

June, 2016, Vol.- 2 No. – 2, ISSN No. : 2454-1516

SHODH DARPAN

(A Quarterly International Research Journal)

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Website : christcollegejagdalpur.in/shodhdarpan.html

Email :1. shodhdarpan@christcollegejagdalpur.in

2. sushil.christ@gmail.com

EDITORIAL

It gives me an immense pleasure to launch this issue of journal "Shodh Drpan". There are a lot of challenges which the growing economies face in the realms of basic necessities in life. Technology can play a very distinct role in bringing about this change. It is very important that different stakeholders unite and collaborate on issues which confront the society. One of the key objectives of research should be its usability and application. This journal attempts to document and spark a debate on the research focused on science, social science and education in context of emerging geographies. I invite research papers from researchers, faculty members and students of different disciplines.

I would like to thank management and all the editorial team members, reviewers and initial team which has helped in making this journal a possibility. I hope that the research featured here sets up many new milestones. We have had an overwhelming response from some very eminent Editors and researchers globally to support as Editorial Team. I look forward to make this endeavour very meaningful. A very warm thanks to Christ College, Jagdalpur to provide an opportunity to make this journal a reality.

- Sushil Kumar Sahu

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- Editor

MESSAGE

I am much delighted to see that Christ College is quarterly publishing an international research journal titled “Shodh Darpan” since the last two years and that the college is bringing out the 2nd volume No.2 of the same in June 2016. On this occasion I would like to sincerely thank the teaching and non-teaching communities of the college for their invaluable perseverance in making this institution of higher education a leader in this field under Bastar University and in Jagdalpur.



Even in this era of e-books and e-learning, the importance of books and journals, especially research related books and journals, in the maintenance and progress of human life has not yet been overlooked. Research activities in every field of knowledge have to be highlighted and the findings of research have to be made known to all sectors of the society, so that they may be suitably used for problem solving and improvement. It is with this mind-set that Christ College is publishing “Shodh Darpan” every quarter of the year.

I congratulate Mr. Sushil Kumar Sahu, for ably steering the editorial board, and Dr. (Mrs.) Anita Nair, Mrs. Siji Jestus John and all other member-teachers of the board for the hardships undertaken in the publication of the journal on time. I also thank the management of the college for the sincere and unstinted patronage to this institution.

I extend my sincere gratitude to all those who have contributed to the present edition of the Journal through their research articles and papers. May God Almighty continue to shower his heavenly blessings upon us all through the patronage of St. Kuriakose Elias Chavara, our founder.

- Principal

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Dr. Anita Nair,

Convenor,

Research and Publication Cell,

Christ College

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Email: shodhdarpan@christcollegejagdarpur.in

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Reversing from Diabetes by Diet and Exercise

Sushila D. Mahant¹ Swapan Kumar Kolay²

Abstract

Diabetes is a world burden and global health concern which is more prevalent among developing world and India is the capital of diabetes. According to IDF (2011), diabetes caused 4.6 million deaths in 2011. The World Health Organisation (WHO) warned that an estimated 300 million people would be affected by the disease by 2025 (Wild S. et al., 2004). While genetics is bigger contributing factor but life style and food habits are dominating one. The aim of the study is to examine the effects of food habit and life style factors which are causes of diabetes.

Both qualitative and quantitative methods were used. A total of 179 industrial employees of Bachel, Dantewada were selected who had been diagnosed with pre diabetes and diabetes at least 5 years prior to the study, all those were registered patients in corporate hospital. For study, used a schedule questionnaire, FGDs and interview to ascertain background information, food habit, life style and quality of life along with management factors. Data analysis was done by using SPSS software Version 17 to analyse data according to descriptive and bivariate analysis.

Findings of the present study in relation to the effects of food, life style and physical exercise by gender, duration of diagnosis, age of diagnosis, occupation (working environment) were significantly highly effected industrial employees because their quality of life is a leading cause of to penetrate their metabolism more in male than women.

The result of this study suggests that diabetes affects whom who have bad routine of life and less physical exercises. It seems that an effective life style management, right food habit and exercise can manage diabetes for long period. In patients with diabetes, one of the most important methods for evaluating treatment and care is to assess their quality of life with life management.

Key Words: *Diabetes, World Health Organisation (WHO), Physical exercise, Life management.*

¹ Research Scholar, School of Anthropology & Tribal Studies, Bastar University, Jagdalpur, District: Bastar, Chhattisgarh, India. Cell: +91-7587134392, Email: asthamahant@yahoo.in

² Associate Professor & Head, School of Anthropology & Tribal Studies, Bastar University, Jagdalpur, District: Bastar, Chhattisgarh, Cell: + 91- 9826497122, Email: kolay.swapan@gmail.com

Introduction

Diabetes mellitus (DM) is one of the most common non-communicable diseases (NCDs) globally. The number of people with type 2 diabetes is increasing in every country 80% of people with diabetes live in low and middle-income countries. The greatest number of people with diabetes is between 40 to 59 years of age. 183 million people (50%) with diabetes are undiagnosed; diabetes caused 4.6 million deaths in 2011. It has been estimated that the global burden of type 2 diabetes mellitus (T2DM) for 2011, would be 366 million people (2010) which is projected to increase to 552 million in 2030; a 75 % increase Similarly, for India this increase is estimated to be 58%, from 51 million people in 2010 to 87 million in 2030 (Snehalatha and Ramachnadaran, 2009). The impacts of T2DM are considerable: as a lifelong disease, it increases morbidity and mortality and decreases the quality of life. At the same time, the disease and its complications cause a heavy economic burden for diabetic patients themselves, their families and society. Although biological factors are important for causes of diabetes however it is important to understand role of life style related factors and food habit.

Diabetes is a fourth leading causes of death not only in India, but developing countries also. It is well known that diabetes is highly prevalent in urban population, so industrial employees in Bachel, Dantewada were selected for study.

A better understanding about the cause of a predisposition of Indians to get T2DM is necessary for future planning of healthcare, policy and delivery in order to ensure that the burdens of disease are addressed (Hoskote and Joshi, 2008). So, this study reviews the recent concepts on association between lifestyle modification with increased physical activity plus changes in dietary and physical activity alone in primary prevention of diabetes.

Methodology

Sample Design

The Industrial employees of Bachel NMDC were selected along with the following condition was stipulated for selection for research purpose:

- Registered diabetic patient of the NMDC employees in the Institutional hospital were selected.
- Pre- diabetic employees were also selected.

- All respondents who were 30-60 years of age and independent for their activities of daily living were included in the survey.
- A detail questionnaire incorporating demographic profile, socioeconomic data, routine life (life style) assessment, food habit, alcohol consumption, physical activity pattern, psychological measures, surrounding environment assessment and awareness questionnaire were administered to the recruited subject.
- Anthropometric measurement and genealogical profile, both were taken from respondents.

Sample Frame

A purposive sampling was used for study where 179 diabetic/ Pre-diabetic employees were selected; only after ascertaining that the respondents fit into the sampling frame they were selected.

Research Tools

A structured interview schedule was prepared for respondents. Data was collected by using schedule questionnaire which comprised of structured as well as open-ended questions, scale type question and checklists, to identify risk factors and effects of diabetes; effective management of food habit; physical exercise and barriers of life managements. The investigator conducted 4 FGDs with doctors, nurses, diabetic patients and normal peoples. Certain issues such as factors of diabetes, life style management and environmental factors were discussed and the opinion of the members was elicited. The responses that were given by the respondents observed and their body language, home environment and surroundings were observed to interlink the information to that of data actuality. Researchers conducted face-to-face interviews with the respondents who were waiting to be seen by a doctor at the hospital.

Data Analysis

The Statistical Package for Social Sciences (SPSS) software version was used to analysis the data according to; Descriptive analysis e.g., mean and Standard Deviation (SD); Bivariate analyses including t-tests to identify trends and examine possible associations between both independent (background variables) and dependent variables (Food habit and physical activities). For analysis purpose, some of the dependent variables were treated as independent variables.

Limitation of Study

The study is confined to those who were from NMDC (National Mineral Development Corporation) project. Till now only five randomized control trails have published on lifestyle modification that have shown significant results in reduced incidence of diabetes. Most of the lifestyle modification studies designed with the intervention group while diabetic drugs used with control group. Only one study compares with different arms: with diet alone, exercise alone, and diet plus exercise. So without large number of studies it is difficult to generalize the hypothesis that life style modification has better effects than only physical activities. In physical activity alone in prevention studies, there were no randomized controls clinical trial compare with the control group for a period of time and the most important factor is, all industrial areas are multi-ethnic group who have their own food habit and socio-cultural tradition which creates variation for researchers.

Observation: Result & Discussion

The unique contribution of anthropological studies is that the global diabetes epidemic strongly impacts modernizing populations and occurs during the nutritional transition involving reduced physical activity, increased obesity and diets rich in processed carbohydrates. Urbanization is a composite variable for several aspects of life style, including decreased physical activity, increased health care access, and differential bad routine of food intake and diet and physical exercise are important lifestyle modifications to control disease (Andrews R.C., Cooper A.R., Montgomery A.A., Norcross A.J., Peters T. J., et al., 2011). The real challenge in anthropological studies of diabetes is how to operationalize 'Life Style'. Drastic lifestyle changes involving nutrition, activity patterns and routine food habit are related to diabetes among industrial peoples. Anthropologists have operationalised the lifestyle changes associated with modernization by measuring activity patterns, affluence and consumption, dietary changes and nutrition.

Correlation with Age of Diagnosis and Duration of Suffering from Diabetes

Out of 179 registered diabetes patients in the hospital, 53 were insulin dependent and the mean age and higher frequency is 53.18 years, were highly prevalent ($t=0.96$) which was significantly higher among all diabetic patients. Mean age between 53-56 years was highly vulnerable group in the Bachel, because this group was more sufferer than other age group. Large numbers of diabetic patients were not depended on insulin. Results shows that participants diagnosed at very young age 31-35 were significantly problematic associated with diabetes and increasing health problems

than those diagnosed at an older age. The t-test showed large number of non-insulin dependent respondents to be more likely to understand how to manage life style and food habit compared to other pre-diabetic and insulin dependent participants. By contrast, Yin Xu found the mean age of the diagnosis and duration of suffering of diabetic patients to have no effect on their diabetes management. A clearer understanding of the disease progress and implications might serve as a motivating factor to institute life- changing and management or life saving practices. In a sample of insulin requiring diabetic, younger individuals were found to be more conscious about the life style to manage diabetes than among older individuals (Tuomilehto J., Lindstrom J., Eriksson J. G., Valle T. T., Hamalainen H., et al., 2001). Older individuals however had significantly better diabetes self care management, suggesting that over time they may have developed greater self care and life management skills.

