

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

I
J
R
C
M



A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A., Google Scholar,

Open J-Gate, India [link of the same is duly available at Inlibnet of University Grants Commission (U.G.C.)],

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 4945 Cities in 183 countries/territories are visiting our journal on regular basis.

Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

<http://ijrcm.org.in/>

CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	A STUDY ON THE GROUP LEVEL WORKPLACE SPIRITUALITY OF THE COLLEGE TEACHERS WITH SPECIAL REFERENCE TO ENGINEERING COLLEGES IN NAMAKKAL DISTRICT <i>R. FLORENCE BHARATHI & DR. M. G. SARAVANA RAJ</i>	1
2.	THE EFFECT OF INVESTOR DEMOGRAPHICS ON CONFIRMATION BIAS OF INDIVIDUAL TRADING DECISIONS AT THE NAIROBI SECURITIES EXCHANGE <i>SHADRACK MTURI KATANA</i>	5
3.	ASSESSING THE MODERATING EFFECT OF CEO VALUES ON CORPORATE CULTURE AND PERFORMANCE LINK: THE CASE OF COMMERCIAL STATE CORPORATIONS IN KENYA <i>THOMAS C.O. MOSE, DR. MIKE IRAVO, DR. GEORGE O. ORWA & DR. ENG. THOMAS SENAJI</i>	9
4.	SCM FRAME WORK FOR COMPETITIVE ADVANTAGE IN RETAIL SECTOR <i>DR. S. SARAVANAN & S. SARANYADEVI</i>	15
5.	FOREX TRADING STRATEGY: AN EMPIRICAL STUDY ON THE CURRENCY PAIR GBP/USD <i>SRIDHAR L S, SUMATHY. M, CHARLES AMBROSE. A & SUDHA N</i>	20
6.	A STUDY OF CONSUMER PERCEPTION OF LIFE INSURANCE CORPORATION IN THE TIRUPATI REGION <i>B. BHASKAR NAIK, M. RAJASEKHAR & G. JANARDHANA</i>	24
7.	GOVERNMENT'S INCLINATION IN DEVELOPMENT OF ORGANIC AGRICULTURE IN INDIA <i>V. VARDHINI & DR. P. RAJA</i>	29
8.	IMPLEMENTATION OF SECURITY IN CLOUD COMPUTING <i>SUDHIR DAWRA & PUSHNEEL VERMA</i>	33
9.	CUSTOMER SATISFACTION LEVEL TOWARDS LANDLINE SERVICE PROVIDED BY BSNL WITH REFERENCE TO COIMBATORE <i>V. SUMATHI & DR. K. GUNASUNDARI</i>	36
10.	PERSPECTIVES CONSIDERED IN BALANCED SCORECARD: A STUDY WITH SPECIAL REFERENCE TO IT/ITES EMPLOYEES OF COIMBATORE DISTRICT <i>SHYAM UMASANKAR K K & DR. KRISHNAVENI V</i>	41
11.	AN EMPIRICAL STUDY OF EDP CELLS IN COLLEGES <i>DR. N. KESAVAN & R. SANGEETHA</i>	45
12.	FORECAST ANALYSIS OF PROFITABILITY IN SELECT STEEL COMPANIES IN INDIA <i>DR. M. KRISHNAMOORTHY</i>	49
13.	A STUDY ON BRAND LOYALTY AND IT'S EFFECT ON BUYING BEHAVIOUR IN CASE OF SELECTED COSMETIC PRODUCTS IN PUDUKOTTAI <i>K. SUNDARAMBAL & DR. EDHAYAVARMAN</i>	55
14.	CUSTOMER PREFERENCE TOWARDS BRANDED ICE CREAM OUTLETS IN COIMBATORE CITY <i>B. ABIRAMI & B. GAYATHRI</i>	58
15.	ECOMMERCE ON THE VERGE THESE DAYS: A STUDY OF ECOMMERCE IN INDIA AND THE WAY FORWARD <i>SHIVALI JINDAL & KANIKA BHATIA</i>	62
16.	A STUDY ON THE IMPACT OF CHANGE IN REPO RATES ON BANK STOCKS IN INDIA <i>ARUNA P & CHARU SOLANKI</i>	66
17.	TAMIL HANDWRITTEN CHARACTER RECOGNITION <i>M.SIVASANKARI</i>	72
18.	A STUDY ON ANALYSIS OF FACTORS AFFECTING THE CUSTOMER'S SATISFACTION WITH REFERENCE TO ATM SERVICES IN BANGALORE CITY <i>NANDINI.N</i>	75
19.	ENSURING A SUCCESSFUL CELEBRITY ENDORSEMENT: A COMPARATIVE STUDY OF MATCH-UP HYPOTHESIS AND MEANING TRANSFER MODEL <i>DANISH HUSSAIN</i>	82
20.	VARIOUS STEGANOGRAPHY TECHNIQUES FOR HIDING INFORMATION: A SURVEY <i>SANJEEB KUMAR BEHERA</i>	86
	REQUEST FOR FEEDBACK & DISCLAIMER	89

