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We are happy to announce the publication of an International Journal of research in education entitled: ***Horizons of Holistic Education*** with International Standard Serial Number (ISSN). You are invited to send your original research papers and research articles for the publication in ***Horizons of Holistic Education.***

The Journal of *Horizons of Holistic Education* (HHE), published by the Children's University, is an International quarterly Interdisciplinary Journal which covers topics related to holistic development of children. HHE covers all the areas which deal with the children, such as Child education, Child psychology and Panchkosh development of children, children's literature and so on. It also includes intellectual efforts encompassing Sociology, Vedic Science, Medicine, Psychology, Drawing, Music, History, Geography, Home Science, Philosophy, Economics, Commerce and Literature concerned with Children. The researches based on such topics shall be given priority.

Aim and Scope — an International journal of ***Horizons of Holistic Education***(quarterly) aims to publish original research papers, related to the theory and practice of various disciplines of Humanities. We invite you to contribute your fulllength research papers, short communications and Review articles and Articles concerned with holistic modern development in the area of liberal sciences pertaining to the children's studies.

FROM THE VICE CHANCELLOR'S DESK

Education assists in discovering and accomplishing the aims and makes a fair contribution to the society. In a similar vein, education contributes significantly to a country's national growth. The National Education Policy 2020 is authorized by the Government of India since there is a significant change taking place in the world.

The goal of the National Education Policy-2020 is to make education available to everyone from preschool through high school. With a 100% GRE (Gross Enrollment Ratio) in academics, it intends to achieve that. It is proposed to be accomplished by 2030. A four-year, interdisciplinary undergraduate curriculum with a range of exit choices is what it intends to introduce. As a result, this new strategy aims to transform India into a superpower in the field of knowledge.

In similar terms, it seeks to make all colleges and universities multidisciplinary by the year 2040. The initiative also intends to fundamentally alter the current educational system while increasing the availability of jobs in India.

The National Education Policy 2020 (NEP 2020) aims to devise four National Curriculum Frameworks (NCFs), for which a comprehensive strategy has been worked out jointly by the Ministry of Education (MoE) and National Council of Educational Research and Training (NCERT). A mandate document was released recently to bring about a paradigm shift in education with focus on holistic development of children, emphasis on skilling, vital role of teachers, learning in mother tongue, cultural rootedness.

- National Curriculum Framework for Early Childhood Care and Education (NCFECCE)
- National Curriculum Framework for School Education (NCFSE)

- National Curriculum Framework for Teacher Education (NCFTE)
- National Curriculum Framework for Lifelong Education (NCFLE)

The National Education Policy (NEP) is a comprehensive framework to guide the development of education in the country. As a policy of education, it not only guides the development of education but also provides directions for regulating and promoting education. The education policy covers education at all the stages including early childhood care and education, school education, higher education, teacher education and vocational education. The first National Policy on Education was formulated in 1968, the second was in 1986 modified in 1992 and the latest National Education Policy in India is NEP, 2020.

The National Education Policy 2020 is the first education policy of the 21st century in India and aims to address the many growing developmental imperatives of our country. NEP, 2020 was released on 29th July, 2020 in India. As per the policy the aim is to have an education system by 2040 that is second to none, with equitable access to the highest-quality education for all learners regardless of social or economic background.

The Policy proposes the revision and revamping of all aspects of the education structure, including its regulation and governance, to create a new system that is aligned with the aspirational goals of 21st century education, including SDG4, while building upon India's traditions and value systems.

The National Education Policy-2020 is a road map to lead the entire nation to rebuild its strengths and make the society people planet friendly. The curriculum frame work will adhere to the educational needs and cater to the social change that is required to re construct *Bharat*.

Regards,

Dr. Harshad Patel
Vice Chancellor
Children's University

FROM THE CHIEF EDITOR'S DESK

Every nation seeks to grow and develop holistically that aims at enhancing the life standards of their citizens. The government of the particular nation strives to make the cordial relationship with the neighboring countries so that they commonly share the natural and other resources to upgrade the life of the people.

India is fortunate to host the G-20 meet in 2023. Together with the European Union, the G-20 includes the finance ministers and central bank governors of 19 of the world's largest economies. The G20 aims to develop a new global financial architecture, advance financial rules that reduce risks and forestall future financial crises, and coordinate policies among its members in order to achieve sustainable growth and global economic stability.

The summit was started in 1999 to talk about international economic development and cooperative policy issues. Two-thirds of the world's population and around 85% of its Wealth are represented by the G20's 20 member nations. Argentina, Australia, Brazil, Canada, China, the European Union, France, Germany, India, Indonesia, Italy, Mexico, Saudi Arabia, South Africa, Turkey, the United Kingdom, and the United States are among these nations. The G20 is significant for India because it gives the nation a forum to interact with the major economies in the world, advance its economic goals, and tackle pressing global concerns.

Looking at G-20 event it draws the attention towards Sustainable Development. United Nations have given 17 Sustainable Development Goals to carry forward Millennium Development Goals. The Global Goals have taken into consideration no poverty, zero hunger, good health and wellbeing, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and

economic growth, industry innovation and infrastructure, reduce inequalities, sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace justice and strong institutions and partnership for the goals. These 17 goals are the respect to the nature and human existence. These goals are the comprehension of peaceful human existence on the planet. These goals are the reflection of Bharatiya Panchkoshatmak Vikas. Indian knowledge system has reflected these thoughts in the Vedas and Upanishads centuries ago. The theme of the G-20 is 'वसुधैव कुटुम्बकम'. The theme reflects universal brotherhood and fraternity. Through G-20 along with other developmental goal Bharat is striving its best to give away the message of peace and serenity.

It is driving lines that human existence and the planet go hand in glows. Both depend on each other systematically and collaborative. True education imparts to reflect and manifests the divine perfection that exists in the men and the nature. If men save nature, nature will save the human existence. True and holistic education reflects the same message for the human race.

Regards,

Dr. Jignesh B. Patel
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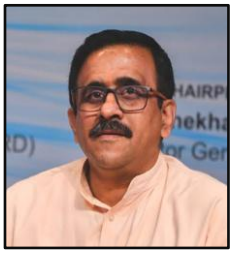

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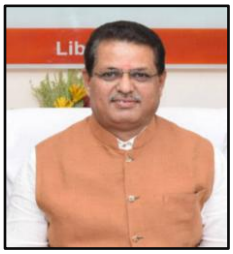

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Weight Loss and Pre-Diabetic Stage
Reverse Prediabetic Stage to Non-Diabetic with Weight Loss

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ABSTRACT

Diabetes has spread over the world, and its prevalence continues to rise with no end in sight. Diabetes is the major cause of blindness, renal failure, and amputations of the lower extremities, peripheral neuropathy, and other complications. It also has a role in coronary artery disease, strokes, erectile dysfunction, and early mortality. The costs of diabetic care and patient misery are enormous. Patients are usually required to take drugs for the rest of their lives.Dietary adjustments can help to control and even reverse diabetes risk. The aim of this research was to know about people with a high risk of acquiring Type 2 diabetes manage without medicine and with the help of losing weight. Although the original cohort comprised over 50 patients, we chose 15 subjects for whom we had finish data to present in this report. According to the findings of this study, the potential for reversing prediabetes should be highlighted and more clearly defined for nutritional alterations.

Keywords: Weight, Diabetic, Therapy, Dietary, Reverse.

Introduction

A diagnosis of prediabetes might be frightening. The most common cause of this illness is insulin resistance, which results in unusually high blood sugar (glucose). This is a condition in which the body fails to appropriately utilize insulin. It's frequently a harbinger of type 2 diabetes. People with prediabetes have a higher chance of acquiring type 2 diabetes, according to the Mayo Clinic. You may be at risk for cardiovascular disease if you have prediabetes.

A diagnosis of prediabetes, on the other hand, does not guarantee that you will develop type 2 diabetes. The aim is to bring your blood sugar out of the prediabetes range as soon as possible. Your diet is crucial, and you must understand the proper foods to consume.

How diet relates to prediabetes

There are numerous factors that raise your chances of developing prediabetes. Genetics can play a role, especially if you have a family history of diabetes. Other factors, on the other hand, play a significant impact in the progression of disease. Other risk factors include inactivity and being overweight.

Because insulin can't easily transfer sugar into your cells, sugar from food builds up in your

bloodstream in prediabetes. People think of carbs as the cause of prediabetes; however, blood sugar is influenced by the amount and kind of carbohydrates taken in a meal. Higher blood sugar spikes can be caused by a diet high in refined and processed carbohydrates that break down fast.

The body has a hard time reducing blood sugar levels after meals for most persons with prediabetes. Keeping a close eye on your carbohydrate intake will help you avoid blood sugar rises. When you consume more calories than your body requires, the excess calories are stored as fat. You may gain weight as a result of this. Insulin resistance is connected to body fat, particularly around the abdomen. This helps to explain why many persons with prediabetes are also obese.

Health Risks Associated With Prediabetes

Progression to diabetes

The pace at which people progress from prediabetes to diabetes varies depending on the demographic and the criteria used to identify prediabetes. According to a meta-analysis published in 2007 that looked at the progression of prediabetes to diabetes, the annual incidence rate of diabetes was 4 percent -6 percent for isolated IGT, 6 percent -9 percent for isolated IFG, and 15 percent -19 percent for both IGT and IFG. Only articles published before 2004 were included in this meta-analysis. The annual incidence rates of progression from prediabetes to diabetes were similar in subsequent significant investigations. The incidence of diabetes in the control group was found to be 11% in the Diabetes Prevention Program (DPP) Outcomes Study. The annual incidence of diabetes in the IFG group was somewhat higher than 4% in the United States Multi-Ethnic Study of Atherosclerosis. Diabetes was reported to be 7 percent in the group with a HbA1c of 5.7 percent to 6.4 percent and 9 percent in the IFG group in the Toranomon Hospital Health Management Center Study. The cumulative incidence of diabetes over a 20-year period was found to be higher than 90% among people with IGT characterized by repeated OGTT in the control group in the China Da Qing Diabetes Prevention Study (CDQDPS). The use of ADA vs. WHO criteria to diagnose prediabetes has also been demonstrated to have an impact on the incidence rate of diabetes, with ADA criteria causing a lower incidence rate than WHO criteria.

According to an expert panel, continuous risk scores are more useful for forecasting the risk of getting diabetes than binary risk ratings. A diabetes risk score based on more easily accessible variables such as age, sex, ethnicity, fasting glucose, systolic blood pressure, HDL cholesterol, BMI, and family history of diabetes has been proven to be more predictive than IFG or IGT.

Kidney illness and nephropathy

Prediabetes has been linked to an increased risk of chronic kidney disease and early nephropathy in several studies. The cause of this correlation is unknown, since it could be attributable to a higher prevalence of diabetes in this group or the existence of other variables linked to hyperglycemia and nephropathy, rather than the influence of prediabetes itself.

Neuropathies

Prediabetes is linked to a malfunction of cardiac autonomic activity, as seen by lower heart rate variability, impaired parasympathetic modulation of the heart, and an increased prevalence of male erectile dysfunction. In participants with IGT, noninvasive evaluation of neurological impairment revealed considerably more abnormalities recognized by four of five cardiovascular reflex tests, a higher prevalence of both hyperesthesia and hypoesthesia, and higher heat detection thresholds. There

is also mounting evidence that prediabetic people with IGT have a greater risk of idiopathic polyneuropathy, unpleasant sensory neuropathy, and small fiber neuropathy. These findings point to a role for tiny unmyelinated nerve fibers in pain, temperature, and autonomic function regulation during prediabetes, which occurs before diabetes develops.

Retinopathy

In the DPP trial, over 8% of people with prediabetes were found to develop diabetic retinopathy. While some studies have linked prediabetes to an increased risk of diabetic retinopathy, the results differ depending on the technique of detection.

Macrovascular disease

Although prediabetes has been linked to an increased risk of acquiring macrovascular disease, it is unclear whether this increased risk is related to the development of diabetes or to the presence of prediabetes. While cross-sectional studies have revealed an increased prevalence of coronary heart disease in those with prediabetes, this association may be muddled by the fact that cardiovascular illnesses and prediabetes share several risk factors.

Pros and Cons of Prediabetes Treatment

Preventing the development of diabetes, the repercussions of diabetes, and the consequences of prediabetes itself are all part of the justification for treating prediabetes. Several research studies have indicated that therapies meant to treat prediabetes are effective in reducing the incidence of diabetes over time. The CDQDPS study, which included a lifestyle intervention and a 20-year follow-up, found a nearly 50% relative risk reduction in the incidence of severe retinopathy, but no difference in the risk of developing other microvascular complications like neuropathy and nephropathy between the intervention and control groups. The scientific data on the effectiveness of therapies on macrovascular problems is mixed. The Malmo Preventive Project, which had a 12-year follow-up, revealed that a long-term lifestyle intervention programme with an emphasis on nutritional counselling and physical activity reduced mortality in participants with IGT, but this was not a randomized trial. In a recent meta-analysis, the combined evidence of all randomized control trials among prediabetic subjects with lifestyle and drug-based interventions showed that these interventions reduced stroke risk but did not reduce the risk of all-cause mortality, cardiovascular death, or myocardial infarction over a mean follow-up period of 3.8 years. While current evidence suggests that numerous treatment methods are effective in preventing diabetes progression, the long-term advantages on microvascular and macrovascular consequences are still being debated. There is no evidence that early intervention is better than late intervention, and long-term research examining cost vs. benefit and long-term results associated to the best time to start glycemic control are inadequate. The majority of published literature and guidelines agree that lifestyle treatments concentrating on dietary changes and increased physical activity should be the foundation of treatment for people with prediabetes who want to avoid diabetes. Despite the fact that lifestyle modifications are both safe and effective in preventing diabetes, most health insurance plans do not cover them. There is growing evidence to support the use of medication in adults with prediabetes and to prove its usefulness. Organizations such as the American Diabetes Association (ADA) have advocated the use of metformin in some high-risk individuals due to its favorable long-term safety profile and demonstrated positive outcomes, although the pharmacotherapy's end aim has yet to be established. The notion of prediabetes or its therapy in children with prediabetes has not been

thoroughly researched. There hasn't been any research on the long-term effects of common prediabetes drugs on children's growth and pubertal development. Furthermore, the incidence of diabetes in children may be exaggerated due to puberty-related insulin resistance. There is a dearth of evidence about the efficacy and safety of pharmacotherapy in children with prediabetes over the long term.

