of the PE, involving the following:

2.2 Giving Young People Control

Underpinning the strategies was an intention to involve the students in decision making. Students re-designed the PE uniform and suggested new activities (such as dance, use of trampolines, gym sessions).

2.3 Changes to the Physical Environment

Small investments were made in terms of updating the equipment, design and decoration for the sports hall. Based on student feedback, changes were also made to improve the experience of using the changing rooms, such as the provision of quality soap dispenser and shower gel so that girls in particular would find them pleasant environments.

2.4 Giving Young People Choice

Students were given choice over which part of the PE uniform they wore to lessons. Students were able to choose between activities and between an indoor and an outdoor activity.

2.5 Empowerment

A number of strategies were designed to increase the physical confidence of students and to encourage participation, including a reward system for participation, such as an annual sporting 'proms' night held at a local hotel. The teaching staff made a conscious decision to shift the priorities of the PE department away from attaining sporting excellence to achieving broad-based participation in the school teams: If they are prepared to turn up for the training, then we play them. I have a couple of girls who turn up every week for netball. They aren't good and wouldn't get near your average school team. But we play them. Their loyalty and commitment needs to be valued. Even if that means we can't win. (PE Teacher)

The teachers stated that as a team they had made a cultural shift away from their traditional expectations as PE teachers, i.e. that they would strive for sporting excellence, and instead move to valuing and prioritizing participation in physical activity. In order to put this strategy in place, the support of the senior management team at the school was required, as the result would be a reduction in success for the school in

external sports competitions: One of the good things is that I have the support of the senior management team, I have had to say to them, 'this school won't have a great big trophy cupboard from winning against other schools.' But they also believe that getting these kids active is more important.

3. METHODOLOGY

Thirty-one students from year group 9 (25 girls and 6 boys aged 14–15 years) who had made the transition from non-participation in PE to active participation were interviewed in five focus groups. The number of students in Year 9 was 163, with a total school population of 815 in school Years 7–11. Teachers initially talked to students about the study and explained that the research was looking at the views of those who had been previously reluctant to participate in PE; students then self-selected to be included in the focus groups. All the young people self-identified as previously being PE adverse that is, they 'avoided' participation or attendance in PE lessons.

This was reported to have taken the form of 'forgetting' to bring their uniform on days when they had PE; bringing notes to say they were physically unable to participate (e.g. due to illness) or just standing around during lessons, not actively participating. They were at the time of the study all active participants, in terms of attending and taking part in all PE lessons, and were committed to additional involvement in either the school teams or the school dance group. In addition, the majority was also engaged in external community-based activities (the relationship between community-based physical activity and PE is discussed later).

The composition and numbers of the focus groups were decided by the young people, thereby enabling them to control who they were interviewed with and to ensure that the research process did not provide an opportunity to intensify any problematic relationships (such as bullying) within the year group. Smaller groups or paired interviews were also offered. The recruitment process resulted in mixed gender groups, with a majority of girls in each focus group. Prior to interview, students were introduced to us as researchers and we observed a single typical PE lesson, a dance lesson and a junior leadership session involving the adolescent students teaching primary school children in the use of trampolines.

Students also provided us with a tour of the changing facilities and showed us the PE uniforms. In order to identify the character and process of implementing the modified PE curriculum, three teachers within the PE team were interviewed, prior to speaking to the students. The observations of the students and the interviews with the teachers allowed insight into the operation of the new PE policy and generated concepts that informed the design of the interview schedules. During the observations, young people were told about the research and asked for ideas and key concepts that would be useful to explore with focus-group

respondents; this raised the importance of exploring the prom night, the value of the junior leadership programme and choice of activities.

4. FINDINGS

4.1 PE Prior to Change

The critique of traditional PE previously found in other research was strongly echoed by our respondents. Prior to the changes made in their school, PE was perceived primarily as an aspect of the school that attempted to exert control over their bodies in ways that the participants reported finding stressful. The emphasis placed on controlling the presentation of their embodied selves through rules overuse of showers, inflexible adherence to PE uniform and lack of choice over activities, resulted in such control being overtly visible to the participants and subject to strategies of resistance: Sue: The previous teacher would come and check that we were in our towels and make us line up and touch our hair to see if it was wet.

