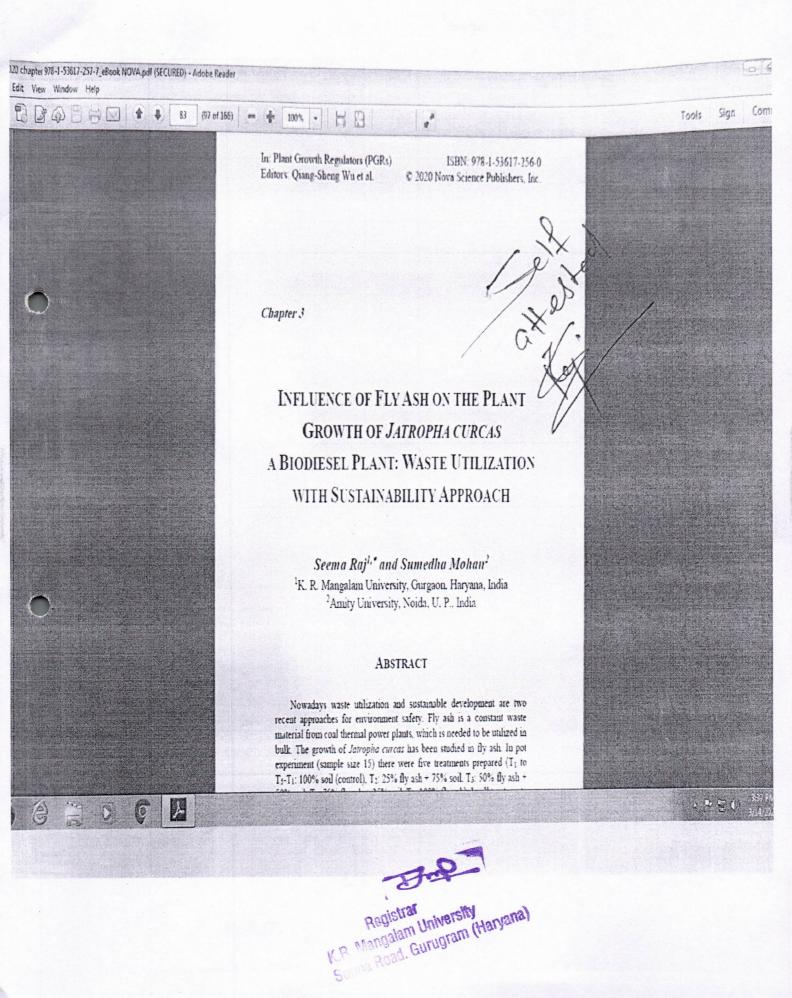
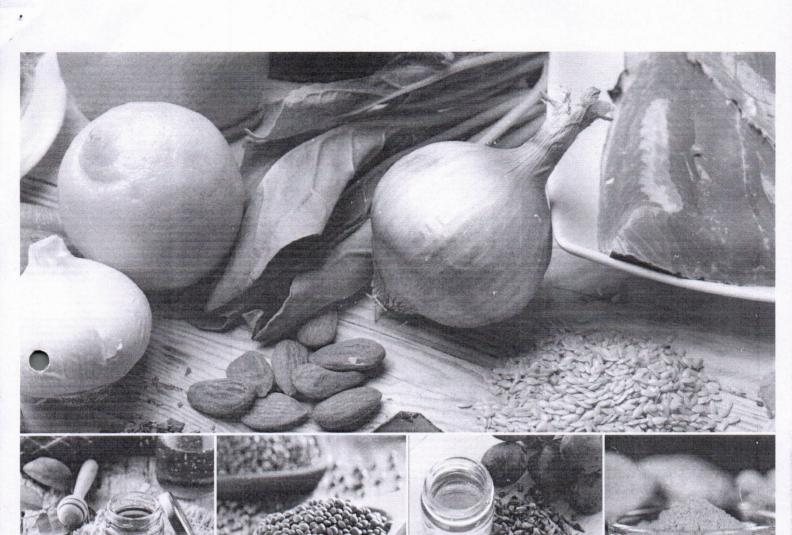
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Functional Foods in Cancer Prevention and Therapy

Edited by Yearul Kabir

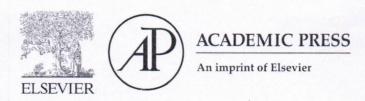




Functional Foods in Cancer Prevention and Therapy

Edited by Yearul Kabir

K.R. Mangalam University Sohna Road. Gurugram (Haryana)



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Functional Foods in Cancer Prevention and Therapy

Edited by Yearul Kabir

Functional Foods in Cancer Prevention and Therapy presents the wide range of functional foods associated with the prevention and treatment of cancer.