Ways to Potentially Reverse Prediabetes

The keys to regulating blood sugar levels are losing excess weight and exercising consistently, according to a reliable source. Other methods may aid in the management or reversal of prediabetes.

Changing your eating habits

Changing one's eating habits can help reverse prediabetes.

People who want to lose weight and avoid or delay type 2 diabetes should follow a low-fat, low-calorie eating plan, according to the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)Trusted Source. Foods that are low in added sugars, saturated fat, and trans fat should be chosen. They should consume less calories, fat, and sugar-rich foods in smaller portions.There is no common food plan for those with diabetes or prediabetes, according to the American Diabetes Association (ADA).

For certain people, the Mediterranean diet is beneficial. This diet includes a lot of fruits, veggies, and whole grains. They eat poultry, eggs, fish, and dairy in moderation. The main source of fat is olive oil.

Consuming fewer carbohydrates.

Eating fewer carbs

Others with prediabetes might opt for a low-carbohydrate diet. Low-carb and extremely low-carb diets may assist persons with type 2 diabetes lower their blood sugar levels, according to research. Carbohydrates accounted for 40–45 percent of daily calories for participants on a low-carb diet in these trials.

Getting enough sleep and addressing sleep apnea are two of the most important things you can do for your health.

Sleeping less than 5 hours or more than 8 hours a night was linked to increased blood sugar levels, according to a study published in Diabetes Care. People with prediabetes or untreated type 2 diabetes who were also overweight or obese were included in the study. In persons with prediabetes, further evidence reveals a relationship between sleep apnea and blood sugar regulation.

Exercising

Prediabetes and insulin resistance can be prevented or reversed with regular exercise, such as walking.

If someone is inactive on a regular basis, they can begin by going for a 5–10-minute walk most days of the week, gradually increasing to 30 minutes.

Instead,then sitting for long periods of time, get up and move around at least once an hour.

Getting rid of excess weight

If a person has prediabetes and is overweight, they can minimize their chance of getting type 2 diabetes by decreasing 5–7% of their weight. This equates to 10–14 pounds for someone weighing 200 pounds.

The risk of acquiring type 2 diabetes after three years reduced by 54 percent for those who lost 5 per cent to 7% of their body weight.

Quit smoking.

Active smokers have a 30–40% increased chance of acquiring diabetes, according to Trusted Source research. The danger rises in proportion to the number of cigarettes smoked.

According to research, patients with type 2 diabetes who are exposed to nicotine have less efficient insulin.

Keeping yourself hydrated

According to a study, drinking plenty of water can help control blood sugar levels. In a study published in Diabetes Care, 3,615 middle-aged men and women with normal blood sugar levels were tracked. 565 people had high blood sugar levels after 9 years, and 202 developed diabetes.The study discovered that those who drank more than a half-liter of water each day had a 28 percent lower risk of getting high blood sugar than those who drank less water.

Keeping alcohol out of your system

According to some studies, drinking a moderate amount of alcohol reduces the chance of acquiring type 2 diabetes, however drinking substantially increases the risk.If people with diabetes or prediabetes prefer to drink alcohol, the American Diabetes Association recommends that they do so in moderation. A maximum of one drink per day for women and two drinks per day for men is considered moderate drinking. 5 ounces of wine, 12 ounces of beer, or 1.5 ounces of spirits equals one drink.

Stress reduction

According to Diabetes UK, stress causes the body to release hormones like adrenaline and cortisol, which may contribute to insulin resistance. High blood sugar levels can be caused by chronic stress.

Making time for rest and relaxation can help a person manage their stress levels more effectively. If someone is concerned about their prediabetes, learning more about the illness through educational resources or joining a support group may help them feel more at ease.

Consultation with a dietitian

People with prediabetes should engage with a registered dietitian nutritionist or enroll in a lifestyle programme, according to the American Diabetes Association.

By adopting dietary modifications, medical nutrition treatment can help someone lower their blood sugar levels and achieve other goals such as losing weight or lowering blood pressure. When formulating eating recommendations, the dietician takes into account the person's dietary preferences

and culture.

Lifestyle-change initiatives that have been approved by the CDC.People with prediabetes may benefit from the services of Trusted Source. The programmes help people who are: -

- 18 years old or older
- who are overweight based on their body-mass index (BMI)
- Neither type 1 nor type 2 diabetes has been diagnosed.
- not pregnant

In addition, to be eligible for the programme, a person must meet one of the following requirements:

- Have you recently had a blood test that showed you to be in the prediabetes range?
- Based on a risk assessment, be at high risk for type 2 diabetes
- Having been diagnosed with gestational diabetes

Medicare diabetes preventive programmes are available to those aged 65 and upTrusted Source. To be eligible, someone must have recently obtained blood test results indicating that they are in the prediabetes range.

Materials and Methods

A retrospective analysis was carried out. The data came from type-2 diabetes patients who agreed to participate in a 90-day health management programme. At the Wellbeing Centre (center for integrated management of chronic diseases) a team of Allopathic, Ayurvedic, Yoga therapists, and Naturopaths devised the programme. The programme was developed and implemented in such a way that patients who were experiencing our methodically devised procedure had learned to incorporate it into their everyday routine. Allopathy, dietary changes, external Ayurveda therapies, pancreatic stimulation treatments including hip bath and spinal spray, therapeutic yoga, massage, and stress-relieving techniques were all used in the programme. Glycosylatedhaemoglobin (HbA1C) levels were measured at 0, 30, and 90 days. The progress was tracked and reviewed on a regular basis.

A fully integrated therapy protocol for the 'Diabetes Reversal Program' included four interventions (food, yoga (diabetic yoga), non-invasive Ayurveda-Naturopathy therapies, and mind therapy (visualization-lymphatic tapping - which influences BEP1), meridian cleansing (Naadishodana), and EFT (emotional freedom technique), as well as regular monitoring of bio markers and consultation with a diabetologist). Udvarthana (powder massage), Shirodhara, Hydrotherapies (hip bath and spinal spray), Abhyanga (oil massage + steam), and GH pack were among the Indian traditional therapies provided (gastro-hepatic pack). Diet counselling, and other parameters, the investigators focused on FBS, PPBS, and HbA1c levels at the start and end of the DRP for this study and nutritional level in participants before and after DRP is also considered. The programme enlisted the participation of 15 patients in total. Because this was retrospective research, we only included data from 15 participants who had complete records to match the data analysis' requirements.

Results and Discussion

There were 15 patient files with comprehensive data on the parameters investigated.

Table 1: Demographic Variables

Age	40-50	06
	50-60	06
	60-70	03
Gender	Male	07
	Female	08
Height	150-155	06
	155-160	05
	160-165	02
	165-170	01

The above table shows the demographic variables of the respondents. Age of the respondents is divided into 3 groups. 40-50 and 50-60 age group has 6 respondents each while 60-70 age group has 3 respondents. The above table shows that 7 respondents are male while 8 respondents are female. Height is also collected from the respondents. 6 respondents are in 150-155 range, 155-160 have 5 participants, 2 respondents are found in height group of 160-165 and only 1 respondent is found in the range 165-170.

Table 2: Weight before and up to 3 months

	Upton 3 months	After 3 months
50-55	00	01
55-60	00	06
60-65	05	04
65-70	05	02
70-75	03	02
75-80	02	00

On comparing the weights of the respondents up to 3 months of treatment and after 3 months of treatment we can see that the weight of the respondents reduced by approx. 46%. By studying the above table we can see that respondents increased from 00 to 01 in the weight group 50-55. Maximum individuals increased in the weight group 55-60 as it changed from 00 to 06 respondents. We further see the decrease in the higher weight groups as respondents decreased to 4 from 05 in the weight group 60-65, in the weight group 70-75 respondents decreased to 02 and the respondents in the age group 75-80 changed to zero after 3 months of program.

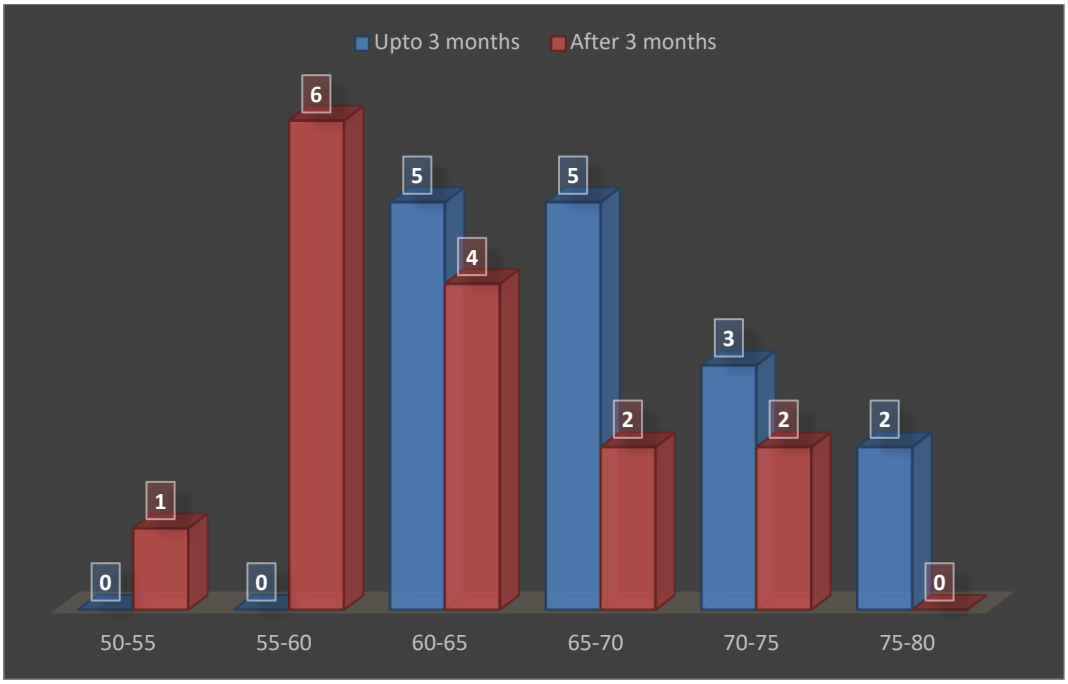

Figure 1: **Weight before and up to 3 months**

Table 3: parameters focused Upton 3 months

FBS (mg/dl)	100-110	6
	110-120	7
	120-130	2
PPBS (mg/dl)	130-135	4
	135-140	6
	140-145	2
	145-150	3
HbA1c (%)	6.0	1
	6.1	2
	6.2	4
	6.3	5
	6.4	3

In the above table we can see the FBS, PPBS and HbA1c levels in the respondents' up to 3 months of the DRP Programme. We can see that FBS range 100-110 mg/dl is found in 6 respondents, 110-120 mg/dl is found in 7 respondents and 120-130 mg/dl is found in 2 respondents only. After that we enquire about the level of PPBS. 130-135 mg/dl is found in 4 respondents, 135-140 mg/dl is found in 6 respondents, 140-145 mg/dl is found in 2 respondents and 145-150 mg/dl is found in 3 respondents. Whereas HbA1c level is found as follows; 1 respondent has 6% of HbA1c level which is the lowest, 2 respondents found 6.1% of glycosylated haemoglobin, 6.3 % is found in 5 respondents and 6.4% is found in 3 respondents.

Table 4: Parameters focused After 3 months

FBS (mg/dl)	70-75	04
	75-80	08
	80-85	03
PPBS (mg/dl)	110-120	02
	120-130	09
	130-140	04
HbA1c (%)	5.1	02
	5.2	04
	5.3	03
	5.4	02
	5.5	03
	5.6	01

In the above table we can see the FBS, PPBS and HbA1c levels in the respondents' after 3 months of the DRP Programme. We can see that FBS range 70-75 mg/dl is found in 4 respondents, 75-80 mg/dl is found in 8 respondents and 80-85 mg/dl is found in 3 respondents only. After that we enquire about the level of PPBS. 110-120 mg/dl is found in 2 respondents, 120-130 mg/dl is found in 9 respondents, and 130-140 mg/dl is found in 4 respondents. Whereas HbA1c level is found as follows; 5.1% and 5.4% of HbA1c level is found in 2 respondents each respectively , 4 respondents found 5.2% of glycosylated haemoglobin, 5.3 % and 5.5% is found in 3 respondents each correspondingly, 5.6% is found in 1 respondent only which is lowest of all.

If we compare the above two tables, that is, uptil 3 months and after 3 months of DRP, we can find that the level of all three FBS, PPBS and HbA1c is reduced in the respondents.