So we used to just flick water on our hair. The previous PE regimen also caused the participants to present their bodies as one that was unsuitable for physical activity. This presentation of a physically 'sick body' was particularly strong in the accounts from the girls, for whom the old uniforms and hygiene regimens represented unacceptable regulation of their embodied selves. Consequently, menstruation became a vehicle for the portrayal of a sick body. Moreover, as the following interaction illustrates maternal support for resisting such control appears to have been regularly sought and given: Interviewer: What would you be doing if things hadn't changed?

Angie: Nothing, I would have had a permanent verruca Paul: Yes (laughing) that is what I was going to say; I had letters for a verruca all the time. People used to go round asking if any one in the class would write it for them. Remember that? (To girl) Melanie: Yeah! My mum used to write period letters for me. She thought it was awful as well that we had to wear those skirts and shower. Stephanie: Yeah mine did too, periods every week! Prior to the implementation of the modified programme of PE, participation was focused on competitive sports with inclusion in school teams determined exclusively on excellence in sports performance.

The emphasis on competitive success resulted in the majority of respondents reporting feeling that they were constructed both by their teachers and by other students as physically marginal individuals, unable to occupy positions of high achievement. Locating themselves on the margins of the lesson, by 'sitting around chatting' (girls) or by 'mucking about' (boys) with friends was one way young people resisted active participation in the lesson, and thereby avoided having to display any weakness in their performance.

This strategy of resistance in the short term functioned to prevent stressful exposure as a 'non-performer', however in the longer term such

a strategy is likely to serve to preserve their marginalized position. Exclusion from the physically achieving group also resulted in the young people feeling that they had physical identities that their peers perceived as marginal and also 'risky' to be included in sporting activities. A risky physical identity appeared to arise from the emphasis placed on winning, with the result that anyone who might jeopardize a potential win, through poor performance, was a 'risk' as a team member.

4.2 Physically Performing Body

Positive incentives for participation, such as the environmental changes and the rewards system worked to construct an initial enthusiasm for participation. Girls valued having control over what aspects of the PE uniform they wore, felt that the new uniform made them feel physically more comfortable and freed them from concerns over displaying their bodies. A recurring theme throughout all the focus groups was the positive impact of incentives for self-improvement as opposed negative sanctions for losing. The reward system, combined with supportive encouragement from the teachers, served to encourage a view that achievement in physical activity was attainable, even by those who previously believed that they lacked skills and ability.

Moving from feeling that they had a nonperforming marginal body to a performing and achieving physical identity was recounted as a dramatic and celebratory experience. The impact of the revelation that they could achieve physical success is illustrated by the 'wow factor' described below: Our netball team is awful, absolutely awful. In Year 7 and Year 8 we used to get shouted at if we lost and it was like, 'that's not fair, we know we're awful but you don't have to tell us!' But like when we had Mrs Falk she was like 'If you get ten goals in this game we'll have a burger on the way home,' and we were like right, let's get the ten and we got like eleven goals and we were like, wow! So we did have fun with things like that, it was like an incentive.

4.3 The Included Body

Respondents valued the opportunity to undertake a range of activities of their own choosing and to express preferences that were acted upon by teachers. The adolescents also felt that through engaging in new activities they were able to display previously hidden physical abilities. The display of newfound physical abilities appeared from the interaction in the interviews to have impacted positively on peer perceptions. As the following discussion illustrates, by displaying new physical skills an individual shifted from being a marginal quiet person, to being perceived within the peer group as a more multidimensional individual, with qualities that were valued by their peers: Laura: Some people are quite surprising when it comes to dance or new things. Interviewer: Surprising?

Laura: Well like, say there's this little girl that sits away from everyone but as soon as she gets on the dance stage or floor and kind of

changes personality wise. Holly: They show you things that you didn't know could be done. Paul: Oh you mean Amy's little sister? Yeah she is good and you would never think it to look at her, would you? Holly: You see, when you are dancing, it brings out things in people that you would never have seen before. You think I never knew they could do that. The quietest people suddenly do really great things.

5. DISCUSSION

This article reported on a small-scale case study in one location, this study was exploratory in nature and sought to further the understanding of adolescents' experiences and attitudes towards physical activity. The study was limited by the reliance on a purely convenience sample of adolescents at the participating school. Theoretical sampling to include those few students who still remained PE adverse would have been ideal, but was not possible due to non-consent by those students. The exploration of the views and experiences of those who remain PE adverse despite the development of adolescent-centred PE programmes requires further exploration.