In recent decades, researchers have made progress in understanding the association between functional foods and cancer, especially as it relates to cancer treatment and prevention. Specifically, substantial evidence from epidemiological, clinical, and laboratory studies shows that various food components may alter cancer risk, the prognosis after cancer onset, and the quality of life after cancer treatment. Although conventional interventions, including surgery, chemotherapy, and radiation, are available, many cancer patients use herbal remedies and functional foods as complementary and alternative treatments. The book documents the therapeutic roles of well-known functional foods and explains, from a multidisciplinary perspective, the role of functional foods in cancer therapy and the promotion of optimal human health.

Functional Foods in Cancer Prevention and Therapy explores how current and future innovations in the functionality of foods will affect cancer therapy in a positive way. The book presents complex cancer patterns and evidence of the effective ways to control cancers with the use of functional foods. This book will serve as an informative reference for researchers focused on the role of food in cancer prevention and physicians and clinicians involved in cancer treatment.

Key Features:

- Presents research-based evidence of the role of herbs and bioactive foods in cancer treatment and prevention.
- Explores antioxidants, phytochemicals, nutraceuticals, herbal medicine, and supplements in relation to cancer prevention and treatment.
- Emphasizes the role and mechanism of functional foods, including characterization of active compounds, on cancer prevention and treatment.

About the Author

Dr. Yearul Kabir is a professor in the Department of Biochemistry and Molecular Biology at the University of Dhaka, where he studies various aspects of human nutrition and molecular genetics, especially as they relate to cancer. He has worked as a visiting scientist at the National Institute of Environment Studies, Japan; as the UNU Fellow at the National Food Research Institute; as a Research Fellow in the Laboratory of Nutrition, Tohoku University, Japan; as a visiting scientist at the Institute of Nutrition, Germany; as a JSPS Fellow in the Laboratory of Nutrition, Tohoku University, Japan; and as a JSPS-Bridge Fellow in the Laboratory of Nutrition, Tohoku University, Japan; and as a JSPS-Bridge Fellow in the Laboratory of Nutrition, Tohoku University, Japan. He has also worked as a consultant in a national project (Early Warning and Food Information System) under the Ministry of Food, the Government of Bangladesh, and as an associate professor in the Department of Food Science and Nutrition, College of Life Sciences, Kuwait University.

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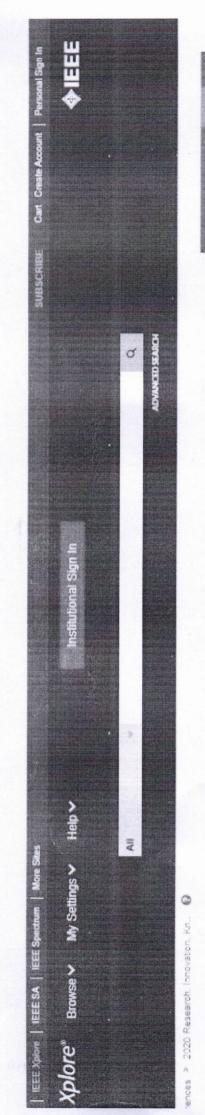




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vice to Device Communication using Stackelberg Game Theory approach







si Rathi , Neeraj Gupta All Authors

20

Text Views 00

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Abstract:

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The constant growth in the heterogeneous devices needs to enhance the network capability to fulfill the increased demand of the users. Such a huge number of devices require higher sum rates, superior throughput, system capacity, minor delay, and

QoS. The accessible resources are finite and must be flexibly utilized by the subscribers and operators with the expanding requirement. The objective of the paper is to analyze the resource allocation aspects of D2D communication. Furthermore, discuss a game theory approach mainly focuses on the Stackelberg game for resource allocation in the heterogeneous

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2D Communication

Resource Allocation

network and how it affects system performance and throughput.

