

A STUDY OF DEPRESSION IN RELATION TO SELF-EFFICACY OF ADOLESCENTS

SHWETA JAIN M.Ed.* CDLU University ,email : mrs.shwetajain@gmail.com

***Abstract :** The term 'depression' covers a variety of negative moods and behaviour changes. Some are normal mood fluctuations and others meet the definition of clinical problems. The mood change may be temporary or long lasting. It may range from a relatively minor feeling of melancholy to a deeply negative view of the world and an inability to function effectively. Depression is a 'whole body' illness, involving body, mood and thoughts. It affects the way people eat and sleep, the way people feel about self and the way they think about things. A depressive disorder is not the same as a passing blue mood. It is not a sign of personal weakness or a condition that can be willed or wished off. People with a depressive illness cannot merely 'pull themselves together' and get better.*

INTRODUCTION

The human being is very intelligent. He is in fact a genius. But the biggest poet of his conscience remains wild and violent. If this wild content comes to the surface of human conscience, which is the side of our conscience that we know, we start having several problems and our thoughts and feelings seem to be distorted and strange. This content is very dangerous especially because it provokes craziness to human conscience. When we feel depressed, we feel the weight of our questions and the world's questions, both those we can articulate and those we can't. We ask ourselves who we are and how do we live in this world. Its message is that we need to take time to go down into ourselves, to reassess things from a new vintage point, to listen to ourselves in a deeper way and digest our experiences in a new way. Its message is that we feel a drift, unable to find within us a 'ground' or solidity that we can, above all else, rely on and listen to. And the reality of depression is that it will actually take us to that ground. It will actually reconnect us with our soul.

OPERATIONAL DEFINITION DEPRESSION

It is an illness of the mind and the body. Some could argue depression is a way of coping with life's pressure. In the present study, depression deals with sadness, self blame, loss of appetite, insomnia, interpersonal relationship and school adjustment as measured by Children's Depression Inventory.

SELF-EFFICACY

People's judgement of their capabilities to organize and execute course of action required to attain the designated types of performance. Here, self-efficacy represents social self-efficacy, academic self-efficacy and emotional self-efficacy.

ADOLESCENCE

Adolescence is that span of years during which boys and girls move from their childhood to adulthood. In the present study, both male and female students in the age range 14-18 years have been taken.

OBJECTIVES OF THE STUDY

To study the Level of depression of male and female adolescents in Govt. and Private secondary level school students. To study the Level of self-efficacy of male and female adolescents in Govt. and Private secondary level school students. To find out the correlation between the two variables i.e. depression and self-efficacy.

HYPOTHESES OF THE STUDY

- H 01 There is no significant difference between the level of depression in Govt. and Private secondary school adolescents.
- H 02 There is no significant difference between the level of depression in male and female adolescents.
- H 03 There is no significant difference between the level of self-efficacy in Govt. and Private secondary school adolescents.
- H 04 There is no significant difference between the level of self-efficacy in male and female adolescents.
- H 05 There is no significant relationship between depression and self-efficacy of Govt. and Private school adolescents.
- H 06 There is no significant relationship between depression and self-efficacy of male and female adolescents.

METHODOLOGY SAMPLE

A sample of 200 adolescents between age group of 14-18 years of Jind District (Haryana) will be taken for the research.

SAMPLE DESIGN

NUMBER = 200			
GOVT. (100)		PRIVATE (100)	
Male	Female	Male	Female
50	50	50	50

TOOLS

For the collection of data statistical tools will be used:

1. Child Depression Inventory (CDI) by Kovacs, 1981.
2. Self-efficacy questionnaire for children (SEQ-C) by Muris, Peter, 2002.

STATISTICAL TECHNIQUES

Statistical Techniques will be used:

1. Mean (the Measure of central tendency), S.D. (Standard Deviation).
2. t-test will be used to find out the significant difference between two groups.
3. Product moment correlation will be used to find out significant relationship between two variables.

PROCEDURE

The data will be collected from the schools of Jind District. Adolescents of age group 14-18 years from standard 9th will be taken into consideration. Both Govt. and Private schools will be surveyed. Both male and female adolescents will be studied. No criteria like social economic factor will be followed. The study will be concentrated on two variables only i.e. depression and self-efficacy.

ANALYSIS & RESULTS

AN OVERVIEW OF MEAN SCORES OF DEPRESSION OF MALE AND FEMALE ADOLESCENTS

Sr. No.	Variance	Mean Scores Male Adolescents	Mean Scores Female Adolescents	Total Mean Scores of Adolescents
1.	DEP	11.7	12.9	12.3

Table shows the mean scores of female adolescents to be 12.9 and mean scores of male adolescents to be 11.7 on depression scales. The total mean score of depression comes out to be 12.3 where as the maximum score on depression scale could be 27. It indicates that the subjects in the study experience quite moderate level of depression.

AN OVERVIEW OF MEAN SCORES OF SELF-EFFICACY OF MALE AND FEMALE ADOLESCENTS

S.No.	Variance	Mean Scores Male Adolescents	Mean Scores Female Adolescents	Total Mean Scores of Adolescents
1.	ASE	13.03	11.59	12.81
2.	SSE	17.00	9.83	10.03
3.	ESE	16.33	10.76	13.54
4.	TOTAL	13.53	10.72	24.26

Table 2 shows the mean scores of female adolescents to be 10.72 and mean scores of male adolescents to be 13.53 on self-efficacy questionnaire. The total mean score of self-efficacy comes out to be 24.26. It indicates that male adolescents have better self-efficacy than female adolescents.

RESULTS

According to the objectives and hypotheses stated earlier in the study, the main findings are presented as follows:

1. All three measures of self-efficacy i.e. Academic Self-efficacy (ASE), Social Self-efficacy (SSE) and Emotional Self-efficacy (ESE) correlate negatively with measures of depression.
2. Significant differences are found between two compared groups. Female adolescents experience more feeling of depression than male adolescents.
3. Male adolescents differ on score of Social Self-efficacy (SSE) and Emotional Self-efficacy (ESE) than female adolescents where as male and female adolescents do not differ on Academic Self-efficacy (ASE).

EDUCATIONAL IMPLICATIONS

In every area of research, the findings have certain implications of practical value. In the field of education also, these findings have special implication for parents, teachers and other school personnel who come in student's close contact. They provide guidelines to educational planner and enable them to utilize the experience and knowledge of the researcher. The study has its implications for curriculum planners also. In curriculum, there should be provision of extracurricular activities. The children, for sometimes, should be freed from the heavy burden of syllabus and home work.

CONCLUSION :

To conclude, it can be said that this study has its implications for parents, teachers, educational planners and curriculum developers. It is their responsibilities to root out causes of distress, fear, depression and frustration in students by adopting the congenial and socially acceptable ways and to plan the educational procedure suited to their capabilities so that they become mentally healthy and productive members of a society and can work for their own well being as well as for the well being of their nation.

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Data Mining in Selection of Appropriate Insurance Policy

Anupam,
Research Scholar, Department of computer science J.J.T. University, (Rajasthan)
dr.anupam.jjtu@gmail.com

Abstract:- The insurance industry of Hong Kong has been experiencing steady growth in the last decade. One of the current problems in the industry is that, in general, insurance agent turnover is high. The selection of new agents is treated as a regular recruitment exercise. This study focuses on the characteristics of data warehousing and the appropriate data mining techniques that can be used to support agent selection in the insurance industry. We examine the application of three popular data mining methods – discriminate analysis, decision trees and artificial neural networks – incorporated with a data warehouse to the prediction of the length of service, sales premiums and persistence indices of insurance agents. An intelligent decision support system, namely Intelligent Agent Selection Assistant for Insurance, is presented, which will help insurance managers to select quality agents by using data mining in a data warehouse environment.

Keywords:-

- intelligent decision support systems;
- data mining

Introduction:-

Data mining can be defined as the process of selecting, exploring and modeling large amounts of data to uncover previously unknown patterns. In the insurance industry, data mining can help firms gain business advantage. For example, by applying data mining techniques, companies can fully exploit data about customers' buying patterns and behavior – as well as gaining a greater understanding of their business to help reduce fraud, improve underwriting and enhance risk management. This paper discusses how insurance companies can benefit by using modern data mining methodologies and thereby reduce costs, increase profits, acquire new customers, retain current customers and develop new products.

Objective of the study: -

Descriptive DM seeks patterns in past actions or activities to affect these actions or activities

1. eg, seek patterns indicative of fraud in past records

Predictive DM looks at past history to predict future behavior

1. Classification classifies a new instance into one of a set of discrete predefined categories

2. Clustering groups items in the data set into different categories

3. Affinity or association finds items closely associated in the data set

Using Data Mining in the Insurance Industry:-

Data mining combines data analysis techniques with high-end technology for use within a process. The primary goal of data mining is to develop usable knowledge regarding future events. This paper defines the steps in the data mining process, explains the importance of the steps, and shows how the steps were used in two case studies

involving fraud detection. The steps in the data mining process are :

problem definition
data collection and enhancement
modeling strategies
training, validation, and testing of models
analyzing results
modeling iterations
implementing results.

The first case study uses the data mining process to analyze instances of fraud in the public sector health care industry. In this study, called “the health care case,” the data contain recorded examples of known fraudulent cases. The objective of the health care case is to determine, through predictive modeling, what attributes depict fraudulent claims. In the second case study, a public sector organization deploys data mining in a purchase card domain with the aim of determining what transactions reflect fraudulent transactions in the form of diverting public funds for private use. In this study, called “the purchase card case,” knowledge of fraud does not exist.

Conclusions:-

Insurance is a data-rich industry; unfortunately, most of that data is underutilized. The key to gaining a competitive advantage in the insurance industry is found in analyzing this data and getting a greater insight into their business. Insurance firms can unlock the intelligence contained in their operational applications - like policy administration, claims management and CRM solutions - through modern data mining technology. Data mining uses predictive modeling, database segmentation, cluster analysis, neural networks and combinations thereof to quickly answer crucial business questions with greater accuracy. New products can be developed and marketing strategies can be implemented, enabling the insurance firm to transform a wealth of information into a wealth of predictability, stability and profits. Data mining uncovers patterns hidden in data to deliver knowledge for solving business questions. Even in the absence of target fields, data mining can guide an organization's actions toward solving its business questions and building a growing knowledge base. The powerful data mining tools found in SAS Enterprise Miner software make it easy for organizations to extract knowledge from data for use in solving core business questions. When followed, the steps in the data mining process (problem definition; data collection and enhancement; modeling strategies; training and validating models; analyzing results; modeling iterations; and implementing results) provide powerful results to organizations.

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An Application of the Security Threats on Electronic-Business

Bijender Singh Yadav

Research Scholar, Department of computer science J.J.T.University (Rajasthan)

dr.bijender.jjtu@gmail.com

ABSTRACT:-

Security is the main considerable part for any and every architectural quality. Critical software must be safe, secure, and dependable. Confidentiality and availability constitute part for measurement of quality consideration along with integrity. Security and most important dependability are particularly the essential part of qualities while dealing with threats in e-business. Architectural tactics, or architectural design decisions, that enhance one aspect of dependability can decrease security and vice versa. The quality attributes are measured on various scales of references. These scales are sometimes not quantitative. This makes it multi scale problem. This paper proposes a qualitative approach to manage the transactions and exchange among the attributes used to def security threats in e-business. This paper is an attempt to give a high-level overview of security in the e-business world. e-Business includes informational websites that are being fielded on an almost daily basis by companies. This paper attempted to view security concerns as a problem to be solved with technology and main consideration is to which firewall or cryptography should use rather than formulating a security strategy. Technology is next to useless unless applied within a strategy, just as tanks are wasted without an overall battle plan. Some of the security threats areas, such as services advertising, require the implementation of only few, security controls, while others, like customer recruitment/registration, require more comprehensive controls, to ensure compliance with money and customer's requirements. This paper throws light into the kinds of various concerns a person should be worrying and providing a look at some of the security technologies available.

Keywords:-

E-business	basic advanced technologies
Durability	Interoperability
Soft Goals	Confidentiality
System Quality	Internet
Security	Phasing
Measurement	Survey method

Introduction:-

E-business or Electronic business may be defined broadly of any business process that runs on the Internet. In more general way, it can be said that any business using computer is E-Business. But today it is mostly done using web, Intranets, Internet, Extranets or any combination of these so e-business refers exclusively to Internet business.

[1] e-business includes informational websites that are being fielded on an almost daily basis by companies. It is not limited to just buying and selling but also servicing customers and collaborating with business partners

[2]. A security plan is an absolute must for companies that are serious about protecting their assets while doing e-business. To e-business security plans are unique and must be developed through a series of steps. While the plans are unique the steps taken by companies can be very similar.

Review of literature:-

Research in any field implies a step ahead in exploration of the unknown. A step towards unknown can only be taken after the review of literature and researches done in that area. Any research without such a review is likely to be a building without foundation. The review of past investigation serves as a guide to the researchers as it avoids duplications in the field. The knowledge of what has already been done in the area of investigation regarding the methods used for data. Collections and results of their analysis keep a researcher systematic in his own endeavor. Thus, the review of related literature is an indispensable step in research.

Objective of the study: -

The main objective of this study is to collect and analyses the views of Internet users that perform business transactions on Internet with regards to the impact of security threats on e-business. An e business can not expect perfect security to be obtained for its network. The security objectives are the goals that are to be achieved in e-Business, on other side security services are means to achieve these goals. Traditionally, when dealing with data security, three security objectives are addressed: confidentiality, integrity, and availability. The individual with whom you are communicating may be masquerading as someone else. The result could be diversion of funds, loss of confidential information, and repudiation of contracts and so on. Present study concentrated upon gauging the Impact of Threats to Internet users. Specific objectives are- To explore the usage pattern of Internet services. To categorize various threats on basis of their potential to jeopardize internet users. To find out the percentage of users adopting security measures. By using security provisions, internet users are able to face the security challenges.

Future scope:-

The advanced technologies are useful for the various categories of persons who use computers and the Internet for attacking and stealing information creating the serious impacts of security threats. Knowing who is attacking can help determine the better way to keep them away. Police and government agencies with e-business companies are going to be benefited with these advanced technologies applications in controlling the impacts of security threats from inside as well as from outside. It is also true on the humanity side that security policies and procedures coupled with a good deal of education are the best defense against social engineering and human nature. Security in E-business with controls has to be balanced with performance. The basic principle in designing with safety decisions becomes more important in case of security, safety and dependability otherwise it may lead dangerous situations of maintenance of e-Business . Zero defect approach for nullifying the impacts of security threats in e-Business using cryptography and e-business policies is the critical application against a reliability growth to eliminate faults in early stages for maximization of process and product methods. There is an urgent requirement for the defensive program against computer virus attack to guide design of dependable software, abstraction hiding, and fault tolerance with safety, dependability and integrity.

Conclusion:-

Security threats in e-Business are just a journey, not a destiny. It is a process of dealing in a war where careful assessment/tendencies of our opponent with a frank look at our own terrain and vulnerabilities are required before taking any defenses. Here clear rules, policies with procedures are to be thoughtfully derived and delivered to the companies. It is the skillful spreading of selected technologies which are configured correctly, and updated continuously. Security is the counter to the necessity of opening the enterprise to the great wide world of the Internet which is associated, anyway, to e-Business. The technological approach is not sufficient to

produce trust or minimize risk so as to cause companies and their clients to conduct e-business with confidence. A risk management approach with safety, dependability and measurement is presented. Hence the chances are at most requirement that the market engaged with e-business will welcome this approach.