This study focused on a group of adolescents whose experiences are of particular relevance to the development of physical activity and health promotion interventions for young people, notably those who had successfully made the transition from inactivity to activity. The findings of this study concur with previous research that, a PE programme which is intensively involved in the surveillance of young peoples' bodies and exclusively prioritizes successful performance creates a physically marginalized subgroup of non-participants.

In situations where poor attainment in physical activity might expose young people to risk of adult or peer sanctions non-participation can be seen as rational, protective, health behaviour. The accounts from the adolescents involved in this study suggest that effective health promotion strategies for adolescents are likely to be those that incorporate an understanding of physical activity decision making as a rational act, rather than simply a feature of sedentary inclined adolescent cultures. The findings of this study provide an illustration of the relevance for health promotion interventions of understandings derived from the new social studies of childhood.

6. CONCLUSION

This study suggests that for both adolescent boys and girls, significant social meanings are attached to the character of their physical identities and these can exert powerful influences on behaviour. However, inactive young people's physical identities from this study do not appear fixed, but possess sufficient fluidity such that facilitation towards an active lifestyle can occur. Committed participation was dependent not only simply on a wider choice of activities but also upon recognition of the

need for structural and cultural changes that positively addressed the construction of physical identities.

Consequently, effective health promotion interventions to address sedentary behaviour are likely to commence with an understanding not only of the benefits of physical activity but also of the potential emotional risks and benefits of participation from the perspective of the adolescent. Findings from this study, suggest that PE based on such an understanding will offer adolescents benefits that can translate from the physical-self to the social, with important positive implications for the well being of young people.

REFERENCES

1. WHO. World Health Report 2002. Geneva: World Health Organization, 2002.
2. Aarnio M, Kujala UM, Kaprio J. Associations of healthrelated behaviors, school type and health status to physical activity patterns in 16 year old boys and girls. Scand J Soc Med 1997; 25: 156–67.
3. Kirkcaldy BD, Shephard RJ, Siefen RG. The relationship between physical activity and self-image and problem behaviour among adolescents. Soc Psychiatry Psychiatr Epidemiol 2002; 37: 544–50.
4. Health Education Authority. Young and Active? Young People and Health-Enhancing Physical Activity—Evidence and Implications. London: Health Education Authority, 1998.
5. Department of Health. Health Survey for England 2002: The Health of Children and Young People. London: Department of Health, 2002.
6. BMA. Adolescent Health. London: British Medical Association Board of Science and Education, 2003.
7. Robinson T. Reducing children's television viewing to prevent obesity—a randomized controlled trial. J Am Med Assoc 1999; 282: 1561–7.
8. DfES and DCMS. Learning Through PE and Sport. Annesley: Department for Education and Skills, 2003.
9. Goran M, Gower B, Nagy T et al. Developmental changes in energy expenditure and physical activity in children: evidence for a decline in physical activity in girls prior to puberty. Pediatrics 1998; 101: 887–91.
10. Kelder S, Perry C, Klepp K et al. Longitudinal tracking of adolescent smoking, physical activity and food choice behaviours. Am J Public Health 1994; 84: 1121–6.
11. Sallis J, Prochaska J, Taylor W. A review of correlates of physical activity of children and adolescents. Med Sci Sports Exerc 2000; 32: 963–75.
12. Coakley J, White A. Making decisions: gender and sport participation among British adolescents. Sociol Sport J 1992; 9: 20–35.
13. Crocker PRE, Eklund RC, Kowalski KC. Children's physical activity and physical self-perceptions. J Sports Sci 2000; 18: 383–94.
14. Mulvihill C, Rivers K, Aggleton P. Views of young people towards physical activity: determinants and barriers to involvement. Health Educ 2000; 100: 190–9.
15. Stahl T, Rutten D, Nutbeam D et al. The importance of the social environment for physically active lifestyle—results from an international study. Soc Sci Med 2001; 52: 1–10.
16. Rees R, Harden A, Shepherd J et al. Young People and Physical Activity: A Systematic Review of Research on Barriers and Facilitators. London: EPPI-Centre, University of London, 2001.
17. Vilhjalmsson R, Kristjansdottir G. Gender differences in physical activity in older children and adolescents: the central role of organised sport. Soc Sci Med 2003; 56: 363–74.
18. Vilhjalmsson R, Thorlindsson T. Factors related to physical activity: a study of adolescents. Soc Sci Med 1998; 47: 665–75.