Stackelberg Game theory

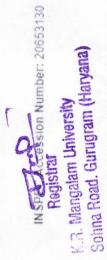
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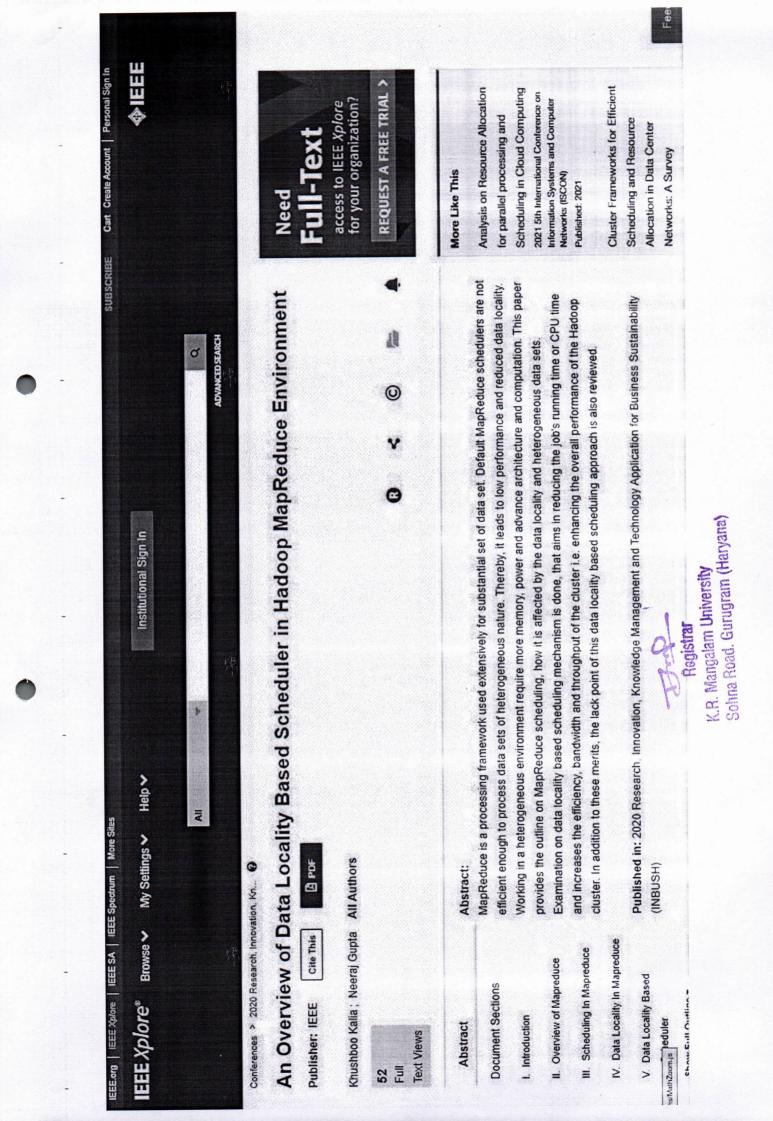
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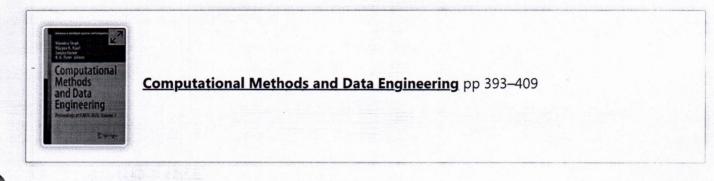
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Comparison of Transform-Based and Transform-Free Analytical Models Having Finite Buffer Size in Non-saturated IEEE 802.11 DCF Networks

<u>Mukta</u> 🗠 & <u>Neeraj Gupta</u>

Conference paper | First Online: 05 November 2020

595 Accesses | 1 Citations

Part of the <u>Advances in Intelligent Systems and Computing</u> book series (AISC,volume 1257)

Abstract

Lots of analytical models had already been proposed for accessing the functioning of IEEE 802.11 DCF networks in various load conditions. Most of the models restricted their study either for small buffer or infinite buffer size for the evaluation purpose. Such models failed to capture the influence of dynamic storage areas on various performance parameters. Extending these models for

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arbitrary buffer size is a challenging task. Few authors accepted this challenge and developed analytical models for characterizing the influence of varying buffer length on performance parameters for unsaturated systems. Most of them relied on complex mathematical concepts of transform-based approach which suffers from the computation speed. In order to accelerate the computation process, authors proposed to use simple and flexible transform-free method for output parameters evaluation having finite buffer size. This paper studies and compares the transform-based and transform-free analytical models developed for the unsaturated IEEE 802.11 DCF networks applying random buffer capacity. The comparison is done in terms of modeling accuracy, time complexity, and computation speed. The performance descriptors are evaluated by employing non-saturated renewal model and considering individual stations as M/G/1/K queuing system. Results show that non-saturated models utilizing transform-free approach provide high computation speed than that of transform-based approach for arbitrary buffer size.