Table 1 : Diabetes associated with Age of Diagnosis and Duration of Suffering

Variables	Duration	Age	N	%	M	SD	t- test	Sig.
Insulin Dependent Diabetes (53)	< 5 year (37)	30-40	3	8.11	35.33	1.04	0.84	0.23
		40-50	7	18.92	44.43	1.13	0.36	
		50-60	27	72.97	53.18	1.21	0.96	
	5-10 year (10)	30-40	3	30.00	33.67	1.07	0.24	0.19
		40-50	2	20.00	48.00	1.02	0.43	
		50-60	5	50.00	53.80	1.43	0.57	
	10 year < (6)	30-40	2	33.33	35.00	1.42	0.83	0.17
		40-50	2	33.33	47.00	1.61	0.94	
		50-60	2	33.33	56.00	1.41	0.98	
Non-Insulin Dependent Diabetes (99)	< 5 year (37)	30-40	8	21.62	35.50	1.56	0.67	0.43
		40-50	10	27.03	44.60	1.48	0.59	
		50-60	9	24.30	55.00	1.73	0.42	
	5-10 year (42)	30-40	9	21.43	35.00	1.81	0.94	0.66
		40-50	20	47.62	45.25	1.93	1.36	
		50-60	13	30.95	55.23	1.83	0.78	
	10 year (20)	30-40	5	25.00	35.00	1.81	0.18	0.84
		40-50	6	30.00	45.50	1.67	0.58	
		50-60	9	45.00	55.00	1.86	0.88	
Pre-Diabetes (27)	< 5 year (7)	30-40	2	28.57	32.00	1.12	0.45	0.52
		40-50	1	14.29	41.00	1.15	0.32	
		50-60	4	57.14	54.50	1.36	0.38	
	5-10 year (15)	30-40	3	20.00	33.33	1.14	0.46	0.62
		40-50	4	26.67	42.75	1.17	0.84	
		50-60	8	53.33	54.87	1.13	0.77	
	10 year (5)	30-40	1	20.00	31.00	1.23	0.58	0.67
		40-50	2	40.00	43.50	1.34	1.12	
		50-60	2	40.00	57.50	1.43	0.99	

Correlation between Diabetes and Occupations of Respondents

It is clear from table 2 majorities of respondents are mainly worker grade (45.81%) in status. And another occupational status is (41.34%) officer, (5.03%) teachers, (3.35%) doctors, (1.68%) nurse and (2.79%) ward boys. However, it shows that the highest range of diabetes is occurred among the worker grade employees (44.13%) because of their unhealthy life style. They always do heavy physical work and not take full rest to maintain physical and psychological stress. They do overtime duty for extra money and it had been observed that they sometimes do continuous 24 hours duty without rest. These kinds of physical stress in industrial environment where the surrounding are noisy, dusty and vibration play an essential role to bad health throughout their duty period and life. Whereas the officer grade employees, teachers, nurse and doctors, they don't have heavy work load as compare to workers. This kind of disparity is the reason of low epidemic rate of diabetes among officers and high prevalence among workers. Fatigue, exhaustion, the need to go bed early or late, fear in their job and lose of interest, may all contribute to compromises the quality of life (Mustapha W., Hossain S. Z., Oloughlin K., 2012). Various factors including heredity, obesity, lack of exercise and socio-psychological factors have been implicated in the onset and aggravation of Non-Insulin Dependent Diabetes (NIDDM) (Bennet *et al.*, 1992; Dowse *et al.*, 1991; Everhart *et al.*, 1992; Tsuchida *et al.*, 2002). Since many of these factors are influenced not only by personal circumstances but also by occupation and work environment. The association between working conditions and the risk of type 2 DM has been reported showing that air traffic controllers who engaged in a high demand job had a higher prevalence of diabetes than other researchers (Cobbs and Rose, 1973). It is reasonable to consider that occupation is related to the development of NIDDM. Insufficient studies have focused on the relation between the development of NIDDM and occupational stress. It was also reported that job strain and job stressors including a lack of work site social support were associated with increased concentration of glycosylated hemoglobin among non-diabetic populations (Netterstrom *et al.*, 1991; Kawakami *et al.*, 1989).

The findings reveal that there is a strong correlation exists between different kind of occupation and diabetes ($t=1.87$, $t=1.83$), meaning those who had problem of blood sugar also reported difficulty with their occupational stress. A similar strong correlation was observed between shift workers of industry compare to other routine workers; between leisure activity and pain/discomfort; and anxiety/depression.

Table 2: Diabetes associated with Occupations of Respondents

Variables	Percent (%)	N=Number M= Mean SD= Standard Deviation	Pre-Diabetes (N=27)	Non-Insulin Dependent Diabetes (N=99)	Insulin Dependent Diabetes (N=53)	t-test	Sig.
Officers (74)	41.34	N	10	45	19	1.87	0.89
		M	1.23	1.38	1.54		
		SD	0.50	0.48	0.47		
Operators (82)	45.81	N	9	47	26	1.83	0.86
		M	1.81	1.31	1.71		
		SD	-1.12	-1.16	-0.98		
Teachers (9)	5.03	N	4	1	4	1.39	0.74
		M	1.37	0.99	1.77		
		SD	0.40	0.45	0.43		
Doctors (6)	3.35	N	2	3	1	0.66	0.05
		M	1.16	1.14	0.99		
		SD	-0.72	0.43	-0.42		
Nurses (3)	1.68	N	1	1	1	0.95	0.18
		M	0.99	0.99	0.99		
		SD	-0.98	0.67	-0.75		
Ward Boys (5)	2.79	N	1	2	2	0.99	0.24
		M	0.99	1.51	1.54		
		SD	0.89	1.16	1.03		

Correlation with Food Habit and Physical Exercise

It's clear from the table 3 the frequency of food intake in a day is not certain (49.16%), while less than 40 percent people take three times in a day because they skip their breakfast because of their working environment and some people (17.90%) are very obese so they don't take breakfast and snack. Diet has a profound role in the control of insulin resistant syndrome particularly Coronary artery disease (Raheja e.t al, 1970; Sanders et al., 1985; Ghafourunissa, 1996; Luscombe et al., 2002; Mitra and Bhattacharya, 2005).

The respondents those who are taking non-vegetarian foods their blood sugar has been observed high, on the other hand vegetarian having the maintained blood sugar. From the study it has been said that the vegetarian food is better than non-vegetarian food to control the high blood sugar. Non-vegetarian food is high in saturated fat and cholesterol which increase the risk of heart

disease. Highly fatty food are high in calories, which increase the chances that a person will become over-weight and being weight increase risk of developing high blood sugar. In fact sugar rises other associated disease through out in life. Table 3 shows that only 0.56% respondents taking pure vegetarian food while 94.41% people are taking both non-vegetarian and vegetarian food. 5.03% respondents are very fond to eating non-vegetarian they only prefer non-vegetarian food. The quantity of food plays an essential role to regulate the metabolism of the individual's body ($t=1.74$). A person, who takes less than hunger, is always fit and his / her metabolism rate is high. With ($\text{sig.}=0.02$), table 3 depicts that 72.63% respondents take adequate quantity of food, 22.35% people take less quantity than their appetite but 3.35% employees less quantity of food often.

During study, it is clear that the reported respondents take carbohydrate rich in their food (32.96%) and 37.43% respondents are very fond to non-vegetarian ($t= -1.03$) and they take high caloric fatty foods like chicken, egg, meat and fish often. Table shows that they prefer roughage diet ($t=0.31$) to maintain their sugar level (25.70%). Only 3.91% respondents take protein diet to keep their body strong and they are physically normal, they don't have any kind of physical/mental problem. Ornish (1996) had advocated a low fat diet is beneficial for health but it has the disadvantage of low HDL level in blood. Hence, a diet with adequate fat and with omega 3 and omega 6 fatty acids is good for health. More than seventy percent of employees have no proper time to take their breakfast, lunch and dinner. They do Shift duty which are morning, night and day shift. It has been observed that this kind of respondents are not aware of, to maintain routine life and rest 5.56% are depend upon the routine of duty to manage their life style. Only 7.26% people take their meals timely because they are in high level post ($t=0.01$). So, it is the big factors that affect the industrial employees' health and that kind of routine life and life style create a hurdle in their life. According to National Center for Biotechnology Information (2012), the management of diabetes involves medicines, diet and exercise to control blood sugar and preventive symptoms and the goal of diabetes treatment and management are to achieve metabolic control, minimize diabetic complications, control co-morbidities and achieve good quality of life (Brooks, Worrell B., Palmer J. P., 2011). All these are largely dependent on life style management of the disease. It is generally acknowledged that measures to reduce obesity and high fat contents in diets and to improve physical activity could favourably impact both the incidence of diabetes and its complications. It is mentioned by Aikens J E., Perkins D. W., Piette J. D., Lipton B. (2008), the quality of life style has also been reported to be jeopardized by diabetes while physical effects of diabetes are known to be

overwhelming to the individual, there may also be pragmatic constraints on life style, especially those imposed by diet, which can cause many individuals to feel disconnected.

Table 3: Association of Diabetes with Food Habit and Physical Exercise and Yoga

Variables	Status	N	%	M	SD	t- test	Sig.
Frequency of Food Intake	Two Time	32	17.88	10.84	1.35	-1.28	0.01
	Three Time	56	31.28	10.53	1.41		
	Four Time	1	0.56	5.59	1.03		
	More Than Four Time	2	1.12	4.07	0.83		
	Not Certain	88	49.16	2.98	0.94		
Kind of Food	Vegetarian	1	0.56	35.9	1.54	-1.03	00
	Non-vegetarian	9	5.03	19.89	1.16		
	Both	169	9.44	2.01	1.24		
Quantity of Food	Less than hunger	40	22.35	8.73	1.25	1.74	0.02
	More than Hunger	3	1.67	89.5	1.23		
	Adequate	130	72.63	2.73	0.76		
	Very less in Quantity	6	3.35	51.14	1.05		
Kind of Food Nutrients	Rich in Carbs	59	32.96	5.42	0.89	0.31	0.04
	Rich in Fat	67	37.43	4.84	1.57		
	Rich in Protein	7	3.91	25.57	0.57		
	Rich in Roughage	46	25.69	6.75	1.33		
Routine of Food Intake	Timely	13	7.26	15.56	1.21	0.01	0.74
	Weekly Change	17	9.49	13.26	0.96		
	Not Certain	139	77.65	2.40	1.01		
	Depend on Duty	10	5.56	17.98	1.15		
Status of Exercise/ Physical Activities/ Yoga	Yes	95	53.07	13.01	1.43	1.48	0.23
	No	24	13.47	7.45	1.21		
	Not Certain	60	33.51	4.26	0.60		

Physical activity has been shown to be inversely related with obesity and fat distribution, particularly visceral obesity. Studies have shown that physical activity may reduce risk of type 2 diabetes both directly by improving insulin sensitivity and indirectly by producing beneficial changes in body mass and body composition (Kriska, 2003). Regular exercise, in any form, can help reduce the risk of developing diabetes. Activity can also reduce the risk of developing complications of diabetes such as heart disease, stroke, kidney failure, blindness and leg ulcers. As little as 20 minutes of walking three times a week has a proven beneficial effect. There are ample

epidemiological evidences to demonstrate that physical inactivity as an independent risk factor is fuelling the epidemic of type 2 diabetes, predominantly in the urban areas.

According to the science of yoga, a person who has not controlled his sense organ of taste cannot control his other sense organs. Human body has two main mechanisms, one that nourishes the body and the other that cleanses the body by eliminating the remaining refuse. By taking excess food, life span decreases (http://www.abc-of-yoga.com/beginners_guide/yogasystem.asp). Human body has two main mechanisms, one that nourishes the body and the other that cleanses the body by eliminating the remaining refuse. By taking excess food, health goes down, life span decreases. It is considered to be bad. A person who has not controlled his sense organ of taste cannot control his other sense organs. The subjects under consideration, therefore, are: what to eat, how much to eat, when to eat and how to eat. So, yoga is a healthy life style pattern widely used in India, as one of her traditional heritage having immense role in mind and disease control.

Recommendation

The physical and emotional needs of diabetic patients at the primary health care setting are essential to help improve their quality of life. It is recognised that many ailments which were problematic in the past, are being coped with now through medical interventions, but need have appropriate knowledge and perceptions of a disease shouldn't be neglected. Thus, a diabetic patient's quality of life should be a primary consideration when prescribing a treatment regimen. Logic model of diabetes prevention programme is a useful tool to reach the goal in the community level prevention. Personal changes in lifestyle (e.g., increasing physical activity, lowering caloric intake) are certainly important for the prevention of obesity and diabetes.

A healthy diet is key to controlling blood sugar levels and prevents diabetes complications. Eat a consistent, well balanced diet that is high in fiber, low in saturated fat and low in concentrated sweets. A consistent diet that includes roughly the same number of calories at about the same times of day helps the health care professional prescribe the correct dose of medication or insulin.

Conclusion

A number of life style factors are known to be important to the development of type 2 diabetes including: obesity, lack of physical activity, poor diet as well as high fatty food and urban life style. A lack of exercise is believed to cause 7% of cases. Zest of the study shows that life style modification

involving diet and enhances physical activity helps to delay or prevent the progression of IGT to diabetes. Compare with pharmaceutical agent, lifestyle intervention had 28.5% risk reduction of diabetes during 30 months follow up. Physical activities was demonstrated by motivated to walk briskly for at least 30 minutes each day and dietary advised included reduction of total calories, refined carbohydrates and fat, avoidance of sugar and inclusion of fiber rich foods. There is no cure for diabetes. However, we can manage or delay diabetes through diet, exercise, weight control and, if necessary, medication.