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“श्री सत्य सांई बाबा का शैक्षिक दर्शन एवं मानव मूल्यों पर अध्ययन की वर्तमान परिप्रेक्ष्य में प्रासंगिकता”

डॉ. ममता कुमारी झुंझुनूं (राज.)

bcmnet.jind@gmail.com

भारतीय दर्शन में अवतारवाद, पुनर्जन्मवाद की बलवती चर्चा को स्थान दिया गया है। हमारे भारत देश में समय-समय पर प्रसिद्ध एवं सद्पुरुष पैदा होते हैं अवतारों के रूप में पूज्य पुरुष सत्य सांई बाबा अपनी वैभवशीलता, करुणाशीलता और अद्भूत प्रदर्शन हेतु पूरे विश्व में प्रसिद्ध हैं। श्री सत्य सांई बाबा मानव कल्याण के लिये पैदा हुये थे। वे मानव जीवन को उन्नत व विकसित करने के लिए प्रत्येक व्यक्ति को यह सन्देश दिया करते थे कि मानव-सेवा प्रत्येक व्यक्ति का व्यक्तिगत धर्म है इससे बढ़कर और अन्य सेवा नहीं हो सकती है। इसके कारण श्री सत्य सांई बाबा भारत में ही नहीं अपितु पूरे विश्व में पूजे जाते हैं। श्री सत्य सांई बाबा का जन्म 23 नवम्बर 1926 को आन्ध्रप्रदेश के अनन्तपुर जिले में स्थित एक छोटे से ग्राम पुट्टापति में हुआ था। उनके जन्म से ही कई प्रकार दिव्य घटनाएँ घटित होने लगी थी तथा लोग उन्हें सद्पुरुष के रूप में देखने लगे थे। श्री सत्य सांई बाबा का मूल नाम सत्य नारायण था। श्री सत्य सांई बाबा कोई साधारण व्यक्ति न होकर असाधारण व्यक्तित्व के धने थे। छोटी सी आयु में ही बाबा ने अनेक असाधारण एवं अलौकिक कार्य किये जिससे बाबा को पूरे ग्राम में “ब्रह्म-अज्ञानी” के उपनाम

से भी पुकारने लगे थे। श्री सत्य सांई बाबा पूज्यपद को प्राप्त ज्ञान, योगी, ध्यानी, अवतारी, सद्पुरुष आदि की उपाधि से अविहित होकर विभिन्न नामों से पुकारे जाने लगे। इस समस्त क्रियाशीलता व कार्यशैली के पीछे उनका जीवन दर्शन, व्यक्तित्व व उनकी वैयक्तिक दार्शनिक विचारधारा होती है। यही विचारधारा उनके जीवन दर्शन, उनके कार्यों को प्रभावित करती है।

विश्व के परमार्थ या कल्याण के लिए जिस समय जिस धर्म की आवश्यकता होती है उसका आदर्श प्रस्तुत करने के लिए स्वयं ईश्वर ही तत्कालीन संतों के रूप में अवतार लेकर अविर्भूत होते हैं। ऐसा ही एक अवतार श्री सत्य सांई बाबा ने भी लिया था।

आज की महत्ती आवश्यकता है – विद्यार्थी की चिन्तन व चेतना शक्ति के संचार में अभिवृद्धि करना जिससे मनुष्य के मनुष्यत्व और देवत्व की शक्ति का उदय हो और उसकी आध्यात्मिक प्रज्ञा, प्रतिभा, विवेकशीलता, कल्पनाशक्ति और प्रसुप्त चेतना का संचार हो और वह संस्कृति का पोषण बनकर उसे सन्तुष्ट कर देश, राष्ट्र, समाज, परिवार, जाति व धर्म के प्रति अपने मानवीय कर्तव्यों की पूर्ति कर स्वधर्म का निर्वाह कर अपने जीवन में धर्म का आचरण कर लक्ष्य की प्राप्ति कर सके। श्री सत्य सांई बाबा द्वारा प्रदत्त व्याख्यानों पर आधारित पुस्तकों में संत ने जिन उपदेशों की चर्चा की उनमें सर्वत्र एक शैक्षिक संकल्पना का प्रादुर्भाव हुआ है। निश्चित ही श्री सत्य सांई बाबा का शैक्षिक दर्शन भारत की वर्तमान शिक्षा प्रणाली में वांछित, अपेक्षित सुधार लाने में अपनी महत्ती भूमिका का निर्वाह करेगी। मानव मूल्यों से अभिप्राय उस नैतिक शिक्षा निर्देशन से है जो कि सांई बाबा द्वारा विविध स्तरों

पर प्रायोजित है। बाल संस्कार, विद्यालयों की स्थापना, देश के उत्थान के लिए विद्यार्थियों के लिए ऋषि प्रसाद, युवाधन आदि कई साहित्य उनके द्वारा बताये गये मानव मूल्यों पर आधारित है। वर्तमान परिस्थितियों में मानव मूल्यों का ह्रास होता जा रहा है इसलिए सांई बाबा के द्वारा बताये गये शैक्षिक विचारों एवं मानव मूल्यों को संरक्षित करके स्वतन्त्र भारत की आवश्यकताओं एवं आंकाक्षाओं के अनुरूप राष्ट्रीय शिक्षा प्रणाली के लिए योगदान कर सकेगा।

श्री सत्य सांई बाबा के अनुसार मानव मूल्य शिक्षा के पाठ्यक्रम में विधाओं एवं कलाओं का सम्मिलित स्वरूप होता है। जिसमें सांई बाबा के नवीन व प्राचीन कलाओं को शामिल किया जायेगा। प्राचीनकाल की 32 विधायें तथा 64 कलाएँ सांई जी के प्रवचनों में यथास्थान वर्णित है। श्री सत्य सांई बाबा का आध्यात्मिक प्रतिभा सम्पन्न ज्ञान शैक्षिक पाठ्यक्रम में समाविष्ट किया जाना चाहिए ताकि भावी पीढ़ी में ज्ञान का स्रोत प्रस्फुटित हो सके एवं मानव-कल्याण के लिए व्यक्तियों में जागृति उत्पन्न हो सकें। सत्य सांई बाबा ने मानव कल्याण के लिए अथक प्रयास किये थे। सत्य सांई बाबा का वर्तमान युग में आध्यात्मिकता को बढ़ावा देने में काफी योगदान है। उन्होंने सत्य, धर्म, ईमानदारी, कर्तव्यनिष्ठता, परोपकारिता, करुणाशीलता इत्यादि को जन मानस तक पहुँचाने का अथक प्रयास किया था एवं उन्हें सफलता भी मिली थी।

वर्तमान भारतीय शिक्षा के भारतीयकरण, राष्ट्रीयकरण तथा पुर्ननिर्माण की दृष्टि से श्री सत्य सांई बाबा के शैक्षिक विचार वर्तमान परिप्रेक्ष्य में पूर्णतः व्यावहारिक एवं प्रासंगिक है और इनकी उपेक्षा करके एक सम्यक राष्ट्रीय शिक्षा प्रणाली का विकास कदाचित् नहीं किया जा सकता। इन्हीं

भावनाओं एवं मान्यताओं के साथ शिक्षा की आवश्यकता, उद्देश्य, पाठ्यक्रम, मानव-मूल्य, शिक्षण विधियों व विद्यालयों के स्वरूप आदि की भारतीय सन्दर्भ में व्याख्या करने हेतु सांई के शैक्षिक विचारों को संकलित किया जा सकता है तथा इन शैक्षिक विचारों एवं मानव मूल्यों से वर्तमान शिक्षा-प्रणाली में काफी सुधार किया जा सकता है।

श्री सत्य सांई बाबा के शिक्षा के अर्थ, प्रकृति, महत्व, उद्देश्य, पाठ्यक्रम, विधियों, अनुशासन, नैतिक नियमों, संगठन, नियन्त्रण आदि के सम्बन्ध में श्री सत्य सांई बाबा के विचारों को भारतीय दर्शन एवं शिक्षा में महत्वपूर्ण माना जाता है। वर्तमान शिक्षा प्रणाली में श्री सत्य सांई बाबा द्वारा वर्णित ग्रन्थों का समावेश करना चाहिए ताकि विद्यार्थियों को आध्यात्मिकता का ज्ञान हो सके एवं धर्म की विस्तृत बातों का ज्ञान व्यक्ति आसानी से सिख सकेंगे। श्री सत्य सांई बाबा भी एक आध्यात्मिक पुरुष थे। पुरुषार्थ की भावना उनमें अत्यधिक थी।

श्री सत्य सांई बाबा के ग्रन्थों में मानव के जीवन मूल्यों से सन्दर्भित शिक्षा की विषद् विवेचना की गई है। सांई बाबा द्वारा प्रदत्त व्याख्यानों पर आधारित पुस्तकों में सांई बाबा ने अनेक उपदेश दिये थे जिससे सर्वत्र एक शैक्षिक संकल्पना का प्रादुर्भाव हुआ है। सत्य सांई बाबा का दार्शनिक पक्ष भी काफी मजबूत था उनके दार्शनिक विचारों को व्यक्ति के जीवन के विविध पक्षों में समावेशित किया जा सकता है। श्री सत्य सांई बाबा पूरे देश को अपने साथ लेकर चले थे। उनमें परमार्थ की भावना थी। वे स्वावलम्बन को अत्यधिक महत्व देते थे।

भारतीय शिक्षा मानव के पूर्ण विकास पर बल देती है। शरीर, मन, बुद्धि, आत्मा का सर्वांगीण विकास करना शिक्षा का लक्ष्य होना चाहिए। शिक्षा और दर्शन का आपस में वहीं सम्बन्ध है जो कि साध्य और साधन में होता है। शिक्षा साध्य को प्रस्तुत करती है। दर्शन के द्वारा विभिन्न सिद्धान्तों का निर्माण किया जा सकता है। शिक्षा इसे व्यावहारिक रूप प्रदान करती है। श्री सत्य सांई बाबा ने इस दिशा में पर्याप्त दिशा-निर्देश दिये हैं। सत्य सांई बाबा ने शिक्षा को एक प्रकाश पुंज के रूप में स्वीकार किया है तथा शास्त्रों में ज्ञान को व्यक्ति का तीसरा नेत्र माना गया है। ज्ञान के अभाव में व्यक्ति पशु के समान होता है। श्री सत्य सांई बाबा के शैक्षिक एवं दार्शनिक विचारों का वर्तमान शिक्षा प्रणाली में समावेश किया जाना चाहिए ताकि भावी पीढ़ी के ज्ञान में अभिवृद्धि हो सकें।

Emotional Intelligence & Leadership

Er. Vipin Mittal¹, Dr. Ekta Sindhu²

¹*Indus Institute of Education & Technology, Jind, Haryana (INDIA)*

²*Indus Public School, Rohtak, Haryana (INDIA)*

Email ID: ¹*vipin.mittal@induseducation.org*, ²*ekta.sindhu@induseducation.org*

Abstract

People who are successful are those who have an optimistic attitude, right kind of flexibility in thoughts, a quick learning attitude and emotionally balanced. An emotionally balanced professional has the ability to cope up with uncertainty and imperfection. They are not very judgmental and believe in win-win situation. They like to groom others, respect people and treat others as 'humans'. They have the ability to cope up with all kinds of situation whether it's about managing a bad boss or an undisciplined subordinate or a high demanding job. Also today the definition of leadership has changed in a way that it has become more people- focused. A person having a good understanding of EQ can only be a good team player and hence an effective team leader. This paper throws some light on how effective leaders demonstrate EQ and what dimensions of EQ are highly important for effective leadership..

1. Introduction

Emotional intelligence. What is it and what role does it play in work and life effectiveness? Nowhere has the topic been hotter than in the area of leadership. Is “emotional intelligence” just a repackaging of “people skills” in scientific clothing? Research suggests it is not. Academics and business people alike are intrigued by the possibility that emotional intelligence is a distinctive and measurable form of intelligence that is important to success as a leader. But how important is it to effective leadership? Are there some aspects of emotional intelligence that are more important than others? And, importantly: are there any downsides to having too high an “EQ”?

2. What is Emotional Intelligence?

It is apparent from a review of the research and the popular press that there is no consensus on what “emotional intelligence” actually is. There are three schools of thought:

- ⊖ Some (e.g., Goleman, 1998) equate it to personal characteristics such as “initiative”, “self-confidence”, and “drive for results”, factors that bear little if any relationship to either emotion or intelligence.
- ⊖ Others (e.g., Bar-On, 1997) view emotional intelligence as a personality dimension, like extroversion, agreeableness, and emotional stability.
- ⊖ A third school of thought defines emotional intelligence as a specific set of abilities that include the capacity to understand, reason about, and use emotions in thinking and action (e.g., Mayer, DiPaolo and Salovey, 1990; Mayer, Caruso, and Salovey, 1999).

All three share a fault in terms of measuring leadership effectiveness. The tests are designed to assess specific aptitudes, traits, abilities, or behaviors thought to relate to emotional intelligence, but without regard as to how those may relate to success in particular situations. These tests begin with a “theory” of what emotional intelligence is. The questions are then designed to reflect that theory. The problem is that scores from tests constructed in this way may show reasonably good relationships with school grades, income level, and occupational choices, but mediocre to poor relationships with actual job performance.

This point was forcefully brought home in David McClelland's article, “Testing for competence rather than for 'intelligence'” (1973), where he summarized a number of studies that showed that tests used by psychologists to predict performance were very poor at predicting success on the job and were also prone to cultural bias. By

contrast, McClelland argued that the fundamental error is starting with the test instead of the criterion; that is, testing for “intelligence” instead of studying the best performers in a given job or occupation and finding out what differentiates them from their less successful counterparts. This is also the fundamental flaw in how “emotional intelligence” is being applied to effective leadership: we are beginning with competing “constructs” of emotional intelligence and attempting to relate them to leadership success, instead of going the other way around. We are, in effect, looking through the wrong end of the telescope at leadership performance.

3. How Effective Leaders demonstrate EQ?

In this paper, we have taken the approach advocated by McClelland: identify the most effective leaders and study what makes them different from the average. In the last 4 years, we have observed and interviewed a number of highly effective senior managers and executives in prominent Fortune 500 companies, federal agencies, nonprofits and the military. In addition, during the past three years, we have engaged in direct communication with numerous leaders in diverse organizations. In almost every case, we conducted extensive interviews with them about their successes and failures, interviews that dwelt on their most significant leadership challenges and how they handled them.

The focus of these interviews was what we term “critical incidents”, case studies of effective performance told in detailed first-person accounts. Based on this research, we have noted several critical aspects of emotional intelligence that are highly important to leadership effectiveness, as well as others that can actually be dysfunctional. What follows is a brief summary of our conclusions about “what works” and “what doesn't work” based on our observations.

4. Findings

1. Effective leaders are aware of their impact on others and use it to their advantage.

The most effective leaders are sensitive as to how they come across to others. They know that their position in the organization, their strong personalities, and even their mere physical presence have a dramatic impact on others. They therefore channel how they come across in ways that bring out the best in others. These leaders are always in charge of their own feelings and how they express them. The downside? There is a risk of overreaching with more impact than is useful. The risk is that the leader may come across as overbearing or disingenuous. Effective leaders create the perfect balance.

2. Effective leaders have empathy for others; yet can still make tough decisions.

The most effective leaders are able to put themselves in the others' shoes and to understand how and why employees are reacting to organizational events, personal crises, and seemingly relentless change. At the same time, their empathy does not prevent them from making tough decisions. They do this by appealing to reason and acknowledging others' feelings, thus enabling people to feel that the decisions make sense. The danger here is that it's easy to over-identify with others or let empathy be confused with sympathy, and not make the tough decisions as needed.

3. Effective leaders are astute judges of people without being judgmental.

Good leaders are able to size others up quickly in terms of their key strengths and weaknesses, and are especially good at recognizing and applying the diverse talents of everyone in the organization. A danger is that they may become judgmental and overly critical about what they perceive to be others' shortcomings. They are likely to dismiss the advice of these people out of hand, making them feel undervalued and disrespected.

4. Effective leaders are passionate about what they do, and show it.

Good leaders are passionate, highly optimistic and believe in the inevitability of success. They encourage others to believe that the most challenging goals can be met and the most daunting obstacles overcome. But it doesn't mean that they are always cheerleaders; their passion may be expressed as persistence in pursuing an objective

or a relentless focus on a valued principle. However, there's a fine line between being excited about something and letting too much passion close your mind to other possibilities and ignoring realities that others see.

5. Effective leaders balance feeling and logic in making decisions.

Effective leaders are in touch with their gut instincts about the right thing to do in the absence of supporting data. They also recognize their internal warning signs that something might not be the right thing to do despite the seemingly compelling analysis. They understand that “logic” and “facts” are not the only things to consider. Nevertheless, they do not just “go with their gut” without checking out their instincts with others. The drawbacks are the temptation to rely largely on their feelings about things and bet that they are correct without further investigation. They are essentially gambling with the resources of the organization, and can lose big.

6. Effective leaders are excellent communicators.

Effective leaders are in touch with the pulse of the organization and where the “hot buttons” are. They are not all great public speakers, nor are they necessarily charismatic, but they do understand the importance of providing timely information about the business and what it means to people. They also know that communication keeps people motivated and connected. Where emotional intelligence plays a role is in knowing what messages will connect with others and how to express them. Where leaders get into trouble is providing too much or too little information, delaying important information, and not being candid in their communications to others for fear of upsetting them with “the truth”.

7. Effective leaders create personal connections with their people.

In today's world of big business, multiple locations and global operations, employees can feel alienated from their leadership and disconnected from the company at a personal level. The most effective leaders pay particular attention to this and find ways to make themselves personally visible and approachable. Most take the time to engage employees individually and in groups, listening to their ideas, suggestions and concerns, and responding in ways that make people feel heard and respected. The downside of visibility is making too many unannounced visits, which can create a culture of fear and micromanagement. Again, striking the correct balance is the key.

8. Effective leaders temper drive for results with sensitivity to others.

Effective leaders drive results and champion beneficial change. They also repeatedly emphasize the importance of continuous or breakthrough improvements and challenge people to rethink old ways of doing things. But good leaders are also patient enough to help others overcome their fears, get people involved before making decisions that affect them, explain the reasons for difficult decisions once they are made, and work to maintain high morale while calling on others to do better. However, they are only patient up to a point and do not suffer people who waste their time, fail to deliver, or resist change for very long. And, importantly: are there any downsides to having too high an “EQ”?

5. Conclusion: EQ in Context

What does it mean to be “emotionally intelligent” as a leader? Clearly, emotional intelligence is not like IQ, which has a distinct meaning and is represented by a single measure. We should really be speaking about “emotional intelligences” and measuring them in different ways, not as a single “EQ” measure. Rather than thinking about emotional intelligence as a set of general abilities, however, we should really be asking how the best leaders use emotional intelligence to think and act effectively.