Keywords

IEEE 802.11

Fixed-point analysis

DCF

<u>Queuing theory</u>

Analytical model

Non-saturated network

Buffer size

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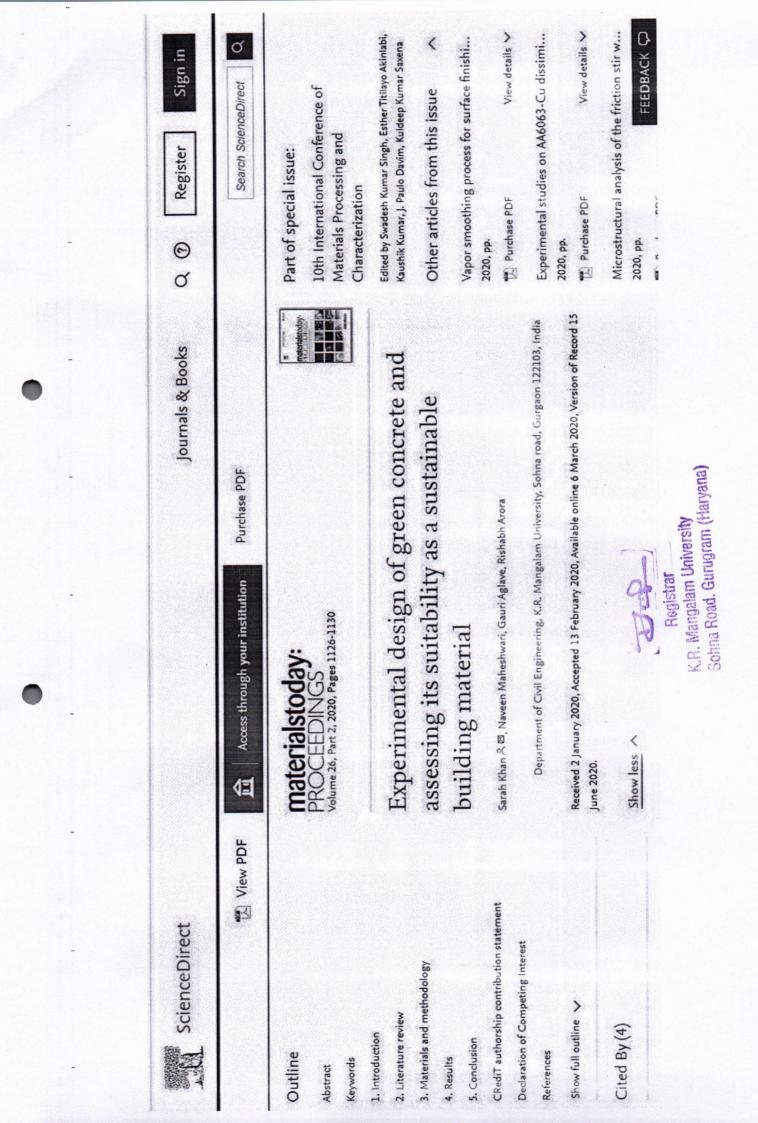
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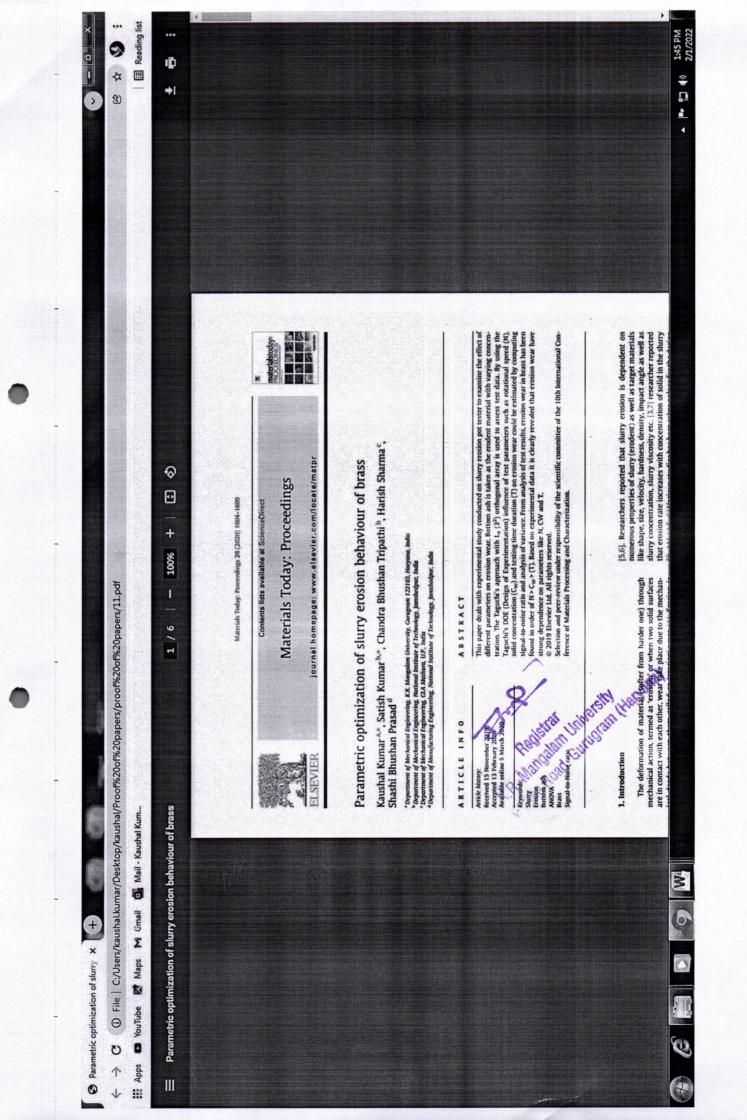
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References

