Criterion – III

3.3.1 Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years

2018-19 to 2022-23

3.3.1.1. Number of research papers in the Journals notified on UGC CARE list year wise during the last five years.

S. No.	Year	No of Research papers in the Journals
1	2022-23	00
2	2021-22	03
3	2020-21	02
4	2019-20	00
5	2018-19	03

ST. ANN'S COLLEGE FOR WOMEN * GORANTLA * Affiliated to Acharya Nagarjuna University

PRINCIPAL
St. Ann's College for Women
GORANTLA, GUNTUR-522 034

Criterion – III

3.3.1 Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years

2021-22

ACTA SCIENTIFIC COMPUTER SCIENCES

Volume 4 Issue 6 June 2022

Research Article

Extreme Value Charts and ANOM Based on Gumbel Distribution

B Srinivas Rao[1], C Chinnamamba[2]*, K Rosaiah[3] and V Pratapa Reddy[4]

[1]R.V.R and J.C College of Engineering, Chowdavaram, Guntur, Andhra Pradesh, India

[2]KL University, Vaddeswaram, Vijayawada, Andhra Pradesh, India

[3]Department of Statistics, Acharya Nagarjuna University, Guntur, India

[4]St.Ann's College for Women Gorantla, Guntur, Andhra Pradesh, India

***Corresponding Author:** C Chinnamamba, KL University, Vaddeswaram, Vijayawada, Andhra Pradesh, India.

Received: March 21, 2022

Published: May 30, 2022

Abstract

The quality is assessable by its feature is implicit with a probability model which follow Gumbel distribution. From each subgroups extreme values are used to construct extreme value charts and variable control charts. Probability model of the extreme order statistics and the size of each sub group are used in control chart constants. To find the decision lines of Gumbel distribution we implement a method of analysis of means (ANOM). The proposed ANOM decision lines are constructed for given number of subgroup within means category and between means category given by Ott (1967). These decision lines are illustrated by giving few examples.

Keywords: Analysis of Means; Statistical Control; Quantile - Quantile Plot; Control Limits

Introduction

Analysis and prediction of the business conditions is the top most trend of research especially in marketing field. Every business has interested to know the future market value of their products. To analyze this type of conditions there are common statistical techniques are available like weekly averages, monthly averages and moving averages etc., Averages gives a summary about the product and business. Statistical methods are important for solving the economic problems of industry. To asses quality common tool is Shewart control charts. These charts are used to diagnose the assignable causes when there is any adjustments made in the process. Otherwise expected assignable cause is treated as to be a quality diverse in character of the subgroup. In this situation analysis of means (ANOM) technique is an effective and appropriate. For example if statistic is a sample mean, which control diversity of the process mean showing away from the expected mean. To analyse the subgroups those are categorized within identical group of means and between the mean of diverse category is possible through ANOM, which is the alternative method of Analysis of Variance (ANOVA). A further most characteristic of ANOM include its interpretation and graphical presentation. An ANOM charts and control charts are theoretically having the same pattern among decision lines, thus magnitude differences and Statistical significance of the treatments may be evaluated at the same time. The ANOM technique was first developed by Prof. Ott (1967) to know the association of means subgroup and to check if any one of them changes significantly from the overall mean. Statistical control charts are designed based on the normal distribution. Where as if the data follows skewed distribution these limits should be calculated according to the distribution based on the variable control limits.

In the present paper we consider Gumbel Distribution is one of the skewed distribution and developed control limits for the distribution.

The probability density function (pdf) of a Gumbel distribution (GD) with scale parameter σ is given by

ISSN NO : 1869-9391

A Study on the Role of Financial Incentives over the Job Satisfaction with reference to the Indian Banking Industry

Dr.Nagaraju Battu [1] & Gudavalli Radhika[2]

(1)Head, Department of Human Resource Management, Acharya Nagarjuna University, Guntur, Andhra Pradesh, India. (2) Research Scholar, Department of Human Resource Management, Acharya Nagarjuna University, Guntur, Andhra Pradesh, India.

Abstract:

This research paper is aimed to understand the impact of different financial incentives in the Indian banking sector. The study is conducted within the state of Andhra Pradesh. The subject samples are drawn from one public and one private sector bank. The independent variables are confined as pay & allowance, incentives, bonus and retirement benefits. However, this research paper aimed to understand the bank employees perceptions towards the concerned financial incentives.

Key Words:

Financial Incentives, Indian banking sector, pay & allowance, bonus, retirement benefits.