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A Study on Intentional Self Harm in Aichach District Bavaria, Germany

Dr.Rosamma Jacob¹

Abstract

In today's scenario high occupational mobility, high ambition and desire for high standard of living is leading to high incidence of suicidal deaths. Nowadays suicidal gesture, attempted suicide & well successful suicide cases are seen in the society often on. Though the world has developed with the introduction of science and technology no country in the world is totally free from the issue of Self Intentional Harm. No creature on earth can destroy its life by itself other than human being. Today without any age variation people kill or try to kill themselves using various modes. Through this study the researcher intends to study the level of committing suicide in developed country like Germany. Researcher included the age, sex, reasons and different methods of the same under the objectives of study.

Introduction

Suicide is not new in human history rather it is as old as humanity itself and its sources reaches far back into the beginning of the culture. It is a specifically human problem. Any animal can die by disease and can be destroyed intentionally or accidentally by an outside agency but as far as we know only man can will his death and kill himself. At some stage of evolution man must have discover that he can kill himself. It is the most personal action, which an individual can take. The study on suicide illustrates that human action, however personal is also interaction with other people and that the individual can not understood in isolation from his social matrix.

Suicide is widely prevalent and no nation and culture has escaped from it, though the toll varies from place to place. The prevalence of suicide in to-days world is quite alarming. In year 2000 about 800000 suicide deaths occurred worldwide. The World Health Organization estimates that more people die each year from suicide than in all the worlds arm conflicts.

¹ Asst. Professor, Christ College of Teacher Education, Jagdalpur, Bastar Distt., Chhattisgarh, India

The word suicide was first used by Sir Thomas Browne in his *ReligioMedici* in 1642 and subsequently by Walter Charleton in 1651. Prior to the introduction of word "Suicide" self destruction, self killing and self murder were in practice.

Suicide has been defined by Becketal as, "a willfulself inflicted life threatening act which results in death."

Schneidman (1976) defined it as, "the human act of self inflicted, self intentional cessation of life". It is an act committed out of constricted thinking, tunnelled logic and acute anguish.

The world health organization defines sui-cidal act "as the injury with varying degrees of lethal intent and suicide may be defined as a suicidal act with fatal outcome." Durkheim (1858-1917) defined suicide as "death resulting directly or indirectly from a positive or negative act of the victim himself, which he knows will produce this result." This excludes those who survive the attempt.

Suicide may be defined as, "an intentional act causing harm to a person amounting to death and committed by person himself in the absence of contribution from any external agency particularly in the commencement of act." Recently the term suicide has been replaced by "Intentional Self-Harm"(ISH) in the scientific literature due to derogatory nature of the word "Suicide". Nowadays suicidal gesture, attempted suicide, well successful suicide cases are every now and then we see or hear in the society.

Aims and Objectives

1. To find out the percentage of age and gender among the victims who committed suicide.
2. To assess various reasons caused for Intentional Self Harm.
3. To assess the methods adopted for suicide.

Materials and Methods

The researcher has prepared a questionnaire and interviewed different people who are associated to victims family and collected the data.

Age and genderwise intentional self harm frequency is given as below -

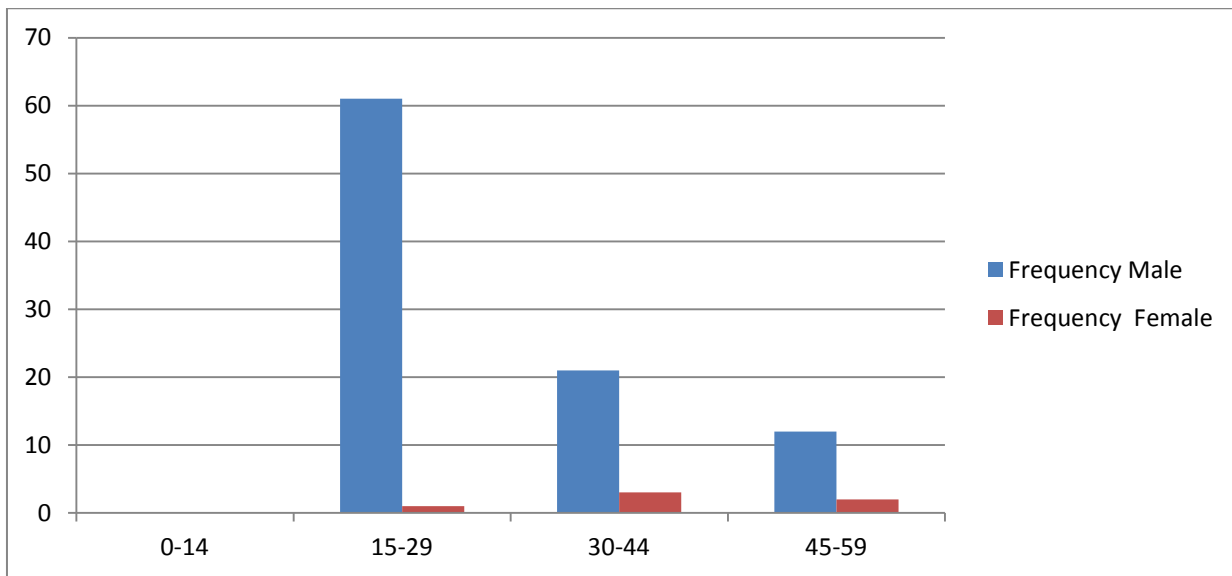


Figure-1 : Intentional Self Harm on Age And Genderwise

Reasonwise intentional self harm intensity is showing by following figure -

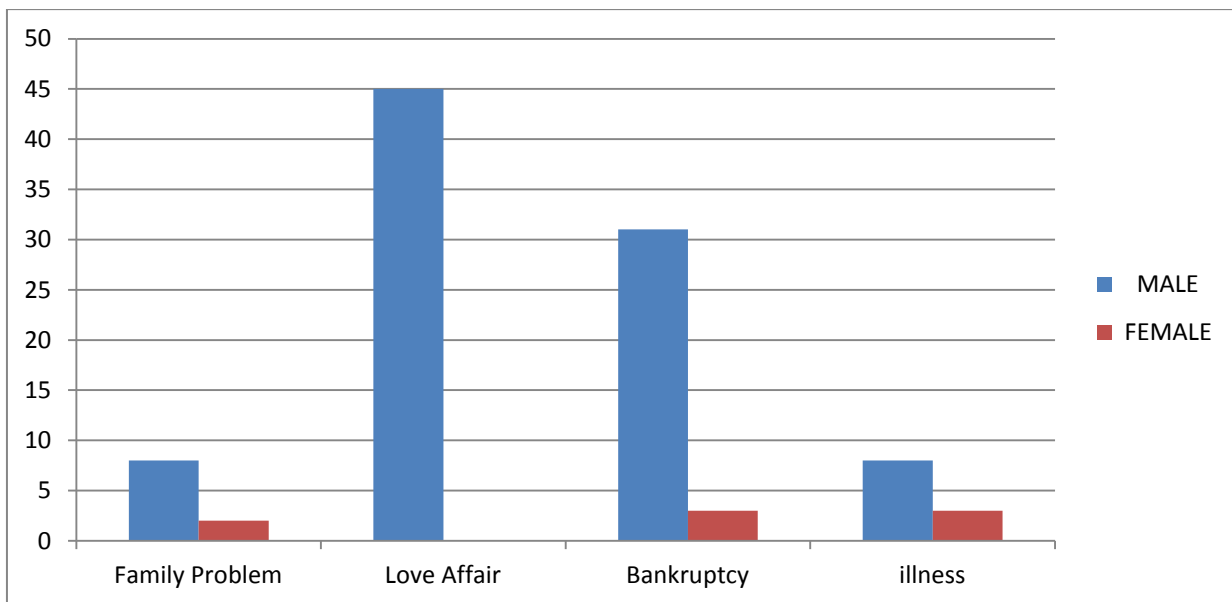


Figure-2 : Intentional Self Harm on Reasonwise

Methodwise intentional self harm intensity is given as below -

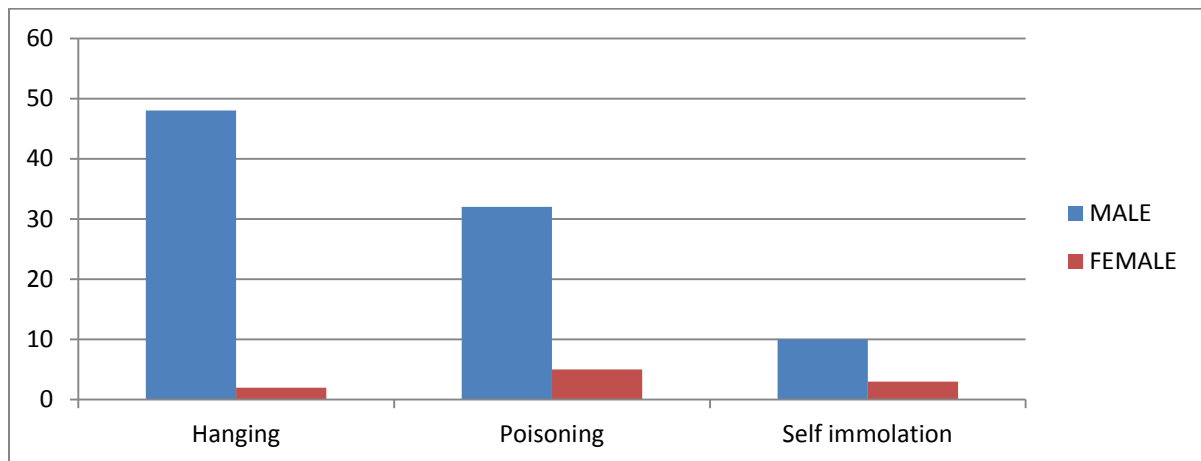


Figure-3 : Intentional Self Harm on Methodwise

Conclusion

The researcher has drawn 100 sample from the District of Aichach to make the afore study. The result has shown that among the people of Aichach District in the state of Bavaria the percentage of committing suicide among the men are very higher than the women. The majority among the victims come under the age of 15-25. The study showed that main reasons for the same is love affair and bankruptcy.

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Studies on Heavy Metal Tolerance by Bacterial Isolates from Industrial Effluents

Sunanda Dhar¹

Abstract

The toxicity occurs in humans due to environmental pollution via soil or water contamination or due to occupational exposure. Some of these metals are useful to us in low concentrations but are highly toxic in higher concentrations. Heavy metals found in wastewaters are harmful to the environment and their effects on biological system are very severe. An efficient and economic treatment for their removal and reuse needs to be developed. Microbial metal bioremediation is an efficient strategy due to its low cost, high efficiency and ecofriendly nature. The paper, textile and paint effluents were collected and through biochemical test the organisms were isolated. This organisms were then screened with three heavy metals i.e. zinc, cadmium and chromium. Among all the isolates Bacillus badius, Bacillus larvae and Lactobacillus fermenti showed resourceful tolerance against the heavy metals used and showed antibiotic sensitivity test.

Keywords: toxicity, bioremediation, paper effluent, paint effluent, textile effluent, biochemical test, antibiotic sensitivity test.

Introduction

Heavy metal is a group of metal or metalloids with atomic density greater than 4 g/cm³ or 5 times or more, greater than water. Heavy metals are emitted both in elemental and compound form. The principal metal emission sources come from the following industries: petrochemical, extractive, metallurgic, mechanic, chemical and ceramic. Accumulation of toxic metals in humans has several consequences such as growth and developmental abnormalities, carcinogenesis, neuromuscular control defects, mental retardation, renal malfunction and wide range of other illness.^[1] Heavy metals are emitted both in elemental and compound (organic and inorganic) forms. Anthropogenic sources of emission are the various industrial point sources including former and present mining sites, foundries and smelters, combustion by-products and traffics. Cadmium is released as a by-product of zinc (and occasionally lead) refining; lead is emitted during its mining and smelting

¹ Research Scholar, Christ College, Jagdalpur, Bastar Distt., Chhattisgarh, India

activities, from automobile exhausts (by combustion of petroleum fuels treated with tetraethyl lead antiknock) and from old lead paints; mercury is emitted by the degassing of the earth's crust.