- Bianchi G (2000) Performance analysis of the IEEE
 802.11 distributed coordination function. IEEE J Select
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- Wu H, Peng Y, Long K, Cheng S, Ma J (2002) Performance of reliable transport protocol over IEEE 802.11 wireless LAN: analysis and enhancement. In: Proceedings. Twenty-first annual joint conference of
 - the IEEE computer and communications societies
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Ionic Concentration and Action Potential Differences Between a Healthy and Alzheimer's Disease Person

<u>Shruti Gupta</u> ⊠, <u>Jyotsna Singh</u> ⊠ & <u>Kaushal Kumar</u> ⊠

Conference paper | First Online: 28 May 2020

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Abstract

Depressed Na^+/K^+ ATParse amount and diminished glutamate agreement in Alzheimer's disease brain is coupled through Alzheimer's disease. Cellular ion disparity might be its outcome. As soon as the cell is energized by some inner or exterior spur then action potential in the shape of very small pulses arises. It overreaches the decisive threshold of the membrane. The action potential initiation observed in cortical neurons is

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IV. Conclusion and Discussion	The paper aims to provide a s				
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I. Introduction

Distributed Denial of Service or DDOS attack is an attempt by a group of multiple distributed computers to stop online service by involving a sudden stream of traffic from multiple sources for a short period of time. As a result of sudden incoming traffic, the victim computer or server will be overloaded, its resources consumed, and it will be unable to neither perform its functions nor connect with other computers. DDOS attacks, therefore, target the 'availability' category of computer security (the other types of security attacks are confided initially and integrity), since the victim computers cannot provide services under this attack [1]. Attackers typically target websites in retail, E-commerce, banking and insurance is digitable comparing connectivity of systems with the internet, DDOS attack incidents have become rampant, both in case of frequency of attacks as well as magnitude (no. of packets sent per second). In 2016, the most number of DDOS attacks happened in the entertainment, professional services, and analyses IOT targeted malware samples determined that almost 34% of these attacks originated from China, followed by 28% from the USA, and a significant number of attack also from Germany, Netherlands, Russia and Ukraine.