Introduction

Indian economy is considered to be one of the oldest economies. There are many evidence which prove the existence of Indian coinage in history. In Rig Veda there is a description of the various coins and their values such as gold, silver, copper and bronze. The other Vedic manuscripts also narrated the various coins like silver, iron, lead and tin and also stated that many large temples were served as bankers. The writings in the ages of Buddha also witnessed the existence of structured money economy in this country. There are some other proofs which demonstrated that there is a strong banking system in the period of Maurya (321 to 185 BC). In this period people used an instrument called "Adesha" to perform the financial transactions. This instrument is like an order gives by the payer to the bank to pay the money to the payee. It is quite similar to the concept of bill of exchange in the modern days (Akintove 2020; Andrew 2017).

Pre-Independence Banking History:

The tenure of pre-independence is witnessed to the existence of many banks which established as the joint stock companies. Most of the banks are under private sector and their purview is confined to certain localities only. The English Agency house of Calcutta (Kolkata) and Bombay (Mumbai) introduced the western type of joint stock banks in

International Journal of Scientific Research and Engineering Development-– Volume 4 Issue 5, Sep- Oct 2021

Available at www.ijsred.com

RESEARCH ARTICLE OPEN ACCESS

Impact of Non – Financial Incentives on Job Satisfaction and Employee Productivity – An Empirical Study With Reference to the Indian Banks

Dr.Nagaraju Battu [1] & Gudavalli Radhika [2]

(1)Head, Department of Human Resource Management, Acharya Nagarjuna University, Guntur, Andhra Pradesh, India.

(2) Research Scholar, Department of Human Resource Management, Acharya Nagarjuna, University, Guntur, Andhra Pradesh, India.

Abstract:

The role of non – financial incentives is found to be vital in the organizations. The impact of non – financial incentives over the job satisfaction levels of the employees is found to be very high in the service sectors and the banking sector is not exceptional. All the Indian banks are implementing the various incentives programmes to attain the satisfaction among their work force. This study is aimed to understand the various non – financial incentives such as career development, job enrichment, employee recognition and employee empowerment impact over the job satisfaction in the Indian banking sector.

Keywords: Incentives, Non – Financial Incentives, Career Development, Job Enrichment, Job Satisfaction

Introduction

The roots of the Indian banking system prevailed in the rural area, where the money lenders lend their funds to the farmers and other individuals for the interest. This scenario has existed in both the northern and southern parts of India. In south India the Vaishyas act as the major bankers. In north India the community of "Seth" or "Sethi"means "chief" acted as either professional bankers or the money lenders. There are other communities namely Chttis, Mahajans, Sahukars and Shroffs who contributed in the indigenous banking system development in various parts of the country. The basic banking principles are condemned even in Manusmriti as money lending is a permitted way of obtaining prosperity. It also fixed the rate of interestto different casts such as to Brahmins - 24 %, Kshatriyas - 36%, Vaishyas - 48% and Shudras 60%. This phenomenonroved that the ancient banking system in India is so stringent and so exhaustive and helped for the development of human civilization. Such banking system cannot be found in any other country around the globe by that time. However, the Indian indigenous banking system undoubtedly supported and acted as the back bone for the growth and development of Indian agriculture, trade and commerce (Aziri (2011); Balkin E et al., (2017)).

Classification of Incentives

Incentiveplays the key role of motivator in any kind of organization be it production or service sector. It can add to the efficiency level of any employee and create a desire amongst the employees to give their best to the organization by putting in more energy and working with better accuracy. These concepts of "incentive", "reward" and "recognition" can be aptly applied to any sector be it production or service sector or otherwise banking as well (Hackman et al., 2011).

Criterion – III

3.3.1 Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years

2020-21

https://doi.org/10.37896/aj9.11/023 ISSN NO: 1301-2746

Spc Using The Length Biased Erlang-Truncated Exponential Distribution And Its Applications In Healthcare

Male Yanadi Reddy[1], D. Venkatesan[2] and J. Pratapa Reddy[3]
[1]PhD Research Scholar, Department of Statistics, Annamalai University, India
[2]Professor in Department of Statistics, Annamalai University, India
[3] Head, Department of Statistics, St. Ann's College for Women, Guntur, India

Abstract

The methodology of SPC (Statistical Process Control) relies mainly by using the quality characteristics, frequency distributions of the observed process data and monitoring the control charts. The main problem of quality improvement is to determine the nature and sources of variation of the process or to measure the outcome and determine which of these changes should be taken into account to improve the quality of service. If one does not wholly understand the causes of process variability or outcome measurement in a complex health system, one will not be able to improve the process adequately.