19. Department for Culture Media and Sport. A Sporting Future for All. London: Department for Culture, Media and Sport, 2000.
20. Tuttle CR. Review of teen jump start programme: educational materials in review. J Nutr 2002; 34: 67.

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AN APPLICATION AND APPROCHES FOR STRATEGIC MANAGEMENT FOR BUSINESS

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Abstract- The examination paper researched the effect of key administration and thinking on expanded business execution of retail industry organizations. It assessed the instance of Tesco Plc in retail industry and assessed how adequately the board of the business can think deliberately to interconnect vital arranging of the business with business activities. The examination fundamentally distinguishes the significance of vital administration and thinking as essential intending to successfully figure, convey and plan accessible business assets and to improve the business execution of the association. The flow research paper demonstrated that senior administration of organizations in retail industry contributes adequately by adjusting business system of the association with its essential deduction to foster a way of achievement with successful use of accessible business assets. Key administration and thinking gives a more noteworthy chance to the organizations to arrangement their business objectives, orchestrate wanted assets, plan and facilitate business tasks to succeed.

Keywords: Strategic administration, vital reasoning, key arranging, adjusting business System.

1. INTRODUCTION

The Flow of research fundamentally examines the effect of vital administration and vital speculation on the business execution of retail industry organizations by investigating the instance of Tesco Plc in the retail business. The examination distinguishes key administration and key speculation as the method involved with fostering an essential intend to bring business points into fulfillment. The principle objective of key administration is to think and oversee business tasks and cycles deliberately without drawing in into key arranging aimlessly for making key making arrangements for the association. Vital administration depends on the endeavors that the administration of an association takes via cautiously surveying and understanding the products of vital intuition for the accomplishment of their association working in a particular industry. The essential administration for an association is conceivable through essential speculation to form, send and plan the business methodology. The essential administration and key in a joint effort with key arranging is displayed in the figure offered beneath to give the better portrayal of key administration for an association.

The examination paper basically distinguishes the significance of key administration and key speculation for organizations working in

retail industry by inspecting the instance of Tesco chain of Stores working all through the UK. Overseeing and thinking deliberately are viewed as exceptionally significant for directors working inside the associations in playing out their significant obligations. In the vast majority of the associations, vital issues paying little heed to their significance for the association depend on burning-through around 20% of the general assets of the association. The exploration depicts that senior administration of organizations working in various ventures specifically and in retail industry overall should be exceptionally centered around the essential issues including where it is going and what it is wanting to accomplish later on (Karel, Adam & Radomir, 2013).

Figure 1 Strategic Management and Strategic Thinking (Karel, Adam & Radomir, 2013)

The exploration is engaged to assess the significance of vital administration and vital speculation for the organizations to guarantee effective accomplishment of their business goals. It examines vital administration as a piece of significant business technique for the association to foster a way to fruitful business tasks via cautiously orchestrating assets. The review directed on the retail business offers an incredible chance to organizations to think and deal with their business activities deliberately to work with their administration in dynamic interaction. The examination researches how fruitful retail industry organizations have set up their business systems effectively and accomplished their ideal destinations by working as per their essential arranging. It gives rules to the directors and chiefs working in retail industry associations to rehearse key administration arranging inside the construction of their organizations. It guides business chiefs of retail organizations to be proactive in their business choices by perceiving the significance of the essential administration and key intuition as the inner business movement (Spillan and Ziemnowicz, 2003). The examination shows that essential administration and thinking in the space of key and monetary administration makes significant effect on the business execution and development of organizations working in the retail business. It looks at the generous impact that administrators can accomplish by taking on powerful business systems in accordance with

their business objectives and destinations. Consequently, the exploration will be valuable for administrators and business leaders of organizations in retail industry and different organizations to develop well and accomplish their business objectives by taking on essential administration and vital speculation in their business methodology advancement measure. Over the long haul, it gives upper hand to organizations giving significance of key administration and thinking in fostering their business measures and working (Karel, Adam and Radomir, 2013).