The most effective leaders we have known possess great reserves of empathy, interpersonal astuteness, awareness of their own feelings, and awareness of their impact on others, but more importantly, they apply these capabilities judiciously as best benefits the situation. The key to this is self-regulation: having some minimum level of these emotional intelligences will help one be effective as a leader, as long as they are channelled

appropriately. Having a large amount of these capabilities may be too much of a good thing if they are allowed to drive inappropriate behaviour.

In addition, emotional intelligence alone does not guarantee good leadership. From a moral standpoint, emotional intelligence is neither good nor bad. Emotionally intelligent leaders can be manipulative, selfish, and dishonest, just as they can be altruistic, focused on the general welfare, and highly principled. It is also not the only way that an effective leader needs to be “intelligent”. Serious consideration of other qualities that make for effective leadership, such as mental capacity, confidence, integrity, drive, and wisdom, must also be factored in. As in most things, emotional intelligence as a leadership requirement should be kept in perspective. The key to effectiveness is balance: a strong mix of cognitive capacity (logical, conceptual and creative thinking), people skills (interpersonal astuteness, influence skills, and communication skills), and the wisdom borne of experience and having to make unprecedented decisions based on a strong set of personal values and personal integrity. Taken together, this is what makes for effective leadership.

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Green Computing : Study of Various Factors

Diwan sher*

*Ph.D. Pursuing and Assistant Professor (CSE), JIET-Jind India

Email : deewanji@gmail.com, Ph. : 09812260323

Abstract :

"Green computing" basically means responsibility and efforts towards reducing power consumption and environmental waste along with keeping the pace of development and research.

It include up to date hardware, data centres and software that plays a vital role in keeping the environment green. Our main emphasis is to study effect of green computing while designing an algorithm. While designing an algorithm we need to keep it in mind that the algorithm take less time for execution so as to conserve power. Also we can manage colour scheme that helps in reducing energy consumption.

In this paper we compare the strategy of various software houses towards energy saving and how these houses are contributing toward green computing.

I. INTRODUCTION:

"Every time you send out 140 characters over the social application Twitter, how much energy does that consume? According to some back of the napkin calculations from Rafli Krlkorian, a developer for Twitter's Platform Team, each tweet sent consumes about 90 joules. That means each tweet emits about 0.02 grams of CO₂ into the atmosphere. So the roughly 50 million tweets sent on averagely per day delivers the equivalent of One metric ton of CO₂. In comparison one Google search query has been found to consume about 1 kilojoule per query, which emits 0.2 grams of CO₂. And according to a recent study each spam email message emits 0.3 grams of carbon(CO₂) "[1]

Green computing or energy efficient computing should be promoted or implemented due to some of the various reasons described below :

- **Change in Climate** : First of all research shows that CO₂ and other emissions are causing global warming and climate damage.
- **Cost Savings** : Green computing can lead to serious cost savings over time.
- **Reliability of Power**: As energy demands in the world go up, energy supply is declining or flat. Energy efficient systems helps ensure healthy power systems.

Various factors that affects green computing include efficient algorithms that consume least power while implementation and servers, cooling, and lighting, in this paper we will study various factors that are responsible for consuming more power .

II. VARIOUS FACTORS

A. Algorithmic efficiency :

The efficiency of algorithms puts impact on computer resources required for any particular computing function , as algorithms leads to efficient coding thus it is of much consideration. For example one particular application which runs many times per day and if it is not efficient than it is going to consume much more energy per cycle and hence energy can be saved very remarkably by using efficient energy saving algorithms .. A study by a physicist at Harvard, estimated that the average Google search released 7 grams of carbon dioxide (CO₂)

[2] Algorithms can also be helpful in routing data to various data centres or server farms where electricity is less expensive or electricity is derived from natural resources. Operating systems also play important role in consuming energy and preserving the same thus leading towards GREEN COMPUTING.

[3] An independent study demonstrate that Windows 7 + Office 2010 require 70 times more memory (RAM) than Windows 98 + Office 2000 to write exactly the same text or send exactly the same e-mail than 10 years ago

[4].Microsoft Windows, has included limited or a few PC power management features since Windows 95. This includes stand-by and later added hibernate (suspend-to-disk) and support for the ACPI standard. First time they introduced power management feature in Windows 2000 and first NT based operating system. Microsoft significantly improved this in [5]Windows Vista by redesigning the power management system to allow basic configuration by Group Policy.

B. Virtualization

Computer virtualization means to the utilization of computer resources, such as the process of running two or more logical computer systems on one set of physical hardware. This concept was initially originated with the IBM mainframe operating systems of the 1960s. With virtualization, a computer system administrator could combine several physical computer systems to act like virtual machines on one single and more powerful computer system, and hence reducing power and cooling consumption. Intel Corporation and AMD have also built proprietary virtualization enhancements to the x86 instruction set into each of their CPU product lines, in order to facilitate virtualized computing.[6]

C. Terminal servers

A terminal server also referred to as a serial server to connect devices with various connectors like RS-232 serial interface to network and local area networks . Terminal servers also play role in implementation of green computing. When using the system, users at a terminal connect to a central server; all of the actual computing is done on the server, but the end user experiences the operating system on the terminal. These can be combined with thin clients, which use up to 1/8 the amount of energy of a normal workstation, resulting in a decrease of energy costs and consumption. [7]

D. Power management

The Advanced Configuration and Power Interface (ACPI), an industry standard, allows any operating system to control the power-saving features of computer system hardware. This allows a system to automatically turn off various components such as monitors/TFT, hard drives or CPU after fixed amount of time if left inactive . In addition, a system may hibernate, where most components (including the CPU and the system RAM) are turned off. ACPI was introduced before Intel-Microsoft standard called Advanced Power Management, which allows a computer's BIOS to control power management functions. Some programs/ algorithms that allow the user to manually adjust the power supplied to the CPU, which reduces both the amount of heat produced and electricity consumed. This process is called *undervolting*.

E. Storage

Sr. No.	HDD Brand	Default Wattage (W)
1.	Seagate ST3146854SS	16.3
2.	Seagate ST3600057SS	15
3.	Hitachi HUS156060VLS600	14.90
4.	Fujitsu MBE2 RC	7.2

[8]

Smaller form factor for example " 2.5 inch " hard disk drives often consume less power per GB than physically larger drives. Unlike hard disk drives, solid-state drives store data in flash memory or DRAM. With no moving parts, power consumption may be reduced somewhat for low capacity flash based devices also. As explained in the table we can see that various hard disks uses various levels of power and choosing the right one can reduce overall system power.

F. Power supply

Desktop computer power supplies (PSUs) are generally 70–75% efficient which dissipates the remaining energy as heat. An industry initiative called 80 PLUS certifies PSUs that are at least 80% efficient.

G. Video card

A fast GPU may be the largest power consumer in a computer. Energy efficient display options include: No video card - use a shared terminal, shared thin client, or desktop sharing software if display required.

H. Processors & Interrupts

Sr. No.	Processor	Default Wattage (W)
1.	Pentium 4.3 GHz	99.74
2.	Pentium 4.2 GHz	66.45
3.	AMD Athlon XP Palomino 2000+	70
4.	AMD Athlon XP 3000+ (Barton)	74.30

[8]

Designing an power efficient system includes few of the factors including Energy Efficient Processors that saves lot of energy, Multi-Core Processors that can enhance computing without adding significant extra power requirements to the overall systems. The interrupt rate impacts deep sleep residency and power consumption by CPU significantly. The power penalty is expected to grow significantly in future platforms. Many applications create sticky interrupts that stay even after the content playback is complete. Such sticky interrupts decrease sleep state residency even while idling. It is recommended that the high interrupt rate be shut down once the playback is finished.

I. Telecommuting or Teleconferencing

Teleconferencing technologies are often implemented in green computing initiatives. The advantages includes increased worker satisfaction, reduction of greenhouse gas emissions related to travel, The savings are significant; the average annual energy consumption for U.S. office buildings is over 23 kilowatt hours per square foot, with heat, air conditioning and lighting accounting for 70% of all energy consumed. Voice over IP (VoIP) reduces the telephony wiring infrastructure by sharing the existing Ethernet copper.

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Romen Basu : A Study of his major Concern With Special Reference to his Post-Ninety Novels

Jyoti Sharma,

Research Scholar, Department of computer science, Bhagwant University, (Rajasthan)

dr.jyoti.bhu90@gmail.com

Abstract:-

Romen Basu is a man of concerns. He writes neither to entertain the reader nor for his own pastime pleasure. He writes with a cause. Having been attached to the world organization (the U.N.O.) he must have developed a feeling of fraternity towards the world-family. Hence, he feels greatly pained to see any kind of oppression, exploitation or the injustice done anywhere to mankind. The social issues such as the family disintegration, the caste discrimination, struggle between the have and havenots, oppression of the ruled by the rulers, of the weaker by the stronger, of the innocent by the crafty criminals, of the minority by the organized majority and even the peace-spoiling disputes of the national and international scale have been of equal concern to him. He has dealt with many of these issues in his pre-ninety novels. For example, he deals with the problem of family disintegration in his very first novel “A House Full of People” which is based on the story of his own family. The problems of the ethnic bias and the cast discrimination have been presented in his novels “Your Life to Live”, The Tamarind Tree, “and “portrait of the roof”.

Introduction :-

Economics graduate, Master in Business Administration, an ex-diplomat and bureaucrat by profession, Romen Basu was born in 1923 in an aristocratic Bengali Calcutta family. His grandfather Joginder Nath Basu was renowned poet and the family was rooted deep in the native culture and traditions. Romen did his Graduation from Calcutta, the Course of the Charter Secretary from London and the Master's Course in Business Administration from the U.S.A.

Soon after finishing his education, he joined the Government of India Service in England as the Assistant Secretary to the then Indian High Commissioner V.K. Krishna Menon. In 1948, he joined the U.N.O. and served the Organization for some 35 year in various capacities. He served as the Chief of the office of Under Secretary General for DTCD, as Presiding Officer of the Staff Council, as the Secretary of the Board of Trustees of United Nations' International School, as UNDP Assistant Resident Representative in Libya and also on the Economic Commission for Asia and the Far East. For his administrative acumen, he had been being assigned important plans and projects even after his retirement form the U.N.O. Chief among them being the Lumbini Protect in Nepal. He is presently settled down in New York, U.S.A.

One wonders how a man of diplomatic mission could develop a flair and manage to spare time for writing from a tight, busy service routine. Yes, where there is a wish, there is a way. Basu would spare no

moment unused to feed the flame of his writing interest. Frankly confessing to a researcher, he reacts to the query. “My writing career began literally on the drawing board. Whenever I could snatch five minutes' time in trains, subways, buses and most of all during air travel, I opened the writing pad, The first result of my effort was a manuscript of the novel 'A House Full of People’” (1968).

Novels:

1. A House Full of people (1968)
2. Your Life to Live (1972)

Short-Stories Collection

1. Canvas and the Brush (1971)
2. Rustling of Many Winds(1982)

Conclusion-

In this chapter, all the major points dealt with extensively in the foregoing chapters will be re-examined and reviewed so as to confirm and consolidate the hypothesis formed; finally, concluding it with the presentation of the merits of Basu's writings and Basu himself as a writer.

Technique- while studying the art and technique used by Roman Basu, the following approach will be undertaken. First of all, an attempt will be made to define the terms 'the novel, and 'the narrative' with the categorical classification. Also it will be seen that what category Basu's novels/fiction fits into. It will be examined whether they are in dramatic (dialogue) form of pure narratives, if narratives, who is the narrator- the author himself of a character.

Further, the structural aspects of his plots will be examined with special reference to the movement of time (whether the action/event have been presented in a chronological order, or the time moves backwards and forwards simultaneously). The constitution of plots will also be examined with reference to the logical order i.e., whether the event/actions are casually connected or they have been presented in order as they happened.

Next, the study of the characters will also be attempted at. The characters will be analyzed if they are flat/static sort of they are round/dynamic characters. If they are dynamic/round, growing up during the action, to what extent they grow. The writer's point of view in his various works will also be examined.

Conclusion- In the chapter, all the major points dealt with extensively in the foregoing chapters will be re-examined and reviewed so as to confirm and consolidate the hypothesis formed; finally, concluding it with the presentation of the merits of Basu's writings and Basu himself as a writer.

An importance of study of Athletics And its various parameter

Manoj Nain,
Research Scholar, Department of computer science Bhagwant University, Ajmer (Rajasthan)
dr.manoj.bhu18@gmail.com

Abstract:-

The purpose of this study was Comparison of pulmonary function parameters changes at different altitudes in female athletes. Methods eleven voluntary Female athletes, (age; 22.27 ± 0.65 yr), (weight; 57.00 ± 6.31 kg), (Fat%; 20.81 ± 3.21) (Height; 160.54 ± 3.7 cm and vo_{2max} : 40.65 ± 1.00) were selected to this study on Spiro metric parameters. Each subject was informed consent form. Respiratory function was assessed in participants before ascending at baseline (1400 meter) and after ascending at 3600 meter in savalan Mount and sea level (3 day's interval between with a Spiro lab II). Spiro metric parameters r changes were compared using ANOVA for repeated measure with Bonferroni (post hoc) statistical analysis computations were performed by spss and p 0.05 was considered significant. Results: spirometric parameters(FVC, FEV1, FEF25-75%, PEF, PIF, MVV, and VC) at altitude(3600 m) were significantly increased . PIF, FEV1, FEF25-75%, MVV was not significantly different between 3600m level and 1400m level. Conclusion: acute ascent to altitude above 3600m lessens airway resistance that facilitates expiratory airflow and increase majority Spiro metric parameters

Keywords:- Altitude, Lung function, Spirometry, Female athletes, Sea level.

Introduction:-

Most of the researches and studies about the physiological responses of human body to the physical activities have been done in the sea level or low altitude. But, when this changes, the Physiological responses of the body may change, also. High altitude is one of this parameters where barometric pressure decreases and consequently the partial pressure of oxygen decreases. Decreasing of partial pressure of oxygen (PO₂) prevents the emission of blood to the tissues. This shortage may have not a considerable effect on performance in rest state, but, it will be important in physical activity situations. Shortage of oxygenation to the body cells causes the human performance drops. Respiration system, that its main duty is to provide the possibility of gas exchange between inside and outside of the body, enables the human body to replace the blood CO₂ with fresh O₂. At high altitude, due to the limitation of oxygen emissions from the air to the blood, oxygen transfer will be disturbed. Therefore, the activity of respiration system increases and this may cause some disorders. Hypoxia play a significant role in lung function in morbidity related to high-altitude exposure. Due to low barometric pressure lung function changes at high altitude may worsen the severity of hypoxemia beyond that expected. In addition, ventilatory studies at simulated altitude in hypobaric chambers have shown decrease in forced vital capacity (FVC) and sometimes decrease in forced expiratory volume in 1 second (FEV1) or maximal midexpiratory flow rate (FEF25-75%). However, actual field and participant conditions acute ascend to high altitude differ from those of chronic state or more controlled experiments. Altitude changes affect the lungs function, but it is not completely clear why and how this happens and this is the subject of the recent numerous researches. Wagner et al (1987) believed that with diminishing the air density during the ascending,

expiration and lung discharge will be easier. Whereas at high altitude, the lung ventilation have a good Correlation with the consumed energy cost and also, the power and endurance of respiratory muscles have the basic role in the ventilation, so this may be affected by high altitude conditions. This has also been pointed out in some researches that the tiredness of diaphragm, as a result of lungs ventilation increase, may affect the respiration in high altitude and the lungs performance. On the other hand, there is a contradiction on the published results concerning the effect of the altitude on the lung performance. For example, Shamara and Brown (2007), during their research about 7 male adults, have shown that immediately after the altitude change between 3450m to 5350m, MVV and, FEV1 and during the first 24 hours, FVC have a significant increasing. Welsh et al (1993) have reported that with altitude increasing, FVC decreases and FEV1 has no changes comparing to the base altitude. Fort V and et al (1997) have also showed that FVC and MVV increase and FEV1 decreases. The results obtained by Faramoushi (2012) showed that by ascending to 3600m altitude, FVC of male athletes (5.08 ± 0.62) has a significant increase comparing to the base altitude (4.93 ± 0.53) and sea level (4.92 ± 0.52). But, there is not a significant difference between the base altitude and sea level. ($p > 0.05$).

Importance of proposed research work:-

Athletic contests in running, walking, jumping, and throwing are among the oldest of all sports and their roots are prehistoric. Athletics events were depicted in the Ancient Egyptian tombs in Saqqara, with illustrations of running at the Heb Sed festival and high jumping appearing in tombs from as early as of 2250 BC. The Tailteann Games were an ancient Celtic festival in Ireland, founded around 1800 BC, and the thirty-day meeting included running and stone-throwing among its sporting events. The original and only event at the first Olympics in 776 BC was a stadium-length running event known as the stadion. This later expanded to include throwing and jumping events within the ancient pentathlon. Athletics competitions also took place at other Panhellenic Games, which were founded later around 500 BC. The Cotswold Olimpick Games, a sports festival which emerged in 17th century England, also featured athletics in the form of sledgehammer throwing contests. Annually, from 1796 to 1798, L'Olympiade de la République was held in revolutionary France, and is an early forerunner to the modern summer Olympic Games. The premier event of this competition was a running event, but various ancient Greek disciplines were also on display. The 1796 Olympiade marks the introduction of the metric system into sport.