In this paper, the control charts have been developed using the length biased Erlang-truncated exponential distribution to check the performances of the health care process.

Keywords: Control Charts, Weighted Distributions, Erlang-truncated distribution, quality improvement

1. Introduction

Health is often a concern for costs, quality and efficiency. Hospitals and healthcare professionals must maintain the highest levels of quality without unnecessarily contributing to the continuous increase in healthcare spending. In this context, hospitals and providers need the right tools to help them monitor and evaluate aspects of their services and make better decisions. An important challenge for improving quality is to identify the nature and sources of discrepancies in the process or the scope of the outcome and consider which of these variations will improve service quality. High variation indicates that the problem is getting out of control, so it is important to identify the sources of variation and get the best correction method. In a complex healthcare system, one cannot develop a process properly and adequately unless one fully understands the causes of process variation.

In SPC, many researchers like, Marilyn and Hart (2001), examined SPC as the methods to be used in the control of health care quality. Process-oriented quality control uses statistical tools to determine sources of process variation or outcome measures, and this approach has been as well as successfully applied in an industrial context. Over last two decades ago, interest in health to improve quality has increased.

Recent Developments in Control Charts Techniques in healthcare and medical sciences

M. Yanadi Reddy[1], D. Venkatesan[2] and J. Pratapa Reddy[3]

[1]Phd Research scholar, Department of Statistics, Annamalai University, India

[2]Professor in Department of Statistics, Annamalai University, India

[3] Head, Department of Statistics, St. Ann's College for Women, Guntur, India

Abstract

Continuous Quality Improvement (CQI) techniques developed in industry are increasingly being applied to the medical field. Statistical process control charts are a Continuous Quality Improvement (CQI) technique aimed at monitoring a process and its variability. As there is more involvement of human in healthcare, the chances of errors are also more. Health care applications present a new frontier for statistical process control (SPC) methods. Interest in SPC is driven by a desire to improve patient outcomes in the face of capitation, cost reduction, competition, and changing health care industry standards. Patient safety is a great concern of healthcare institutions and the correct reporting and management of adverse events is a key element for supporting safety improvement efforts. Patient falls are the most frequent adverse event in hospitals and often cause serious patient outcomes. This paper presents the recent developments in control charts techniques in healthcare sector and medical sciences.

Keywords- Statistical Process Control; Control Charts; Healthcare; Adverse Events; Patient Safety; Cumulative Sum Chart; Healthcare Surveillance; Healthcare sector; Exponentially Weighted Moving Average

1. Introduction

Statistical process control (SPC) tools have been applied successfully in different sections of the healthcare industry to provide a monitor, diagnose, assess, improve and control of specifically dedicated processes.[1] One of the basic tools in SPC is the control or process-behavior or Shewhart chart which is very useful mean for the visualization of the inspected properties under investigation.[2] In medical studies, data from different sources, including administrative claim records, clinical registries, electronic health records, biometric data, patient-reported data, medical imaging data, biomarker data, and more, are often used together for developing effective new medical treatments.[3] Quality in healthcare is always a big concern because bad quality in healthcare can make a difference in terms of life or death of patients. The investment is continuously growing in this sector with little interest towards quality. Nowadays, control charts have many applications in public health and healthcare monitoring in hospitals and the improvement of hospital performance. The quality parameters in health care, such as the time for the examination of the patient, the number of surgical failures, the utilization of health services, and the cost of treatment and management. Healthcare organizations are continuously engaged in increasing or maintaining high levels of quality and safety of care. Over the past decade, the term improvement science has gained attention and sparked debate.[4] In healthcare, improvement science is viewed by many as the natural successor or supplement to evidence

Criterion – III

3.3.1 Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years

2018-19

© 2019 IJSRST | Volume 6 | Issue 1 | Print ISSN: 2395-6011 | Online ISSN: 2395-602X
Themed Section: Science and Technology
DOI : https://doi.org/10.32628/IJSRST196148

Preliminary and Biochemical Characterization of Bacterial Strains Isolated from Ramie Cane Soils

Darsi Phebe Sarah Koti Ratnam[*1], Davala Simon[2]

[1]Department of Botany & Microbiology, Andhra Christian College, Guntur, Andhra Pradesh, India