Table 5: Nutritional level of Pre-diabetic

T.C.(kcal)	1700-2000	03
	2000-2300	04
	2300-2600	08
CHO(gms)	300-350	03
	350-400	02
	400-450	07
	450-500	03
Fat(gms)	20-30	01
	30-40	05
	40-50	09
Pro (gms)	50-55	04
	55-60	04
	60-65	02
	65-70	02
	70-75	03

Fiber (gms)	10-12	07
	12-14	02
	14-16	05
	16-18	01

In the above table we have recorded the nutritional content before DRP Programme, which includes kcal, CHO, Fat, Protein and Fiber. It is observed that Total calories is divided into 3 groups. 1700-2000 kcal is found in 3 respondents, 2000-2300 kcal is found in 4 respondents and 8 respondents lie in the range 2300-2600. We also observed CHO and found that 3 respondents lie in group 300-350 gms, 350-400 gms is found in 2 respondents, 400-450 gms is observed in 7 respondents and 450-500 gms of CHO is found in 3 participants. Most of the respondents have fat level of 40-50 Gms. We also enquired protein level in individuals. 50-55 and 55-60 Gms of protein is found in 4 respondents each while 60-65 and 65-70gms is found in 2 respondents each. Next we studied fiber content and found that maximum number of respondents i.e. 7 individuals have fiber content of 10-12 gms and least numbers of respondents have 16-18 gms of fiber.

Table 5: Nutritional level in process of going to non-diabetic from pre diabetic (i.e. Nutritional level in non-diabetic)

T.C.(kcal)	1000-1500	06
	1500-2000	09
CHO(gms)	150-200	04
	200-250	03
	250-300	07
	300-350	01
Fat(gms)	15-20	04
	20-25	05
	25-30	06
Pro (gms)	50-60	04
	60-70	02
	70-80	03
	80-90	04
	90-100	02
Fiber (gms)	20-22	06
	22-24	03
	24-26	06

In the above table we have recorded the nutritional content after DRP Programme, which includes kcal, CHO, Fat, Protein and Fiber. It is observed that Total calories is divided into 2 groups. 1000-1500 kcal is found in 6 respondents and 1500-2000 kcal is found in 9 respondents. We also recorded CHO and found that 4 respondents lie in group 150-200 gms, 200-250 gms is found in 3 respondents, 250-300 gms is observed in 7 respondents and 300-350 gms of CHO is found in 1 participants. Most

of the respondents have fat level of 25-30 gms and 20-25 gms of fat is found in 5 respondents while the remaining respondents have fat level of 15-20 gms. We also enquired protein level in individuals. 50-60 and 80-90 gms of protein is found in 4 respondents each while 60-70 gms is found in 2 respondents, 70-80 gms of protein is found in 3 respondents and 90-100 gms is found in 2 respondents. Next we studied fiber content and found that fiber content of 20-22 Gms and 24-26 Gms of fiber is found in 6 respondents each.

In contrasting the above two table we can observe that calories, Carbohydrates and fat level of respondents have decreased after 3 months as compared up to 3 months whereas protein and fiber content increased which is positive response for DRP Programme.

Conclusion

These chronic metabolic illnesses have not been decreased, reversed, or prevented in any country. These metabolic illnesses are, for the most part, lifestyle diseases. Thousands of people have been researched all around the world to see if complementary therapies can help with glycemic control, lipid profiles, and other diabetes problems. We investigated the effect of a Diabetes Reversal Protocol utilizing such a combination therapy in this early investigation. We found the reduction in weight level after DRP Program and from going to non-Diabetic from pre-diabetic. Wealso studied the FBS, PPBS and HbA1c levels and found that the level of all three FBS, PPBS and HbA1c is reduced in the respondents after 3 months. It is also observed that calories, Carbohydrates and fat level of respondents have decreased after 3 months as compared up to 3 months whereas protein and fiber content increased which is positive response for DRP Programme.

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Development and Tryout of Computer Assisted Instruction on Dayanand Saraswati

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ABSTRACT

The purpose of this research was to develop the Computer Assisted Instruction on Dayanand Saraswati and tryout it on trainees of Education College. The researcher has been teaching this unit to trainees for a long time. The Computer Assisted Instruction was prepared by reading 45 books on this unit. It was tryout on 47 trainees who were the trainees of college of Teacher Education where the researcher has been teaching for 15 years. One day workshop was arranged to experiment the Computer Assisted Instruction. Pretest was given in the first session to check the previous knowledge, than the Computer Assisted Instruction which was developed by the researcher on Dayanand Saraswati was given for the study. The researcher was the facilitator during the work shop. The post test was given to the trainees in the last session to know the learning outcomes. It was experimental research and Single group pre-test post-test design was used. It was found in the result that the average score of pretest was 04.98 and the average score of posttest was 42.09. There was significance difference between the mean score of pre-test and post-test. It clearly indicated that Computer Assisted Instruction which was developed on Dayanand Saraswati was effective.

Keywords: Computer Assisted Instruction, Dayanand Saraswati

Introduction

The trainees were taught the unit Dayanand Saraswati in the education college by the researcher. In today's computer age, students prefer to study with the help of computers rather than books. One thing was noticed from the previous researches that if CAI programme is developed on this unit, it will be easier for the trainees. So it was decided to develop Computer Assisted Instruction on Dayanand Saraswati. The principal gave permission to arrange work shop to implement the CAI Programme and the trainees were also curious to

know about Dayanand Saraswati. This research was the result of systematic effort which was done on that direction.

Objectives

1. To develop the Computer Assisted Instruction on Dayanand Saraswati
2. To tryout the Computer Assisted Instruction on Dayanand Saraswati and to study its effectiveness.

Hypothesis

There will be no significance difference between mean score of pre-test and post-test on Computer Assisted Instruction on Dayanand Saraswati.

Review of Literature

The Research work which was done on CAI was reviewed to give the final touch to this study. The researcher reviewed many research reports: Hegde (2014), Basu(1973), Barad(2010), Bharathi(2011), Desai(2004), Joel(2004), You-Jin(2009), Khirwadkar(1998), Leonard(1999), Naik(2003), Panchal(2007), Patel(2006), Patel(2008), Rothman(2000), Sonvane(2004) and Gohil(2020) in which were Computer Assisted Instruction was developed and tried out. Based on these previous researches, it was easy to outline the research design. This study also helped a lot in the development of Computer Assisted Instruction on Dayanand Saraswati.

Research Design

It was experimental research and the research design was single group pre-test post-test experimental design.

Sample

The sample was purposive. 47 trainees of College of Teacher Education was the sample of this research.

Tools

1.Computer Assisted Instruction on Dayanand Saraswati

Computer Assisted Instruction on Dayanand Saraswati was developed. The CAI was in DVDs form. It was self made tool.

2.Test

a. The teacher made test which were used in pre test and post test was developed to know the trainees' achievement score on Dayanand Saraswati.

b. There were 50 multiple choice questions which contained 50 marks in the test. The test which was developed to know the trainees' achievement score on Dayanand Saraswati was used in pre test and post test.

Research Design

Step	Sessions detail	Time
1	Pre-Test	45 Minutes
2	Implementation of Computer Assisted Instruction Computer Assisted Instruction which was developed on Dayanand Saraswati was given to the trainees for study. The researcher was facilitator during the sessions.	4 hr.
3	Post test	45 Minutes

Data Collection

The pre test was given to the trainees in the first session of the work shop to know their previous knowledge regarding Dayanand Saraswati. After that printed Computer Assisted Instruction was given. Four hours were given to the trainees to study and discuss the printed Computer Assisted Instruction. The researcher was facilitator during this time. The post test was given in the last session. The trainees responses were recorded in answer sheets which were examined properly and marks were given them according to their answers. The researcher collected the research data in this way.

Data Analysis

The collected research data was statistically analyzed. The statistical function Mean, Standard Deviation and t-test were used for data analysis.

	Number of trainees	Mean	S.D.	t-test
Pre- Test	47	04.98	0.87	Significant at 0.01 level
Post- Test	47	42.09	3.93	

It was found in the result that the mean score of pre test was 04.98 and the mean score of post test was 42.09. The difference between the mean score of pre test and post test was 37.11. It clearly indicated that Computer Assisted Instruction which was developed on Dayanand Saraswati was effective.

Discussion

This study proved that the Computer Assisted Instruction which was developed on Dayanand Saraswati was effective. This study will helpful to those teachers who are interested in developing Computer Assisted Instruction. It will be also helpful to the learners who want to know about Dayanand Saraswati.

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A Study of the Impact of Faculty on the Opinion of Beneficiary Candidates of the Scheme of Developing High Quality Research Regarding the Scheme

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ABSTRACT

Research is essential for all as it helps continuously improve and evolve, ensuring that everyone receives the best living environment. To produce meaningful research is the responsibility of researchers. Hence, dedicated researchers are essential to produce useful research in all fields. Researchers who are committed to producing valuable research often encounter various obstacles on their research journey, one of which is financial stress. Many central and state government funding agencies provide financial support to Ph.D. scholars through various financial assistance schemes that help the researcher to produce meaningful research in the field. The scheme of developing high quality research – SHODH is an initiative of the Government of Gujarat to provide financial assistance to Ph.D. scholars of the state from different recognized universities/institutes of the state to produce quality research in various disciplines. The presented research is a study of the opinion of beneficiary candidates of the scheme of developing high quality research about the scheme benefits, functional processes, and utility based on their faculty. The study is carried out under the causal-comparative research method to know whether the opinion of the Ph.D. scholars (beneficiaries of the scheme) about selected aspects of the scheme differs on the basis of their faculty or not. This will help to understand the requirements of research scholars of different faculties; to get an idea to facilitate scholars in a better way to produce meaningful research in their respective faculties.

Keywords: SHODH-ScHeme of Developing High quality research, Beneficiary Ph.D. Scholars, Opinion and Faculty.

Introduction

Researchers are a valuable asset to our nation, the contribution of researchers is very much useful to identify issues/challenges/problems of the community, find out possible solutions to them, and produce meaningful research for future development. In this manner, researchers need to be taken care of. Researchers must be dedicated to their work to do meaningful, useful, and quality research work. Hence, they require focus, support, motivation, and incentive to inspire them to produce such research. Financial assistance is one kind of support for Ph.D. scholars to work proficiently in their research; the scheme of developing high quality research provides such financial support to those scholars. SHODH is an abbreviation of the ScHeme of Developing High quality research – which gives a meaningful Gujarati word that means 'Research' in English. It is an initiative of the State government of Gujarat to provide financial assistance to Ph.D. scholars of recognized universities/institutes of Gujarat to overcome their financial stress in terms of producing quality research.

The scheme is designed to support full-time Ph.D. scholars from recognized universities/institutes in Gujarat who have enrolled in the course after July 2018 and achieved a minimum of 55% in their graduation and master's degree (with a relaxation of 5% for candidates from reserved categories). The tenure of the scheme is two years, during which scholars receive a monthly stipend of Rs. 15,000 and a contingency amount of Rs. 20,000 per year, making the total benefit up to four lakh rupees. The selection process for the scheme is based on research proposals, and selection is not merit-based or caste/category-based and does not require any additional qualifications such as NET/GSET. However, selected scholars must not receive an income from any other source and cannot avail of any other similar schemes during the tenure of the scheme.

The presented research is conducted to study the opinions of beneficiary research scholars of the scheme about the functional processes like application, communication, and monitoring system, and benefits of the scheme; such as tenure, monthly stipend, contingency amount, and utility of the scheme based on their faculty i.e., Science & Technology, and Social Science & Humanities. The study has been conducted to explore if the Ph.D. scholars are having any differences in their opinion about the various aspects of the scheme based on their faculty because there could be differences in research, their life experiences, exposure, or need.

Research Objectives

The researcher has established the following objectives to investigate the opinions of beneficiary candidates of the scheme of developing high quality research regarding the scheme in terms of their faculty.

1. To study the opinions of the beneficiaries of the scheme regarding the functional processes of the scheme with respect to their faculty.
2. To study the opinions of the beneficiaries of the scheme regarding the benefits of the scheme with respect to their faculty.
3. To study the opinions of the beneficiaries of the scheme regarding the importance of the scheme with respect to their faculty.

Variable

Table 1 describes the variables of the study. The independent variable is the faculty, which has been categorized into two levels: Science & Technology, and Social Science & Humanities. The dependent variable is the opinion of the beneficiaries on the benefits of the scheme.

Table – 1 Variables of the study

Sr. No.	Type	Variable	Level
1.	Independent	Faculty	1. Science & Technology 2. Social Science & Humanities
2.	Dependent	Opinion on SHODH benefits	-

Hypotheses

The researcher has framed null hypotheses for the presented study as follows,

H_{0_1} There is no significant difference between the opinion of the beneficiaries from Science & Technology and Social Science & Humanities regarding the application process of the scheme.

H_{0_2} There is no significant difference between the opinion of the beneficiaries from Science & Technology and Social Science & Humanities regarding the monitoring system of the scheme.

H_{0_3} There is no significant difference between the opinion of the beneficiaries from Science & Technology and Social Science & Humanities regarding the communication channel

of the scheme.

H_{0_4} There is no significant difference between the opinion of the beneficiaries from Science & Technology and Social Science & Humanities regarding the benefits of the scheme.

H_{0_5} There is no significant difference between the opinion of the beneficiaries from Science & Technology and Social Science & Humanities regarding the importance of the scheme.

Type of Research and Research Method

The presented study can be categorized as an applied type of research and involves quantitative data. The study was conducted using the causal-comparative research method (ex-post-facto research method), which is best suited for establishing a cause-and-effect relationship between the independent and dependent variables of the study. In this case, the independent variable is the faculty, while the dependent variable is the beneficiaries' opinion on the scheme of developing high quality research.

Population & Sample

The population of the study includes 2676 Ph.D. scholars who belong to three beneficiary batches of the scheme of developing high-quality research from recognized universities/institutes in the Gujarat state. A fourth batch is currently under process. To conduct the study, a purposive sampling method was employed to select a sample of 636 beneficiary Ph.D. scholars. This sample includes 439 beneficiaries from Science & Technology and 197 beneficiaries from Social Science & Humanities.

Research Tool

The data for the study was collected using a questionnaire developed by the researcher. The questionnaire contains twenty items divided into three components of the scheme: Functional Processes (consisting of 10 items), Benefits (consisting of 4 items), and Importance (consisting of 6 items). Respondents were asked to indicate their responses as either 'Yes' or 'No' using the options provided in the questionnaire.