Objectives of the present study:-

The International Association of Athletics Federations, the sport's governing body, defines athletics in five disciplines: track and field, road running, race walking, cross country running, and mountain running. All forms of athletics are individual sports with the exception of relay races. However, athletes' performances are often tallied together by country at international championships, and in the case of cross country the finishing times of the top athletes from each team or country are combined to declare a team victor.

Conclusion:-

The history of athletics has taught us that the sport was originally used for survival purposes; later it was used to remain fit and healthy, and in recent history the focus shifted to uniformity, safety and excellence. History also taught us that the format in which athletics were practised during ancient times differed from country to country. In ancient competitions the emphasis was on the final result, rather than the method that was used. The free style techniques and few rules that were used at the time confirm this fact. In ancient history the sport was tailor made to suit society's need to survive. As the sport evolves over time, the sport became more focused on excellence and as a result it became less accessible to the average member of society. The large amount of rule changes that

took place in the late 1800's and early 1900's changed the focus in athletics to the method on how the performance was achieved. As a result, in the early 1900's the free style competitions were replaced with competitions where all competitors used very similar methods. With the exception of Road Running, Cross Country and Race Walking, the rules as it is applied today significantly reduces the capacity of the sport to accommodate large numbers of participants. The rule changes in the late 1800's and early 1900 have favoured certain life styles and body types. Life styles and body types differ from country to country and from culture to culture. Free style athletics will give a better reflection of the specific skills of athletes in the various countries and will encourage larger participation of the relevant societies. It will also reduce the gap that exists between athletes with poor facilities and athletes competing in well developed facilities.

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Rebellion and Art: A Reading of *The Outsider* by Albert Camus

Navneet Kaur

Research Scholar, Singhania University, Jhunjhunu (Rajasthan)

The Outsider by Albert Camus has been read as a rebel in general without particular reference to “Rebellion and Art”, wherein Camus has given his view of rebellion in art. In the fourth section of *The Rebel* titled 'Rebellion and Art', Camus puts forth his rebellious artist, as follows:

Art is the activity that exalts and denies simultaneously...

Camus does not agree with Nietzsche that artists do not tolerate reality. Camus believes that they do because no artist can get along without reality. According to him, “Artistic creation is a demand for unity and a rejection of the world. But it rejects the world on account of what it lacks and in the name of what it sometimes is...”(TR 253)

What Camus means to say is that rebellion in art is not total. It is not in its pure state. That is why he feels unhappy with Plato, though he finds that the great philosopher only calls in question the deceptive function of language, and exiles only poet's from his *Republic*. Like Aristotle, who tried to defend poetry i.e. tragedy as against epic which Plato attacked, Camus shifts the focus from the poet to the novelist. The reformation chooses morality and exiles beauty. Rousseau denounces in art a corruption of nature by society and so on. The same has been the case with Russian Nihilists. Marx also denounced art though he preferred the old artist in comparison with the new but then the old artist is non-progressive. But the artist's rebellion against reality, says Camus, contains some affirmation as the spontaneous rebellion of the oppressed. According to Camus, the revolutionary spirits, born of total negation, instinctively felt, there was a risk of contemplation counterbalancing action, beauty and injustice. For example, “To create beauty, he must simultaneously reject reality and exalt certain of its aspects. Art disputes reality, but does not hide from it” (TR 258)

Art thus leads, as Camus further observes, back to the origin of rebellion, to the extent that it tries to give its form to an illusive value which the future perpetually promises, but of which the artist has a presentiment and wishes to snatch from the grasp of history. He feels that this becomes more illustrative in the novel. Like all forms of literature, novel is generally called fiction. The novel is born at the same time as the spirit of rebellion and expresses, on the same aesthetic plane, the same ambition, call it a make-believe story. Alternatively, the novel, of all other forms of literature, is termed romance, used to give an exaggerated description or lying account of some event. The word Romance is originally opposed to reality, an escape from the work-a-day-world. Romantic literature thus implies a rejection of reality. But this rejection, as Camus avers, is not a “a mere escapist flight, and might be interpreted as the retreat of the soul which, according to Hegel, creates in itself, in its disappointment, a fictitious world in which ethics reigns alone...” (TR 260)

This may appear contradictory as we will shortly see in our study of Camus' *The Outsider* – a contradiction wherein man rejects the world as Meursault does without accepting the necessity of escaping it. As Camus finds, that men cling to the world, fearing lest they should become estranged citizens of the world, exiled from their own country. So they dare not do

anything unsocial or even asocial.

Meursault is neither one nor the other, his rebellion is one he himself does not understand, but there is a desire in him, indeed a strong one to possess the world he lives in but which slips out of his fingers. Hence his desire is metaphysical i.e. to seek unity in the world – to give it a form. In the “Afterward” of the novel, Camus states that “In our society any man who does not cry at his mother's funeral is liable to be condemned to death.” The construction is paradoxical, on the one hand, the hero of the novel is condemned to death because he could not lie, could not play the game the society wishes him to play, but on the other hand, he, Camus affirms, is not a reject. To get a more accurate picture of Meursault, asks Camus, that one which it conforms more closely to the novelist, “you must ask yourself in what way Meursault does not play the game. The answer is simple: he refuses to lie”. (TO 118). However, lying in his case is not only saying what is not true. It is also, in fact especially, saying more than one feels. According to Camus, we do it, everyday, to make life simple, i.e. to conform to social norms, howsoever, absurd. By not conforming passively, Meursault rejects social norms in order to make a better society. This is not merely to reject or destroy it.

Nevertheless, the truth that he aspires for “is yet a negative one, a truth born of living and feeling, but without which no triumph over the self or over the world will ever be possible.” (TO 119). Thus, what appears to be yet negative envisions positive.

Meursault in the novel does betray his positive attitude though intermittently, thus achieving essence of unity, which is necessary for existence, particularly as he waits for his death. In the trial scene itself when the prosecutor said that: “Not once in front of examining magistrate did he show any emotion with regard to his abominable crime,” (TR 97). Meursault could not help admitting that the prosecutor was right:

I didn't much regret what I'd done. But I was surprised that he was so furious about it. I'd have liked to have explained to him in a friendly way almost affectionately, that I'd never really been able to regret anything. (TR, 97)

He explained his lack of emotions in his pre-occupation with something or the other – what was about to happen, today or tomorrow. He thus tried to excuse himself, a weak excuse, at that, but all the same it expresses his desire to make amends. Even in his death cell when the priest left him alone, Meursault, on the morning of his execution, felt for the first time in a very long time: “I thought of mother. I felt that I understood why at the end of her life she'd taken a 'fiance' and why she'd pretended to start again...” (TO, 116)

He continued ruminating on this aspect:

So closed to death, mother must have felt liberal and ready to live her life again. No one, no one at all had any right to cry over her. And I too felt ready to live my life again. (TO, 117).

This expression, the last of his clear vision made him, happy. This also made him feel less lonely. He wished that there should be a crowd of spectators at his execution to condemn him, that they should greet him with the cries of hatred. This consummation, his last wish and testament, so to say, affirms that his rebellion was misconceived to the extent that by outrightly rejecting reality, he has helped neither himself nor his society.

That does not mean that he had no idea of a better world than this apathy of revolt. Indeed, he wanted to give the world – its common-places of absurd thinking, that only one who cries over the funeral of his mother is an affectionate and a loving son. But the society could not understand this gesture, for it was too subtle for even the judges to understand its value. His attempt to give a form to his disperse universe his final words express his realisation that he wished to rectify his world, that is one reason for his accepting the verdict as justified though at times he feels that he was not allowed to defend himself, thus pointing out the absurdity of legal system, as also of the rituals of cremation.

Camus's discussion in “Rebellion in Art” provides a clear instance of two kinds of false rebellion, one that all art is essentially a revolt against reality; two, all art conforms to reality Camus seeks the third dimension of art, that it both needs the world and denies it. He wrote his novels to show that contemporary art has allowed itself to the side tracked. Formalism gravitates too exclusively toward negation, banishing reality and ending in delirium. Realism, however, by reducing man to elemental and external reactions, is too eager to impose its own order on the world. But both arise, in a sense, out of the spirit of revolt, protesting the hypocrisy of bourgeois conventionality; both fail as art in as much as they lose touch with the springs of revolt. Camus thus suggests that the creative way is not that of all or nothing but that of moderation and limit. The order and unity which makes for genuine art do minimal violence to the matter they undertake to reform. And the artist remains above all, a friend of man.

This is Camus concept of metaphysical revolt, The Outsider is an imaginary world, created by the rectification of the actual world ' “a world where suffering can, if it wishes, continue until death, where passions are never distracted, where people are prey to obsessions and are always present to one another. . .” (TR, 264)

Man, Camus finds, is finally able to give himself higher form and limit which he pursues in vain all his life. The novel creates destiny to suit any eventuality. In this way it competes with creation and thus conquers death. No novel thus can reject reality. The Outsider is no exception

in this regard. Meursault finds that there is a limit to his rebellion, that he should have sought moderation and thus achieved unity between reality and revolt. If he goes to his gallows, he goes with the feeling that somewhere there could have been reconciliation between society and the revolt against it. Some of his actions, later highly blown up were unintentional such as his taking a cup of white coffee offered by the caretaker and likewise his act of smoking cigarette while sitting in vigil. One of the highly objectionable acts of his was that he refused to see his mother's face when he was asked whether he would like to do so. His other actions which came in for severe criticism in the court were that he, after the cremation, had a swim and sex with a girl and saw a comic movie. There may not be anything objectionable, had it not been a serious occasion. The society which objected to his actions and felt threatened, finding him so heartless, amounting to matricide, was not all together wrong. Camus is not in favour of totally consenting to reality, nor does he turn aside from it, completely. There is no room in the novel as in Camus conception of the novel for the purely imaginary. The novel does not exist in an ideal world either.

The real and the romantic go hand in hand in the novel of Camus conception.

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Rebel in *Animal Farm* by George Orwell

Most people read *Animal Farm* as a fable with a political agenda to expose Russian totalitarianism. They ignore that it has more serious matter in hand: that is the birth of rebel. Richard Rees, finds the book subversive with regard to the role of the common man who has to serve and die for a “gang of pigs”.

The story of the novel begins on the Manor Farm. Mr. Jones had locked the hen-houses for the night, but was too drunk to remember to shut the pop holes. He soon fell asleep. Thus the book begins with human comedy inspired by the prophetic dream of Old Major, a Prize Middle White Boar. The animals of the Manor Farm drive out of their human farmer, and set up an animal Republic, reminding us of Plato's Republic and More's Utopia. The farm is re-named Animal Farm and the book relates its fortunes up to the day when the original name is restored and “Friendly” relations are re-established with the neighbouring human farmers. The fable thus does not remain a children's story but becomes a serious document of our age of revolutions, against absurd conditions of existences. It is a novel about creating value through rebellion almost existential in nature. It amounts to say that, as Camus put it; I rebel therefore I exist. We have such a rebel in Camus' own *The Outsider*, who rebels against the absurd conditions. Orwell imagines animals revolting, only that they do not do so in actuality. Thus the novel is not a ridiculous tale about pigs. It shows as well as that while it is possible to revolt as it is the demand of human existence; it is difficult to remain balanced because those who attempt to rebel by becoming nihilist or utopians fail to achieve authentic rebellion. The animals, Orwell imagines do perhaps think of revolting. The old pig, the wisest among them, tells them that he had a dream but before telling the animals about his dream, he traces down the history as human being feels under a tyrant. The fable has a parallel line of exploitation. Orwell begins by referring to his experience in Barcelona during the purge of the Trotskyists when many of his P.O.U.M. friends were shot and others were in prison for a long time or simply disappeared. This purge, he points out was a minor supplement to the great purges going on in Russia at the same time.

Thus the story of revolt of animals is multi-dimensional. The struggle of the farm animals is part serious, part comic in it, the way they assemble, think of revolting, but they do not do so, till they were driven to desperation. They were hungry as the master and his men, brought them to the verge of starvation. It is then like Camus rebel they were forced to say; enough is enough. It is then they chase away Mr. Jones and his men. The struggle of the farm animals, having driven out their human exploiter to create a free and equal community takes the form of a most “ingeniously worked out recapitulation of the history of Soviet Russia from 1917 to the Tehran Conference, which is symbolised by a game of cards between the pig-director Napoleon and a human neighbour Mr. Pilkington.”

It is this parallel which makes an interesting reading of the novel. Right from the beginning, we find a kind of parody of the Soviet revolt from the Tzar. This parody becomes more interesting as the animals gather to listen to the old Major. We learnt that the old Pig was not of first rate intelligence, but he was universally respected among the animals. The Novel becomes hilarious when he addresses the animals as Soviets do one another comrades. However, in places the fable takes a serious turn, as the Old Major dwells upon the miserable lives of animals; We are born, we are given just as much food as will keep the breath in our bodies... and the very instant that that our usefulness comes to an end we are slaughtered with hideous cruelty. No animals in England knows the meaning of happiness or leisure after he is a year old. No animals is misery and slavery; this is the plain truth. (AF, 28)

The Old Major further underlines almost in the language of P.B. Shelley in the poem "Song to the men of England". He asks: is it because of ours is so poor that it can not afford a decent life to those who dwell upon it. The soil of England is futile, its climate is good, it is capable of affording food in abundance to an enormously greater number of animals. Why then, he asks, do we continue in this miserable condition. Because he adds nearly the whole of the produce of our labour is stolen from us by human beings. So man is their enemy, man is capital because he is the only creature who consumes without producing. The language of the Major is that of a rebel. Orwell is interested in creating the condition for rebellion. One has only to grow conscious of the absurd conditions of existence. The worse condition that animals find them selves is in the way they are killed. The pigs are done to death to supply meat. To that horror, says the Old Major, we all must come cows, pigs, hens, sheep everyone. Even the horses and the dogs have no better fate. The horses are sold to the knacker, who will cut their throat and boil the meat for the foxhounds. As for the dogs, when they grow old and toothless, Jones tries a brick round their neck and down them in the nearest pond.

It is this absurd condition to which the animals wake up. It is the same for all men under a tyrant. The parallel between animal revolt and that of Russians against the Tzar is unmistakable: Comrades, unite, you have nothing to lose but your chains. There are other parallels which strike the mind readily, as for example resorting to vote whether rats and rabbits should be allowed to join the union. Thus the comic and the serious, the parody get mixed up.

This makes the novel lose its simple satirical purpose as generally we suppose it to be a satire upon Soviet Russia. If it has satirical intention, it is only to the extent that there are certain echoes, but the rest is a serious drama of the birth of rebel under the absurd conditions. It does not matter whether the subjects are animals or humans; the latter are not regarded as better than animals in any totalitarian regime. They suffer the same cruelties, even the worst. Orwell thus makes the animals express their anguish. He de-familiarises their natural span of life. They are killed. In fact no animal escapes from the cruel knife.

Orwell concentrates on those conditions, the awareness of which makes rebel possible. All else, the fable itself, and its parallel with the revolt of the proletariat, is not of much importance. Not even the song of the “beast of England”. The whole tale is told to suggest that even the lowest animals feel the pain. Its parallel with Russian Revolution is only incidental. The reaction of English intellectuals to the book was quite simple; it ought not to have been published, for the reasons already stated. The reviewers of the book who understood the art of denigration did not attack it on political grounds but on literary ones. They said that it was 'a dull, silly book and a disgraceful waste of paper'. (AF, XVIII) According to Orwell that was not the whole story. The English intelligentsia objected to this too book because it traduced their leader. What Orwell meant to say that the book exposed the weakness of all revolutions. Orwell, indeed, wanted to defend the liberty to publish it. He claimed the liberty of press. If liberty means anything at all it means the right to tell people what they do not want to hear. And that is the subject of the book. They do want to hear how communism and fascism failed us. It tells the story how in the course of time, today's leaders become tomorrow's tyrants. Not that they mean to do so but there is something as we have earlier suggested, in the very nature of rebellion to backfire. It may lie in the enthusiasm with which the revolution begins. In the case of animals we can well see how they are enthused over the prospect of gaining their liberty. The song itself with its universal appeal to the animals of the world, expresses the wildest excitement of the animals. Orwell is aware of the irony of such Euphoria. He writes: “even the stupidest of them had already picked up the tune and a few of the words, and as far the clever ones, such as the pigs and dogs, they had the entire song by heart within a few minutes...”(AF,33)

The idea of *Animal Farm* struck Orwell as he tells that the actual details of the story did not come to him, as we have already referred to, for sometime until one day he saw a little boy, perhaps ten years old, driving a huge cart horse along a narrow path, whipping it whenever it tried to turn. It is at this moment that Orwell went into skin of animals and spoke for him.

PROPOSED SCHEME FOR RELIABLE DATA TRANSFER IN WIRELESS SENSOR NETWORKS

Mukesh Garg^{#1}, Gurudev Jangra^{#2}

^{#1}CSE Department, JIET, JIND Haryana-126102, India

^{#2}H.O.D CSE Department, JIET, JIND Haryana-126102, India
aggarwal.mukesh87@gmail.com, gurudevjangra@gmail.com

ABSTRACT :- Wireless sensor networks are a new type of networked systems, characterized by severely constrained computational and energy resources, and an ad hoc operational environment. When we work with a large sensor area network with dense sensors, there are some nodes that has to bear the heavy traffic load then over the time such sensor goes weak and they start losing the packet. This packet loss is bearable up to some threshold value, but as the packet loss exceed this level it disturb the whole network and now any kind of data transfer over this node is not reliable. In this paper author will proposed a algorithm that will solve the problem of packets lost and improve the reliability of network. The author will implement this algorithm by help of NS-2 simulator.