1.1 Background of the Study

The exploration fundamentally researches the course of vital reasoning and the executives and their commitment in the space of making advancement, viable functional administration and arranging and creating business methodologies to prevail in extraordinary rivalry. Enormous quantities of organizations are finding out with regards to key administration and thinking by assessing their previous encounters and prevailing with regards to creating viable future methodologies. The examination demonstrates that without key administration and figuring, no association could prevail with regards to creating inventive strategic policies and insightfully thinking about the significance of making important administrations for their clients. It explores the achievement of Tesco Plc as the notable retail area association that offers tremendous scope of items and administrations to their clients in the retail business. The administration of Tesco zeroed in on creating powerful business system through essential reasoning and the executives to accomplish their business objectives of growing their business in various nations and ethnicities and getting upper hand over their rivals (Khan and Huda, 2016). The exploration shows that the course of vital arranging depends on noting how and when the business will actually want to catch their ideal portion of the overall industry by smoothing out their business activities deliberately through essential administration and thinking. The essential administration and thinking assumes an extremely critical part for organizations like Tesco Plc to get what and why of their business improvement and arranging measure. Vital administration and believing is constantly founded on the cycles of imagination and development that the administration of an association can embrace to inspect the voice and assumptions for their clients, their representatives and industry best practices. It depicts the interaction in creating business technique for the association by portraying jobs and obligations of supervisors and their staff individuals, understanding the necessities of their clients and ensuring every one of the essential targets are connected to unmistakably characterized vital goals (Rudd et al., 2008). The fundamental goal of key administration and key speculation for an organization is to make a powerful business methodology for the organization to accomplish their business destinations through intelligible, binding together and

integrative system for dynamic interaction. It gives fundamental course to the organizations on successful usage of accessible assets including monetary, authoritative, HR and functional assets. Key administration and key reasoning has become fundamental for organizations in various ventures including the retail business to viably use inward and outer information on sentiments and business discernments to settle on powerful business-related choices. It is exceptionally viable, helpful and useful for the nonstop and economical business development of organizations working in the retail business (Rudd et al., 2008). Various organizations have taken on powerful essential administration ways to deal with prevail with regards to accomplishing their business objectives, for example, Tesco Plc, Walmart, Toyota Motors and BMW Motors and so on These organizations have embraced successful vital administration and vital deduction approach by further developing their business techniques and taking on new strategic policies to prevail with regards to getting upper hand over their rivals. For instance, Toyota Motors took on Lean assembling cycles to prevail with regards to creating Hybrid vehicles addressing wanted requirements and assumptions for their clients. Additionally, different retails and car fabricating ventures have likewise taken on interesting and creative strategic policies to further develop their business usefulness, improve worker execution by creating inside culture of the business and rousing representatives to upgrade advancement inside the work environment climate. Because of key administration and vital reasoning, the work cycles of organizations have improved and the opposition level stiffed up expanding difficulties for new organizations to go into various business sectors. Presently organizations embracing vital reasoning and the executive's approaches can prevail with regards to winning the reliability and trust of their clients to foster new items and benefits and acquaint them with their dependable and new sections through their promoting divisions.

2. LITERATURE REVIEW

2.1 Strategic Management & Thinking for Businesses to get Competitive Advantage

Agha, Alrubaiee and Jamhour (2012) explored the significance of vital administration for organizations to get upper hand in the space of center capability on expanded business execution and upper hand over others. The scientists portrayed the focal idea of serious system for organizations to get upper hand over others in profoundly cutthroat business market. The center skill is related with information and learning and organizations that advanced picking up sharing climate inside their associations prevail to accomplish expanded degree of execution and strategic advantage over others. The scientists plainly demonstrated the significance of key administration and thinking which is related with the advancement of center capabilities of their representatives through information sharing and preparing climate inside the inner culture of the

associations. The center skill was arisen through different factors like shared vision, strengthening and expanded collaboration among best performing representatives. To gauge the upper hand of the associations, the examination embraced adaptability and responsiveness as the two central point that were utilized in deciding the seriousness of firms working in comparable businesses. By taking on overview research technique, the examination showed that there was a solid connection between essential administration, key reasoning and center ability of organizations as far as their business execution and seriousness. The outcomes affirmed that center ability and authoritative execution was related with changing impacts on the general business execution of the associations working in profoundly serious enterprises and commercial center.