Data Analysis & Interpretations

The data collected for the study were analyzed in two ways. Descriptive statistic of frequency distribution has been used to describe the responses of the beneficiaries. The chi-square test of non-parametric methods of inferential statistics has been used to test the hypotheses of the study as the collected study data is in a nominal scale of measurement. Each component of

the scheme was analyzed separately based on the formulated objectives of the study.

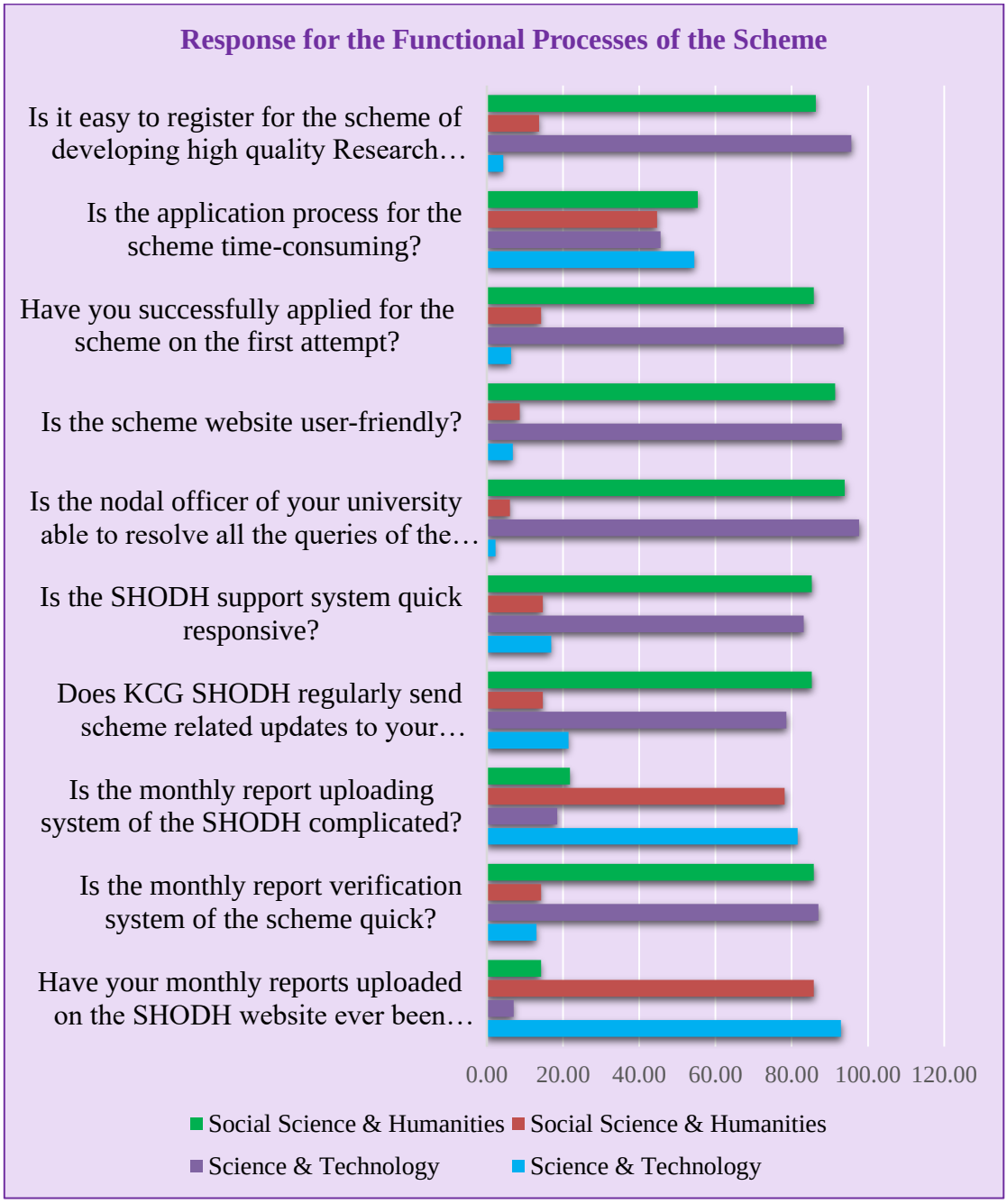

Chart – 1 Response for the Functional Processes of the Scheme

Chart – 1 is a presentation of responses collected from the study sample for the questions related to the functional process of the scheme with respect to their faculty. Green and yellow bars show positive responses and orange and blue bars show negative responses of the study sample from Social Science & Humanities, and Science and Technology respectively.

H_{0_1} There is no significant difference between the opinion of the beneficiaries from Science & Technology and Social Science & Humanities regarding the application process of the scheme.

Table – 2Calculations for the Responses Regarding the Application Processes of the Scheme

Faculty	**Science & Technology**				**Social Science & Humanities**				**Chi-square**
Item	Yes	%	No	%	Yes	%	No	%	
Is it easy to register for the scheme of developing high quality Research (SHODH)?	420	95.67	19	4.33	170	86.29	27	13.71	16.45
Is the application process for the scheme time-consuming?	200	45.56	239	54.44	109	55.33	88	44.67	4.81
Have you successfully applied for the scheme on the first attempt?	411	93.62	28	6.38	169	85.79	28	14.21	9.44

The calculated values of the Chi-square for all three questions regarding the application process of the scheme 16.45, 4.81, and 9.44 are respectively greater than the chi-square table values of 3.84 and 6.63 at 0.05 and 0.01 levels of significance. Therefore, the null hypothesis is not accepted for all the questions given in Table - 2 at 0.05 and 0.01 levels of significance, and the alternative hypothesis is accepted that there is a significant difference between the opinion of the beneficiaries from Science & Technology and Social Science & Humanities regarding the application process of the scheme. It can be said that the opinions of Ph.D. scholars from Science & Technology and Social Science & Humanities regarding the functional process of the scheme are not at the same level.

H_{0_2} There is no significant difference between the opinion of the beneficiaries of Science & Technology and Social Science & Humanities regarding the monitoring system of the

scheme.

Table – 3Calculation for the Responses Regarding the Monitoring System of the Scheme

Faculty	**Science & Technology**				**Social Science & Humanities**				**Chi-square**
Item	Yes	%	No	%	Yes	%	No	%	
Is the monthly report uploading system of the SHODH complicated?	81	18.45	358	81.55	43	21.83	154	78.17	0.78
Is the monthly report verification system of the scheme quick?	382	87.02	57	12.98	169	85.79	28	14.21	0.08
Have your monthly reports uploaded on the SHODH website ever been rejected?	31	7.06	408	92.94	28	14.21	169	85.79	7.43

The calculated values of the Chi-square for questions “Is the monthly report uploading system of the SHODH complicated?”, “Is the monthly report verification system of the scheme quick?”0.78and0.08 respectively are lesser than the chi-square table values of 3.84 and 6.63 at 0.05 and 0.01 levels of significance. Therefore, the null hypothesis is not rejected for the mentionedfirst two questions given in Table - 3 at 0.05 and 0.01 levels of significance. It can be said that the opinions of Ph.D. scholars from Science & Technology and Social Science & Humanities on the complexity of the monthly report uploading system and the verification system of the scheme are at the same level.

The calculated value of the Chi-square for the question “Have your monthly reports uploaded on the SHODH website ever been rejected?” 7.43 is greater than the chi-square table values of 3.84 and 6.63 at 0.05 and 0.01 levels of significance respectively. Therefore, the null hypothesis is not accepted for the mentioned question at 0.05 and 0.01 levels of significance,and the alternative hypothesis is accepted for the question. It can be said that the

opinions of Ph.D. scholars from Science & Technology and Social Science & Humanities on therejection of the monthly reports uploaded on the website are not at the same level.

H_{0_3} There is no significant difference between the opinion of the beneficiaries of Science & Technology and Social Science & Humanities regarding the communication channel of the scheme.

Table – 4Calculation for the Responses Regarding the Communication Channel of the Scheme

Faculty	**Science & Technology**				**Social Science & Humanities**				**Chi-square**
Item	Yes	%	No	%	Yes	%	No	%	
Is the scheme website user-friendly?	409	93.17	30	6.83	180	91.37	17	8.63	0.40
Is the nodal officer of your university able to resolve all the queries of the beneficiaries related to the scheme?	429	97.72	10	2.28	185	93.91	12	6.09	4.83
Is the SHODH support system quick responsive?	365	83.14	74	16.86	168	85.28	29	14.72	0.31
Does KCG SHODH regularly send scheme-related updates to your registered email id?	345	78.59	94	21.41	168	85.28	29	14.72	3.48

The calculated value of the Chi-square for questions “Is the scheme website user-friendly?”, “Is the monthly report verification system of the scheme quick?”, and “Does KCG SHODH regularly send scheme-related updates to your registered email id?” 0.40, 0.31, and3.48 respectively are lesser than the chi-square table values of 3.84 and 6.63 at 0.05 and 0.01 levels of significance. Therefore, the null hypothesis is not rejected for the mentioned

questions at 0.05 and 0.01 levels of significance. It can be said that the opinions of Ph.D. scholars from Science & Technology and Social Science & Humanities on the user-friendliness of the scheme website, the responsiveness of SHODH support, and the system update of the scheme are at the same level.

The calculated value of the Chi-square for the question "Is the nodal officer of your university able to resolve all the queries of the beneficiaries related to the scheme?" 4.83 is greater than the chi-square table value of 3.84 at a 0.05 level of significance. Therefore, the null hypothesis is not accepted for the mentioned question at a 0.05 level of significance,and the alternative hypothesis is accepted for the question. It can be said that the opinions of Ph.D. scholars from Science & Technology and Social Science & Humanities to get solutions to their queries regarding the scheme from Nodal officers of the scheme are not at the same level.

H_{0_4} There is no significant difference between the opinion of the beneficiaries from Science & Technology and Social Science & Humanities regarding the benefits of the scheme.

Table – 5 Calculation for the Responses Regarding the Benefits of the Scheme

Faculty	**Science & Technology**				**Social Science & Humanities**				**Chi-square**
Item	Yes	%	No	%	Yes	%	No	%	
Should the tenure of the scholarship be increased?	370	84.28	69	15.72	143	72.59	54	27.41	11.182
Is the amount of monthly scholarship sufficient for monthly livelihood?	132	30.07	307	69.93	64	32.49	133	67.51	0.268
Is the contingency amountsufficient to fulfill the research requirements?	215	48.97	224	51.03	96	48.73	101	51.27	0.001
Should the contingency amount be paid every three months?	300	68.34	139	31.66	134	68.02	63	31.98	0.0001

The calculated value of the Chi-square for the question "Should the tenure of the scholarship

be increased?" 11.18is greater than the chi-square table values of 3.84 and 6.63 at 0.05 and 0.01 levels of significance respectively. Therefore, the null hypothesis is not accepted for the mentioned question at 0.05 and 0.01 levels of significance,and the alternative hypothesis is accepted for the question. It can be said that the opinions of Ph.D. scholars from Science & Technology and Social Science & Humanities on the tenure of the scheme are not at the same level.

The calculated value of the Chi-square for questions "Is the amount of monthly scholarship sufficient for monthly livelihood?", "Is the amount of contingency sufficient to fulfill the research requirements?", and "Should the contingency amount be paid every three months?" 0.268, 0.001, and0.0001 respectively are lesser than the chi-square table values of 3.84 and 6.63 at 0.05 and 0.01 levels of significance. Therefore, the null hypothesis is not rejected for the mentioned questions at 0.05 and 0.01 levels of significance. It can be said that the opinions of Ph.D. scholars from Science & Technology and Social Science & Humanities on the monthly amount of scholarship, contingency, and the yearly disbursement of the contingency of the scheme are at the same level.The graphical representation of the analysis has been given in Chart- 2.

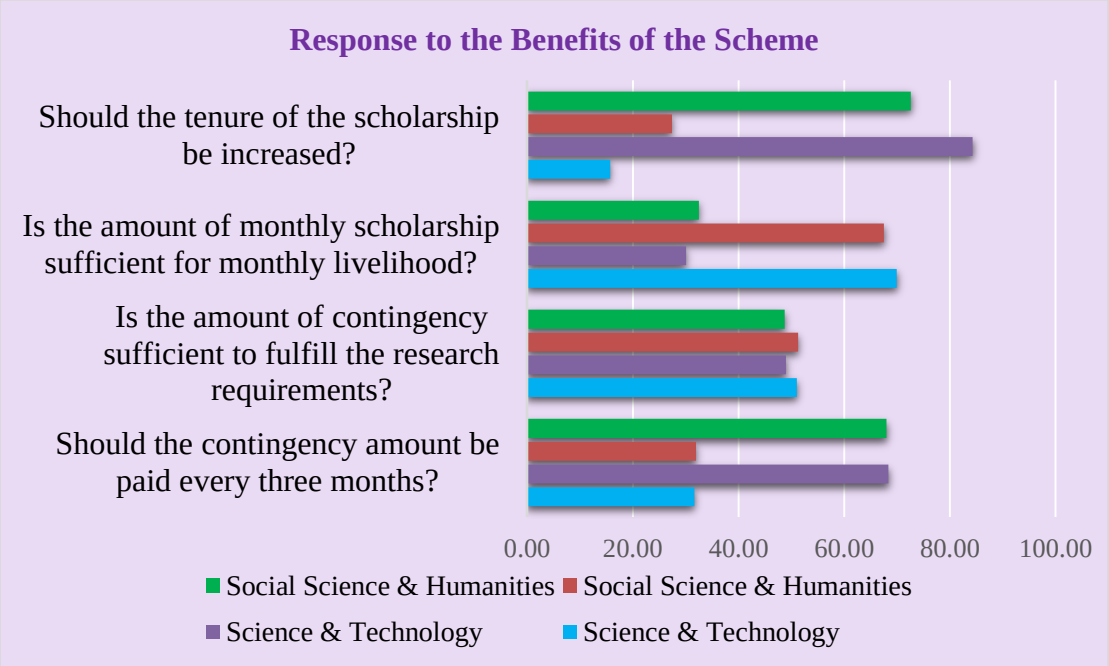

Chart – 2 Responsesto the Benefits of the Scheme

H_{0_5} There is no significant difference between the opinion of the beneficiaries from Science & Technology and Social Science & Humanities regarding the importance of the scheme.