Keywords:- Wireless, Sensors, Data Loss, Aggregation, NS-2S.

I. INTRODUCTION

Wireless Sensor Networks have emerged as an important new area in wireless technology. In the near future, the wireless sensor networks are expected to consists of thousands of inexpensive nodes, each having sensing capability with limited computational and communication power [1], [2] and which enable us to deploy a large-scale sensor network. Wireless sensor nodes have emerged as a result of recent advances in low-power digital and analog circuitry, low-power RF design and sensor technology. **Sensor** networks are distinct from traditional computing[3] domains. Their Design assumes being embedded in common environments, instead of dedicated ones. As these devices are deployed in large numbers, they will need the ability to assist each other to communicate data back to a centralized collection point. A critical step towards achieving this goal of cooperative mini device is the design of a software architecture that bridges the gap between raw hardware capabilities and a useful system.

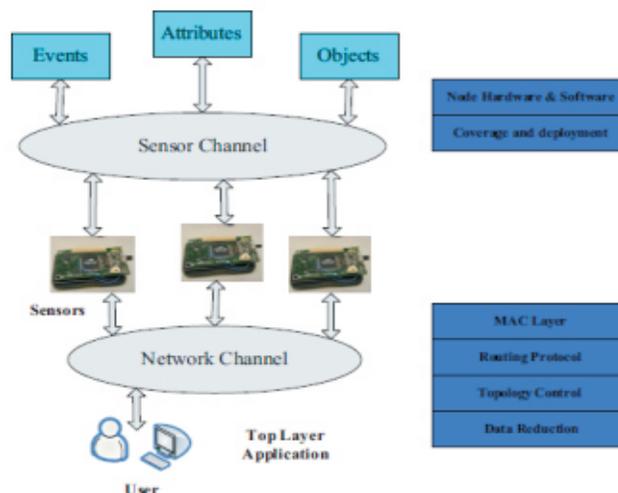


Fig 1 :- Wireless Sensor Network Architecture

1.1 The design of WSN is influenced by many challenging factors. They are following:-

- **Node deployment:** Node deployment in WSN is application dependent and affects the performance of the routing protocol. The deployment can be either deterministic or randomized. In deterministic deployment, the sensors are manually placed and data is routed through pre-determined paths. However, in random node deployment, the sensor nodes are scattered randomly creating an infrastructure in an ad hoc manner.
- **Energy consumption without losing accuracy:** In a multihop WSN each node plays a dual role as data sender and data router. The malfunctioning of some sensor nodes due to power failure can cause significant topological changes and may need re-routing of packets and reorganization of network.
- **Data Aggregation:** Since sensor nodes may generate significant redundant data, similar packets from multiple nodes can be aggregated [4] so that the number of transmissions is reduced. **Data aggregation [5]** is the combination of data from different sources according to a certain aggregation function.
- **Quality of Service:** In some applications, data should be delivered [6] within a certain period of time from the moment it is sensed; otherwise the data will be useless. Therefore bounded latency for data delivery is another condition for time-constrained applications.
- **Data Reporting Model:** Data sensing and reporting in WSN is dependent on the application and the time criticality of the data reporting. Data reporting can be categorized [7] as either time-driven (continuous), event-driven, query-driven, The routing protocol is highly influenced by the data reporting [8] model with regard to energy consumption and route stability.
- **Node/Link Heterogeneity:** In many studies, all sensor nodes were assumed to be homogeneous [9], i.e., having equal capacity in terms of computation, communication, and power. However, depending on the application a sensor node can have different role or capability. The existence of heterogeneous set of sensors raises many technical issues related to data routing.
- **Fault Tolerance:** Nodes may fail due to power failure, physical damage etc. This may require actively adjusting [10] transmit powers and rerouting packets through regions of the network where more energy is available.
- **Network Dynamics:** Routing messages from or to moving nodes [11] is more challenging since route stability becomes an important issue, in addition to energy, bandwidth etc.
- **Transmission Media:** In a multi-hop sensor network, communicating [12] nodes are linked by a wireless medium. The traditional problems associated with a wireless channel (e.g., fading, high error rate) may also affect the operation of the sensor network.
- **Coverage:** In WSN, each sensor node obtains a certain view of the environment. Hence area coverage is also an important design parameter in WSN.

LITERATURE REVIEW:

In paper [2] we have studied the WSN hardware platforms and secondly about the software platform. Then we study the details information about networking and applications of the Wireless Sensor Networks. At last, idea of the future application of the wireless sensor networks is given.

Paper [35] discuss the introduction of wireless sensor network, how it works, WSN nodes architecture, WSN architecture, power consideration WSN and applications of wireless sensor network.

Paper [10] describes the concept of sensor networks which has been made viable by the convergence of micro electro- mechanical systems technology, wireless communications and digital electronics. The sensing tasks and the potential sensor networks applications are explored, and a review of factors influencing the design of sensor networks is provided. The communication architecture for sensor networks is outlined, and the algorithms and protocols for each layer are explored.

Paper [5] presents a dynamic discover routing method for communication between sensor nodes and a base station in WSN. This method tolerates failures of arbitrary individual nodes in the network (node failure) or a small part of the network (area failure). Each node in the network does only local routing preservation, needs to record only its neighbor nodes' information, and incurs no extra routing overhead during failure free periods.

Paper [3] gives details information about networking and applications of the Wireless Sensor Network and the future application of the wireless sensor networks.

Paper [32] Wireless sensor networks are often deployed in unattended and hostile environments, leaving individual sensors vulnerable to security compromise. We study the novel notion of *location-based keys* for designing compromise-tolerant security mechanisms for sensor networks.

Paper [30] gives idea of localized sensor localization scheme making full use of controlled mobility of a location-aware actor and the connectivity of the sensor network.

II.

III. PROPOSED WORK:-

We are representing reliable data transfer over the network in case of a Wireless Sensor Network. To solve this problem the proposed system identify the low power nodes, because in sensor area network it is not possible to track all the nodes.

The proposed algorithm we will use for solve the problem of low power nodes in wireless sensor network. In this algorithm we follow the following step:-

Main Algorithm(S,D)

/*S is the source node and D is the destination node, the network defined is dynamic*/

```
{
1. Find all the nodes that occur in path between source and the destination. These nodes are
   representing by NodeList(1 to N).
2. for i=1 to N
3. {
4. if(PacketLoss(NodeList(i))> MAX_THRESHOLD_VALUE)
5. {
6. find the list of compromising nodes for Node NodeList(i). This list is represented by
   Compromising(1 to K)
7. Select any of the compromising node from this list and use it in place of node dropping the data
   packet
   NodeList(i)=Rand(Compromising,1,k)
8. if K=0 /* if there is no compromising node*/
9. {
10. NodeList(i)=Include New Node
11. }
12. }
13. }
14. }
```

I. II.

IV. FUTURE WORK

This paper shows the Study of wireless sensor network. Based on the study the author identified some problems. So low power nodes (packets lost and unreliable transmission) is one problem among. To solve this problem the author proposed algorithm that will give the best result based on performance and security. ***The proposed algorithm first detects the weak sensor node over the network and then blocks it or set its load to the minimum.*** .This algorithm will implement using ns-2 simulator.

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A STUDY OF THE IMPACT OF ANXIETY ON EMOTIONAL MATURITY IN TEENAGERS.

PUSHKRIT GUPTA^{#1}, SATISH KUMAR^{#2}

^{#1}A.P.,SURYA COLLEGE OF EDUCATION,TOHANA.

^{#2}RESEARCH SCOLAR(M.Ed.)SURYA COLLEGE OF EDUCATION, TOHANA

^{#1}pushkritgupta@yahoo.com

ABSTRACT:

The present study carried out to study the impact of anxiety on emotional maturity in teenagers.

Anxiety is a multi-system response to a perceived threat or danger. It reflects a combination of biochemical changes in the body, the patient's personal history and memory, and the social situation. As far as we know, anxiety is a uniquely human experience. Other animals clearly know fear, but human anxiety involves an ability, to use memory and imagination to move backward and forward in time, that animals do not appear to have. The anxiety that occurs in post-traumatic syndromes indicates that human memory is a much more complicated mental function than animal memory. Moreover, a large portion of human anxiety is produced by anticipation of future events. Without a sense of personal continuity over time, people would not have the "raw materials" of anxiety. Emotional maturity refers to that stage of individual in which he/she is able to feel proper emotion in proper situations. A person is emotionally mature or stable when his/her responses to the situation are appropriate to the degree of development. The sample consisted of 800 teenagers between the ages of 14-19 years. Anxiety was measured by State-Trait Anxiety Inventory by Spielberger and emotional maturity was measured by Emotional maturity Scale by Yeshbeer Singh & Mahesh Bhargava. Results show that there is no-significant difference in emotional maturity with high and low level anxiety in teenagers.

KEYWORDS:

ANXIETY, EMOTIONAL MATURITY, TEENAGERS

INTRODUCTION:

The feeling of anxiety is an intrinsic part of the condition of human being. It is a natural response, built into the human design, to certain environmental and psychological factors. Presumably, man has always experienced anxiety, as long as he has existed as a species, though the contents of his anxieties, and the ways in which these affects are felt and categorized phenomenally, as well as the kinds of circumstances that give rise to them, are, to a considerable degree, a function of the assumptions of the cultures in which he has lived.

The theme of anxiety not a delineation of the concept but an awareness of the effect appears in the first literary narrative, (Mason, 1972) the Epic of Gilgamesh. Throughout early Greek thought there is a concern with the seeping of tranquility. This is in a sense, the opposite and more positive end of the dimension of anxiety and it says something for the optimism of the ancient Greek world that their emphasis was on un-anxiousness rather than on anxiousness.

In philosophy Socrates changed the emphasis of the study from the external to the internal forms of reference and furthered the shifts towards a personal, self-oriented worldview. His contributions, as reported by

Plato, do not deem to have added directly to the developing concept of anxiety, but they affect. Aristotle, for his part, discussed the emotion fear at some length. In his delineation fear, the concept is fairly close, though not identical, to that of anxiety.

In 1747, a book, "An enquiry into the Origin of the Human Appetites and Affections", appeared. The author of this book has still not been definitely determined but, it may have been James Long (McReynolds, 1969). This book gave for the first time the idea that a state of uncertainty can lead to anxiety. He uses the term "uneasiness" but he also uses the word "anxiety" in a technical sense.

It is not clear when the present period, anxiety and the modern era, begin, but perhaps it would be accurate to consider Soren Kierkegaard as its chief progenitor. Kierkegaard is particularly relevant here because of his classic work on anxiety, "Begrudges Angest", written in 1844 and translated into English in 1944 under the title "The Concept of Dread". He distinguished between two different kinds of anxiety. The first, which is especially evident in children, is the apprehension associated with "a seeping after adventure, a thirst for the prodigious, the mysterious". The second is the anxiety concerned with the choice that one faces as a function of his responsibilities as a person.

In 1859, Heinrich Newsman, in his influential textbook of psychiatry, developed an interpretation of anxiety (Angst) as a danger signal. Anxiety arises when the person becomes aware of threats to vital concerns. The term "Anxiety" was appearing as a standard term in medico-psychiatric. Freud proposed the delineation of a new diagnostic entity, the "Anxiety Neurosis". Two early contributions to science, those of Darwin and of Freud, established anxiety as a subject of scientific study. Subsequently, Spence Taylor, Sarason, Spielberger and their respective associates transformed the concept of anxiety into measurable and useful psychological construct.

Darwin (1872) made anxiety and fear (which he did not distinguish from one another) the subjects of scientific inquiry by describing and documenting their manifestations in man and animals. He pointed out that these among higher animals (rapid heart beat, perspiration, dryness of mouth, and change in voice quality) are so clearly established that one can readily recognize these emotions. An important characteristic of the expression of fear was that it varied in its level of intensity.

Anxiety is a multi-system response to a perceived threat or danger. It reflects a combination of biochemical changes in the body, the patient's personal history and memory, and the social situation. As far as we know, anxiety is a uniquely human experience. Other animals clearly know fear, but human anxiety involves an ability, to use memory and imagination to move backward and forward in time, that animals do not appear to have. The anxiety that occurs in post-traumatic syndromes indicates that human memory is a much more complicated mental function than animal memory. Moreover, a large portion of human anxiety is produced by anticipation of future events. Without a sense of personal continuity over time, people would not have the "raw materials" of anxiety.

Emotional maturity refers to that stage of individual in which he/she is able to feel proper emotion in proper situations. A person is emotionally mature or stable when his/her responses to the situation are appropriate to the degree of development.

When a person is able to keep a control on the maturity factor like emotional instability, emotional regression, social maladjustment, personality disintegration and lack of independent, he/she is called an emotional mature person.

Emotional maturity in its broadest sense means the degree to which the person has realized his/her potential for richness of having and has developed his capacity to enjoy things, to love and to laugh, his/her capacity of whole hearted sorrow when for grief arises, his capacity for experiencing anger when faced with thwarting that would increase the temper of any reasonably tolerance or sensible person and his/her capacity to show fear when there is occasion to the fringed.

Bessell, R. (2004) emotional maturity refers to those behavioral patterns that make for good adjustment in life.

Lisa J.M.,(2004) emotional maturity brings with it a capacity for independence, the willingness to take action as free agent, along with the capacity to affiliate to freely initiate and sustain leaving relationship.

Hence emotional maturity refers to that stage of individual in which the individual is able to face reality and deal with it, is interested in given and receiving love, is able to accept frustrations and hostility in a constructive manner.

RATIONAL OF THE STUDY:

The term anxiety is also used to refer to a complex psycho-biological process (Spielberger, 1972). In essence, the concept of anxiety as a process implies a theory of anxiety that stress, threat and state anxiety are fundamental constructs or variables. So, anxiety as process refers to a sequence of cognitive affective, psychological and behavioral events. This process may be initiated by a stressful external stimulus that is perceived or interpreted as dangerous or threatening, or by thought or idea that forecasts threat or that causes the individual to recall earlier danger are immediately followed by A-state reactions, or by increment in the level of A-state intensity. It should be noted that, this process also involves stress, threat, physiological changes, and behavioral reactions. The concept of anxiety implies the following temporally ordered sequence:

External Danger Perception of Danger Emotional Reactions

(Stress) (Threat) (State Anxiety)

Life is become complex day by day in the present circumstances. Teenagers are facing difficulties which are giving rise to many psycho-somatic problems such as anxiety, tension, frustration and emotional upset in day to day. At present anxiety is increasing at an alarming rate. In such state of affairs the teenagers need to more emotional maturity so as to establish satisfactory relationship with their environment and their own self.

OBJECTIVES OF THE STUDY:

Following are the objectives of the present investigations:

1. To study the levels of anxiety among teenagers (boys and girls).
2. To study the impact of anxiety on emotional maturity of low anxiety and high anxiety of teenagers.
3. To compare the anxiety of teenagers boys and teenagers girls students.

HYPOTHESIS OF THE STUDY:

In the light of stipulated objective, the following hypotheses have been formulated:

1. There exists significant difference in anxiety of boys and girls.
2. There exists significant difference in emotional maturity of students having high anxiety and students having low anxiety.
3. There exists significant difference in emotional maturity of boys having high anxiety and boys having low anxiety.
4. There exists significant difference in emotional maturity of girls having high anxiety and girls having low anxiety.
5. There exists significant difference in emotional maturity of boys having high anxiety and girls having high anxiety.
6. There exists significant difference in emotional maturity of boys having high anxiety and girls having low anxiety.
7. There exists significant difference in emotional maturity of boys having low anxiety and girls having high anxiety.
8. There exists significant difference in emotional maturity of boys having low anxiety and girls having low anxiety.

SAMPLE:

Sampling, a fundamental thing in all statistical methodology of research, is a part of the strategy of research, and has by now acquired the status of a technical job. It is imperative for the scientific minded researcher to take good care of sampling. This study covered the target population of twelfth grade boys and girls of Ambala, Yamuna Nagar, Kurukshetra and Panchkula of Haryana, INDIA. A total number of 8 schools were selected randomly from nearly 20 Govt. Schools. 800 students were selected to form the sample.

Age and Sex wise Distribution of Sample:

Table 1 shows age-wise distribution of sample. As is clear from the table, most of the students selected in the sample were of the age group 14 to 19 years.

TOOLS:

Following tools were used for the collection data:

1. Emotional maturity scale by Yeshbeer Singh & Mahesh Bhargava.
2. State-Trait Anxiety Inventory by Spielberger.

STATISTICAL TECHNIQUES:

In the present study 't' test was employed to ascertain the significant differences between the means of the groups of (a) students belonging to high and low levels of anxiety, and (b) boys and girls.

ANAYSIS and INTERPRETATION:

Formation of Comparison Group:

In order to make comparison in emotional maturity between various groups of students, the sample was

divided into groups on the basis of sex and scores obtained on State-Trait Anxiety Inventory (STAI). The usual method of formation of high, average and low groups was followed. The scores of the students on STAI were arranged in ascending order and then top 27% and bottom 27% students were selected to form high level group and low level group. For sex variable, two groups of boys and girls were formed.