3. RESEARCH METHODOLOGY

3.1. Introduction to Research Methodology

The examination philosophy segment of this exploration portrays the exploration strategies to be utilized during the time spent information assortment to explore the effect of vital administration and key deduction on the business execution of organizations in the retail business. The exploration configuration is chosen concurring the cycles of information assortment to ensure wanted outcomes are accomplished from the examination. The flow research centered to accumulate currently distributed data by embracing exploratory examination cycle to notice and explore information previously distributed in optional wellsprings of information assortment. The examination takes on subjective procedure during the time spent information assortment by exploring the information on currently distributed sources like books, diaries, and online distributed materials. In the exploration strategy segment, the ebb and flow study investigates research theory and examination ways to deal with research the information on key and monetary administration. It analyzed currently distributed information to decide how essential administration and thinking has turned into a significant piece of key getting ready for organizations were working in the retail business to accomplish ceaseless and manageable development, intensity and expanded business execution in contrast with others working in the comparative business.

3.2. Explanation and Justification of Research Methods

As indicated by the meaning of examination system, it is utilized to accumulate fundamental data with respect to a particular exploration theme to settle on better business choices by the administration of an organization which is intending to gather essential data about their business measures and the ubiquity of their items and administrations among their expected clients. Subsequently, an examination could be led to accomplish three significant destinations like graphic examination,

exploratory examination or illustrative exploration to gather and break down information on explicit examination issue. The momentum research is a sociology research and viewed as vital for organizations that work and contend in the retail business in the UK and all throughout the planet. The examination philosophy in the ebb and flow research is embraced by the principle objective of the exploration to analyze expected effects of vital administration and thinking on the business execution of organizations working in the retail business in the UK and all throughout the planet offering comparative items and administrations to their clients. In the flow research, exploratory examination is liked and depicted as given beneath.

4. ANALYSIS AND DISCUSSIONS

The exploration fundamentally examined the possible effects of key administration and key deduction on the organizations working in the retail business. The retail business at the worldwide level has assumed a vital part in molding the worldwide economy. Retail industry has utilized biggest part of individuals with expanded degree of income age for various nations all throughout the planet including the created and immature nations. The retail organizations are working as enormous large box stores and concentrated outlets that offer tremendous scope of items and administrations from world know brands through on the web or different retail channels. Today, we live in esteem driven climate and safety buffers are extremely close. Thusly, organizations offering best items and administrations of widely acclaimed brands are effective to get fascination. The exploration researched a wide range of retailers including snaps and blocks retailers that need extraordinary abilities from their chiefs to comprehend the significance of vital reasoning and the board to use accessible assets and get wanted business development and execution living up to their customer desires. The ebb and flow research examined two chose explores in the space of key and monetary administration and covering the examination point with related issues and proposed arrangements.

5. SELECTED RESEARCH ON STRATEGIC MANAGEMENT & THINKING

In the optional wellsprings of information assortment, first exploration that was examined with regards to existing examination was directed by Ken Haycock, Anne Cheadle and Karla Spence Bluestone covering key administration and vital intuition by taking in illustrations from solid initiative practices to get expanded business execution and upper hand for organizations working in the various ventures including the retail business. It demonstrated that essential administration and thinking can be successfully used to further develop business execution and to get upper hand in offering special, recognized and creative items and administrations of retail marks in the retail business. It demonstrated

that organizations can possibly prevail with regards to accomplishing their ideal objectives in the event that they think and plan their business methodologies through inventiveness and development by building a solid vision and future needs for the association to contend well and prevail in their business objectives. In the chose research article, present day key methodologies were distinguished that could be utilized by the organizations working in the retail business to think brilliant and think deliberately through inventiveness, development and right-brained measure which is utilized in the inward culture of the organizations to support open trade of thoughts and arrangements addressing explicit business issues or inconveniences to meet the dynamic and flighty difficulties of the cutting edge organizations working in the retail business. It very well may be profoundly significant for the organizations to guarantee fruitful key administration and wanting to think deliberate and consistent in creating distinctive business techniques.

The data given in the examination paper showed that the job of pioneers is very significant to start vital administration and key deduction inside the inner culture of the organizations to establish a reasonable work environment climate where open-finished thoughts are traded and representatives are offered a chance to take part and assume their part in the essential administration thinking and arranging of the business to prevail with regards to tending to their customer needs and guarantee effective accomplishment of their business objectives and goals.