Generally, metals are emitted during their mining and processing activities.^[2] Environmental pollution by heavy metals is very prominent in areas of mining and old mine sites and pollution reduces with increasing distance away from mining sites. These metals are leached out and in sloppy areas, are carried by acid water downstream or run-off to the sea. Through mining activities, water bodies are most emphatically polluted. The potential for contamination is increased when mining exposes metal-bearing ores rather than natural exposure of ore bodies through erosion, and when mined ores are dumped on the earth surfaces in manual dressing processes.^[3] Through rivers and streams, the metals are transported as either dissolved species in water or as an integral part of suspended sediments, (dissolved species in water have the greatest potential of causing the most deleterious effects). They may then be stored in river bed sediments or seep into the underground water thereby contaminating water from underground sources, particularly wells; and the extent of contamination will depend on the nearness of the well to the mining site. Wells located near mining sites have been reported to contain heavy metals at levels that exceed drinking water criteria.

In recent years, ground soil and other materials polluted with heavy metals have become a serious environmental problem throughout the world due to their use in many manufacturing processes, and up as waste in industrial effluent, through which heavy metals can enter water cycle, and then in the food chain where they are concentrated ultimately reaching the toxic levels.^[4] Use of industrial wastewater for irrigation is a common practice in most of the third world countries which could alter the fertility of soil.^[5] Moreover, accumulation of heavy metals in vegetation due to irrigation with waste water could affect human health.^[6] Availability of heavy metals in the cell must be carefully controlled due to their potential to form radicals and their tendency to bind to biological macromolecules^[7]. Microorganisms use a number of mechanisms to maintain the correct equilibrium, including the uptake, chelation and extrusion of metals^{[8][9]}.

While some of the heavy metals are purely toxic with no known cellular role^[10], other metals are essential for life at low concentration but become toxic at high concentrations^[11], high concentration of all the heavy metals inhibits the activity of sensitive enzymes^[12]. Wide range of essential cell components is potential targets for metal induced damage such as DNA for replication

as a result of which cell death can occur^[13]. The bacterial resistance mechanisms are encoded generally on plasmids and transposons, and it is probably by gene transfer or spontaneous mutation that bacteria acquire their resistance to heavy metals. The *czc* system is responsible for the resistance to cadmium, zinc and cobalt. The *czc*-genes encode for a cation-proton antiporter (*CzcABC*), which exports these metals^[14]. A similar mechanism, called *ncc* system, has been found in *Alcaligenes xylooxidans* which provides resistance against nickel, cadmium and cobalt. The metal uptake by the microbial biosorbent may be an active or passive process or exhibit both active and passive processes depending upon the microbial species. Moreover, passive uptake is a rapid and reversible process and is independent of cellular metabolisms, physical conditions such as pH and ionic strength.

Materials and Methods

Sample Collection

The effluent samples were collected in dry sterilized polyethylene bottles from Industrial Area. Effluents from textile, paper and paint industries were collected. Samples were collected by immersion by hand of a polyethylene sampling bottles.

Isolation of micro-organism from paper, paint and textile industry

50 ml of 0.85% Normal saline water was prepared for each samples (textile, paper and paint effluent). 5 test tubes were taken for each sample. 9 ml Normal saline water was poured into each test tubes. 1ml of water sample was added into 1st test tube to make bacterial suspension.

The 6 plates were inoculated. Streaking in this technique was done using a bent glass rod. 0.1 mL of bacterial suspension was placed in the center of the plate using a sterile pipette. Colony morphology and characterization was done by gram staining. The isolates from paper, textile and paint effluents were screened with 1M zinc, 0.1M, chromium and cadmium heavy metals. Further the organism was identified with the biochemical tests.

Heavy metal tolerance activity

The isolates *Bacillus badius*, *Bacillus larvae*, *Bacillus pasteurii*, *Lactobacillus fermenti*, *Corynebacterium kutscheri* were screened with 200mM, 400mM, 600mM, 800mM concentrations of zinc, 10mM, 20mM, 50mM, 100mM concentrations of chromium and cadmium heavy metals.

Isolation of plasmid and transformation

The three strains of gram positive bacteria *Bacillus badius*, *Bacillus larvae*, *Bacillus pasteurii* were used to isolate plasmid. The plasmid isolated were transformed in host cell and were allowed to propagate.

Screening of transformed cells

The transformed cells were screened with heavy metals, 0.1M zinc, chromium and cadmium. Nutrient media was prepared, transformed cells and competent cells were inoculated in plates containing different heavy metals.

Result and Discussion

The bacteria were isolated and identified according to the colony morphology, different staining procedures and biochemical tests. From the three sampling points, 6 bacterial colonies were selected for the biochemical tests and their identification were done by Bergey's manual of determinative bacteriology as in table-1. Different bacterial species were isolated basing upon their observation in gram's staining and their colony morphology on the plates such as arrangement, colour, etc. six bacterial colonies were isolated as *Bacillus badius*, *Bacillus larvae*, *Bacillus pasteurii*, *Lactobacillus fermenti* and *Corynebacterium kutscheri* The different microorganism were analysed for the antibiotics sensitivity test where zone of inhibition (in mm) was calculated against antibiotics such as Ampicillin, Erythromycin, Chloramphenicol, Streptomycin (table 2). The different microbial isolates were subjected to heavy metal toxicity test against three heavy metals such as zinc at table 3, chromium at table 4 and cadmium at table 5 at different concentration such as 200mM, 400mM, 600mM, 800mM for zinc, 10mM, 20mM, 50mM, 100mM for chromium and cadmium. It was kept for four consecutive days for bacterial species.

Discussion

The ability of microbial strains to grow in the presence of heavy metals would be helpful in the wastewater treatment where microorganisms are directly involved in the decomposition of organic matter in biological process for wastewater treatment. In the present study, the different bacterial strains *Bacillus badius*, *Bacillus larvae*, *Bacillus pasteurii*, *Lactobacillus fermenti* and *Corynebacterium kutscheri* showing tolerance to three heavy metals viz, Zinc, Chromium, Cadmium. For determining minimum inhibitory concentration (MIC) 200-800mM concentration for Zinc was used, 10-100mM concentration was used in chromium and cadmium. This study showed a high incidence of metal resistance for the bacterial isolates. Many bacterial species isolated from industrial zones had been shown to develop resistance to heavy metals. The bacterial isolates also showed the resistance to antibiotics. The strains were cultured in nutrient agar and screened with heavy metals in which, chromium was showing the highest degradation in textile and paper effluent. The isolates had shown least bioremedial properties against Cadmium. The bacterial isolates from paint effluent shown positive towards all the three metals for degradation.

Further the tests were carried out, biochemical tests were performed. *Bacillus badius* identified by the positive results of endospore staining, starch hydrolysis, catalase test and nitrate reduction test and negative result for V-P test and citrate utilization. Likewise, *Bacillus larvae* was identified by endospore staining and gelatinase hydrolysis with positive result while starch hydrolysis, catalase test, citrate utilization test giving negative results. The positive results of *Bacillus pasteurii* were endospore staining, catalase test, nitrate reduction and starch hydrolysis gave the negative result. *Lactobacillus fermenti* showed glucose fermentation positive while endospore staining and catalase test negative. *Corynebacterium kutscheri* was endospore negative but catalase test and starch hydrolysis positive (A. Tamil Selvi et al., 2012). The isolates were tested for heavy metal tolerance and degradation of heavy metals. The isolates, *Bacillus badius* and *Bacillus larvae* showed maximum inhibitory concentration at 800mM where as *Corynebacterium kutscheri* showed 200mM in zinc. For chromium, the maximum inhibitory concentration was at 100mM for all strains, but *Corynebacterium kutscheri* MIC at 50mM. The maximum inhibitory concentration value for cadmium by *Bacillus badius* was at 100mM, *Bacillus pasteurii*, *Corynebacterium kutscheri* showed 20mM MIC and *Bacillus larvae*, *Lactobacillus fermenti* showed 50mM as highest MIC. (Filali et al., 2000).

The strains were showing antibiotic resistance in which *Bacillus pasteurii* was total resistance against erythromycin with no inhibition zone. *Bacillus badius*, *Bacillus pasteurii* and

Corynebacterium kutscheri with 18mm, 17mm, 19mm inhibition zone showed resistance against chloramphenicol. The isolates *Bacillus badius*, *Bacillus pasteurii* with 31mm, 30mm inhibition zone showed sensitive to ampicillin. *Bacillus larvae* was sensitive against chloramphenicol with 31mm inhibition zone and *Corynebacterium kutscheri* was sensitive against streptomycin with 35mm inhibition zone. The cell was transformed with ampicillin and X-Gal/IPTG in which all the strains were transformed showing positive result by forming white colonies. The cells were again screened with transformed colonies. Zinc showed the highest growth and Chromium and Cadmium with minimum growth showing positive results. The strains were also tested for enteric pathogenicity by triple sugar iron agar media. The *Bacillus larvae* showed acidic positive. *Lactobacillus fermenti* and *Corynebacterium kutscheri* showed alkaline positive confirmed by red color in media. *Bacillus badius* and *Bacillus pasteurii* were negative to this test.

Conclusion

The industrial effluents are enriched media to grow and spread microbial population, which are resistance to different metals. The identification of resistance against different metals may provide a useful tool for the simultaneously monitoring of several toxic pollutants in the environment. It is clearly indicated that domestic waste and industrial waste are responsible for the development of the bacterial resistance along with the risk of human health and environment. Hence, this species can be used as a bioremediation tool for the treatment of effluent from paper, textile, paint and other industries handling heavy metals.

Table 1 : Biochemical test for selected colonies of paper, textile and paint effluents

Biochemical tests	P2	C1	C7	P1	T1	T8
1. Endospore staining	+ve	+ve	+ve	-ve	-ve	-ve
2. Starch hydrolysis	+ve	-ve	-ve	NA	+ve	+ve
3. Catalase test	+ve	-ve	+ve	-ve	+ve	+ve
4. Glucose fermentation	NA	NA	NA	+ve	NA	NA
5. VP test	-ve	NA	NA	NA	NA	NA
6. Citrate utilization test	-ve	-ve	NA	NA	NA	NA
7. Gelatinase test	NA	+ve	NA	NA	NA	NA
8. Organism identified	Bacillus badius	Bacillus larvae	Bacillus pasteurii	Lacto-bacillus fermenti	Coryne-bacterium kutscheri	Coryne-bacterium kutscheri

+ve = positive, -ve = negative, NA = not attempted

Table 2 : Antibiotic sensitivity test

Identified organism	Antibiotics	Zone of inhibition
Bacillus badius	Ampicillin Erythromycin Chloramphenicol Streptomycin	31mm(S) 19mm 18mm(R) 26mm
Bacillus larvae	Ampicillin Erythromycin Chloramphenicol Streptomycin	31mm 27mm 32mm(S) 20mm(R)
Bacillus pasteurii	Ampicillin Erythromycin Chloramphenicol Streptomycin	30mm(S) TR(NZ) 17mm(R) 24mm
Lactobacillus fermenti	Ampicillin Erythromycin Chloramphenicol Streptomycin	27mm 34mm(S) 25mm(R) 34mm(S)
Corynebacterium kutsceri	Ampicillin Erythromycin Chloramphenicol Streptomycin	23mm 21mm 19mm(R) 35mm