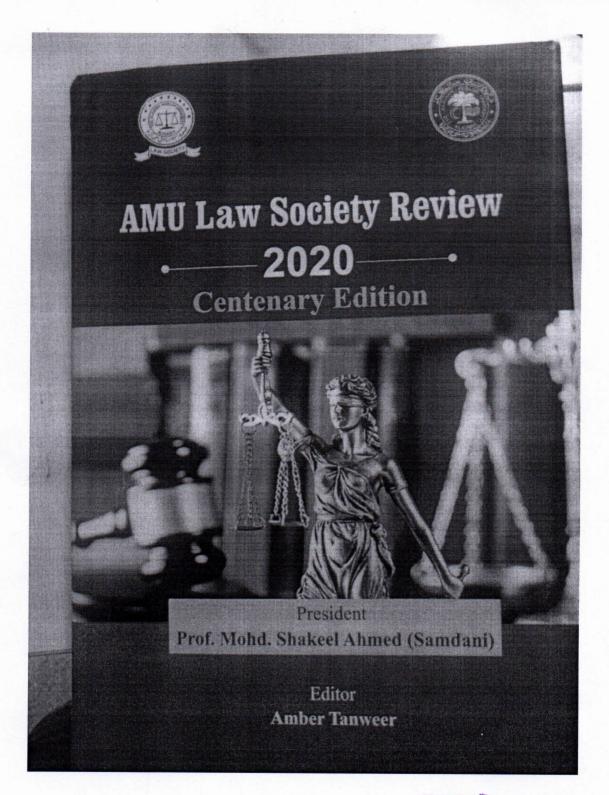
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Marital Rape: A Shrouded Legal Crime

Ankita Shukla' & Dr. Kaven Sharing

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I just want to sleep. A coma would be nice. Or amnesia. Anythe I just want to steep. A coma washingers in my mind. Did he rape my just to get rid of this, these thoughts, whispers in my mind. Did he rape my

Laurie Halse Anderson head, too?"

Rape is one of the most terrible crimes on earth and it happens every few minutes. All around the world, it is seen as one of the most gruesome crimes of all as it strips off a woman of her dignity and self-

Rape by a stranger is punished grossly, however, rape by someone respect. as close as her spouse is mildly punished and even in some countries a not even viewed as a crime. Rape is rape, whether done by a stranger or husband. It should be equitably punished but the lawmakers have been silent over this issue for decades.

The United Nations Declaration on the Elimination of Violence against Women defines violence against women as "any act of genderbased violence that results in or is likely to result in, physical, sexual, or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life.

Domestic violence in India is a common problem of almost every household and is a manifestation of the patriarchal mindset which Inde has been breeding for decades now. It is only in the year 2005 that Indu enacted the Protection of Women from Domestic Violence Act, thereby recognizing five forms of violence that take place with women within the four walls of their households. 1- Research Scholar, SOIS, KRMU

2. Avociate Professor, SOLS, KRMU, Sohna Road, Gurugram.



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33

THE EFFECT OF POSITIVE PSYCHOLOGY ON ORGANIZATIONAL EFFECTIVENESS (AN EMPIRICAL STUDY ON INDIAN AUTOMOBILE INDUSTRY)

Dr. Richa Nangia

Associate Professor, K.R. Mangalam University, Haryana (India)

Arunima

Research Scholar, K.R. Mangalam University, Haryana (India)

Abstract

Positive Psychology has become progressively more prevalent in the workplace nowadays. The study aims towards understanding the effects of the level of psychological well-being (mental health) on organizational effectiveness and the relationship between the positive psychology of the workers and organizational effectiveness of Indian companies operating in Delhi NCR. The effect of different demographic factors like age, gender, education pattern, personality, culture etc. will be considered to provide better understanding. Data for current study is gathered from both primary and secondary sources. Primary sources used for current study are questionnaire and interviews of industry experts and secondary sources are business journals, newspapers, magazines, periodicals, etc. Correlation test has been used for empirical analysis and interpretation of data. The study shows that the null hypothesis is accepted which says that there is a positive relationship between the positive psychology of the workers and organizational effectiveness.

Key Words: Positive Psychology, Organizational Effectiveness, Employee Effectiveness, Indian Automobile Industry.