Comparison of Anxiety of Teenager (Boys and Girls)

It is clear from the table-2 that the value of 't' for comparison group is 1.14 which is not significant at 0.05 level of confidence. This means that both the means do not differ significantly. Thus it may be said that both the groups do not differ significantly as far as their level of anxiety is concerned. Therefore, the hypothesis is rejected.

Comparison of Emotional Maturity of Students having High Trait Anxiety and Students having Low Trait Anxiety

It is clear from the table-3 the value of 't' for comparison groups is 1.1 which is not significant at 0.05 level of confidence. This means that both the means do not differ significantly. Thus it may be said that both the groups do not differ significantly as far as their emotional maturity is concerned. Therefore, the hypothesis is rejected.

Comparison of Emotional Maturity of Boys having high anxiety and Boys having low anxiety.

. It is clear from the table that-4 the value of 't' for comparison groups is 0.31 which is not significant at 0.05 level of confidence. This means that both the means do not differ significantly. Thus it may be said that both the groups do not differ significantly as far as their emotional maturity is concerned. Therefore, the hypothesis is rejected.

Comparison of Emotional Maturity of Girls having High Trait Anxiety and Girls having Low Trait Anxiety.

Table 5 shows the means S.D. and 't' value of scores for girls having high trait anxiety and girls having low trait anxiety on emotional maturity. It is clear from the table that the value of 't' for comparison groups is 0.32 which is not significant at 0.05 level of confidence. This means that both the means do not differ significantly. Therefore, the hypothesis is rejected.

Comparison of Emotional Maturity of Boys having High Trait Anxiety and Girls having High Trait Anxiety.

Table 6 shows the means S.D. and 't' value of scores for boys having high trait anxiety and girls having high trait anxiety on emotional maturity. It is clear from the table that the value of 't' for comparison groups is 0.30 which is not significant at 0.05 level of confidence. This means that both the means do not differ significantly. Therefore, the hypothesis is rejected.

Comparison of Emotional Maturity of Boys having High Trait Anxiety and Girls having Low Trait Anxiety.

Table 7 shows the means S.D. and 't' value of scores for boys having high trait anxiety and girls having low trait anxiety obtained on emotional maturity. It is clear from the table that the value of 't' for comparison groups is 0.0 which is not significant at 0.05 level of confidence. This means that both the means do not differ significantly. Therefore, the hypothesis is rejected.

Comparison of Emotional Maturity of Boys having Low Trait Anxiety and Girls having High Trait Anxiety.

Table 8 shows the means S.D. and 't' value of scores for boys having low trait anxiety and girls having high trait anxiety on emotional maturity. It is clear from the table that the value of 't' for comparison groups is 0.06 which is not significant at 0.05 level of confidence. This means that both the means do not differ significantly. Therefore, the hypothesis is rejected.

Comparison of Emotional Maturity of Boys having Low Trait Anxiety and Girls having Low Trait Anxiety.

Table 9 shows the means S.D. and 't' value of scores for boys having low trait anxiety and girls having low trait anxiety on emotional maturity. It is clear from the table that the value of 't' for comparison groups is 0.50 which is not significant at 0.05 level of confidence. This means that both the means do not differ significantly. Therefore, the hypothesis is rejected.

CONCLUSION:

In the light of above mentioned hypotheses, the following outcomes are observed:

1. There exists no-significant difference in anxiety of boys and girls.
2. There exists no-significant difference in emotional maturity of students having high anxiety and students having low anxiety.
3. There exists no-significant difference in emotional maturity of boys having high anxiety and boys having low anxiety.
4. There exists no-significant difference in emotional maturity of girls having high anxiety and girls having low anxiety.
5. There exists no-significant difference in emotional maturity of boys having high anxiety and girls having high anxiety.
6. There exists no-significant difference in emotional maturity of boys having high anxiety and girls having low anxiety.
7. There exists no-significant difference in emotional maturity of boys having low anxiety and girls having high anxiety.
8. There exists no-significant difference in emotional maturity of boys having low anxiety and girls having low anxiety.

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Table 1: Age and Sex wise distribution of Sample

Sr. No.	Age	No. of Boys	No. of Girls
1	14 Years	75	60
2	15 Years	73	55
3	16 Years	68	57
4	17 Years	79	45
5	18 Years	81	55
6	19 Years	84	68
Total		460	340

Table 2: Comparison of Anxiety of Teenager (Boys and Girls)

Comparison Groups	N	Mean	S.D.	't'
Boys	460	45.4	4.9	1.14
Girls	340	42.3	4.3	

df = 198, t = 1.96 at 0.05 level

Table 3 Comparison of Emotional Maturity of Students having High Trait Anxiety and Students having Low Trait Anxiety

Comparison Groups	N	Mean	S.D.	't'
Students High Trait Anxiety	216	46.22	4.6	1.1
Students Low Trait Anxiety	216	44.26	4.1	

df = 106, t = 1.98 at 0.05 level.

Table 4: Comparison of Emotional Maturity of Boys having high anxiety and Boys having low anxiety.

Comparison Groups	N	Mean	S.D.	't'
Boys High Anxiety	125	64.2	5.4	0.31
Boys Low Anxiety	125	61.2	4.9	

df = 58, t = 2.00 at 0.05 level

Table 5: Comparison of Emotional Maturity of Girls having High Trait Anxiety and Girls having Low Trait Anxiety.

Comparison Groups	N	Mean	S.D.	't'
Girls High Trait Anxiety	92	47.68	5.89	0.32
Girls Low Trait Anxiety	92	48.16	5.58	

df = 48, t = at 2.01 at 0.05 level.

Table 6: Comparison of Emotional Maturity of Boys having High Trait Anxiety and Girls having High Trait Anxiety.

Comparison Groups	N	Mean	S.D.	't'
Boys High Trait Anxiety	125	48.17	5.89	0.30
Girls High Trait Anxiety	92	47.68	5.89	

df = 53, t = at 2.00 at 0.05 level.

Table 7: Comparison of Emotional Maturity of Boys having High Trait Anxiety and Girls having Low Trait Anxiety.

Comparison Groups	N	Mean	S.D.	't'
Boys High Trait Anxiety	125	48.17	5.89	0.0
Girls Low Trait Anxiety	92	48.16	4.58	

df = 53, t = at 2.00 at 0.05 level.

Table 8: Comparison of Emotional Maturity of Boys having Low Trait Anxiety and Girls having High Trait Anxiety.

Comparison Groups	N	Mean	S.D.	't'
Boys Low Trait Anxiety	125	47.68	3.69	0.06
Girls High Trait Anxiety	92	47.68	5.89	

df = 53, t= at 2.00 at 0.05 level.

Table 9: Comparison of Emotional Maturity of Boys having Low Trait Anxiety and Girls having Low Trait Anxiety.

Comparison Groups	N	Mean	S.D.	't'
Boys Low Trait Anxiety	125	47.68	3.69	0.50
Girls Low Trait Anxiety	92	48.16	4.58	

df = 53, t= at 2.00 at 0.05 level.

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Biological studies of living organisms

Rakhi Sarraf,
Research Scholar, Bhagwant University, Ajmer (Rajasthan)
E-mail:- rangana.saraf@gmail.com

Abstract:- Paper emphasis on law genes are responsible for the different traits in living organisms, which Passes from one generation to another. Mutation causes various types of drastic changes in living organisms.

Key words:-

Genes: - A basic unit of heredity.

Alleles: - Alternative forms of a gene.

Trait:- Any recognizable feature of an individual.

Introduction:-

- The paper fusses or biological studies of living organisms related to genetics. Genetics is the study of principal of heredity and variations.

Objective of the study: -

- What is genetic?
- To study genetic material, genetic code protein synthesis etc.
- Mutation & its types
- Human genetics
- TO explain gene expression and regulation.
- To understand the meaning of genetic engineering.
- Applications and possible dangers of genetic engineering.

What is genetics:-

- Genetics is the study of principles and mechanism of heredity and variation. Heredity is the studies of transmission of characters from parents to offspring of from are generation to nested generation. Variations are differences found in morphological physiological, Cytological and individuals of belonging to same species, race and family.

Genetic material, genetic code and protein synthesis:-

- Genetic material is material substance that not only controls the formation and expression of traits in organisms but can also replicate and pass on from a cell to its daughters to the next DNA is the genetic material DNA occurs in cells which constitutes chromosomes.

Genetic code

- A sequential arrangement of the bases in the DNA molecule which controls sequence of amino acids in a protein

Protein synthesis

- It involves transcription initiation, elongation and termination of polypeptide chain. The sequence of bases on mRNA decides the sequence of amino acids in a protein. Protein synthesis requires former amino acids, mRNA, tRNA and amino acryl tRNA synthetics PNA are formed over DNA during transcription while protein synthesis occur in the cytoplasm over ribosome's.

Mutation & its types

- Though DNA replication is near exact and any error that might occur due to wrong base pairing is corrected during proof-reading and by repair mechanisms, sometimes the base changes in DNA occur due to mutagens like rays, UV rays, higher energy radiations and chemicals. These changes causes mutation mutations that influence protein structure belong to three types
 1. Gene of point mutation
 2. Addition or deletion of DNA segments due to cross over and re combination
 3. Jumping genes.

Insertion or deletion of one or more nucleotides of a cistron changes the reading of the frame of base sequence is called frame- shift mutation. Cancer is also due to chromosomal deletions, translocations and jumping genes.

Human genetics:-Is mainly studied by pedigree analysis since humans cannot be used for studies on inheritance pattern. It helps to understand the inheritance of some naturally occurring traits like eye color, blood grouping to roll one's tongue, skin color, mental ability hemophilia etc. it helps to identify and understand some health related genetic diseases.

Gene expression and regulation:- It is the mechanism at by the which a gene is able to express itself in the organism. It involves biochemical genetics. It consists of synthesis of specific RNA s, polypeptides, structural proteins, enzymes which controls the structure or functioning of specific traits.

Gene regulation:- All the mature cells of a living being possess the same gene complement or genetic material. Even then they differ in their structure and function. It is possible only if the organism has a mechanism of regulating gene activity, allowing some to function and restraining others through a system of switching on and switching off. From a number of studies on the metabolism of bacterium & coli, Jacob & Monod found that the genetic material possesses regulated gene units called Peron . structural genes and operator genes together form an Peron.

Genetic engineering:- It is also human as recombinant DNA technology. It is the manipulation of DNA from different sources so as to recombine desired DNA portions for repair, improvement perfection and matching of a genotype.

Applications of genetic engineering:-

1. To understand the structure and mechanism of expression of genes.
2. The introduction of specific genes into bacterial or yeast cells has enabled man to create living factories churning out chemicals. E.g. - Human insulin, human growth hormones.
3. It has also helped man to use gene therapy for certain diseases like phenyl dalton and hemophilia

Dangers:-The dreadful microorganisms produced as a result of genetic engineering if used in biological warfare can wipe off the human or any living population from the earth.

Conclusions:- Paper concludes various advantages and disadvantages of genetic engineering and how genetics aware about heredity and variations which plays important part in our life.

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A Descriptive & critical Study of Athletics

Sandeep,
Research Scholar, Bhagwant University (Rajasthan)
dr.sandeep.bhu31@gmail.com

Abstract:-

Athletics is an exclusive collection of sporting events that involve competitive running, jumping, throwing, and walking. The most common types of athletics competitions are track and field, road running, cross country running, and race walking. The simplicity of the competitions, and the lack of a need for expensive equipment, makes athletics one of the most commonly competed sports in the world. Athletics is mostly an individual sport, with the exception of relay races and competitions which combine athletes performances for a team score, such as cross country. Organized athletics are traced back to the Ancient Olympic Games from 776 BC, and most modern events are conducted by the member clubs of the International Association of Athletics Federations. The athletics meeting forms the backbone of the modern Summer Olympics, and other leading international meetings include the IAAF World Championships and World Indoor Championships, and athletes with a physical disability compete at the Summer Paralympics and the IPC Athletics World Championships.

Keywords and Tagline:-

Keywords

In addition to the University's key words, the following words that describe UW Oshkosh Intercollegiate Athletics may be used in day-to-day, athletics-related communications.

- Strength
- Determination
- Power
- Teamwork
- Sportsmanship
- Grace
- Quality
- Championship
- Competition
- Tagline

The Athletics Department's "Tradition built on success" tagline can be used on many of the department's communications, both internal and external. However, it must not be used as part of the Athletics word mark and logo.

Introduction:-

Athletics is an exclusive collection of sporting events that involve competitive running, jumping, throwing, and walking. The most common types of athletics competitions are track and field, road running, cross country running, and race walking. The simplicity of the competitions, and the lack of a need for expensive equipment, makes athletics one of the most commonly competed sports in the world. Organized athletics are traced back to the Ancient Olympic Games from 776 BC, and most modern events are conducted by the member clubs of the International Association of Athletics Federations. The athletics meeting forms the backbone of the modern Summer Olympics, and other leading international meetings include the IAAF World Championships and World Indoor Championships, and athletes with a physical disability compete at the Summer Paralympics and the IPC Athletics World Championships. We will have a better understanding of the future of athletics, if we know more about the inception of athletics and how it evolved through the ages. Athletics have a proud and colourful history. This article will not attempt to cover the evolution process in detail. It will give a brief

overview of the history of athletics. Based on the overview of the history of athletics, some analysing questions will be asked which are intended to widen your perspective of athletics as it is experienced and practiced today.

Importance of proposed research work:-

Athletic contests in running, walking, jumping, and throwing are among the oldest of all sports and their roots are prehistoric. Athletics events were depicted in the Ancient Egyptian tombs in Saqqara, with illustrations of running at the Heb Sed festival and high jumping appearing in tombs from as early as of 2250 BC. The Tailteann Games were an ancient Celtic festival in Ireland, founded around 1800 BC, and the thirty-day meeting included running and stone-throwing among its sporting events. The original and only event at the first Olympics in 776 BC was a stadium-length running event known as the stadion. This later expanded to include throwing and jumping events within the ancient pentathlon. Athletics competitions also took place at other Panhellenic Games, which were founded later around 500 BC. The Cotswold Olimpick Games, a sports festival which emerged in 17th century England, also featured athletics in the form of sledgehammer throwing contests. Annually, from 1796 to 1798, L'Olympiade de la République was held in revolutionary France, and is an early forerunner to the modern summer Olympic Games. The premier event of this competition was a running event, but various ancient Greek disciplines were also on display. The 1796 Olympiade marks the introduction of the metric system into sport.

Objectives of the present study:-

The International Association of Athletics Federations, the sport's governing body, defines athletics in five disciplines: track and field, road running, race walking, cross country running, and mountain running. [13] All forms of athletics are individual sports with the exception of relay races. However, athletes' performances are often tallied together by country at international championships, and in the case of cross country the finishing times of the top athletes from each team or country are combined to declare a team victor.

Future:-

It is interesting to note that the rules and regulations implemented in Europe and Great Britain towards the end of the 1800's, and later implemented in all other countries of the world were designed to suit the physical attributes and life style of only a few specific culture groups in the world. The type of life style of the European led to most of the rules and regulations that all countries in the world abide by today. The exclusion of women and children in active sport, until fairly recently, also had a huge influence in the way that we participate in athletics today. As athletics became more regulated over the past 150 years, more events could take place on one day, but the number of participant in athletics became rapidly less. The industrial revolution also contributed to the ever decreasing number of participants and spectators in athletics. For the sport to survive the current industrial revolution, the format in which we participate must change to accommodate not only the participation of men, women and children as individuals. The sport should be able to accommodate the participation of groups, families or even whole communities in a team format. Current rules and regulations restrict participation in large numbers. The only section of athletics which have limited success at the moment in engaging family and friends all at the same time are Road Running and Race Walking. Unfortunately, the increase in the popularity of ultra-distance running/walking and the relevant rule changes regulating ultra-marathons in recent years restrict participation in these events to the super fit athletes only.

Conclusion:-

The history of athletics has taught us that the sport was originally used for survival purposes; later it was used to remain fit and healthy, and in recent history the focus shifted to uniformity, safety and excellence. History also taught us that the format in which athletics were practised during ancient times differed from country to country. In ancient competitions the emphasis was on the final result, rather than the method that was used. The free style techniques and few rules that were used at the time confirm this fact. In ancient history the sport was tailor made to suit society's need to survive. As the sport evolves over time, the sport became more focused on excellence and as a result it became less accessible to the average member of society. The large amount of rule changes that

took place in the late 1800's and early 1900's changed the focus in athletics to the method on how the performance was achieved. As a result, in the early 1900's the free style competitions were replaced with competitions where all competitors used very similar methods. With the exception of Road Running, Cross Country and Race Walking, the rules as it is applied today significantly reduces the capacity of the sport to accommodate large numbers of participants. The rule changes in the late 1800's and early 1900 have favoured certain life styles and body types. Life styles and body types differ from country to country and from culture to culture. Free style athletics will give a better reflection of the specific skills of athletes in the various countries and will encourage larger participation of the relevant societies. It will also reduce the gap that exists between athletes with poor facilities and athletes competing in well developed facilities.