R: resistance, S: sensitive, TR: total resistance, NZ: no zone

Table 3 : Heavy metal tolerance activity of zinc, absorbance at 620 nm

Different concentrations	200mM				400mM				600mM				800mM			
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs
Bacillus badius	0.29	0.30	0.31	0.32	0.18	0.23	0.24	0.25	0.25	.024	.024	.024	0.36	0.35	.034	0.34
Bacillus Larvae	0.23	0.26	0.27	0.28	0.33	0.34	0.35	0.36	0.25	0.37	0.38	0.38	0.28	0.37	0.37	0.38
Bacillus pasteurii	0.22	0.25	0.24	0.25	0.27	0.29	0.30	0.33	0.22	0.25	0.25	0.32	0.27	0.30	0.30	0.31
Lactobacillus fermentii	0.23	0.22	0.23	0.29	0.25	0.36	0.37	0.39	0.27	0.29	0.31	0.33	0.17	0.23	0.25	0.27
Corynebacterium kutsceri	0.45	0.50	0.53	0.55	0.31	0.35	0.34	0.35	0.36	0.39	0.39	0.40	0.43	0.44	0.44	0.43

Table 4 : Heavy metal tolerance activity of chromium, absorbance at 620 nm

Different concentrations	10mM				20mM				50mM				100mM			
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs
Bacillus badius	0.11	0.11	0.11	0.13	0.13	0.15	0.16	0.18	0.10	0.14	0.12	0.16	0.18	0.20	0.21	0.25
Bacillus Larvae	0.06	0.06	0.06	0.10	0.05	0.06	0.07	0.12	0.07	0.09	0.10	0.15	0.10	0.13	0.15	0.18
Bacillus pasteurii	0.08	0.09	0.10	0.11	0.09	0.09	0.10	0.11	0.10	0.13	0.15	0.18	0.11	0.14	0.15	0.21
Lactobacillus fermentii	0.07	0.07	0.07	0.07	0.17	0.21	0.22	0.26	0.15	0.19	0.21	0.25	0.22	0.26	0.28	0.31
Corynebacterium kutscheri	0.16	0.19	0.20	0.28	0.10	0.12	0.15	0.25	0.20	0.21	0.24	0.30	0.10	0.13	0.14	0.19

Table 5 : Heavy metal tolerance activity of cadmium, absorbance at 620 nm

Different concentrations	10mM				20mM				50mM				100mM			
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs
Bacillus badius	0.23	0.23	0.23	0.23	0.22	0.23	0.24	0.24	0.24	0.25	0.25	0.25	0.24	0.25	0.26	0.26
Bacillus Larvae	0.27	0.27	0.27	0.27	0.30	0.30	0.32	0.33	0.30	0.31	0.33	0.34	0.28	0.29	0.32	0.34
Bacillus pasteurii	0.26	0.27	0.28	0.28	0.27	0.28	0.30	0.32	0.24	0.26	0.28	0.29	0.24	0.24	0.26	0.27
Lactobacillus fermentii	0.27	0.28	0.26	0.26	0.29	0.30	0.32	0.31	0.30	0.31	0.32	0.34	0.27	0.29	0.31	0.29
Corynebacterium kutscheri	0.27	0.27	0.27	0.27	0.27	0.27	0.28	0.28	0.25	0.25	0.26	0.26	0.26	0.26	0.27	0.26

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स्नातक स्तर के विद्यार्थियों के आत्मविश्वास का एक अध्ययन

श्रीमती मौली चक्रवर्ती¹, डॉ. जसबीर कौर²

सारांश

शिक्षा व आत्मविश्वास का अपना एक विशेष संबंध होता है। शिक्षा आत्म विश्वास को बढ़ाने का एक सार्थक उपाय है। यहां पर स्नातक स्तर के महाविद्यालय के प्रथम व अंतिम वर्ष के आधार पर भिन्न-भिन्न विषयों (जैसे वाणिज्य एवं विज्ञान) के विद्यार्थियों के आत्मविश्वास का अध्ययन किया गया है। विद्यार्थियों के आत्मविश्वास के मापन के लिए डॉ. डी.डी. पाण्डेय द्वारा निर्मित मापनी की सहायता से अध्ययन किया गया है। आत्मविश्वास जागृत करने के शिक्षा के अतिरिक्त पारिवारिक वातावरण, विद्यालय का वातावरण, वंशानुक्रम आदि कारक भी प्रभावित करते हैं।

भूमिका

आत्मविश्वास वस्तुतः एक मानसिक एवं आध्यात्मिक शक्ति है। आत्मविश्वास से ही विचारों की स्वाधीनता प्राप्त होती है। इसके कारण ही महान कार्यों के संपादन में सरलता एवं सफलता मिलती है। इसी के द्वारा आत्मरक्षा होती है। जो व्यक्ति आत्मविश्वास से ओत-प्रोत होते हैं उन्हें अपने भविष्य के प्रति किसी प्रकार की चिंता नहीं होती है। यदि हम कोई महान कार्य करना चाहते हैं तो सबसे पहले हमें अपने मन में स्वधीनता के विचार को भरना होगा। जिस मनुष्य का मन संदेह, चिंता, और भय से भरा हो वह महान कार्य तो क्या कोई सामान्य कार्य भी नहीं कर सकता है। संदेह हमारे मन को कभी एकाग्र नहीं होने देंगे। इस प्रकार आत्म विश्वास वह अद्भुत भाक्ति है जिसके बल पर मनुष्य अकेला ही हजारों विपत्तियों और शत्रुओं का सामना कर लेता है।

इस प्रकार शिक्षा से विद्यार्थियों में आत्मविश्वास जागृत होता है।

मनुष्य के व्यक्तित्व का अवलोकन किया जाये तो आत्मविश्वास को मुख्यतः तीन भागों में बांटा जा सकता है—

1. अल्प आत्मविश्वास
2. संतुलित आत्मविश्वास
3. अति आत्मविश्वास

अध्ययन का क्षेत्र

शिक्षा वह साधन है जिससे बालक की शारीरिक मानसिक, सामाजिक तथा आध्यात्मिक शक्तियों का विकास होता है। शिक्षा व्यक्ति के चरित्र को उत्कृष्ट बनाती है। यह व्यक्ति को सभ्य बनाती है। शिक्षा के द्वारा व्यक्ति सही रूपों में चिंतन करना सीखता है तथा शिक्षा के बिना व्यक्ति संपूर्णता को प्राप्त नहीं कर सकता।

शिक्षा विद्यालयों एवं महाविद्यालयों में ही बालक ग्रहण नहीं करता बल्कि बालक की शिक्षा तो जन्म से ही प्रारंभ हो जाती है। बालक जब परिवार में जन्म लेता है तो सर्वप्रथम माता-पिता के संपर्क में आता है तथा सबसे पहली शिक्षा वह अपने माता-पिता तथा परिवार से ही प्राप्त करता है। विद्यालयों में औपचारिक शिक्षा प्रदान की जाती है जबकि परिवार में बालक अनौपचारिक शिक्षा ग्रहण करता है। वह जन्म से जीवन पर्यन्त परिवार से कुछ न कुछ सीखता रहता है।

¹ श्रीमती मौली चक्रवर्ती (सहायक प्राध्यपिका), रूंगटा कॉलेज ऑफ साइंस एंड टेक्नोलॉजी गंजपारा दुर्ग (छत्तीसगढ़)

² डॉ. जसबीर कौर (रीडर), रूंगटा कॉलेज ऑफ साइंस एंड टेक्नोलॉजी गंजपारा दुर्ग (छत्तीसगढ़)

अच्छी शिक्षा प्राप्ति और समाज में अपना उचित स्थान प्राप्त करने के लिए बालक में आत्म-विश्वास का होना अत्यंत आवश्यक है। बालकों के आत्मविश्वास को प्रभावित करने में उनके महाविद्यालय के वातावरण का महत्वपूर्ण स्थान रहता है।

निम्नवर्गीय परिवार के बालक समाज के विभिन्न वर्गों से अपनी तुलना करते हैं और तब इन्हें लगता है कि वे इस कार्य को नहीं कर सकते। अधिकांशतः ऐसे परिवार के बालकों में महाविद्यालय में अधिक क्रियाशीलता एवं सक्रियता होते हुए भी उचित मार्गदर्शन एवं अपने मन की हीनता के कारण चाह कर भी इनका आत्मविश्वास बढ़ नहीं पाता। जिसका नकारात्मक प्रभाव इनकी शैक्षिक उपलब्धि पर पड़ता है।

उच्चवर्गीय परिवार के बालकों को प्रारंभ से ही सारी सुविधाएँ मिलती रहती है। इनके परिवार को सहयोग भी इन्हें प्राप्त होता रहता है। ऐसे परिवार के अभिभावक का केन्द्र बिन्दु बालक ही होता है जिसके कारण वे बालक को अधिक समय दे पाते हैं तथा अपने बालकों के आत्मविश्वास को विकसित करने एवं उनकी शैक्षिक उपलब्धि पर सकारात्मक प्रभाव डालते हैं।

परिवार चाहे उच्चवर्गीय हो या निम्न वर्गीय दोनों ही वर्ग के विद्यार्थियों में आत्मविश्वास को प्रभावित करने में महाविद्यालय का स्थान महत्वपूर्ण है। शैक्षिक उपलब्धि में भी इनकी महत्वपूर्ण भूमिका होती है जिसका प्रभाव विद्यार्थियों के आत्मविश्वास पर पड़ता है।

बालक ही शिक्षा का केन्द्र बिन्दु है इसलिए बालक के विभिन्न समस्याओं को देखते हुए शोध का क्षेत्र निश्चित किया जाता है हमारे शोध का क्षेत्र स्नातक स्तर के विद्यार्थियों के आत्मविश्वास का अध्ययन ही हमारे शोध का विषय क्षेत्र है।

- तेजिंदर कौर एवं मंजु मेहता, LJPE ISSN (0187-1003)48 (4) 144-147 जुलाई 2007
शीर्षक—“किशोरी छात्राओं के उपलब्धि स्तर एवं अभिप्रेरणा एवं आत्मविश्वास के साथ तुलनात्मक अध्ययन”
निष्कर्ष— ग्रामीण एवं शहरी छात्राओं के उपलब्धि स्तर में सार्थक अंतर पाया गया। शहरी छात्राओं में ग्रामीण छात्राओं की अपेक्षा अधिक उपलब्धि स्तर एवं अभिप्रेरणा स्तर दिखाई दी।
- Rawewat rattanakoses Univesity Sonmalisa Vol-11 No-2 (2012)
सामाजिक विज्ञान के यूरोपीय जर्नल
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निष्कर्ष— पुरुष एथलीट एवं महिला एथलीट की कल्पना शक्ति में अंतर है अर्थात् महिलाओं की कल्पना शक्ति उच्च स्तर की पाई गई।
- Safe alhabaish Mohamad
भाषा अध्ययन Vol-1 No-1 P-(55-60) Jan(2014)
शीर्षक—“अध्ययन विशेष रूप से सामान्य और मौखिक पाठ्यक्रम में शैक्षिक उपलब्धि के बीच संबंध
निष्कर्ष— अध्ययन विशेष रूप से सामान्य और मौखिक पाठ्यक्रम में शैक्षिक उपलब्धि के बीच संबंध” की जांच करने के उद्देश्य से किया गया। परिणाम एक सकारात्मक सामान्य आत्मविश्वास और शैक्षिक उपलब्धि के बीच महत्वपूर्ण संबंध का पता चला जो मौखिक उपलब्धि परीक्षा में अच्छा अंक लाया। भाषा प्रशिक्षकों ने अपने छात्रों के आत्मविश्वास के निर्माण में उनके मौखिक प्रबंधन उपलब्धि का विकास बढ़ाने के लिए सिफारिश की।