INTRODUCTION

- Buddha

Registrar

Nowadays, in the working environment positive mental strength has a significant role to play. Positive psychology clearly offers scope for enhancing satisfaction, motivation, and productivity in the workplace which evidently means an overall development of organizational effectiveness. Positive psychology is a recent branch of psychology whose purpose was summed up in 1998 by Martin

HR Analytics and Artificial Intelligence – Transforming Human Resource Management

Meenal Arora School of Management and Commerce

K.R. Mangalam University Gurgaon, India – 122103 meenal.bajaj20@gmail.com Anshika Prakash School of Management and Commerce K.R. Mangalam University Gurgaon, India – 122103 anshika.prakash@krmangalam.ed u.in Amit Mittal Chitkara Business School Chitkara University Punjab, India – 140401 amit.mittal@Chitkara.edu.in Swati Singh Bharatiya Vidya Bhavan's Usha and Lakshmi Mittal Institute of Management New Delhi, India – 110001 swatisingh@bulmim.ac.in

Abstract-Advancements in artificial intelligence (AI) has led to rapidly changing the business environment. Integration of AI in human resource will facilitate the analysing, predicting and diagnosing of the issues faced by the organizations and help to make better employee related decisions. An integrative synthesis of multiple streams of literature was undertaken to critically analyze the implementation of AI and HR analytics in HRM for performance enhancement and to gain a competitive advantage. The HRM has undergone a drastic transformation from the administrative functionality to more advanced processes like automation through application of artificial intelligence which has entirely re-defined and re-shaped the attributes of the organizational workforce. AI plays a major role within HR to support smart people analytics. With deployment of AI and analytics in HR functions such as talent acquisition, training and development, employee retention, employee engagement and performance appraisal, organizations can enhance proficiency and productivity. Additionally, AI, cloud and HR Analytics also support in collecting huge volumes of employee information. HR is considered as a 'predictive engine' essential for the organizational upliftment. The real challenge for HR department is how thoroughly they can enhance employee skills and rerenovate their teams in the field of HR Analytics and AI. The current research evaluates the functional analysis of artificial intelligence in the human resource context. It emphasizes on the application of AI in various HRM functions and stipulates the barriers in adoption of HR technological among employees.

Keywords— Artificial Intelligence, HR Analytics, Big Data, Technology, Decision

I. INTRODUCTION

Artificial intelligence can be referred to as a technique that acts like an individual's brain and apply human intelligence in numerous disciplines to enhance the efficiency and productivity of various industries. It consists of diverse inputs to provide outputs in the field of HRM. It includes three essential mechanisms - advanced algorithms, high- speed computation large volumes of quality data, which differentiates it from an ordinary software. This technology uses algorithms which connects quality data with fast computation services and can perform multiply tasks that require human cognition. With the advent of AI, organizations have undergone a revolutionary change in the decision-making process [1] and has redefined various management models [2]. AI technology offers important opportunities for enrichment of various HR processes, such as talent acquisition, payroll, self-service transactions, policies and procedures and reporting. HR professionals believe that collaboration of AI with various HR practices will enhance the people related decision making process.

The advancement in HR technology, has encouraged the availability of real-time data for organizations but they still rely on their intuitions and instincts for drawing insights from data. This creates delays in drawing insights from the data which gradually becomes outdated. AI helps HR to extract insights from data and provide suggestions on real time basis. AI can eliminate various human biases and discrepancies in a sensitive function like Human Capital Management. Hence, decisions are more data- driven, consistent and unbiased. The application of AI is seen majorly in five HR functions such as analytics and metrics, time and attendance, talent acquisition, training and development, and compensation and payroll [3].

Incorporating technologies like AI and analytics in HRM have proved to be way beyond just a tool [4]. Previous studies have illustrated the impact of AI on various HR functions such as using techniques of data mining and extraction tools in employee selection and recruitment, detect knowledge hiding, smart sensory mechanism for assessing productivity of employees and intelligent agent technologies for employee development [5,6]. Nevertheless, till now the studies have emphasized the role of AI in human resource at a functional level. However, the emergence of AI-powered machines such as robots and its application in various tasks related to human interaction and collaboration including product development [7], customer service delivery [8] and industrial production [9] have established a new domain for research. Though these technologies have now become an integral part of the businesses, their still exists many controversies regarding the application of AI-based analytics within the human resource functions [10]. Hence, the managers and the employees have an obligation to use, augmented reality and games, big data analytics, simulations, algorithms, social media, machine learning in day to day lives which helps to support the decisionmaking processes

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