Table – 6 Calculation for the Responses Regarding the Importance of the Scheme

Faculty	**Science & Technology**				**Social Science & Humanities**				**Chi-square**
Item	Yes	%	No	%	Yes	%	No	%	
Would it have been possible for you to pursue a Ph.D. without financial support from this scheme?	49	11.16	390	88.84	28	14.21	169	85.79	0.920
Does the benefit of this scheme help the researcher to improve the quality of his research?	434	98.86	5	1.14	194	98.48	3	1.52	0.0003
Does the benefit of this scheme help reduce the financial stress of Ph.D. scholars?	425	96.81	14	3.19	192	97.46	5	2.54	0.038
Does the benefit of this scheme help reduce the anxiety of getting a job for a Ph.D. scholar?	350	79.73	89	20.27	158	80.20	39	19.80	0.001

Faculty	**Science & Technology**				**Social Science & Humanities**				**Chi-square**
Item	Yes	%	No	%	Yes	%	No	%	
Should a researcher choose the benefit of SHODH over a job to do quality research work in Ph.D.?	361	82.23	78	17.77	158	80.20	39	19.80	0.250
Will you recommend availing SHODH to other Ph.D. scholars?	429	97.72	10	2.28	182	92.39	15	7.61	8.889

The calculated value of the Chi-square for questions “Would it have been possible for you to pursue a Ph.D. without financial support from this scheme?”, “Does the benefit of this scheme help the researcher to improve the quality of his research?”,“Does the benefit of this scheme help reduce the financial stress of Ph.D. scholar?”, “Does the benefit of this scheme help reduce the anxiety of getting a job for a Ph.D. scholar?”, “Should a researcher choose the benefit of SHODH over a job to do quality research work in Ph.D.?” 0.920, 0.003, 0.038, 0.001, and0.0001 respectively are lesser than the chi-square table values of 3.84 and 6.63 at 0.05 and 0.01 levels of significance. Therefore, the null hypothesis is not rejected for the mentioned questions at 0.05 and 0.01 levels of significance. It can be said that the opinions of Ph.D. scholars from Science & Technology and Social Science & Humanities on financial support to pursue a doctorate, improve the quality of work, and reduce financial stress and job anxiety are at the same level.

The calculated value of the Chi-square for the question “Will you recommend availing SHODH to other Ph.D. scholars?” 8.889 is greater than the chi-square table values of 3.84 and 6.63 at 0.05 and 0.01 levels of significance respectively. Therefore, the null hypothesis is not accepted for the mentioned question at 0.05 and 0.01 levels of significance,and the alternative hypothesis is accepted for the question. It can be said that the opinions of Ph.D. scholars from Science & Technology and Social Science & Humanities on the recommendation of the scheme are not at the same level. The graphical representation of the analysis has been given in Chart- 3.

Chart – 3 Response for the Importance of the Scheme

Result & Discussion

Based on the data interpretation of the study, a difference in the opinion of the scholars has been seen based on the taken variable indicating that the faculty does have an impact on their opinion regarding the scheme of developing high quality research. Based on the difference in the opinion of the scholars with respect to their faculty beneficiary Ph.D. scholars from the Science and Technology face fewer challenges in performing tasks of the functional processes like application, uploading monthly evaluation documents, and communicating with the functionaries of the scheme compared to beneficiary Ph.D. scholars of Social Science & Humanities; It may be due to lack of technical awareness/knowledge/skills of scholars as most of the work of the scheme is need to be done in online.

Based on the responses of the study sample, it can be said that the beneficiaries from both faculties are expecting an increase in the benefits of the scheme like tenure, amount of

monthly stipend, and contingency of the scheme. Ph.D. scholars from Science & Technology are more likely to expect an increase in the tenure of the scheme in comparison to beneficiary Ph.D. scholars from Social Science & Humanities. Moreover, beneficiaries from both faculties equally believe to have a contingency amount quarterly instead of yearly disbursement.

The importance of the scheme in developing quality research work in their respective faculty is acknowledged by all the beneficiary Ph.D. scholars. The financial support provided by this scheme enables them to pursue their doctoral course and produce quality work in their research while reducing their financial stress and job anxiety. Furthermore, Ph.D. scholars from Science and Technology are more likely to recommend this scheme to other scholars in comparison to beneficiary Ph.D. scholars from Social Science & Humanities.

Therefore, it is essential to address the challenges faced by beneficiary Ph.D. scholars and fulfill the expectations of both faculties to improve the scheme's effectiveness.

Conclusion

The Presented study examined the impact of faculty on the opinions of beneficiary candidates of the scheme of developing high quality research. The study reveals that Ph.D. scholars from Science and Technology face fewer challenges in performing tasks of functional processes compared to those from Social Science & Humanities, possibly due to the latter's lack of technical awareness. Both faculties expect an increase in benefits, such as tenure, monthly stipend, and contingency. All beneficiary scholars acknowledge the scheme's importance in developing quality research and reducing financial stress. Ph.D. scholars from Science and Technology are more likely to recommend the scheme. The findings of the study provide insights into the opinions of beneficiary candidates of the scheme and can be useful for policymakers in improving the scheme and addressing the challenges faced by scholars in different faculties.Despite these challenges, researchers remain committed to their work and strive to overcome these obstacles in order to make meaningful contributions to their fields of study.

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Influence of Demographic Variables on E-learning Readiness of Students

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ABSTRACT

E-learning is being considered as a solution for the rising demand for higher education. It is an innovative open learning multimedia modality to deliver education. E-learning makes use of multimedia technologies to enhance teaching and learning. However, the readiness to E-learning is influenced by many factors and hence, the current study aimed at exploring the influence of Gender, Location of Institution and Type of Institution on the E-learning Readiness (ELR) of Students. The sample of the study consisted of 57 students of higher education institutions of the Jammu region of Jammu and Kashmir. The students were asked to rate their readiness to E-learning on a five-point symmetric likert scale consisting of 43 items related to various dimensions of ELR. The collected data was analysed with the help of SPSS V26. The statistical techniques like Independent Samples t-test was used to test the hypotheses. The results of the study reveal that Gender, Location of Institution and Type of Institution have no significant influence on the ELR of Students. The study concludes by giving further suggestions for research in this area.

Keywords: Information and Communication Technology, E-learning, E-learning Readiness, Gender, Location of Institution, Type of Institution, Higher Education

Introduction

E-learning is considered as a vital technology of modern era where it aims to create an interactive learning environment which is based on computers and internet. It empowers learners by provindg them access to information from anywhere in the world (Mosa et al., 2016). It is an innovative open learning multimedia modality to deliver education in which acquisition of knowledge is primarily facilitated and distributed by electronic means. It can be defined as the use of electronic media (Paiva, et al., 2016; Agarwal & Pandey, 2013), Information and Communication Technology (ICT) and Educational Technology (ET) in education (Contreras & Hilles, 2015; Al-araibi, et al., 2019). E-learning uses a variety of digital communication devices and softwares to carry out teaching learning activities remotely (Hadining et al., 2019). The E-learning system possesses the ability to support interactive communication which gives the students full control of their learning (Liaw & Huang, 2011). E-learning makes use of multimedia technologies to enhance teaching and learning. It is helpful in the delivery of just-in-time information and guidance from experts belonging to various walks of life and also efficient in eliminating the distance barriers between teaching and learning. It is being introduced for enhancing the learning opportunities and facilitating students' access and success in education (Coopasami, et al., 2017). However, the potential benefits of E-learning can be accured only when the stakeholders of it are ready to embrace it i,e. E-learning Ready. The adoption of E-learning in higher education can only be achieved by measuring the readiness towards it (Rohayani et al., 2015).

E-learning Readiness (ELR) can be defined as the “state of mental, physical and material preparedness of stakeholders for fruitful e-learning experience and action” (Nwagwu, 2019; Navani & Ansari, 2020). It can also be defined as the level of readiness and the ability to use new technological tools (Watkins & Triner, 2004; Hashim & Tasir, 2014). The ELR assessment helps organizations to design the E-learning strategies comprehensively (Kaur & Abas, 2004). It is one of the most critical factor for the successful implementation of E-learning in higher education (Rohayani et al., 2015). E-learning is being considered as a new phenomenon and the instructors and students are trying to adopt to it for its successful implementation (Mahajan & Kalpana, 2018). Hence, for successful implementation of E-learning, it becomes necessary to assess the readiness towards it.

Method

The population of the study consisted of students of higher education institutions belonging to Jammu region of Jammu and Kashmir state. The data for the study was collected online during the year 2021 when India was facing the 2nd wave of COVID19. On the basis of

review of literature (Lindasari et al., 2021; Alam, 2020; Ullah et al., 2021 etc.), the researcher used simple random sampling technique for selecting the sample of the study. The research tool was emailed to 121 students in the form of an online survey prepared in the google form. Out of 121 students, 57 students responded to the survey and hence the response rate of the study is 47.1 %.

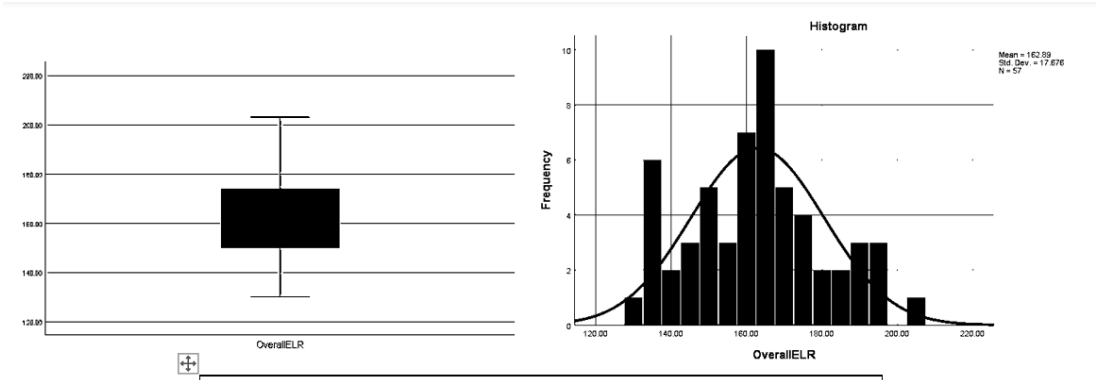
To study the influence of demographic variables on the ELR of the students, the respondents were asked to provide their personal information and also to rate about their ELR on a continuum of five-point likert type scale of "Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree". The scale consisted of 43 items categorized under 03 dimensions namely "Technological Readiness, Psychological Readiness and Infrastructure Readiness". To ensure the face validity of the tool, the tool before implementation was sent to around 05 subject experts for their suggestions. The suggestions/corrections given by the subject experts were incorporated and the reliability of the full scale and dimension wise reliability tested using Cronbach Alpha (vide table 1.1) reveals that the tool was reliable (Heale & Twycross, 2015). The collected data was further analysed using SPSS V26.

Table 1.1: *Reliability Statistics of the tool*

Dimension	**Cronbach's Alpha**
Technological Readiness	0.8
Psychological Readiness	0.73
Infrastructure Readiness	0.8
Overall	**0.89**

Results

The current study aimed to explore the influence of Gender, Location of Institution and Type of Institution on ELR of Students. The data was collected from students of higher education institutions of Jammu region. The collected data on E-learning readiness of students was without outliers and was normally distributed as shown in figure 1.1



Kolmogorov-Smirnov[a]			
	Statistics	**df**	**Sig.**
ELR of Students	.057	57	.200*
a. Lilliefors Significance Correction * Normal Distribution			

Figure 1.1: Box Plot, Normal Probability Curve and Test of Normality of ELR of Students

The students were asked to express their level of ELR by responding to the items given on a continuum 5 point scale of ELR tool. The mean score on ELR of students was 162.89 (table 1.2) and around 52% of students are above the mean score and around 47% of them are below the mean score. The standard deviation value indicates that the E-learning readiness score of students is not highly deviated. The value of Std. Error of Mean indicates that the sample mean is more accurate reflection of the actual population mean (table 1.2)

Table 1.2: *Descriptive Statistics of ELR of Students*

Mean	162.89
Std. Error of Mean	2.34
Std. Deviation	17.67
Minimum	130.00
Maximum	203.00

To study the influence of Gender on ELR of students, the collected data was tested for normality (table 1.3) and was found normally distributed (Male: KS=0.081, df=30, $p > 0.05$; Female: KS=0.097, df=27, $p > 0.05$) and use of "Independent Samples t-test" (t-test = 0.842, $p > 0.05$) (table 1.3) revealed that gender does not have any significant influence on ELR of students and hence both male and female students are equal in terms of their ELR.