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A Critical study of E-networking in the present scenario

Santosh Singh,

Research Scholar, Department of computer science J.J.T.University, (Rajasthan)

dr.santosh.jjtu@gmail.com

Abstract:-

The authors propose a paradigm shift in the investigation of the self. Synthesizing neuroimaging results from studies investigating the self, the authors first demonstrate that self-relatedness evaluation involves a wide cerebral network, labeled E-network, comprising the medial prefrontal cortex, precuneus, temporoparietal junction, and temporal poles. They further show that this E-network is also recruited during resting state, others' mind reading, memory recall, and reasoning. According to these data, (a) the profile of activation of the E-network demonstrates no preference for the self, and (b) the authors suggest that activity in this network can be explained by the involvement of cognitive processes common to all the tasks recruiting it: inferential processing and memory recall. On this basis, they conclude that standard ways to tackle the self by considering self-evaluation do not target the self in its specificity. Instead, they argue that self-specificity characterizes the subjective perspective, which is not intrinsically self-evaluative but rather relates any represented object to the representing subject. They further propose that such self-specific subject– object relation is anchored to the sensor motor integration of efference with reference (i.e., the motor command of the subject's action and its sensory consequence in the external world).

Keywords:- first-person perspective, sensorimotor integration, efference, shared representations, reasoning, social cognition

Introduction :-

An electrical network is an interconnection of electrical elements such as resistors, inductors, capacitors, transmission lines, voltage sources, current sources and switches. An electrical circuit is a special type of network, one that has a closed loop giving a return path for the current. Electrical networks that consist only of sources (voltage or current), linear lumped elements (resistors, capacitors, inductors), and linear distributed elements (transmission lines) can be analyzed by algebraic and transform methods to determine DC response, AC response, and transient response.

A network that contains active electronic components is known as an electronic circuit. Such networks are generally nonlinear and require more complex design and analysis tools.

Network Analyzer :-

A network analyzer is an instrument that measures the network parameters of electrical networks. Today, network analyzers commonly measure s–parameters because reflection and transmission of electrical networks are easy to measure at high frequencies, but there are other network parameter sets such as y-parameters, z-parameters, and h-parameters. Network analyzers are often used to characterize two-port networks such as amplifiers and filters, but they can be used on networks with an arbitrary number of ports.

The E-networking industry expands as new ground-breaking technologies are introduced into the market. This merges biology and technology to make advancements in the medicine, food, agriculture, and other fields. As the field expands, the need for biotechnology scientists and experts to network with one another becomes increasingly important.

The problem is that the field is so busy and there is a lot of work to do, it can be hard to find time to network with others. That is why e-networking is so important. E-networking uses the standard principals of networking but instead of the process taking place in person, it takes place online. This saves time and can help you develop friendships easily from all over the globe.

The fact is that biotechnology is something people are interested in on a global scale. The more people you can reach and network with, the easier it will be to make advances. That is what e-networking is for. Everything can be done online. For example, if you read about someone who made advancements in the medical aspect of biotechnology and you are interested in asking them about it, you can send an email. This benefits both of you because the person would be more likely to respond.

Objective of Present Study :-

The main objective of this study is to collect and analysis the views of E-networking that perform network on Internet with regards to the impact of security threats on E-network. An E-networking cannot expect perfect security to be obtained for its network. The individual with whom you are communicating may be masquerading as someone else. The result could be diversion of funds, lose of confidential information, repudiation of contracts and so on.

Today the Threats have affected the every aspect of E-networking. Present study concentrated upon gauging the Impact of Threats to Internet users. As E-Networking is growing day by bay and also its challenges i.e. threats. So the main aim of this study is to know up to which extent it has impact on users.

Specific objective :-

To explore the usage pattern of E-Networking.

To categorize various threats on basis of their potential to jeopardize network users.

To find out the advantages of E-networking.

To find out the percentage of users adopting security measures.

By using security provisions, internet users are able to face the security challenges.

Conclusions :-

The York/Habitat Networking Initiative showed that in the absence of resources allocated to promote collaborative activities among people busy with their own current endeavours, it is very difficult to maintain interpersonal interactions. A great deal of organizing must be done by those most involved in establishing a new network, especially one that links people across several traditional fields.

The Native Computer Communications Network Project was a good example of how a focus on creating a network of computers does not necessarily ensure the interpersonal networking of the potential users of that technology. If the people were not communicating with each other before, developing another method of communication doesn't mean they'll start.

Habnet was a project that tried to overcome the limitations of these initiatives. It succeeded as an exploration of the potentials of online interactions, but failed to thrive when it ceased to grow. It again showed how difficult it is to create an online network without sufficient numbers of people to maintain enough interaction, and thereby enough interest, to make it worthwhile to use.

Computer communication, it seems, will become a much more useful networking tool when large numbers of people with similar interests acquire access to the technology. Though it can expedite the formation of new interpersonal networks by overcoming the space and time barriers faced by traditional networking techniques, it still requires a great deal of concentrated effort and resources to get the people to use it. This problem should become increasingly minimized over the coming years as the technological innovations become more diffused throughout society.

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श्री भट्टनारायण प्रणीतम् के नाटक के पात्रों का निजी परिवेश एवं अनुशीलन का विस्तृत अध्ययन

सीमा सिंह

स्थान - भगवंत विश्वविद्यालय अजमेर, राजस्थान(भारत)

सांराशिका- भारतीय साहित्योद्यान को पल्लवित और विकसित करने वाले महान साहित्यकारों की यह परम्परा रही है कि वे अपने जीवन के विषय में किंचित भी उल्लेख नहीं करते । इसी परम्परा का पालन "वेणीसंहार" नामक नाटक के रचनाकार भट्टनारायण ने भी किया है । भट्टनारायण की एकमात्रा उपलब्ध कृति "वेणीसंहार" है ।

वेणीसंहार का कथानक महाभारत से लिया गया है । मुख्य कथानक कौरवों की सभी में पाण्डवों तथा द्रौपदी का अपमान है । यह नाटक द्रौपदी की खुली वेणी के संहार (संवारने) की घटना को केन्द्र बनाकर चलता है । कौरव सभा में द्रौपदी के केश खींचे जाने पर द्रौपदी की वेणी खुल जाती है और वह प्रण रखती है कि जब तक इस अपमान का प्रतिशोध नहीं लिया जायेगा, वह वेणी नहीं बाधेगी, भीमसेन ने भी तुरन्त प्रतिज्ञा की कि वह दूर्योधन के मद्यरक्त से रंगे हाथों ही द्रौपदी का वेणी संहार करेगा । प्रथम अंक में नाटक विद्या, अर्थ, स्वरूप, परिमाण, संस्कृत नाटक का विकास क्रम एवं नाटकों परिचय का वर्णन है । द्वितीय अंक में रचना की समकालीन परिस्थितियां कथावस्तु एवं कथानक में वस्तु-संमति का उल्लेख है । तृतीय और चतुर्थ अध्याय में पात्रों का वर्णन एवं पात्रों का संवाद नारी पात्रों की करुणाई दिखाई गई है । पंचम अंक में शैली शिल्प, नाटकों की शैलीगत विशेषताएं, द्वन्द्वभाषा एवं षष्ठ अंक में नाटकों का उद्देश्य नाटकों की मूल संवेदना, नाटकों में निहित विचार सूत्रा, समस्याएं एवं समाधान तथा वर्तमान में प्रभाव दिखाते हुए उपर्युक्त नाटकों की सारभूत आलोचना तथा नाटककारों में भट्टनारायण प्रणीतम् नाटक का स्थान वर्णन है ।

प्रस्तावना - भारतीय साहित्योद्यान को पल्लवित और विकसित करने वाले महान साहित्यकारों की यह परम्परा रही है कि वे अपने जीवन के विषय में किंचित भी

उल्लेख नहीं करते। इसी परम्परा का पालन "वेणीसंहार" नामक नाटक के रचनाकार भट्टनारायण ने भी किया है। इसकी स्थिति का प्रश्न भारतीय साहित्य का अनुमानित एवं गुफित प्रश्न रहा है। भट्टनारायण की एकमात्रा उपलब्ध कृति "वेणीसंहार" है। अपने अपने सम्बन्ध में "वेणीसंहार" नामक की प्रस्तावना में अपना नाम "भंगराजलक्ष्मी भट्टनारायण दिया है। इसके अतिरिक्त उनका कोई परिचय उनकी कृति से प्राप्त नहीं होता। अतः अन्तसाक्ष्य के आधार पर आपका समय निर्धारित करना। कल्पना का विषयमात्रा है क्योंकि आपने न तो वेणीसंहार में अपने विषय में कुछ लिया है और न ही अपने से पूर्ववर्ती किसी कवि तथा समकालीन किसी घटना का उल्लेख ही किया है। अतः बहिःसाक्ष्य की दृष्टि से आपके स्थिति काल का अनुमान अनुक साहित्यकारों एवं इतिहास वेताओं के द्वारा लगाया गया है।

संस्कृत-साहित्य के महाकवियों एवं नाटककारों ने अपनी अमर कृतियों से साहित्य निधि का विस्तार किया है एवं उसे समृद्ध करते रहें है किन्तु कब कहाँ और कैसे ? यह प्रश्न अनुमान के द्वारा ही हल होते रहे हैं। इन मनीषियों एवं साहित्यकारों ने स्वयं के विषय में व अपने जीवन वृत्त, समय के विषय में अपनी कृतियों में उल्लेख नहीं किया है जिससे कि इनकी कृतियों की श्रेष्ठता तो प्रत्यक्ष दर्शित होती है किन्तु स्वयं कर्ता का समय काल तक प्रमाणिक नहीं हो पाता। अतः अपनी रचनाओं व तत्कालीन घटनाओं का उल्लेख न करना एक परम्परा ही बन गई थी। जिसकी एक कड़ी भट्टनारायण भी है। ये सार्वकालिक कवि इस परम्पराओं में जुड़ने के कारण देशकाल का उल्लेख करना महत्व से परे समझते थे। अतः भट्टनारायण ने भी अपने सम्बन्ध में स्पष्ट रूप से कुछ भी नहीं लिखा है। अन्ततोगत्वा आश्रय प्राप्त करना पड़ता है अनुमान एवं कल्पना का 'भट्टनारायण' ने वेणीसंहार की प्रस्तावना में अपने को "मृगराजलक्ष्या" तदिदं कवेमृगराजलक्ष्मणे भट्टनारायणस्य कृति वेणीसंहार नाम नाटक प्रयोक्तुमुधता वयम" इत्यादि कहा है। अतः इससे यह ज्ञात होता है इनको कवीन्द्र तथा कविमृगेन्द्र कहा जाता था। इसके अतिरिक्त यह नाटक नाटककार के विषय में कुछ भी जानकारी नहीं देता।

किन्तु सौभाग्य की बात है कि बंगाल के राजाओं के विषय में संस्कृत भाषा में कतिपय ऐतिहासिकलेख मिलते हैं जिनसे कि "वेणीसंहार" के रचयिता

के जीवन पर कुछ प्रकाश पड़ता है। यद्यपि यह वंशावली ऐतिहासिक दृष्टि से बहुत प्रामाणिक नहीं है और न ही इसी के आधार पर ठीक-ठाक समय ही निश्चित हो पाया है।

” क्षितीश वंशावली चरितम् ” के अनुसार भट्टनारायण मूल रूप से काव्य कुब्ज का निवासी शाण्डिल गोत्रोत्पन्न सारस्वत ब्राह्मण था। वह बंगाल में सेनवंश के प्रवर्तक ”गौडाधिपति आदिसूर” के निमन्त्रण पर अन्य चार ब्राह्मणों के साथ कंभौज में जाकर बंगाल में बस गया था। जहाँ आदि सूर ने इन्हें वैदिक अनुष्ठान कराने के निमित्त दक्षिणा में पांच गांव प्रदान किये थे। धीरे-धीरे वह राज्य सम्पत्ति उत्कर्ष को प्राप्त हो गई थी जिसके कारण इन्हें एक राज्य का प्रवर्तक माने जाने लगा था। इन्हें बंगाल ’आदिसूर’ ने क्यों बुलवाया ? इसके कारण ये जिसका उल्लेख राज्य-वंशावलियों में विभिन्न रूपों में उपलब्ध होता है-

1. एक कथा के आधार पर यह विदित होता है कि एक बार बंगाल देश में सूखा पड़ गया था। अतएव राजा ”आदिसूर” ने अपने देश में वर्षा कराने के उद्देश्य से कंभौज के पांच ब्राह्मणों को बुलवाया था। इनमें भट्टनारायण प्रमुख थे।
2. क्षितीशवंशावलीचरितम्’ के अनुसार ”आदिसूर” एक शूद्र था। वे वैदिक अनुष्ठान कराने के इच्छुक थे परन्तु शूद्र होने के कारण बंगदेशवासियों ने अनुष्ठान कराने से मना कर दिया जिससे कि उन्होंने कान्यकुब्ज से पांच ब्राह्मणों को बुलवाया था इनमें भट्टनारायण भी थे।
3. एक अन्य कथा के अनुसार यह ज्ञात होता है कि बंगदेश के राजा ने अपने देश पर आने वाली विपतियों को ध्यान में रखते हुए कन्नौज से पांच ब्राह्मणों को बुलवाया था। इन्हीं में से एक भट्टनारायण भी थे।
4. बंगराज घटक के अनुसार राजा ’आदिसूर’ एक प्रकार के यज्ञ को कराने के इच्छुक थे जिससे ईश्वर उनसे प्रसन्न हो जाए। उनकी इसी ईप्सा को पूर्ण करने वाला कोई ज्ञानी ब्राह्मण उन्हें अपने राज्य में न उपलब्ध हुआ। फलतः इस कार्य के समपादनार्थ उन्होंने कन्नौज से ब्राह्मणों को आमन्त्रित किया।

अतः उपर्युक्त चारकथाओं के अतिरिक्त एक कथा और है कि ये

ब्राह्मण परिवार धार्मिक उत्पीड़न के कारण स्वयं ही कन्नौज छोड़कर बंगाल चले गये थे।

उपर्युक्त मतों की सिद्धि में कोई भी प्रमाणिकता उपलब्ध नहीं है। अतः उपर्युक्त चारकथाओं के अतिरिक्त एक कथा और है कि ये ब्राह्मण परिवार धार्मिक उत्पीड़न के कारण स्वयं ही कन्नौज छोड़कर बंगाल चले गये थे।

उपर्युक्त मतों की सिद्धि में कोई भी प्रमाणिकता उपलब्ध नहीं है। अतः उपर्युक्त सम्पूर्ण विवरण से यह सिद्ध होता है कि 'क्षितीशवंशावली चरित्रा' 'बगराजघटक' 'राजावली' तथा 'दक्षिणायघटक कारिका' आदि वंशानुवर्णन करने वाले ग्रन्थ इस बात से तो एकमत है कि अन्त चार ब्राह्मणों के साथ कान्यकुब्ज से 'भट्टनारायण' नामक ब्राह्मण भी आया था। अतः हम प्राप्त तथ्यों के आधार पर यह स्वीकार करते हैं कि भट्टनारायण कान्यकुब्ज देश के ही निवासी नाटककार थे। वे गौडाधिपति आदिसूर के आमंत्रण पर बंगालदेश गये।

ज्ञान की वर्तमानदशा व कथावस्तु :-

वेणीसंहार का कथानक महाभारत से लिया गया है और असको नाटकीय प्रदर्शन के उपयुक्त बनाने का प्रयास किया है मुख्य कथानक कौरवों की सभा में पाण्डवों तथा द्रौपदी का अपमान है। यह नाटक द्रौपदी की खुली वेणी के संहार की घटना को केन्द्र बनाकर चलता है। कौरव-सभा में द्रौपदी के केश घीचें जाने पर द्रौपदी की घुल जाती है और वह प्रण करती है कि जब तक इस अपमान का बदला नहीं लिया जायेगा, वह वेणी नहीं बाधेगी, भीमसेन ने भी तुरन्त प्रतिक्षा की कि वह दुर्योधन के महारक्त हाथों से द्रौपदी की वेणी का संहार करेगा। अन्त में यह प्रतिज्ञा पूर्ण करके अपना प्रतिशोध पूरा करता है।

सम्बन्धित साहित्य-

Dr. Das Gupta- "The purpose of the literature was the creation of an idealized atmosphere of idealized and objective reality.