6. CONCLUSION

The examination basically researched the significance of key administration and key intuition related with imagination and advancement to further develop business execution and intensity of organizations working in the retail business. It recognized and uncovered diverse vital administration approaches, for example, liberal thoughts creation by the workers and upgraded learning inside the interior culture of the organizations offering their marked items and administration to their clients. The exploration inspected how effectively the administration and initiative of retail organizations could prevail with regards to fostering a learning business climate inside their business construction to prevail in the cycles of vital deduction to upgrade advancement and imagination and uniqueness of thoughts inside the association.

The examination demonstrated that organizations can never design indiscriminately and their administration ought to be proactive to painstakingly survey and understand the products of key reasoning and wanting to accomplish expanded piece of the pie, expanded deals and income age from their business tasks exercises.

REFERENCES

1. Agha, S., Alrubaiee, L., & Jamhour, M. (2012). Effect of Core Competence on Competitive Advantage and Organizational Performance. International Journal of Business and Management, Vol. 7, No. 1, pp. 192-204.

2. Haycock, K., Cheadle, A., & Bluestone, K., S. (2011). Strategic Thinking: Lessons for Leadership from the Literature. Library Leadership & Management, Vol. 26, No., pp. 1-23.
3. Ismail, A., I., Rose, R., C., Uli, J., & Abdullah, H. (2012). The Relationship between Organizational Resources, Capabilities, Systems and Competitive Advantage. Asian Academy of Management Journal, Vol. 17, No. 1, pp. 151-173.
4. Julian, O., (2013). Relationship between Strategic Planning and Organization's Performance in Non-Governmental Organizations (NGOs): A Case of ACTIONAID, Kenya. School of Business, University of Nairobi Karel, S., Adam, P., & Radomir, P. (2013).
5. Strategic Planning and Business Performance of Micro, Small and Medium-Sized Enterprises. Journal of Competitiveness, Vol. 5, Issue 4, pp. 57- 72.
6. Khan, R., & Huda, F. (2016). The impact of Strategic Management on the Performance of Health Care Organizations (A Study of Three Selected Tertiary Health Care Center of Karachi, Pakistan). Arabian Journal of Business and Management Review, Vol. 6, No. 5, pp. 1-4.
7. Kitonga, D., M., Bichanga, W., O., & Muema, B., K., (2016). Strategic Leadership and Organizational Performance in Not-for- Profit Organizations in Nairobi County in Kenya. International Journal of Scientific & Technology Research, Vol. 5, No. 5, pp. 17-27.
8. Mohamud, G., Y., Mohamud, A., S., & Mohamud, B., H. (2015). The Relationship between Strategic Management and Organizational Performance in Mogadishu-Somalia. European Journal of Research and Reflection in Management Sciences, Vol. 3, No. 2. pp. 42-51.
9. Mryan, N., N., (2012). Analysis of the Relationship between Strategic Planning and Competitive Advantage in Jordanian Banks. Interdisciplinary Journal of Contemporary Research in Business, Vol. 4, No. 8, pp. 220-238.
10. Omotayo, F., O. (2015). Knowledge Management as an Important Tool in Organizational Management: A Review of Literature. Libraries at University of Nebraska-Lincoln, Library Philosophy and Practice (e-Journal), 1238.
11. Rudd, J., M., Greenley, G., E., Beatson, A., T., & Lings, I., N. (2008). Strategic Planning and Performance: Extending the debate. Journal of Business Research, Vol. 61, No. 2, pp. 99-108.
12. Singh, H., & Mahmood, R. (2014). Combined Effect of Competitive and Manufacturing Strategies on Export Performance of Small and Medium Enterprises in Malaysia. Global Journal of Management and Business Research: A Administration and Management, Vol. 14, No. 1, pp. 93-100.
13. Spillan, J., E. & Ziemnowicz, C. (2003). Strategic Management in Small Retail Businesses. SAGE Journal, Brining Teaching, Learning and Research to Life Waiganjo, E., -W., Mukulu, E., &Kahiri, J. (2012).
14. Relationship between Strategic Human Resource Management and Firm Performance of Kenya's Corporate Organizations. International Journal of Humanities and Social Science, Vol. 2, No. 10, pp. 62-70.

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