- साइंस डेली के जर्नल (6 अप्रैल 2015)
शीर्षक – “बागवानी विज्ञान कक्षा में आत्मविश्वास एवं शैक्षिक प्रशिक्षण के सहसंबंध का अध्ययन”
निष्कर्ष— छात्र शिक्षा में शैक्षिक प्रशिक्षण के विश्वास के साथ प्रदर्शन की तुलना में पूर्व और बाद के मूल्यांकन परिणामों के आधार पर निष्कर्ष निकाले गये। पाठ्यक्रम के लिए रूपरेखा में एक उपयोगी उपकरण था। अध्ययन के अनुसार यह भी समझा है कि क्यों सेमेस्टर के अंत में छात्र आत्मविश्वास अन्य वर्षों की तुलना में पहले से अधिक था।
- लेस्ली Pratch- (18 नवंबर 2015)
शीर्षक— “महिला नेताओं में आत्मविश्वास की आवश्यकता”
निष्कर्ष— निष्कर्षतः पाया गया कि पुरुषों और महिलाओं के लिए व्यक्तित्व की भविष्यवाणी समान रूप से सक्रिय एवं समग्र उपाय प्रकट करती है। तनाव के लिए स्वीकार्यतः अधिकतम क्षमता विकसित करने की आवश्यकता थी।
- पाल सेण्डर और एल लेग सैडर्स
वेल्स विद्यालय के संस्थान 0.12
निष्कर्ष— नवीन विद्यालय और सीखने के प्रभाव का पता लगाने के लिए इस्तेमाल किया जा सकता है।
- गैरी भुरनम ने पुस्तक “ इन्सटेंट कॉन्फिडेन्स” 92 टिप्स हाऊ टु व्युल्ट कॉन्फिडेन्स टु डेवलप सेल्फ कॉन्फिडेन्स एंड सेल्फ स्टिम में उन्होंने पारिवारिक स्तर से महाविद्यालय स्तर तक आत्म सम्मान के लिए आत्मविश्वास की आवश्यकता पर बल दिया है एवं आत्मविश्वास कैसे संतुलित किया जाए इन बिंदुओं पर जोर दिया है।
- गेल मेकहार्न हरीस ने पुस्तक “ स्टुडेंट सेल्फ स्टीम” में विद्यालय और महाविद्यालय स्तर के छात्रों के आत्मविश्वास के बारे में चर्चा की है एवं इसे बढ़ाने का उपाय बताया है।

अध्ययन का उद्देश्य— स्नातक स्तर के विद्यार्थियों के आत्मविश्वास का अध्ययन करना ही शोधकर्ता का उद्देश्य है। जो इस प्रकार हैं—

- महाविद्यालय के विद्यार्थियों के आत्मविश्वास का अध्ययन करना।
- महाविद्यालय के प्रथम वर्ष के विषय के आधार पर भिन्न-भिन्न विषयों के विद्यार्थियों के आत्मविश्वास का अध्ययन करना।
- अंतिम वर्ष के विद्यार्थियों के विभिन्न विषय (वाणिज्य एवं विज्ञान) के आधार पर आत्मविश्वास का अध्ययन करना।
- छात्र-छात्राओं के आत्म-विश्वास का अध्ययन करना।

प्रकार्यात्मक परिभाषा

आत्मविश्वास— आत्मविश्वास वस्तुतः एक मानसिक एवं आध्यात्मिक शक्ति है। आत्मविश्वास से ही विचारों की स्वाधीनता प्राप्त होती है। और इसके कारण ही महान कार्यों के संपादन में सफलता मिलती है। आत्मविश्वास वह अद्भुत शक्ति है जिसके बल पर एक अकेला मनुष्य हजारों विपत्तियों एवं शत्रुओं का सामना कर लेता है।

शैक्षिक उपलब्धि— शैक्षिक उपलब्धि से तात्पर्य बालक का शिक्षा के क्षेत्र में प्राप्त परिणामों से होता है। वर्षभर विद्यालय में शिक्षा ग्रहण करने पश्चात् जो परीक्षण परिणाम प्राप्त होता है वह शैक्षिक उपलब्धि कहलाता है।

परिकल्पना

- H_1 प्रथम वर्ष के विद्यार्थियों एवं अंतिम वर्ष के विद्यार्थियों के आत्मविश्वास में सार्थक अंतर पाया जाएगा।
- H_2 प्रथम वर्ष के वाणिज्य के विद्यार्थी एवं विज्ञान के विद्यार्थियों के आत्म-विश्वास में सार्थक अंतर पाया जायेगा
- H_3 प्रथम वर्ष के वाणिज्य के छात्र एवं छात्राओं के आत्मविश्वास में सार्थक अंतर पाया जाएगा।
- H_4 प्रथम वर्ष के वाणिज्य के छात्र एवं छात्राओं के आत्मविश्वास में सार्थक अंतर पाया जायेगा।
- H_5 अंतिम वर्ष के वाणिज्य के विद्यार्थी एवं विज्ञान के विद्यार्थियों के आत्मविश्वास एवं विज्ञान के विद्यार्थियों के आत्म-विश्वास में सार्थक अंतर पाया जायेगा।
- H_6 अंतिम वर्ष के वाणिज्य के छात्र-छात्राओं के आत्म विश्वास में सार्थक अंतर पाया जायेगा।
- H_7 अंतिम वर्ष के विज्ञान के छात्र एवं छात्राओं के आत्मविश्वास में सार्थक अंतर पाया जायेगा।

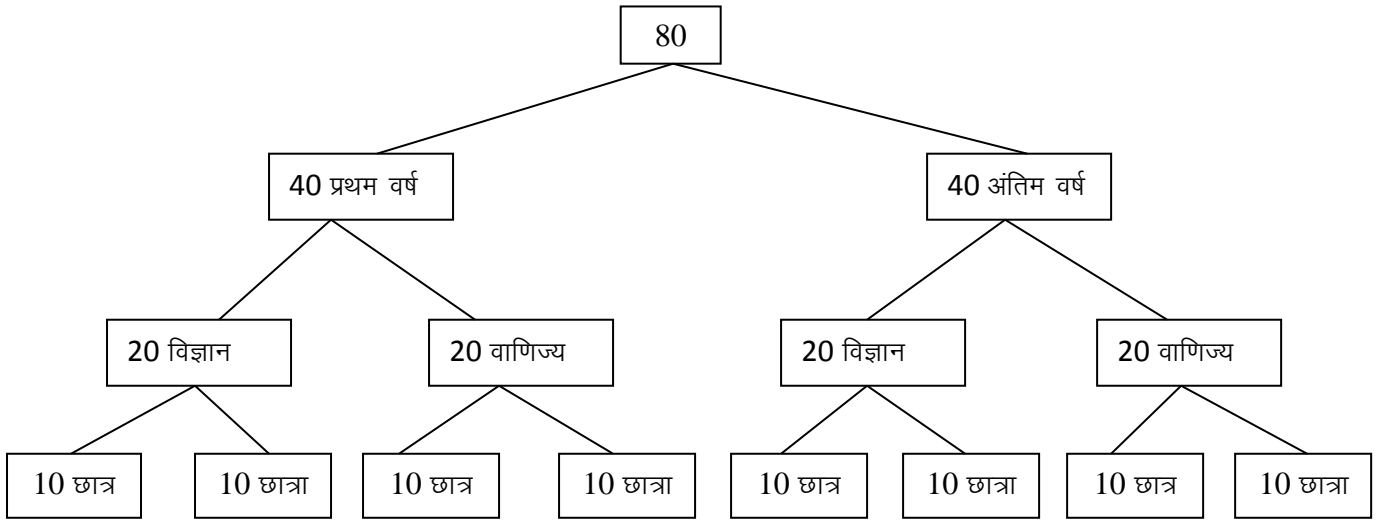
अध्ययन की परिसीमा

- प्रस्तुत शोध-हेतु दुर्ग एवं भिलाई-नगर के 5 महाविद्यालयों का चयन किया गया।
- प्रस्तुत शोध हेतु 80 छात्र एवं छात्राओं का चयन किया गया।
- प्रस्तुत शोध हेतु केवल प्रथम वर्ष एवं अंतिम वर्ष के विद्यार्थियों का चयन किया गया।
- प्रस्तुत शोध हेतु केवल वाणिज्य एवं विज्ञान का चयन किया गया।
- प्रस्तुत शोध हेतु छात्र/छात्राओं का पृथक चयन किया गया।
- प्रस्तुत शोध हेतु आत्मविश्वास हेतु डॉ. डी. डी. पाण्डेय द्वारा निर्मित मापनी का प्रयोग किया गया

80 विद्यार्थियों का चयन विषय के आधार पर किया गया है।

80 विद्यार्थियों में 40 प्रथम वर्ष तथा 40 अंतिम वर्ष के विद्यार्थी हैं।

चयनित न्यादर्श का रेखाचित्र



उपकरणों का विवरण— प्रस्तुत लघुशोध में डी.डी. पाण्डेय द्वारा निर्मित “सेल्फ-कॉन्फिडेंस इन्वेन्ट्री” का प्रयोग विद्यार्थियों के आत्मविश्वास मापन हेतु किया गया है। आत्मविश्वास मापनी में 60 कथन दिये गए हैं। प्रश्न के स्वरूप के 2 भागों में विभाजित किया गया है।

- सकारात्मक
- नकारात्मक

इसमें 42 प्रश्न सकारात्मक की श्रेणी में है और 18 प्रश्न नकारात्मक की श्रेणी में हैं।

* प्रदत्तों की प्राप्ति एवं विश्लेषण

प्रदत्तों की प्रश्नावली के सहायता से किया गया है। प्राप्त आँकड़ों का मध्यमान, मानक विचलन एवं टी मूल्य निकाला गया।

परिकल्पना— H_1

“प्रथम वर्ष के विद्यार्थियों एवं अंतिम वर्ष के विद्यार्थियों के आत्मविश्वास में सार्थक अंतर पाया गया है।”

सारणी क्रमांक-1.1

क्र	चर	प्रदत्तों की सं.	मध्यमान	मानक विचलन	टी मान
1	प्रथम वर्ष के विद्यार्थी	40	31.95	7.29	0.72
2	अंतिम वर्ष के विद्यार्थी	40	33.27	8.78	
df=78		p< 0.05		सार्थक नहीं है	

उपरोक्त सारणी से यह स्पष्ट है कि स्नातक के प्रथम वर्ष के विद्यार्थियों के आत्मविश्वास का मध्यमान 31.95 तथा विचलन 7.29 प्राप्त हुआ।

इसी प्रकार स्नातक के अंतिम वर्ष के विद्यार्थियों का आत्मविश्वास का मध्यमान 33.27 तथा विचलन 8.78 प्राप्त हुआ तथा टी मूल्य का मान 0.72 प्राप्त हुआ है जो स्वतंत्रता कोटि 78 पर 0.05 स्तर पर सारणी मान 1.97 से कम है।

अतः परिकल्पना अस्वीकृत होती है।

परिकल्पना- H_2

“प्रथम वर्ष के वाणिज्य विद्यार्थी एवं विज्ञान के विद्यार्थियों के आत्मविश्वास में सार्थक अंतर पाया जाएगा।”

सारणी क्रमांक-1.2

क्रं.	चर	प्रदत्तों की सं.	मध्यमान	मानक विचलन	टी मान
1	प्रथम वर्ष के वाणिज्य विद्यार्थी	20	30.65	6.55	1.74
2	प्रथम वर्ष के विज्ञान विद्यार्थी	20	34.60	7.40	
df=38		p< 0.05		सार्थक नहीं है	

उपरोक्त सारणी से यह स्पष्ट है कि प्रथम वर्ष के वाणिज्य विद्यार्थी का आत्मविश्वास का मध्यमान 30.65 तथा मान विचलन 6.55 पाया गया।

इसी प्रकार प्रथम वर्ष के विज्ञान के विद्यार्थियों का आत्मविश्वास का मध्यमान 34.60 तथा मानक विचलन 7.40 पाया तथा टी मूल्य का मान 1.74 प्राप्त हुआ है जो स्वतंत्रता कोटि 38 पर 0.05 स्तर पर सारणी मान 1.99 से कम है।

अतः परिकल्पना अस्वीकृत की जाती है।

परिकल्पना- H_3

“प्रथम वर्ष के वाणिज्य छात्र एवं छात्राओं के आत्मविश्वास में सार्थक अंतर पाया जाएगा।”