कवि विल्हण ने अपने 'विग्रमाडकक्षेवचरित' में काव्यरूपी अमृत को साहित्य समुन्द्र के मन्थन से उत्पन्न कहा है -

”साहित्यपाथोनिधिमन्थनोत्थं काव्यामृत रक्षत है कवीन्द्राः ।

कालिदास ने तो यर्थातः अपने शाकुन्तलम् ऐसे उच्च कोटि के नाटक के बल पर ही विश्वख्याति प्राप्ति की है जैसे गीतान्जलि के बल पर रवीन्द्र ने । काव्य में नाटक की प्रतिष्ठा सर्वोच्च सभी को स्वीकृत रही है । महाकवि कालिदास का कहना है-

” त्रौगुणाद्भवदमत्रा लोकचरितं नानारसं दृश्यते ।
नाट्य भिन्नरुचेर्जनस्य बहुधाप्येक समारोधनम् ।

आचार्य वामन के अनुसार-

” सन्दर्भेषु रूपकं श्रेयः तद्विचित्राम् ।
चित्रापटवट विशेषसाकल्यात ॥

आचार्य भरत के अनुसार-

नतज्ज्ञानं न तन्छिल्पं न सा विद्या न सा कला ।
न सा योगो न तत्कर्म नाट्येस्मिन् यन्त्रादृश्यते ॥“

शैक्सपियर अपने नाटकों के कारण ही आंगल साहित्य में मुर्धन्य है ।

भट्टनारयण- वेणीसंहार में 6 अंक है । इसके नायक का प्रश्न अत्यन्त विवादपूर्ण है । कोई इसका नायक दुर्योधन, कोई भीम तथा कोई युधिष्ठिर को कहता है । यह नाटक भास के 'उरुभंग' पर आधारित है ।

प्रथम अंक-

भीम और सहदेव के संवाद से प्रारम्भ होता है । वे कृष्ण के प्रयत्न के परिणाम की प्रतीक्षा कर रहे हैं जो पाण्डवों तथा कौरवों में सन्धि का प्रस्ताव लेकर गए हैं । अपनी शक्ति के द्रम्भ और उग्र क्रोध की अभिव्यक्ति करते हुए भीम उदघोष करते हैं कि यदि द्रौपदी के अपमान का बदला लिये

बना युधिष्ठिर सन्धि करते हैं तो मैं उनसे विच्छेद कर लूंगा। इसमें नाटक विद्या और श्री भट्टनारायणप्रणीतम् नाटक, अर्थ स्वरूप परिणाम, संस्कृत नाटक का विकासक्रम और उसमें श्रीभट्टनारायण प्रणीतम् का स्थान संस्कृत साहित्य में रूपक परम्परा श्री भट्टनारायणप्रणीतम् का व्यक्तित्व कृतित्व एवं उनके नाटकों का परिचय है।

द्वितीय अंक-

श्री भट्टनारायण प्रणीतम् नाटकों का वस्तुविधान नाटक-रचना की समकालीन परिस्थितियां नाटकों की कथावस्तु, कथानक में वस्तु-संमति को बताया है।

तृतीय अंक-

श्री भट्टनारायण प्रणीतम् नाटक का चित्रांकन शिल्प एवं नाटकों में पात्राचयन, प्रमुख नारी पात्रा प्रमुख पुरुष पात्रा, पात्रा चयन में इतिहास एवं कल्पना का प्रयोग है।

चतुर्थ अंक-

नाटक की कथावस्तु, पात्रों का संवाद, मात्रा मायाधुधों की गरिमा एवं नारी पात्रों में करुणाई का वर्णन।

पंचम अंक -

श्री भट्टनारायण प्रणीतम् नाटकों का शैली शिल्प, नाटकों में शैलीगत विशेषताएं, शैली भाषा छन्द।

षष्ठ अंक-

नाटक का उद्देश्य, नाटकों की मूल सर्वेदना, नाटकों में निहित

विचार सूत्र, समस्याएं एवं समाधान उद्देश्य का वर्तमान में प्रभाव ।

निष्कर्ष:-

उपर्युक्त समस्त नाटकों को सारभूत आलोचना, नाटकों का प्रदेय नाटककारों में श्री भट्टनारायण का स्थान ।

जहां तक वेणीसंहार नाटक के नाटकीय होने का प्रश्न है तो इसमें इस तत्व की अल्पता है। डा० कीथ के शब्दों में - "कुल मिलाकर यह नाटक अपाटकीय है।" इस नाटक में वर्णनों ने व्यापार को अवरुद्ध कर दिया है। इस रूप में प्रस्तुत किये गये विवरणों की बहुलता उलझन पैदा करती है। और रोचकता को नष्ट करती है। इसमें चरित्रा चित्राण सुन्दर है। दुर्योधन पात्रा है। वह भावनुभक्ती की आंशकाओं का उपहास करता है।

इस प्रकार निष्कर्ष में हम कह सकते हैं कि कवि सम्मत घटनाओं को नाटकीय ढंग पर प्रस्तुत करने में उतनी सफलता प्राप्त नहीं कर सका, जितनी घटनाओं के औचित्य का ध्यान रखकर सहज ही प्राप्त कर सकता है।

सन्दर्भ ग्रन्थ सूची

1. क्षितीशवंशावली चरितम्
2. वेणीसंहार नाटकम् डा० कृष्णकान्त त्रिपाठी
3. बंगराजघटक
4. राजवली
5. दक्षिण संघीय घटककारिका
6. महाभारत गीताप्रेस, गौरखपुर
7. श्रीमद् भगवतगीता गीताप्रेस गौरखपुर
8. गीता गीताप्रेस गौरखपुर
9. संस्कृत नाटकों का विकास, चौखम्भा प्रकाशन, वाराणसी।
10. 'कालीदास के नाटक' चौखम्भा प्रकाशन, वाराणसी।

उच्च शिक्षा में निजी क्षेत्र की भागीदारी

प्राचीन भारत में हमारे देश में शिक्षा की जितनी संस्थाएँ थी वह शासन से सहायता प्राप्त नहीं थी। वैदिक काल में गुरुकुलों में परिवार में दी जाने वाली शिक्षा भी शासन से सहायता प्राप्त नहीं थी। ये नितान्त निजी तौर पर स्वैच्छिक एवं स्वतायत्तशासी थे। इन्हें सता से कोई अनुदान नहीं मिलता था। समाज के द्वारा प्रदत्त सेवा राशि पर इनका संचालन निर्भर होता था। उस समय शिक्षा का कार्य आंतरिक भावना से समाज सेवा की दृष्टि से अपने ज्ञान को प्रसारित करने के उद्देश्य से, जनहित के लिए होता था। वही शिक्षक शिक्षा देता था, जो आध्यात्मिक और भौतिक क्षेत्र में कुशल एवं दक्ष होता था। विद्यालय भवन प्रकृति की गोद में हुआ करते थे, विद्यालय का कार्यालय गुरु का घर हुआ करता था। यह परम्परा बौद्ध काल तक चली आयी। मुस्लिम और अंग्रेजी काल में विद्यालयों के स्वरूप में बदलाव आया।

आजादी के समय शिक्षा, जो समाज के विकास की नींव है, पर गहन विचार विनिमय हुआ। उसी समय भारत आर्थिक और सामाजिक संकमण के दौर से गुजर रहा था, ऐसी स्थिति में भारत के नेता, अगुवा और शिक्षाविदों ने शिक्षा का दायित्व समाज पर न छोड़कर राज्य पर प्रदान किया और इतना ही नहीं केन्द्र और राज्य दोनों पर जिम्मेदारी सौंपने का प्रयास किया। शिक्षा को संविधान की समवर्ती सूची में डाला। इसके परिणामस्वरूप केन्द्र और राज्य सरकारों ने शिक्षण संस्थाओं को मान्यता प्रदान करना शुरू कर दिया और दो-तीन साल के उपरान्त उन्हें अनुदान प्रदान करना शुरू किया। जिससे विद्यालय भवन, फर्नीचर सामग्रियाँ और शिक्षकों तथा कर्मचारियों का वेतन उस अनुदान राशि से प्रदान किया जाने लगा। संस्थाएँ बढ़ने लगीं। शासन पर व्यय-भार अधिक होने लगा। इस व्यय-भार से बचने के लिए शासन ने सन् 1991 के बाद से शिक्षा का दायित्व निजी हाथ में सौंपने का विचार किया। परिणामस्वरूप शिक्षा का दायित्व पूर्णतया निजी प्रबन्धतंत्र के अन्तर्गत आ गया है।

आज अनुदानित और स्ववित्तपोषित दो प्रकार की शिक्षण संस्थाएँ शिक्षा का दायित्व सँभाल रही हैं। इस समय भारत सरकार ने पहल करके शिक्षा को अनुत्पाद की संज्ञा देते हुए शिक्षा के दायित्व को अर्थाभाव के कारण समाज पर तथा समाज सुधारकों पर डाल दिया है। जिस समय शिक्षा को समाज के लोगों में उनके निजी हाथों में सौंपने की संकल्पना की गयी। बहुत अच्छे तर्क प्रस्तुत किये गये, उनका निचोड़ उभरकर सामने आया कि बढ़ती हुई आबादी में सभी बच्चे इस व्यवस्था से शिक्षा प्राप्त कर लेंगे और शासन शिक्षा पर व्यय होने वाले आर्थिक बोझ से उबर जायेंगे।

संस्थाओं को मान्यता प्रदान की जाने लगी, व्यवहार में इन संस्थाओं के कार्य का स्वरूप समाज की आकांक्षा और सरकार के मन्तव्य के प्रतिकूल परिलक्षित हो रहा है। समाज में इन दोनों के दायित्वों और कृत्यों में विभिन्नता दिखायी पड़ती है। जिनका उल्लेख कुछ बिन्दुओं पर प्रस्तुत करने का प्रयास किया जा रहा है।

६ वर्ष 1991 में देश में उदारीकरण की प्रक्रिया प्रारंभ होने से उच्च शिक्षा पर इसका सीधा प्रभाव परिलक्षित होने लगा। इसी समय खाड़ी संकट के बहाने यू.जी.सी. द्वारा उच्च शिक्षा बजट में 35 प्रतिशत की कटौती की गयी और विश्वविद्यालयों को निर्देश दिये गये कि वे अपने पैरों पर खड़े हों।

६ 'ए पालिसी फेमबर्क फॉर फार्म्स इन एजुकेशन' नामक अम्बानी-बिड़ला रिपोर्ट (2000) में प्रक्षेपित की गयी-उच्च शिक्षा के लिए 27 हजार 271 कॉलेज विश्वविद्यालय खोलने होंगे, जिस पर 42 हजार करोड़ खर्च होंगे। इसके अतिरिक्त 15 व र्षों में भारत सरकार को नये उच्च शिक्षा संस्थानों के निर्माण पर 11 हजार करोड़ रुपये की पूँजी लगानी होगी।

चूँकि सरकार को अपने बूते इतना करना संभव नहीं है। इस प्रकार इसमें खुलकर उच्च शिक्षा के निजीकरण पर बल दिया गया है, निजी प्रशिक्षण कॉलेज, निजी मेडिकल कॉलेज और इंजीनियरिंग कॉलेज में भर्ती फीस कैपिटेशन फीस की योजना लागू की। शिक्षा के क्षेत्र में निजीकरण की मुहिम का प्रारम्भ में विरोध भी हुआ है, किन्तु अन्त में दो प्रकार की प्रवेश नीति स्वीकार की गयी। इनमें एक आधार था गुणवत्ता या योग्यता और दूसरा आधार था पैसा यानि फीस और उसकी अदायगी क्षमता।

निजी संस्थाओं की महत्ता इस बात से भी स्वीकार की जा सकती है कि अभी हाल ही में हमारे मानव संसाधन विकास मंत्री कपिल सिब्बल ने उच्च शिक्षा के क्षेत्र में एक रिपोर्ट जारी की है जिसमें उन्होंने बताया है कि भारत में 25 करोड़ विद्यार्थी विद्यालयी शिक्षा प्राप्त करते हैं जिसमें से 2.5 प्रतिशत विद्यार्थी उच्च शिक्षा प्राप्त कर पाते हैं। जबकि विकसित राष्ट्रों में यह प्रतिशत 40 प्रतिशत है। हमें 30 प्रतिशत तक का आंकड़ा प्राप्त करने के लिए सन् 2020 तक महत्त्वपूर्ण निर्णय लेने होंगे जिसमें आज हमारे पास 420 विश्वविद्यालय व 22 हजार महाविद्यालय उच्च शिक्षा प्रदान कर रहे हैं। लेकिन 30 प्रतिशत छात्रों को उच्च शिक्षा मिल सकें इसलिए हमें सन् 2020 तक 1 हजार विश्वविद्यालयों व 35 हजार महाविद्यालयों की आवश्यकता होगी जो अकेले सरकारी व्यय पर संभव नहीं है।

अतः आने वाले समय में निजी संस्थाओं की भागीदारी बढ़ेगी। जहाँ तक इनमें गुणवत्ता का सवाल है इसके लिये हमारी सरकार की ओर से कार्यरत संस्थाएँ जैसे - NCTE, AICTE, UGC - कौंसिल ऑफ नर्सिंग तथा नेक (NAAC) जैसी संस्थाएँ निरन्तर इनमें गुणवत्ता लाने का प्रयास कर रही है।

अतः हम कह सकते हैं कि गुणात्मक एवं मात्रात्मक दोनों ही रूपों से निजी संस्थाएँ उच्च शिक्षा के क्षेत्र में अपना महत्त्वपूर्ण योगदान दे रही हैं।

NON- LINEAR OPTICAL PROPERTIES OF FIBER MATERIAL A CRITICAL STUDY

Sunil Kumar,
Research Scholar, J.J.T.University, (Rajasthan)

Abstract:-

Nonlinear optics (NLO) is the branch of optics that describes the behavior of light in nonlinear media, that is, media in which the dielectric polarization P responds nonlinearly to the electric field E of the light. This nonlinearity is typically only observed at very high light intensities (values of the electric field comparable to interatomic electric fields, typically 10^8 V/m) such as those provided by pulsed lasers. Above the Schwinger limit, the vacuum itself is expected to become nonlinear. In nonlinear optics, the superposition principle no longer holds.

Nonlinear optical properties of high- Δ , small-core single-mode fibers were investigated. Results indicated that such fibers have low stimulated Raman scattering critical powers and large frequency chirping. In addition, 43% coupling efficiency was achieved in the direct coupling between high- Δ fibers and an edge-emitting LED.

Key words:-

- Optical limiting
- Fiber Bragg grating
- Nonlinear refraction
- Nonlinear coupled mode equation

Introduction:-

Nonlinear fiber optics concerns with the nonlinear optical phenomena occurring inside optical fibers. Although the field of nonlinear optics traces its beginning to 1961, when a ruby laser was first used to generate the second-harmonic radiation inside a crystal [1], the use of optical fibers as a nonlinear medium became feasible only after 1970 when fiber losses were reduced to below 20 dB/km [2]. Stimulated Raman and Brillouin scatterings in single-mode fibers were studied as early as 1972 [3] and were soon followed by the study of other nonlinear effects such as self- and cross phase modulation and four-wave mixing [4]. By 1989, the field of nonlinear fiber optics has advanced enough that a whole book was devoted to it [5]. This book or its second edition has been translated into Chinese, Japanese, and Russian languages, attesting to the worldwide activity in the field of nonlinear fiber optics.

Nonlinear fiber optics has continued to grow during the decade of 1990s, perhaps even more dramatically than anticipated. This growth is motivated by several recent advances in light wave technology, the most important being the advent of high-capacity fiber-optic communication systems [6]. In such systems, the transmitted signal is amplified periodically by using optical

amplifiers to compensate for residual fiber losses. As a result, the nonlinear effects accumulate over long distances, and the effective interaction length can exceed thousands of kilometers! Among other fiber devices in which nonlinear effects are becoming increasingly important are mode locked fiber lasers, distributed fiber amplifiers, and fiber Bragg gratings. It is impossible to review the entire field of nonlinear fiber optics in a chapter of this size. The focus therefore is on optical solutions' and optical switching, the two topics that are driven by advances in the field of fiber-optic communications and are likely to remain important as we enter the 21st century.

Frequency mixing processes:-

- Second harmonic generation (SHG), or frequency doubling, generation of light with a doubled frequency (half the wavelength), two photons are destroyed creating a single photon at two times the frequency.

- Third harmonic generation (THG), generation of light with a tripled frequency (one-third the wavelength), three photons are destroyed creating a single photon at three times the frequency.
- High harmonic generation (HHG), generation of light with frequencies much greater than the original (typically 100 to 1000 times greater)
- Sum frequency generation (SFG), generation of light with a frequency that is the sum of two other frequencies (SHG is a special case of this)
- Difference frequency generation (DFG), generation of light with a frequency that is the difference between two other frequencies
- Optical parametric amplification (OPA), amplification of a signal input in the presence of a higher-frequency pump wave, at the same time generating an idler wave (can be considered as DFG)
- Optical parametric oscillation (OPO), generation of a signal and idler wave using a parametric amplifier in a resonator (with no signal input)
- Optical parametric generation (OPG), like parametric oscillation but without a resonator, using a very high gain instead
- Spontaneous parametric down conversion (SPDC), the amplification of the vacuum fluctuations in the low gain regime
- Optical rectification (OR), generation of quasi-static electric fields.
- Nonlinear light-matter interaction with free electrons and plasmas.

Conclusions:-

At the dawn of the 21st century, the field of nonlinear fiber optics is vibrant with a lot of foresight activity. This chapter has touched only the tip of an iceberg by focusing on two themes related to solutions and optical switching. Stimulated Raman scattering is attracting a lot of attention for making broadband optical amplifiers. Similarly, FWM has been used for channel demultiplexing in a WDM light wave system. FWM is also harmful for WDM systems since it leads to interchange crosstalk, and the dispersion-management technique is often used to suppress it. Another

topic that is attracting considerable attention is the study of nonlinear effects in fiber gratings [40]. Fiber gratings exhibit modulation instability and support a new type of solutions referred to as Bragg solutions. From the wide range of nonlinear effects in optical fibers currently being studied, it is expected that nonlinear fiber optics will remain a topic of interest well into the 21st century.

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