***Table 1.3**: Influence of gender on ELR of students*

	Kolmogorov-Smirnov			**Levene's Test for Equality of Variances**	
Gender of Students	Statistics	df	Sig.	0.069	0.793**
Male	0.081	30	0.200*		
Female	0.097	27	0.200*		
*Normal				Equal variances assumed**	
H_{01}				"There is no significant difference in the mean scores of E-learning Readiness of students on the basis of their gender"	
Sig				0.842	
Decision				Fail to reject H_{01}	

To study the influence of Location of Institution on ELR of students, the collected was tested for normality (table 1.4) and was found normally distributed (Urban: KS=0.081, df=46, p > 0.05; Rural: KS=0.165, df=11, p > 0.05) and use of "Independent Samples t-test" (t-test = 0.655, p > 0.05) (table 1.4) revealed that location of institution does not have any significant influence on ELR of students and hence students studying in institutions located in urban and rural areas area are equal in terms of their ELR

***Table 1.4:** Influence of location of institution on ELR of students*

	Kolmogorov-Smirnov			**Levene's Test for Equality of Variances**	
Area	Statistics	df	Sig.	0.330	0.568**
Urban	0.081	46	0.200*		
Rural	0.165	11	0.200*		
*Normal				Equal variances assumed**	
H_{02}				"There is no significant difference in the mean score of E-learning Readiness of students on the basis of Location of Institution"	
Sig				0.655	
Decision				Fail to reject H_{02}	

To study the influence of Type of Institution on ELR of students, the collected data was

tested for normality (table 1.5) and was found normally distributed (Central level: KS=0.089, df=42, p > 0.05; State level: KS=0.116, df=15, p > 0.05) and use of "Independent Samples t-test" (t-test = 0.822, p > 0.05) (table1.5) revealed that type of institution does not have any significant influence on ELR of students and hence students from Central and State level institutions do not differ significantly in their ELR.

***Table 1.5**: Influence of type of institution on ELR of students*

	Kolmogorov-Smirnov			**Levene's Test for Equality of Variances**	
Type of Institution	Statistics	df	Sig.	0.277	0.601**
Central Level	0.089	42	0.200*		
State Level	0.116	15	0.200*		
*Normal				Equal variances assumed**	
H_{03}				"There is no significant difference in the mean scores of E-learning Readiness of students on the basis of type of Institution"	
Sig				0.822	
Decision				Fail to reject H_{03}	

Discussion & Conclusion

E-learning is going to play a crucial role in Education 4.0. It has the potential to address various challenges of higher education and hence, it becomes highly essential to study the readiness of stakeholders towards it. ELR is a multi-dimensional construct and demographic variables may play an important direct or indirect influence in it (Aydin and Tasci, 2005; Xhaferi et al., 2022; Aldowah et al., 2013). The demographic characteristics of students can contribute more when they are used in predicting the outcomes of learning (Rizvi et al., 2019). The influence of demographic variables on ELR of students was explored earlier as well by various researchers but as clear conclusions about them is still not established, the present research also tried to explore whether the demographic variables like Gender, Location of Institution and Type of Institution influence the ELR of Students or not. The influence of these variables on ELR was tested using "Independent Samples t-test" in SPSS V26. Gender gaps in ELR were one of the most explored questions in ELR. The influence of Gender on ELR was measured and it was found that Gender has no significant influence on

the mean score of ELR of students. The result relate to other precedent studies by Mohammad (2019); Gay, (2018), Hashim & Tasir, (2014); Tweed, (2013), Aslam et al., (2021), Adams et al., (2022) & Changiz et al., (2013) whereas the study by Naresh et al., (2016) reveal that Gender has influence on ELR of students. Similarly, the researchers tested the influence of location of institution and type of institution on ELR of students. It was found that both location of institution and type of institution have no influence on the mean score of ELR of students. The result relate to other earlier studies by Sharavjamts et al., (2022); Kaushik & Agrawal (2020); Yoo et al., (2015); Rasouli et al., (2016); Malkawi et. al., (2021). Contrary to this, the study by Sulistio (2021) reveals that location of the institution has influence on ELR of students. Also Adams et al., (2018) in his study revealed that there was influence of demographic variables on ELR of students. Similarly, Islam et al., (2021) in his study revealed that demographic variables have significant affect on effectiveness of E-learning.

The current study contributes to the existing literature by highlighting the influence of demographic variables of students on ELR. The data for the current study was collected by fully online mode due to COVID19. Regarding the delimitation of the study, the current study was delimited to Students of Higher Education Institutions (HEI's) of Jammu and Kashmir, India. The current study was conducted on the basis of data collected during COVID pandemic and there may be a probability for this scenario to change and hence, there is a need to conduct ex-post facto studies in this area. Further, similar study can be conducted on both students and teachers of HEI's to explore about their comparative ELR.

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Poisonous Pedagogy- a Present Treatment leading to Future Mistreatment

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ABSTRACT

Character is not merely a sense that emanates or rises from within; it is mostly decided by extrinsic substances, such as culture, station, religion, and public perception. Poisonous pedagogy refers to a parenting and teaching technique that attempts to conquer a child's will by overt or covert violence, deception, and emotional blackmail. Such a toddler is besieged by arrogance and derision, deprived of privileges and conversation, duped in its attachment and trust, ignored, humiliated, and mocked in its anguish, and is blinded, lost, and cruelly exposed to the intensity of misinformed adults. To completely know a person's criminal mentality, it is not always sufficient to focus just on the individual's status; it is also vital to comprehend the individual's background, particularly what motivates them to perpetrate crime and other horrible deeds. Long-term, the developing adult would want to externalise his repressed rage because he was never permitted to comprehend and express it in non-dangerous ways. Educators must consider these concepts and methodologies to provide an equivalent solution. When an individual appreciates the benefits of being both great and restrained, he or she should have considered the norms of child conduct. Although the concept of poisonous pedagogy is not new, it does need standards, approaches, and treatments. The author endeavoured to study the concept of poisonous pedagogy in the contemporary context and offer solutions for minimising it. There is an urgent need for effective treatments, exercises, arrangements, or methods that will allow the child to transition from a "silent savage child" to an "expressive decent child."

Keywords: Poisonous pedagogy, Remedies, Violent Behavior

Introduction

Character is not only a sense that emits or evolves from within; it is mostly decided by external factors such as culture, status, religion, and consistency. To understand a person's criminal mindset, it is often futile to focus solely on the person's current situation; it is also vital to understand their past, which explains why they make mistakes or behave irrationally. Poisonous pedagogy may be the proper response in such a case. This prevents these individuals from forming a verifiable and genuine sense of self and society. The oppressive environment desensitises young people to the suffering of others. Long-term, the mature adult would want to vent their repressed displeasure through external emphasis because they were never taught to comprehend and express it securely. Childhood traits such as flexibility and a sense of care must be cultivated throughout a child's existence so that when a situation that is unfavourable to the child later in life arises, the child applies an uplifting attitude and avoids wrongdoing. Even though poisonous pedagogy is not a novel concept, it requires criteria, techniques, and answers. By focusing on this notion, the author attempted to analyse the concept of poisonous pedagogy in the present context and appreciate its justification for limiting such pedagogy. There is an urgent need for treatments, exercises, arrangements, and processes that enable the child to transition from "silent savage child" to "expressive decent child."

Conceptualization of Poisonous Pedagogy

In 1980, Alice Miller reported a fact relating to the "tradition of child rearing that seeks to suffocate the child's energy, creativity, and emotion and to preserve the parents' authoritarian, godlike role at all costs." The term "poisoned pedagogy" was given for such cases. It is founded on inequity, like a master-servant relationship. Instead of learning from children, poisonous pedagogy encourages shaping and training them as animals. Because it was considered a beneficial way for parents to express their love and loyalty to their children, corporal punishment was prevalent (and poisonous pedagogy continues to promote it). Miller believes that the majority of psychiatric models regard childhood therapy as a vital part of subsequent mental health and interpersonal relationships, which has allowed parental and institutional abuse to persist for an excessively long time. Thus, this phrase is intended to be unequivocally negative. The definition of "poisonous pedagogy" about child maltreatment is generally uncontested. It has become obvious that poisonous pedagogy is based on a false conception of what a child is and how we treat ourselves (our inner child) and our children

similarly. It is a term used by current psychologists and educators to distinguish themselves from the child-rearing practises of earlier eras.

Emerging viewpoints on poisonous pedagogy as seen through the eyes of different authors, academicians, and educators

Among educators, poisonous pedagogy is a matter of controversy. This is primarily attributable to a lack of conceptualization and advanced research. The concept dates back to the 1980s, but it is still widespread in the educational community; yet, the majority of stakeholders are indifferent about it, as many have never heard of it. Since there is less research or conceptualization in poor nations, the researcher did not differentiate between Indian and international perspectives. The researcher aimed to provide an understandable overview of the books, current articles, and scholarly papers on poisonous pedagogy.

Emerging perspectives from 1980–1990

In her 1980 book For Your Good, Swiss psychologist Alice Miller refers to nineteenth-century educational approaches as "poisonous pedagogy." In addition, she asserted that mistaken information was passed down through the generations and eagerly accepted by the youth. She says that teachers are the kids' mentors in terms of school instruction. The school decides what is right and what is wrong. The school exceeds the expectations of any sensible parent. The eagerness and zeal of children pose a threat to authority. Teachers should be recognised just for being teachers, despite their imperfections. She underlined that children should be respected just for being children, despite their flaws. To avoid self-humiliation, teachers must be inspired to please. Everyone, regardless of age, must feel unrestricted in their ability to communicate affection to others.

Perspectives between 1991 and 2000

David M. Harrington (1993) investigated components of Alice Miller's concept of "poisoned pedagogy" that functioned in the history of insufficient childhood personality development. He provided a critique of Alice Miller's concept of "poisonous pedagogy" (1983). The poisonous pedagogy, which diminishes the possibility of optimal personality development, was described by Block and Block (1980). Utilizing these findings, the author built indices for how pre-school parents used harmful pedagogy. It described poisonous pedagogy in a real-world school context but did not offer solutions or alternative strategies.

Robert et al. (1995) conducted a community-based epidemiological study and investigated the phenomenology of major depression in adolescents, classified as "events" in the DSM-III-R (Diagnostic and Statistical Manual of Mental Disorders). While depression was addressed, the majority of paediatric and adolescent mental disorders were classified. Depression, sleeplessness, and the inability to concentrate were the most prevalent baseline symptoms caused by toxic pedagogy, in which parents and teachers tortured students for achievement. The most common symptoms of new incidents or accidents were depression and cognitive impairments, which were compounded by poisoned pedagogy. This study highlights the mental pressure placed on adolescents by toxic teaching, as they are more susceptible to identity crises.

Palmer, S. The BACP Counselling Reader, published by et al. in 1996, is a compilation of some of the best work in the United Kingdom over the preceding 15 years. In addition, the collection of articles offers a historical framework for the development of separate counselling learning and teaching themes in the United Kingdom. Poisonous pedagogy is included since it impacts all stakeholders. Such guiding thoughts can aid adolescents in overcoming trauma brought on by parental and instructor pressure. Nevertheless, no more description of this pedagogy has been provided, nor have any strategies been defined.

Kanvey and Fitzclarence (1997) postulated a relationship between education and several forms of sexual and/or physical violence (male-to-male, male-to-female, and adult-to-child), identifying and criticising mainstream, sociocultural, and feminist anti-violence pedagogies. In Masculinity, Violence, and Schooling: Confronting Poisonous Pedagogies, the author outlines an alternate anti-violence pedagogy and a poisonous pedagogy. This discussion's results were used to provide an outline of the relationships between education and abuse. In this manner, Alice Miller's beliefs on toxic pedagogy were applied to education. The characters' grasp of poisonous pedagogy and its negative impact on child development was accurate. The focus here was on the violence directed disproportionately at male characters, particularly in a school setting, and not on age.

Emerging perspectives in 2001–2010

Alexander (2002) supplied a paper on naive dichotomous representations of complex reality, in part because a political and conceptual vacuum allows them to thrive. The author expanded the range of pedagogical orientations and options. Aside from that, assumptions about the relationships between people and two cultures have a direct impact on how educators think

and act. The inclusion of a consistent model or structure for conceptualization instruction greatly facilitates the identification of these principles, i.e., concordances and dissonances, in everyday classroom practice. Creating systems that make educational concepts and behaviours as resistant to bipolarity as possible is one technique for overcoming bipolar teaching models. These complicated methods have the potential to have a lethal educational component. Although the author did not take part in poisonous pedagogy in this instance, the scenario's dynamics led to it.

In their **2006 article titled "Whether Morality Harms Children," William L. Fridley and Alice Miller (a former psychoanalyst)** gained international recognition for their controversial and provocative works on child parenting. Miller asserts that standard child-rearing practises in schools, churches, and households involve physical and psychological abuse. This is what she calls poisoned pedagogy. These children have little choice but to suppress their rage, frustration, and scorn for their violent parents. The harmful pedagogical method is transmitted from one generation to the next.

While Miller's psychological theories (particularly the psychological effects of "spanking") have earned a great deal of attention, her theory regarding the role of morality in this process has received little attention from philosophers. Miller's current research is focused on child psychology. It was anticipated that the theoretical component would be ineffective unless it was incorporated into the research in a practical manner. In this scenario, knowledge was not extremely useful, but a psychological approach may be more realistic. The concept dates back 20 to 25 years in the field of education, but more study reveals that it is not considered.

The primary work in **gender theory** now relates to the concept of poisoned pedagogy. Arnot and Ghaill are correct about this. The 2006 publication The Routledge Falmer Reader in Gender & Education illustrates the complexity of contemporary gender theory and research methods in education. Alice Miller's research in this book offers new insight on the connection between school and violence. In general, she argues that mass education, with its propensity for organisation and regulation and its preference for the logical and practical over the subjective and passionate, provides an excellent setting for the indoctrination of a culture of violence. Miller's work, according to another academic, "makes chillingly obvious to the masses what was previously only understood by a select few," namely, the immense physical and psychological suffering inflicted on children by traditional parenting approaches. Miller’s research calls into question the widely held belief that teacher-student relationships are primarily motivated by compassion. Unless victims can understand what transpired and deal

with the accompanying emotions, the repercussions of this trauma are likely to recur throughout their lives. She claims that the absence of cognitive recognition of the overwhelming emotions associated with abuse results in the return of repressed fears and frustrations, which can occasionally show as aggressive and destructive behaviour. To engage a person in the process and eliminate his or her violent and abusive behaviour, he or she must recognise the problem and understand and accept anger, frustration, and self-hatred as parts of themselves. Currently, Poisonous Pedagogy's ideas have progressed beyond those of Alice Miller and attracted attention in the realm of gender theory, notably in the fields of masculinity and feminism.