सारणी क्रमांक-1.3

क्रं.	चर	प्रदत्तों की सं.	मध्यमान	मानक विचलन	टी मान
1	प्रथम वर्ष के वाणिज्य छात्र	10	30.30	6.23	0.22
2	प्रथम वर्ष के वाणिज्य की छात्राएँ	10	31.00	6.85	
df=18		p< 0.05		सार्थक नहीं है	

उपरोक्त सारणी से यह स्पष्ट है कि प्रथम वर्ष के वाणिज्य के छात्र का मध्यमान 30.30 तथा मानक विचलन 6.23 पाया गया।

इसी प्रकार प्रथम वर्ष के वाणिज्य के छात्राओं का मध्यमान 31.00 तथा मानक विचलन 6.85 पाया तथा टी मूल्य का मान 0.22 प्राप्त हुआ है जो स्वतंत्रता कोटि 18 पर 0.05 स्तर पर सारणी मान 2.10 से कम है।

अतः परिकल्पना अस्वीकृत होती है।

परिकल्पना - H_4

“प्रथम वर्ष के विज्ञान के छात्र एवं छात्राओं के आत्मविश्वास में सार्थक अंतर पाया जाएगा।”

सारणी क्रमांक-1.4

क्रं.	चर	प्रदत्तों की सं.	मध्यमान	मानक विचलन	टी मान
1	प्रथम वर्ष के विज्ञान के छात्र	10	36.50	6.16	1.13
2	प्रथम वर्ष के विज्ञान के छात्राएँ	10	32.70	7.90	
df=18		p< 0.05		सार्थक अंतर नहीं है	

उपरोक्त सारणी से यह स्पष्ट है कि प्रथम वर्ष के विज्ञान के छात्रों के आत्मविश्वास का मध्यमान 36.50 तथा मानक विचलन 6.16 प्राप्त हुआ। इसी प्रकार स्नातक के प्रथम वर्ष के विज्ञान की छात्राओं का आत्मविश्वास का मध्यमान 36.50 तथा मानक विचलन 6.16 प्राप्त हुआ।

इसी प्रकार स्नातक के प्रथम वर्ष के विज्ञान की छात्राएँ का आत्मविश्वास का मध्यमान 32.70 तथा मानक विचलन 7.90 प्राप्त हुआ तथा टी मूल्य का मान 1.13 प्राप्त हुआ है जो स्वतंत्रता कोटि 18 पर 0.05 स्तर पर सारणी मान 2.10 से कम है।

अतः परिकल्पना अस्वीकृत होती है।

परिकल्पना – H_5

“अंतिम वर्ष के वाणिज्य के विद्यार्थी एवं विज्ञान के विद्यार्थियों के आत्मविश्वास में सार्थक अंतर पाया जाएगा।”

सारणी क्रमांक-1.5

क्रं.	चर	प्रदत्तों की सं.	मध्यमान	मानक विचलन	टी मान
1	अंतिम वर्ष के विज्ञान के छात्र	20	36.40	8.50	2.40
2	अंतिम वर्ष के विज्ञान के छात्राएँ	20	30.60	6.18	
df=38		p > 0.05		सार्थक अंतर है	

उपरोक्त सारणी से यह स्पष्ट है कि स्नातक के अंतिम वर्ष के वाणिज्य के विद्यार्थी का आत्मविश्वास का मध्यमान 36.40 तथा मानक विचलन 8.5 प्राप्त हुआ।

इसी प्रकार स्नातक के अंतिम वर्ष के विज्ञान के विद्यार्थियों के आत्मविश्वास का मध्यमान 30.60 तथा मानक विचलन 6.18 प्राप्त हुआ तथा टी मूल्य का मान 2.40 प्राप्त हुआ है जो स्वतंत्रता कोटि 38 पर 0.05 स्तर पर सारणी मान 2.02 से अधिक है।

अतः परिकल्पना स्वीकृत होती है।

परिकल्पना – H_6

“अंतिम वर्ष के वाणिज्य के छात्र एवं छात्राओं के आत्मविश्वास में सार्थक अंतर पाया जाएगा।”

सारणी क्रमांक-1.6

क्र	चर	प्रदत्तों की सं.	मध्यमान	मानक विचलन	टी मान
1	अंतिम वर्ष के वाणिज्य के छात्र	10	36.30	9.41	0.045
2	अंतिम वर्ष के वाणिज्य के छात्राएँ	10	32.50	9.41	
df=18		p < 0.05		सार्थक अंतर नहीं है	

उपरोक्त सारणी से यह स्पष्ट है कि स्नातक के अंतिम वर्ष के वाणिज्य के छात्रों का आत्मविश्वास का मध्यमान 36.30 तथा मानक विचलन 9.41 प्राप्त हुआ।

इसी प्रकार स्नातक के अंतिम वर्ष के वाणिज्य के छात्राएँ के आत्मविश्वास का मध्यमान 36.50 तथा मानक विचलन 9.41 प्राप्त हुआ तथा टी मूल्य का मान 0.045 प्राप्त हुआ है जो स्वतंत्रता कोटि 18 पर 0.05 स्तर पर सारणी मान 2.10 से कम है।

अतः परिकल्पना अस्वीकृत होती है।

परिकल्पना – H_7

“अंतिम वर्ष के विज्ञान के छात्र एवं छात्राओं के आत्मविश्वास में सार्थक अंतर पाया जाएगा।”

सारणी क्रमांक-1.7

क्र	चर	प्रदत्तों की सं.	मध्यमान	मानक विचलन	टी मान
1	अंतिम वर्ष के विज्ञान के छात्र	10	29.50	4.69	0.77
2	अंतिम वर्ष के विज्ञान के छात्राएँ	10	31.70	7.18	
df=18		p< 0.05		सार्थक अंतर नहीं है	

उपरोक्त सारणी से यह स्पष्ट है कि स्नातक के अंतिम वर्ष के विज्ञान के छात्रों का आत्मविश्वास का मध्यमान 29.50 तथा मानक विचलन 4.69 प्राप्त हुआ।

इसी प्रकार स्नातक के अंतिम वर्ष के विज्ञान के छात्राएँ के आत्मविश्वास का मध्यमान 31.70 तथा मानक विचलन 7.18 प्राप्त हुआ तथा टी मूल्य का मान 0.77 प्राप्त हुआ है जो स्वतंत्रता कोटि 18 पर 0.05 स्तर पर सारणी मान 2.10 से कम है। अर्थात् दोनों स्तर के विद्यार्थियों पर सार्थक प्रभाव नहीं पड़ता है।

अतः परिकल्पना अस्वीकृत होती है।

परिकल्पना की पुष्टि

परिकल्पना के परिणाम से यह ज्ञात होता है कि प्रथम वर्ष के विद्यार्थी एवं अंतिम वर्ष के विद्यार्थियों में सार्थक अंतर नहीं पाया गया है। अतः हमारी परिकल्पना की पुष्टि नहीं हुई है। इसका कारण यह है कि आत्मविश्वास व्यक्तित्व का गुण है जो की महाविद्यालय पहुँचने के पहले से ही छात्रों में विद्यमान होता है। आत्मविश्वास महाविद्यालय पहुँचने के बाद नहीं बढ़ता।

परिकल्पना H_5 स्वीकृत हुई है इसका कारण संभवतः वाणिज्य के अंतिम वर्ष के छात्रों का अपने व्यवसाय क्षेत्र में जाने का आत्मविश्वास बहुत ज्यादा होता है जबकि स्नातक के विज्ञान के अंतिम वर्ष के छात्रों में आगे और पढ़ाई करने की चिंता सताती है क्योंकि विज्ञान का क्षेत्र बहुत विशाल है इसलिए विज्ञान के छात्र का आत्मविश्वास कम हो जाता है।

निष्कर्ष

अतः सांख्यिकीय विश्लेषण के पश्चात् यह निष्कर्ष पाया गया कि आत्मविश्वास एक व्यक्तित्व का गुण है जो बालक में बाल्यवस्था से ही विकसित होता है न कि महाविद्यालय पहुँचने के पश्चात्। इसी कारण स्नातक स्तर के प्रथम वर्ष एवं अंतिम वर्ष के छात्रों के आत्मविश्वास में कोई अंतर नहीं पाया गया। आत्मविश्वास में वृद्धि होने के अन्य कारण जैसे पारिवारिक वातावरण, शिक्षा, विद्यालय का वातावरण, वंशानुक्रम आदि कारक प्रभावित करते हैं। महाविद्यालय के कक्षाएँ (प्रथम एवं अंतिम) इस पर कोई प्रभाव नहीं डालते हैं।

सुझाव

प्रस्तुत लघुशोध में प्राप्त निष्कर्ष के आधार पर आत्मविश्वास के संदर्भ में अग्रानुसार सुझाव दिये गये हैं—

1. समाज में लिंग भेद की भावना को समाप्त कर बालक व बालिकाओं को समान अधिकार प्रदान करना चाहिए जिससे वे अपने लक्ष्य को प्राप्त कर सकें और आत्मविश्वास में वृद्धि कर सकें।
2. परिवार को बालक व बालिकाओं को उनकी योग्यता के अनुसार शिक्षा की व्यवस्था करनी चाहिए।
3. विद्यालयों में शिक्षण के अलावा अन्य पाठ्य सहगामी क्रियाएँ भी होनी चाहिए जिससे विद्यार्थियों का ज्ञान बढ़े व अपना विकास कर सकें।
4. शिक्षकों को विद्यार्थियों के साथ मित्रता पूर्ण व्यवहार करना चाहिए और उनकी समस्याओं को हल करना चाहिए।

संदर्भित ग्रंथ सूची

संक्षेप में शैक्षिक अनुसंधान व्यवहार विज्ञान का एक अंग है जिसका प्रयोग मानव व्यवहार को समझना उसकी व्याख्या भविष्यवाणी करना और कुछ अंश उसे नियोजित करना होता है।

- 1) तेजिंदर कौर एवं मंजु मेहता (2007) : LJPE, ISSN(0487-1003), Vol.-48(4) pp. 144-147
- 2) Raweewat rattanakoses university Sonmalisa सामाजिक विज्ञान के यूरोपीय जर्नल— Vol-11-no-2 (2012)
- 3) Safe alhabish mohamad भाषा अध्ययन Vol-1-no-1 P-(55-60) Jan 2014
- 4) साइंस डेली के जर्नल (6 अप्रैल 2015)
- 5) लेस्ली Pratch (18 नवंबर 2015)
- 6) पाल सेण्डर और एल लेग सैडर्स वेल्स विद्यालय के संस्थान
- 7) गैरी भुरनम ने पुस्तक "इन्सटेंट कॉन्फिडेन्स" 92 टिप्स में उन्होंने आत्मविश्वास करने संतुलित किया जाये इस पर जोर दिया है।

विद्यार्थियों में नैतिक मूल्य का ह्रास

सोहन कुमार मिश्रा¹, डॉ. जुबराज खमारी²

सारांश

“कर्मण्य वाधिकारस्ते मा फलेषु कदाचन”

यह पवित्र वाक्य महाकाव्य गीता से लिया गया है। जिसमें मानव जीवन में अपनाये जाने वाले नैतिक मूल्यों का संकलन मिलता है। भारत देश एवं इसकी संस्कृति इसकी नैतिक मूल्यों से पहचानी जाती है। यहाँ की धरती मर्यादा पुरुषोत्तम राम, महावीर स्वामी, गौतम बुद्ध आदि जैसे महान अवतारों से सुशोभित है। सबसे प्राचीन ग्रंथ ऋग्वेद की रचना इस देश की महत्ता को दर्शाती है। प्राचीन काल से ही नैतिक शिक्षा का महत्व सर्वोपरि रहा है। विद्यार्थी अपने गुरु के साथ गुरुकुल में निवास करते और उनकी सेवा करते। गुरुकुल में विद्यार्थियों के नैतिक मूल्यों का विकास होता था।