[2]Department of Botany and Microbiology, Acharya Nagarjuna University, Guntur, Andhra Pradesh, India

*Corresponding author email : phebesarah63@gmail.com

ABSTRACT

For the present study a total of 18 bacterial isolates were isolated from Ramie canes soils. Preliminary characteristics like colony characteristics and substrate concentrations were studied for the microorganisms. Physicochemical factors affecting the bacterial growth. The three seasons winter, summer and rainy seasons were also affected the growth of the bacteria. Various substrates like starch peptone, xylan peptone, Glycerol, Aspargine, glucose nitrate agar, carboxymethyl cellulose agar and pectin peptone agar media were studied. Maximum colony growth was recorded in pectin peptone agar media. Cream white, orange, red, yellow, lemon yellow and watery white colonies were recorded. The size of the bacterial strains was recorded in 1-55 mm in diameter. All the strains were entire lobed, convex having smooth and rough surface. of the 18 strains 11 were gram positive rods and the remaining strains were negative rods. Among the 18 strains, we were selected six strains for further studies like effect of seasons on growth and amino acid infilteration of bacteria. Maximum growth was recorded in winter season with 85.0 colony count in the presence of CCLS strain. There are 10 amino acids were introduced into the bacteria, with maximum growth was WCES bacterial strain. The results of this study reveal that the soil microflora associated with the ramie cane soils. These bacterial strains were used in the process of decortication and degumming.

Keywords : Ramie Canes, Isolation, Bacteria

I. INTRODUCTION

Ramie is a perennial herbaceous plant of the Utricaceae family, that provides a fibre of excellent quality. Harvest time and crop affected the agronomic performance and fibre properties of ramie. Ramie showed a good adaptability to the pedo-climatic conditions of the Mediterranean region, providing new perspectives for arable farming system. The crop persisted for upto 13 years giving stable off take of bast fibre. The main change in the cell wall composition during the development concerns lignin and cellulose than hemicelluloses material.

Ramie has been grown in China for many centuries, and farmers in ancient China are known to have used the fiber to weave clothing. It may have been used in cloths for wrapping mummies in Egypt. Though ramie and flax are difficult to distinguish in ancient

ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 10, Issue, 08, pp. 72606-72609, August, 2018

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

FACTORS INFLUENCING THE RAMIE CELLULASE SYNTHESIS IN *ASPERGILLUS FLAVUS* BY ASSESSMENT OF DECORTICATION AND DEGUMMING

[1,*]Darsi Phebe Sarah Koti Ratnam and [2]Davala Simon

[1]Department of Botany and Microbiology, Andhra Christian College, Guntur, Andhra Pradesh, India
[2]Department of Botany and Microbiology, Acharya Nagarjuna University, Guntur-522510

ARTICLE INFO

Article History:
Received 25th May, 2018
Received in revised form
10th June, 2018
Accepted 17th July, 2018
Published online 30th August, 2018

Key Words:
Aspergillus flavus, Cellulase, Decortication, Degumming, Ramie.

ABSTRACT

Ramie (Boehmeria nivea Gaud) a member of Utricaceae, yields fibres which are longest and toughest. These fibres showed highest resistant to the action of water and are use industrial point of view in paper and textile industry. A total of 20 fungal strains were isolated from Ramie canes. Of the 20 there are six strains were identified as *Aspergillus* species. Among the Six strains Aspergillus flavus showed maximum colony count at 72 hours of incubation. In the present study deals with the isolation and screening of freshly isolated potent fungal strain as *Aspergillus flavus* for the production of cellulase enzyme consisting of the endoglucanase. Assessment of Decortication and degumming also recorded in cellulase enzyme production by *Aspergillus flavus*. Further the studies were undertaken on the optimization of physiological and nutritional culture conditions in respect of pH, incubation time, and temperature. Maximum cellulase production was recorded with 9 days of incubation time, optimum pH 7.0 and 35° C temperature. Synthesis of maximum endoglucanase 77.8% viscosity loss at 12 days of age. *Aspergillus flavus* showed the production of higher activity of cellulase enzyme consisting of endoglucanase yielded higher cellulase enzyme activity.

Citation: ***Darsi Phebe Sarah Koti Ratnam and Davala Simon.*** **2018.** "Factors influencing the Ramie Cellulase synthesis in *Aspergillus flavus* by assessment of Decortication and Degumming", *International Journal of Current Research*, 10, (08), 72606-72609.