Murphy et al. (2008) produced a book on pedagogy and its approaches titled Pedagogy and Practice: Language and Identities. This book places an emphasis on pedagogy to encourage students to reflect on their own experiences and circumstances as teachers and students. This book explores the meaning and implications of pedagogy in educational and occupational settings, as well as the position of the educator within this sociocultural viewpoint on learning. In addition, it addressed other types of pedagogy that require special study (critical pedagogy), including toxic pedagogy. To comprehend and interact with critical pedagogy, specific attention and effort are required. Rather than gender, the key concern or question in this instance was curriculum, even though the focus is not yet global.

Later, poisonous pedagogy was related to social and political thinking, and **Roslyn Wallach Bologh's (2009)** exploration of the male component of Max Weber's social and political theory, Love or Goodness, was well executed. The study by Alice Miller reveals that Freud's belief in psychodynamics explains "poisonous education." Miller emphasises the existence of circumstances that separate children from their emotions. Poisonous pedagogy was well-known in the field of education. This book documents its influence, assisting instructors in better comprehending it and seeking to develop a remedy for its eradication and suppression. Yet it is widely employed in all education sectors, and there is no indication of country-based discrimination.

Surhone et al. (2010) published the book Poisonous Pedagogy. This book contains articles that can be found online for free via Wikipedia or other publicly accessible sources. Poisonous pedagogy, sometimes known as "black pedagogy," is a term used by current psychologists and sociologists to refer to coercive traditional child-rearing techniques. It is a negative umbrella term for acts and relationships that these individuals consider to be violent or coercive, such as corporal punishment. She used the term to allude to child-rearing

approaches that, in her opinion, hinder a child's emotional development. According to her, this alleged emotional injury induces undesirable behaviour in adults.

Lisa Baron et al. (2010) examined the intergenerational transmission hypothesis. They hypothesised that Holocaust trauma, combined with survivor circumstances (early loss of a parent, child survivor, hiding experience), survivor circumstances in their children's lives (having a surviving father), being the firstborn or only child, and not engaging in the survivor's children, The results do not support attributing variability and personality characteristics in child survivors to their survivor status.

Using this penumbra pedagogy, education is always tied to a larger culture. Arguments about the persistence of old dichotomies run the risk of overlooking the growing philosophical and empirical literature on art, music, science, and the art of teaching science, not to mention the emergence of a literature that explicitly uses the term "pedagogy," albeit occasionally as "poisonous pedagogy." Children suffer as a result of the situation and are engaged in such pedagogy.

Emerging perspectives in 2011-2020

Unmasking: In Science Education, Violence, Masculinity, and Superheroes was published by Broadway and Leafgren in 2012. The writers have focused their attention on startling terrorism and its role in science education across three media: schools, masculinity, and science, addressing hate violence while highlighting loving abuse. In schools, a poisonous pedagogy "for your own good" develops into a curriculum "for your own good" or a curriculum of coercive science teaching and learning; nonetheless, the curriculum contains violence—the demolition of the public mask and the exposure of the secret identity. Ironically, science frequently inflicts irreversible injury through authorised violence in order to fulfil its self-identified cultural, political, and educational role as a superhero charged with protecting and preserving the private and public masks. The authors conclude that, although they are unaware of the nature of this violence, they are aware of it and have been responsible for the majority of the abuse. This kind of thinking has exacerbated the practical effects of toxic curriculum pedagogy. It expands the notion of "poisonous pedagogy" by not limiting it to a particular field, subject, age group, or classroom.

The book Critical Perspectives on International Education by **Yvonne Hebert and Ali A. Abdi (2013)** illustrates that every research endeavour on international education must have a multidirectional approach. The quality of the observations and analysis reflects the increasing

political, economic, and cultural interconnections that define this potentially prosperous century. This book provides a variety of pedagogical platforms in international education for adapting to the changing educational and living contexts of the world. As a result, the book vigorously promotes human well-being through a variety of educational methods and locations. This book compiles an astounding selection of essays from throughout the world that explore this topic from a variety of critical perspectives and case studies. The production of culture is linked to destructive pedagogy. It symbolises the notion that some civilizations hold contrasting worldviews that are in conflict with the prevailing social order. The culture of the settlers represents a cultural hegemony constructed to sustain religious, political, social, and economic dominance. In Indigenous culture, self-identification with property, language, and social group contributes to a functional egalitarianism that is poorly structured and results in poisonous pedagogy. There are not enough mainstreaming minority kids among typical students.

Baker et al. (2017) published the Routledge Handbook of Talent Identification and Development in Sport, which identifies the identification and development of athletic talent to its maximum potential as a basic concern in sport, regardless of skill output or coaching. Identified talents and their repercussions for both positive and negative developmental outcomes are key components of sporting success. This book presents a comprehensive examination of modern talent discovery and development, from methodological and philosophical issues to practical implementation, with contributions from leading researchers and practitioners. Alice Miller introduced the term "poisonous pedagogy" to describe techniques for influencing a child's will in order to maintain the parent's compliance, conformance, and desire to satisfy social norms. Many instances of poisonous pedagogy approaches include bribery, fear tactics, intimidation, corporal punishment, bullying, mocking, and a lack of affection. Some, on the other hand, are used in a good way to teach important life lessons like honesty and patience and to improve the child's future experiences.

Lee-Anne Gray (2019) published Educational Trauma, a book in which she criticises and analyses the impact of trauma-based schooling through examples ranging from standardised testing to the school-to-prison pipeline. Using insights from education, psychology, sociology, history, political science, social justice, and philosophy, the authors connect the dots between various forms of educational distress throughout a student's life, ranging from bullying and anxiety to social inequity and the school-to-prison pipeline. Regarding education, memory, social group dynamics, democracy, and mental health, this

book serves as a rallying cry, advocating civil rights for all students and education's ultimate purpose as a force for the common good. This section forms the entire poisonous pedagogy theory. Lisa Goldstein defined "poisonous pedagogy" as the process of emotionally and psychologically harming children in order to obtain an advantage. He maintained that parents and teachers taught moped children by intimidation, deception, and dishonesty.

In addition, she argued that by cleansing and euphemistically defining a programme, these behaviours are passed down from generation to generation. This societal cycle encourages instructional practises that influence pupils to cause harm, resulting in a poisonous pedagogy that serves as the banality of evil. Even the author separated educational trauma, the banality of evil, and poisoned pedagogy into three separate phenomena. While educators and administrators attempt to establish constructive interactions with large, diverse groups of people in a democratic and neutral manner, they are also influenced by their nation's changing policies.

Lee-Anne Gray (2019) published another study titled, "How Hazardous Is Pedagogy?" It discusses the chapters beginning with Steven, a case study of a college student who demonstrates the negative effects of Freire's "banking education" notion. This method of instructing children is presented as evidence of the harm done to them in the name of education. Toxic pedagogies typically target social psychology, conformity to authority, society's moral norms, and identity leadership. Educators and other stakeholders were questioned about the likely causes of bad study results, the burden of evaluation, and the weight of an individual's achievements. Are children capable of managing stress? How do they reconcile societal pressure with stress testing? How do they define employment and success?

Pondering thoughts that need a wake of an hour

The researcher makes the following points about the ideas behind different types of research and problem-solving:

Poisonous pedagogy is established in the lives of children; it is a necessary evil with both positive and negative manifestations. It is a global concern for educators, yet even at the local level, it is overlooked. It is creating a single critical book, and a few sorts of research are insufficient to negate the necessity for a critical pedagogy. The notion was introduced to the field in the 1980s, and finger-counting research continues today. This topic is found in literature as well, but only eponymous thinking addresses it comprehensively. It can be

labelled "black pedagogy" since it leads the child's life into darkness, even if it cannot be seen in the early stages or, if it can be seen; there is no way to remove it. That is a problem for the education community as a whole, not only for the construction of an average education system. The expectation of goodness has become an obstacle to its growth. It is possible to conclude that medicine contributes to the spread of disease.

Pedagogy is often seen favourably. This pedagogy is intrinsically flawed, though. It fosters insight and has a difficult-to-escape unconscious effect on the mind's innermost region. The lack of practical methods for eradicating it, the absence of cognitive processes, and the absence of an adequate research methodology to examine this topic may all have an impact on the growth of research in this domain. It includes age, gender, mental process, teaching-learning process, classroom setting, examination, study pattern, and curriculum. Owing to its expansive limits, it confronts educators and politicians with a difficult situation. Although essential to the learning process of children, it is not included in India's educational regulations or suggestions. The researcher sought to review the completed study in this subject and analyse a book on this pedagogy; nevertheless, an appropriate response or solution is lacking or cannot be found in this literature.

Such an idea should serve as a wake-up call regarding our current course of action. Is it an urgent matter requiring a more harsh response? Is there something that requires quick action, or will it have a greater negative impact? Will developing a theoretical basis be the first step in understanding the associated psychology? Might the creation of model, general, and specialised procedures be the solution to this pedagogical obstacle?

It is important to highlight that doing a comprehensive investigation does not in and of itself uncover solutions or alternatives. Only by making a deliberate effort can the most suitable option be identified.

Conclusion

The researcher made an effort to combine prior findings on poisonous pedagogy. Such pedagogy is not a constructive method of education, and it is important to pay attention to it. In addition, the researcher evaluated works that represent poisonous pedagogy and arrived at a number of significant conclusions. Certainly, these conclusions are meaningless without corresponding replies or remedies. Although the concept of poisonous pedagogy is still in its infancy and the picture is unclear, it is essential to establish its distinguishing characteristics. If something has been described and validated, it is straightforward for future researchers to work on it. Educators must consider these concepts and pedagogy and design a solution for

the equivalent based on them. When a person understands the benefit of being both great and restrained, he or she should have studied general standards of kid behaviour.

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Enhancing Early Childhood Development with Knowledge of Panchamahabhutas

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ABSTRACT

The five elements—earth, water, fire, air, and space—make up our bodies. Children who comprehend and interact with these factors may become more conscious of and present in their body. They could have a deeper understanding of who they are and their place in the environment around them as a result. The part of Vedic learning most closely associated with Rigveda and Atharvaveda is the ancient science of life known as Ayurveda. Panchamahabhuta (space, air, fire, water, and earth) and the tridosha- vata, pitta, and kapha are at their core.

The Panchmahabhutas also manifest in the functioning of the five senses of humans which are related to hearing, touch, vision, taste and smell, respectively. Ayurveda regards the human body and its sensory experiences as manifestations of universal energy expressed in the five basic elements. The understanding of these concepts aims to help us bring our body into perfect harmony with its conscious mind. The outside world shapes children's development through experiences that they have, which include using their five senses—hearing, sight, smell, taste, and touch. Drawing a child's attention to the five senses and discussing them increases understanding of and communication about the world around us.

The paper explores the significance of early childhood development and offers suggestions

for improving it using the Panchamahabhuta principles, which are apparent in the way a child's senses function. The paper will derive the importance of using sensory activities to refine their thresholds for different sensory information, helping their brain to create stronger connections to sensory information. The activities are intended to help children learn increasingly difficult material more successfully and to assist their cognitive, linguistic, gross motor, social, and problem-solving development.

Keywords: Panchamahabhuta, five senses, child development, early child development, Educations, sensory play, sensory organs, mahabhutas

Introduction

Ayurveda regards the human body and its sensory experiences as manifestations of universal energy expressed in the five basic elements. Panchamahabhuta or the five basic elements—earth, water, fire, air, and space—make up our bodies and the tridosha- vata, pitta, and kapha are at their core. The understanding of these concepts aims to help us bring our body into perfect harmony with its conscious mind. Children who comprehend and interact with these factors may become more conscious of and present in their bodies. They can have a deeper understanding of who they are and their place in the environment around them as a result.

The Panchmahabhutas manifest in the functioning of the five senses of humans which are related to hearing, touch, vision, taste and smell, respectively. The five senses are our link to the outside world. These senses collect information about our environment that are interpreted by the brain. We make sense of this information based on previous experience (and subsequent learning) and by the combination of the information from each of the senses. In early education drawing a child’s attention to these five senses and there by the five elements and discussing them increases understanding of and communication about the world around us. The outside world shapes children’s development through experiences that they have, which include using their five senses.

Education begins the moment we are born and continues throughout our lives - we are continuously learning. However, 90% of human brain development occurs outside the womb, in the first three years of life. Unsurprisingly, the earliest ideal phase for human growth is from infancy to preschool (0-5 years). We are capable of learning and developing quickly throughout this stage; we improve our senses, motor abilities, recognize our group, and build our language and social behaviours. By the age of six, the brain has grown to 95% of its adult size. However, the grey matter, or thinking section of the brain, thickens throughout development as synapses form new connections in response to input from the outside world.

Stimulating the senses at an early age promotes a child's creativity and imagination, develops social skills with peers such as collaboration and turn-taking, improves motor skills, and teaches self-expression. Drawing from the Panchmahabhutas theory educators can strengthen their programs and build on better early child development by stimulating the five senses for a better learning experience.