मनुष्य इस संसार की सर्वश्रेष्ठ कृति है। खान-पान, रोना, भय का भाव तो पशु में भी पाया जाता है। तो मनुष्य को सर्वश्रेष्ठ होने का गर्व किसलिए है? क्योंकि मनुष्य अपने मानवता व नैतिक गुणों के कारण यह स्थान प्राप्त कर सका है। समाजशास्त्री मैक्लेवर के अनुसार “समाज सामाजिक संबंधों का ताना-बाना है, जहाँ सभी परस्पर निर्भर है।” जो मानव के नैतिक मूल्य के बिना संभव नहीं हो सकता है।

परन्तु वर्तमान में यह महसूस किया जा रहा है कि मानव संबंध गिरते हुए नैतिक मूल्यों के कारण प्रभावित हो रहा है। विद्यार्थी वर्ग भी इससे अछूता नहीं है। किसी भी राष्ट्र का विकास उस देश का मानव श्रम तय करता है, और नैतिक मूल्य का ह्रास निश्चित ही उसे पतन की ओर ले जाता है।

विद्यार्थियों में नैतिक मूल्य

विद्यार्थी कुम्हार के कच्ची मिट्टी के समान है, जिसे शिक्षक मनचाहा आकार देता है, और उसमें विभिन्न मूल्यों का विकास कर उसे एक पक्का पात्र बनाता है। वह जीवन रूपी कठिनाईयों को आसानी से पार कर जाता है। वर्तमान के विद्यार्थी जीवन में नैतिक मूल्य अति अनमोल है। शाला एक प्रशिक्षण संस्थान है जहाँ बच्चों का सर्वांगीण विकास कर जीवन जीने की कला में प्रशिक्षित किया जाता है।

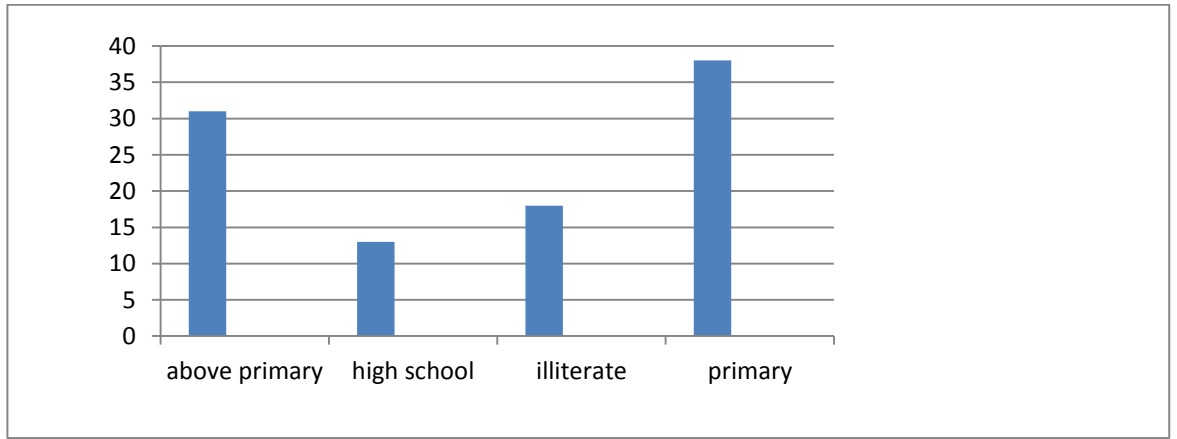
¹ शोधकर्ता, मैट्स विश्वविद्यालय, आरंग, रायपुर, छत्तीसगढ़, भारत

² शोध निर्देशक, मैट्स विश्वविद्यालय, आरंग, रायपुर, छत्तीसगढ़, भारत

बाल अपराध संबंधी आंकड़ें

विद्यार्थियों के गिरते नैतिक मूल्य का अंदाजा राष्ट्रीय अपराध अनुसंधान रिकार्ड के द्वारा पेश आंकड़ों से लगाया जा सकता है। आंकड़ों के अनुसार वर्ष 2015 में भारत में कुल 43,506 बाल अपराध दर्ज किये गये। जिनमें से 28,830 अपराध 16–18 वर्ष के बच्चों के द्वारा किये गये। आंकड़ों के अनुसार बाल अपराध में छत्तीसगढ़ का 5 वाँ स्थान है।

बाल अपराध के आंकड़ों को दर्शाता यह चार्ट:—NCRB-2015 के अनुसार



संवैधानिक प्रावधान

भारतीय संविधान में बच्चों के हितों की सुरक्षा के लिए कुछ प्रावधान दिये गये हैं।

अनच्छेद-45—यह कहता है कि यह राज्य की नैतिक जिम्मेदारी है कि वह महिलाओं व बच्चों के लिए विशेष प्रयोजन करें।

अनच्छेद-23—के अनुसार बाल श्रम का उन्मूलन।

अनच्छेद-24—दुर्घटनाग्रस्त स्थानों में बच्चों का कार्य करना निषेध होगा।

अनच्छेद-21 (क) में 6–14 वर्ष के बच्चों के लिए अनिवार्य व निःशुल्क प्रारंभिक शिक्षा।

अनच्छेद-51 (क) में यह कहा गया है कि बच्चों को प्रारंभिक शिक्षा पूर्ण करवाने का दायित्व माता-पिता का है जिसे मूल कर्तव्यों से जोड़ा गया है।

उपरोक्त आंकड़ों और ग्राफ के आधार पर प्रश्न आता है कि नैतिक मूल्य के पतन के कारण क्या हैं ?

नैतिक मूल्यों के पतन के कारण

- **आधुनिक शिक्षा नीति**
वर्तमान में उच्च प्रतिशत वाले परीक्षाफल, निःशुल्क शिक्षा, आठवीं तक वार्षिक मूल्यांकन न होना आदि कुछ ऐसे नीतियाँ हैं जिनसे कहीं न कहीं नैतिक मूल्य का पतन तो हुआ है।
- **संयुक्त परिवारों का विघटन**
संयुक्त परिवार में जहाँ बच्चा दादी-नानी के द्वारा प्रेरक कहानियाँ सुनकर बड़ा होता था, वहीं उनमें नैतिक गुणों का भी विकास होता था। परंतु आज की स्थितियाँ विपरीत हैं। आज एकल परिवार का चलन हो गया है जहाँ माता-पिता दोनों नौकरी करते हैं और बच्चों के लिए समय ही नहीं होता है। पालन-पोषण आया के द्वारा किया जाता है।
- **संचार साधनों का दुरुपयोग**
नवीनतम प्रौद्योगिकी विश्व को अपने जाल में इस तरह लिए हुए है कि विद्यार्थी भी इसके शिकंजे में कसते चले जा रहे हैं। यह सच है कि संचार-साधन शिक्षा प्राप्त करने में वरदान साबित हो रहे हैं परन्तु इन संसाधनों के दुरुपयोग भी कम नहीं हैं। फेसबुक, वाट्सअप, ट्वीटर कुछ ऐसे ही सोशल नेटवर्किंग साइट हैं जो हमें अनसोशल बना रही हैं।
- **पाश्चात्य सभ्यता का प्रभाव**
स्वामी विवेकानंद के शिकागो धर्म-सम्मेलन में हिस्सा लेने के दौरान उनके अभिनंदन – हे मेरे अमरिकी भाईयों और बहनों के उपर 15 मिनट तक तालियाँ बजती रहीं। ऐसा व्यक्तित्व आज के विद्यार्थियों में आज नज़र नहीं आता है। वहीं पाश्चात्य सभ्यता आज हमारी नैतिक पतन का कारण बन रही है।
- **पाठ्यक्रमों में नैतिक शिक्षा को अनिवार्य स्थान न देना**
प्रतिस्पर्धा के दौर में नैतिक शिक्षा का अध्यापन विद्यालयों में न होना भी नैतिक पतन का कारण है। किताबी ज्ञान ही पर्याप्त नहीं है।
- **पालक की अत्यधिक अपेक्षाएँ**
पालकों का बढ़ता दबाव बच्चों पर इस प्रकार बढ़ा है कि बोर्ड परीक्षा के परिणाम के पूर्व अवांछनीय घटना प्रकाश में आते हैं। अत्यधिक दबाव से बच्चों में सही निर्णय लेने की क्षमता में कमी आई है।
- **अशिक्षित अभिभावक**
स्वयं अशिक्षित होने के कारण बच्चों में नैतिक मूल्य के विकास में सहयोग न दे पाना पालकों की मजबूरी बन जाती है।
- **गरीबी**
गरीबी कई अपराधों का मूल कारण है। अर्थ में कमी कभी-कभी गरीब बच्चों के नैतिक मूल्य के ह्रास का कारण बन जाता है।

- **राजनैतिक प्रभाव**
जातिवाद और भ्रष्टाचार को बढ़ावा देकर वोट बैंक बढ़ाने की रणनीति सामाजिक मूल्यों का हास का कारण बनता जा रहा है। भ्रष्टाचार समाज और समुदाय को दीमक की तरह भ्रष्ट कर रहा है।
- **शिक्षकों की भूमिका**
घर के बाद नैतिकता को विकसित करने की जिम्मेदारी शिक्षक की है। परंतु शिक्षक का गैर-जिम्मेदाराना रवैया इस पतन को बढ़ावा दे रहा है।
- **संस्कारों का अभाव**
संस्कृतिक रूप से धनी भारत में आज एकल परिवारों का चलन बढ़ा है जो नैतिक मूल्यों के अवमूल्यन के कारणों में से एक है।
- **आधुनिकीकरण**
वर्तमान जीवनचर्या में मानव जीवन से गुणात्मकता समाप्त होती जा रही है। परिवार के साथ समय बिताने के लिए समय का अभाव भी इस पतन के कारणों में से एक है।
- **नशे की लत**
आज के तनावभरी परिवेश में बच्चे भी नशे की आदी होते जा रहे हैं जो उनके शारीरिक व मानसिक विकास में बाधक है।
- **नैतिक पतन हेतु उपाय**
इस पतन के उपाय हेतु शिक्षक, समुदाय व पालकों को मिलकर कदम उठाने होंगे तभी कुछ सही सुधार देखने को मिल सकता है। इनकी भूमिकाएं होनी चाहिए।
- **शिक्षकों व विद्यालयों की भूमिका**
शिक्षकों का प्रयास होना चाहिए कि वे बच्चों को समुदाय से जोड़ें रखें। बच्चों को नैतिक मूल्य से संबंधित क्रियाकलाप में व्यस्त रखें। बच्चों में आत्मविश्वास को बढ़ावा देने के लिए सतत् प्रयासरत रहना चाहिए।
- **पालकों की भूमिका**
बच्चों की पहली पाठशाला घर होती है, जिसमें वह पल-बढ़ कर दुनिया में कदम रखता है। बच्चों के मनोविज्ञान को समझें ओर उनसे मित्रवत व्यवहार करें। संयुक्त परिवार को बढ़ावा दें और विद्यालय से जुड़ें।
- **समुदाय की भूमिका**
बच्चों का समय घर-स्कूल के साथ ही साथ समुदाय में भी बीतता है। जहाँ अच्छे और बुरे दोनों अनुभव प्राप्त होते हैं। उन्हें इस लायक बनाना कि वे अपने विवेक से काम कर सकें। समाज बच्चों को अधिक से अधिक रोल मॉडल देने वाला होना चाहिए न कि भटकाने वाला।

N.C.F. 2005 की भूमिका

N.C.F. 2005 ने निम्न बिन्दुओं पर ध्यान देने की बात कही है—

1. बच्चों को रटन्त पद्धति से मुक्त करना।
2. बच्चों का सर्वांगीण विकास करना।
3. बोझ रहित शिक्षा की व्यवस्था करना।
4. नैतिक मूल्यों का विकास करना।
5. बच्चों के मन से जातिगत भेदभाव को दूर करना।

उपसंहार

पूरे विश्लेषण से यह बात सामने आती है कि वर्तमान में विद्यालयों में विद्यार्थियों के नैतिक मूल्यों का ह्रास हो रहा है। इन कमियों को दूर करने के लिए विद्यालय, समाज और पालकों को एक नये परिवेश में नये शुरुआत की आवश्यकता है।

संदर्भ

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