INTRODUCTION

Cellulose occurs in native fibres in close interaction with lignin and hemi cellulose. Cellulose represents the most abundant substance in the environment. In the enzyme world, Cellulose is the major component, and cellulose mainly appears on plant cell wall and the most abundant renewable biological resource in the biosphere (Gruno *et al.*, 2004). Cellulose is a bio-polymer of glucose units linked by β1,4- glycosidic bonds. Cellulose a readily available renewable energy resource in environment utilized properly. Extensive studies on Cellulolytic enzymes produced by microorganisms like bacteria and fungi shoed the maximum cellulase production. Cellulose is a potentially valuable resource it may available in many forms like fibre, fuel and feed. The cellulosic systems of most fungi are inducible by cellulose and its derivatives and are repressed, almost generally, by glucose, sucrose, fructose, lactose and maltose. These carbon sources greatly influenced the cellulase enzyme production. This regulation is controlled by various parameters such incubation periods, pH and temperature.

Corresponding author:* **Darsi Phebe Sarah Koti Ratnam
Department of Botany and Microbiology, Andhra Christian College, Guntur, Andhra Pradesh, India

Many fungal strains secrete higher amounts of cellulases than bacterial ones, when compared with *Aspergillus strains* as the leading one (Takashima *et al.*, 1997). Other fungal species were shown to be highest cellulase producers, such as *Trichoderma* and *Humicola* (Enari., 1983). A few of unstudied strains could reveal some difference of cellulases since much still to be known on this class of hydrolytic enzymes. The cellulolytic enzymes are composed of three main activities: endoglucanase, exoglucanase and β- glucosidase, are wide spread among bacterial and fungal strains even though the exoglucanases are rare in the bacterial generations. From the available literature a huge information on fungal cellulases. There are more than hundred of endo and exoglucanase sequences are known (Bourne *et al.*, 2002). Endo β-gluconases produce nicks in the cellulose polymer exposing reducing and non-reducing ends, cellobiohydrolases acts upon the reducing and non-reducing ends to liberate cello-oligosaccharides and cellobiose and β-glucosidase cleave the cellobiose to liberate glucose completing the hydrolysis (Sukumaran *et al.*, 2009). The process of saccharification of lignocellulosic biomass, cellooligosaccharides, hydrolytic enzymes and cellobiose are often produced by the limited hydrolysis of cellulosic materials, something that leads to inefficient ethanol fermentation, whereas their hydrolytic product, glucose, is the best and suitable substrate for ethanol

Journal of Computer and Mathematical Sciences, Vol.9(12),1890-1897 December 2018 ISSN 0976-5727 (Print)
(An International Research Journal), www.compmath-journal.org ISSN 2319-8133 (Online)

Variable Control Charts for Gumbel Distribution Based on Percentiles

K. Rosaiah*[1], B. Srinivasa Rao[2], J. Pratapa Reddy[3] and C. Chinnamamba[4]

[1]Department of Statistics,
Acharya Nagarjuna University, Guntur, INDIA.
[2]Department of Mathematics & Humanities,
R.V.R & J.C College of Engineering, Chowdavaram, Guntur, INDIA.
[3]Department of Statistics,
St. Ann's Women College, Guntur, INDIA.
[4]Department of Mathematics & Statistics,
P R Govt. College, Kakinada, INDIA.
*Corresponding author: rosaiah1959@gmail.com

(Received on: November 29, 2018)

ABSTRACT

A Variable quality characteristic is assumed to follow Gumbel Distribution. Based on the evaluated percentiles of sample statistic like mean, median, standard deviation, the control limits for the respective control charts are developed. The admissibility and power of the control limits is assessed in comparison with those based on the popular Shewart control limits.

Keywords: Most probable, equi-tailed, percentiles, Gumbel distribution.

1. INTRODUCTION

The well-known Shewart control charts are developed under the assumption that the quality characteristic follows a normal distribution. If $x_1, x_2, \ldots, x_n$ is a collection of observations of size n on a variable quality characteristic of a product and if t_n is a statistic based on this sample, the control limits of Shewart variable control chart are $E(t_n) \pm 3S.E(t_n)$. In quality control studies, data is always in small samples only. Since most of the distributions tend to normal distribution, it is taken as an alternative solution for all the distributions because of its central limit theorem. And if the data is assumed to follow normal distribution, the commonly used constants are Shewart control limits constants. Even if a skewed data which