Panchamabhutas –The Five Elements of Life

Ayurveda has drawn many of its principles from Samkhya Philosophy. One of the six philosophical systems known in Indian Philosophy. Samkhya is the oldest of the orthodox philosophical schools, and it holds that everything, in reality, is derived from Purusha (self, soul, or intellect) and Prakriti (matter, creative agency, energy). 'Panchamahabhuta Siddhanta' or 'Principle of Five Basic Elements' forms the foundation of Ayurvedic philosophy and believes that five elements make everything in this universe & universe itself. The word Panchamahabhutas are made up of three words; 'Pancha'- five, 'Maha'-great, 'Bhuta'- that which exists. All living beings and non-living objects in the universe are made up of Panchamahabhuta (Sharma RK & Dasa B, 2013). The five elements are Akasha mahabhuta, Vayu mahabhuta, Agni mahabhuta, Jalamahabhuta, Prithvi mahabhuta. (Sharma RK Dasa B, 2013) The Purusha is being formed by combination of Panchamahabhuta and Chetana (consciousness) (Sharma RK & Dasa B, 2013).

This implies that whatever the world is made up of, man too is made up of those same things or Pancha Maha Bhutas, but with different combinations and degrees. In fact Ayurveda postulates that all living beings on the earth including the non-living too are made up of these same Pancha Maha Bhutas in varying degrees, specific to each form, matter and species, and according to a predetermined

ratio that cannot be changed. These Pancha Maha Bhutas (PMB) combine with each other to form the three humors of Vata, Pitta and Kapha, (also called as the Tridoshas in unison) which is the corner stone of Ayurvedic philosophy. [Jha (2004), Murthy (1996, 2007), Sharma, P. (1981)]. This pertains to the biological and the

Physiological aspect of man.

One of the basic tenets of Ayurveda is that man is a microcosm of the very world that he inhabits. This implies that whatever the world is made up of, man too is made up of those same things or Panchamahabhutas, but with different combinations and degrees. In fact, Ayurveda postulates that all living beings on the earth including the non-living too are made up of these same Panchamahabhutas in varying degrees, specific to each form, matter and

species, and according to a predetermined ratio that cannot be changed. These Panchamahabhutas combine with each other to form the three humors of Vata, Pitta and Kapha, (also called as the Tridoshas in unison) which is the cornerstone of Ayurvedic philosophy. [Jha (2004), Murthy (1996, 2007), Sharma, P. (1981)]. This pertains to the biological and physiological aspects of man. For good health, these three doshas must be in proper balance with one another. When the doshas are in balance, the person has good mental and physical health, which supports the body.

Panchamahabhutas and the Five Senses

Man has five senses, through which he perceives the outside world in five distinct ways. Elements in nature can be understood as energy through one' nose, tongue, eyes, ears, and skin. The cosmos is split into five distinct elements called the five mahabhutas based on these five separate categories of senses. Panchamahabhuta is created when the bhutas are combined. The Panchamahabhuta is a Sanskrit word composed of three words i.e. Pancha, Maha and Bhuta. The bhuta is derived from the word "bhu" means that having their own existence. The bhuta is not generated by others, but it causes the generation of mahabhuta. It is inherent character of mahabhuta. Mahabhuta cannot be generated without the help of bhuta. It is so minute that cannot be perceived by sense organ also. It is very minute and transformed from one person to other by the help of mana (mind). So it is clear that bhuta can be considered as causative factor, eternal, very minute and not perceived by any sense organs but transferable from one form to another. It can be considered as quantum (unit of energy). (Donald T. Haynie, 2007). It is knowledgeable by inference. There are so many different theories of philosophy described, regarding the genesis of bhuta. Ayurveda accepts mainly Samkhya view, Vedant view and Nyaya Vaisheshika view. (Dr. Shambhu Sharan & Dr. Vidyavati Pathak, 2017).

The five components each have a unique characteristic. Sound, touch, colour, taste, and smell are attributes of space, air, fire, water, and earth, respectively. Each element contains its previous element in a certain ratio, according to the order of their development. When children's senses are engaged, they are attentive and take in the surroundings around them. Sensory development is linked to other aspects of early childhood education such as physical development, expressive arts and design, and overall personal, social, and emotional development.

Taking the theory of Panchamahabhuta for developing better sensory development activities will help enhance early child development. Sensory development should be emphasised

throughout the child's preschool experience, if not earlier, and should always be included in an early education setting as well as curriculum. These sensory responses are frequently employed to track developmental milestones in early childhood.

Elements	Sense	Sense Organ
Prithvi (Earth)	Smell	Nose
Jal (Water)	Taste	Tongue
Vayu (Air)	Touch	Skin
Agni (Fire)	Sight	Eyes
Akash (Ether	Sound	Ear

Fig.1 Connections between panchamahabhuta and five senses

Benefits of Sensory Development in Early Child Development

Exploration, curiosity, problem-solving, and creativity are encouraged through sensory play. It promotes the development of language and motor abilities by assisting in the formation of nerve connections in the brain. Advantages, such the improvement in the ability to focus and filter out distractions are some of which go unnoticed.

Exposing children to various sensory experiences is necessary for a young brain to develop the proper sensory processing capabilities. (Hensch TK., 2005). Sensory play activity is especially important to children with sensory processing problems such as sensory processing disorder. These children tend to have difficulty engaging in sensory play activities. (Watts T et al., 2014)

Sensory play is a crucial element of development, and there are few restrictions on what you may use in sensory exercises. When it comes to sensory play, nature is frequently the best teacher. Following are some of the known benefits of sensory play;

- Helps children process and understand their senses so that they can complete more complex tasks.
- Supports language development, problem-solving skills, cognitive growth, fine and gross motor skills and social interaction.
- Aids in developing and enhancing memory.
- Involves mindful activities which are beneficial for all children but specifically those that are anxious or frustrated.
- Helps to develop sensory attributes which are valuable particularly when it comes to food in determining different tastes and textures.

Engaging early learning through Panchamahabhuta

Children learn with their hands first rather than their heads. To create a relationship with the natural elements or the panchamahbhutas; Air, Water, Earth, and Fire (i.e. a connection to Nature), they must experience their magic and wonder with all of their senses. Only then can we begin to teach them vocabulary and assist them in understanding the intricate relationships and delicate balance on which all living things, including humans, rely. We can appeal their emotions once their brains realise the interconnection of all existence. And if they established fundamental memories outside as a child, with trees, birds, and clean water, their hearts will respond.

Sensory activities provide valuable, hands-on, active learning experiences and support children's growth and learning in multiple domains. Children who comprehend and interact with panchamahabhutas may become more conscious of and present in their body. They could have a deeper understanding of who they are and their place in the environment around them as a result. Through sensory experiences, teachers can address early learning standards and observe children's progress in many areas of development. They could have a deeper understanding of who they are and their place in the environment around them as a result.

Exploring panchamahabhuta's, through activities like absorbing sounds, texture, smells, pictures, tastes, and emotions, helps children connect with nature as well as themselves better. At a young age, children are incredibly sensitive. Learning occurs naturally when they have an opportunity to utilize as many senses as possible.

Characteristics of sensory play and panchamahabhuta experience examples

1. **Prithvi (Earth) - Sense of smell.**

Earth or Prithvi is the first of the five elements. We can touch and feel the earth's element. The Earth element is responsible for giving structure, shape, and strength to the body. Earth is associated to smell. The small particles of earth scattered all over the place give us a sense of smell.

Experiences: gardening (herb garden), cooking experiences, scented playdough, nature walk, bush program, sensory canisters (filled with various smells e.g. lavender, rose, peppermint etc). excursions to places with distinctive smells gardens/farm etc)

Type of activities that can enhance learning;

Gardening (herb garden), cooking experiences, scented playdough, nature walk, sensory

canisters (filled with various smells e.g. jasmine, rose, mint etc). Excursions to places with distinctive smells gardens/farm etc).

2. **Jal (Water)- Sense of taste.**

What we generally term the "taste" of food or beverage is actually a multimodal phenomenon. While the sense of taste delivers fundamental information like sweet, sour, bitter, and so on, much of the food experience rests on the sense of smell. The tongue may detect pressure, temperature, and pain in addition to taste. This is why we can discriminate between different food textures and feel certain meals as hot or minty. The sense of smell also influences the tastes we taste. Our food-related sensory perceptions are shaped by odour traits such as flowery, fruit, charred, or rotten.

Type of activities that can enhance learning;

Food tasting activities, flavour detecting, tasting memories, fruit explorations, shared meals times (discuss healthy foods and associated flavours), science experiments to discuss sweet, sour, salty & bitter.

3. **Vayu (Air) - Sense of touch.**

The sense of touch—something in contact with the skin—is picked up by specialised receptor sites and communicated by specific nerve fibers to the brain. Temperature, bodily position and movement, and pain all have independent but parallel sensors and neural pathways. Children learn about temperature, pressure, vibrations, textures. Asking children to feel the wind and drawing their attention to questions like; Does it feel cold or warm? Is it gentle or forceful? Which direction is it coming from? These subtle cues are a wonderful way to become present and engaged with your surroundings instantly.

Type of activities that can enhance learning;

Discover nature through blind walks and picking objects in the open, Water play, mud kitchen, sand play, playdough, clay, paint, collage materials, nature play (natural textures, objects), loose parts play. Materials that differ in size, texture, shape, materials (man- made, natural, metal, wood, plastic etc)

4. **Agni (Fire) - Sense of sight.**

All of our senses provide important information about our environment, but sight is the one we rely on the most. We walk (or drive, or ride) safely through the earth, identify friends (and

foes), read, write, and otherwise understand what's going on thanks to the power of sight. Accordingly, the physical instrument for acquiring visual information—the eye—and the brain circuits that analyze this information are more complicated than analogous systems for the other senses. Sense of sight takes far more brain area than all other senses combined.

Type of activities that can enhance learning;

Visual arts experiences, literacy experiences (books, felt boards), sand play, water play, excursions. Incursions, active play (ball games, obstacle courses), drama, dramatic play, construction, interest tables, objects with patterns, glisten, sparkle, lights, mirrors, spaces that take advantage of natural light, soft lighting, crystals etc.

5. **Akash (Ether) - Sense of Sound.**

Everything in the cosmos is made up of vibrational frequencies, and although some are good, others can be detrimental to wellness. Children who are outwardly shy or have been instructed to 'be quiet' very often, are likely to acquire a throat obstruction and mute temperament. It is critical that children are made to practice expressing the truth in order to facilitate increased energy flow across this key place. Singing and chanting, as well as expressing their feelings to someone they trust, is a good practice.

Type of activities that can enhance learning;

Use of Music (instruments, singing), make instruments from recycled materials, nature walks to identify environmental sounds, listening posts, books & told stories. Sharing poems, rhymes, chants, and jingles in class.

Benefits of sensory play and panchamahabhuta experience

Sensory play is essential for your child's development from infancy through early childhood. It aids in the formation of nerve connections in their brain pathways, which helps in the completion of complicated activities by your child. When your child engages in sensory play combined with the panchamahabhuta experience, they are assisting their brain in developing and learning from many components of their surroundings. The following are the benefits of sensory play and the development of skills.

1. **Enhances language skills**

   Language skills develop organically via sensory play. When a kid engages in any type of play, sensory or otherwise, they are learning via experiences in their surroundings and discovering new methods to convey their emotions, wants, and needs. By engaging the senses, the youngster will learn how to express what they're doing and

how it feels, eventually communicating with more descriptive words.

2. **Develops fine motor skills**

Sensory play can help a child in developing fine motor skills such as shoe tying, writing, and zipping. Children improve their ability to use tiny muscle groups and coordinate motions via tactile play that focuses on constructing, pouring, and mixing. Tactile play is an excellent method to address and focus on using a child's fine motor skills in a fun way. Enabling the child to freely explore small sensory objects such as sand. Mud, dry cereal, rice, slime, or play dough will improve and build their fine motor abilities.

3. **Grows gross motor skills**

Sitting, crawling, leaping, and running are examples of gross motor skills. These are activities that need the child to engage vast muscles in their arms, legs, and core (stomach area). Whether the child is just starting to walk or attempting to toss a ball, the key is to give them lots of opportunities to practise.

4. **Helps with cognitive growth**

Asking questions, considering how things function, conducting experiments, and assessing outcomes are important aspects of healthy cognitive development. It's how we learn something new and figure things out. It's also how we solve problems. With sensory play, a child is practicing problem-solving abilities. It stimulates them to investigate how to play and interact with various situations, as well as how to navigate problems they meet, such as how to transfer the ice from one container to another or how to stay balanced on a swing etc.

5. **Fosters social interaction**

Children start to build social skills by playing with siblings or other kids through sensory play. They will pick up communication skills, problem-solving techniques, and how to adjust to different people's playing styles. Everyone can engage in sensory play, whether they're playing with building blocks or swinging in the park. It is quite inclusive.

Sensory play can help children become more adaptive and versatile in other spheres of their lives. The world becomes considerably less frightening for them as a result of using their senses and acquiring these abilities since they have the skills necessary to deal with anything that comes their way.

Conclusion

Children utilize their senses to explore and make sense of the world around them from infancy to early childhood. They do this by touching, tasting, smelling, seeing, moving, and hearing. Children and even adults learn best and retain the most knowledge when they activate their senses. Providing chances for children to actively employ their senses as they explore their surroundings through' sensory play is essential for brain development since it aids in the formation of nerve connections in the brain's circuits. This improves a child's capacity to perform more difficult learning activities and promotes cognitive development, language development, gross motor skills, social interaction, and problem-solving abilities.

Understanding and including the knowledge of Panchamahabhutas in design of sensory play or activities will enhance and strengthen early child development. The sensory play should be designed such that the panchamahabhutas in the child's body are in balance leading to a better learning experience and stable living.

Sensory play encompasses any activity that engages your child's senses, including touch, smell, taste, movement, balance, sight, and hearing. Sensory activities influenced by panchamahabhuta stimulate discovery and naturally inspire children to employ scientific procedures when they play, create, research, and explore. The sensory exercises allow children to fine-tune their thresholds for various sensory information, assisting their brains in developing stronger connections to process and respond to sensory information. Sensory play physically shapes what children think in their brains to be positive and safe. Finally, guiding children's choices and influencing behaviour.

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