CHIEF PATRON

PROF. K. K. AGGARWAL

Chairman, Malaviya National Institute of Technology, Jaipur
(An institute of National Importance & fully funded by Ministry of Human Resource Development, Government of India)
Chancellor, K. R. Mangalam University, Gurgaon
Chancellor, Lingaya's University, Faridabad
Founder Vice-Chancellor (1998-2008), Guru Gobind Singh Indraprastha University, Delhi
Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

FOUNDER PATRON

LATE SH. RAM BHAJAN AGGARWAL

Former State Minister for Home & Tourism, Government of Haryana
Former Vice-President, Dadri Education Society, Charkhi Dadri
Former President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

FORMER CO-ORDINATOR

DR. S. GARG

Faculty, Shree Ram Institute of Business & Management, Urjani

ADVISORS

PROF. M. S. SENAM RAJU

Director A. C. D., School of Management Studies, I.G.N.O.U., New Delhi

PROF. S. L. MAHANDRU

Principal (Retd.), Maharaja Agrasen College, Jagadhri

EDITOR

PROF. R. K. SHARMA

Professor, Bharti Vidyapeeth University Institute of Management & Research, New Delhi

EDITORIAL ADVISORY BOARD

DR. RAJESH MODI

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

PROF. PARVEEN KUMAR

Director, M.C.A., Meerut Institute of Engineering & Technology, Meerut, U. P.

PROF. H. R. SHARMA

Director, Chhatrapati Shivaji Institute of Technology, Durg, C.G.

PROF. MANOHAR LAL

Director & Chairman, School of Information & Computer Sciences, I.G.N.O.U., New Delhi

PROF. ANIL K. SAINI

Chairperson (CRC), Guru Gobind Singh I. P. University, Delhi

PROF. R. K. CHOUDHARY

Director, Asia Pacific Institute of Information Technology, Panipat

DR. ASHWANI KUSH

Head, Computer Science, University College, Kurukshetra University, Kurukshetra

DR. BHARAT BHUSHAN

Head, Department of Computer Science & Applications, Guru Nanak Khalsa College, Yamunanagar

DR. VIJAYPAL SINGH DHAKA

Dean (Academics), Rajasthan Institute of Engineering & Technology, Jaipur

DR. SAMBHAVNA

Faculty, I.I.T.M., Delhi

DR. MOHINDER CHAND

Associate Professor, Kurukshetra University, Kurukshetra

DR. MOHENDER KUMAR GUPTA

Associate Professor, P. J. L. N. Government College, Faridabad

DR. SHIVAKUMAR DEENE

Asst. Professor, Dept. of Commerce, School of Business Studies, Central University of Karnataka, Gulbarga

DR. BHAVET

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

ASSOCIATE EDITORS

PROF. ABHAY BANSAL

Head, Department of Information Technology, Amity School of Engineering & Technology, Amity University, Noida

PROF. NAWAB ALI KHAN

Department of Commerce, Aligarh Muslim University, Aligarh, U.P.

ASHISH CHOPRA

Sr. Lecturer, Doon Valley Institute of Engineering & Technology, Karnal

FORMER TECHNICAL ADVISOR

AMITA

Faculty, Government M. S., Mohali

FINANCIAL ADVISORS

DICKIN GOYAL

Advocate & Tax Adviser, Panchkula

NEENA

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

LEGAL ADVISORS

JITENDER S. CHAHAL

Advocate, Punjab & Haryana High Court, Chandigarh U.T.

CHANDER BHUSHAN SHARMA

Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

SUPERINTENDENT

SURENDER KUMAR POONIA

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to the recent developments & practices in the areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Rural Economics; Co-operation; Demography; Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript** **anytime** in **M.S. Word format** after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. infoijrcm@gmail.com or online by clicking the link **online submission** as given on our website ([FOR ONLINE SUBMISSION, CLICK HERE](#)).

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

DATED: _____

THE EDITOR

IJRCM

Subject: SUBMISSION OF MANUSCRIPT IN THE AREA OF _____.

(e.g. Finance/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

DEAR SIR/MADAM

Please find my submission of manuscript titled ‘ _____ ’ for likely publication in one of your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published anywhere in any language fully or partly, nor it is under review for publication elsewhere.

I affirm that all the co-authors of this manuscript have seen the submitted version of the manuscript and have agreed to inclusion of their names as co-authors.

Also, if my/our manuscript is accepted, I agree to comply with the formalities as given on the website of the journal. The Journal has discretion to publish our contribution in any of its journals.

NAME OF CORRESPONDING AUTHOR :
 Designation/Post* :
 Institution/College/University with full address & Pin Code :
 Residential address with Pin Code :
 Mobile Number (s) with country ISD code :
 Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No) :
 Landline Number (s) with country ISD code :
 E-mail Address :
 Alternate E-mail Address :
 Nationality :

* i.e. Alumnus (Male Alumni), Alumna (Female Alumni), Student, Research Scholar (M. Phil), Research Scholar (Ph. D.), JRF, Research Assistant, Assistant Lecturer, Lecturer, Senior Lecturer, Junior Assistant Professor, Assistant Professor, Senior Assistant Professor, Co-ordinator, Reader, Associate Professor, Professor, Head, Vice-Principal, Dy. Director, Principal, Director, Dean, President, Vice Chancellor, Industry Designation **etc.** The qualification of author is not acceptable for the purpose.

NOTES:

- a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. ***pdf. version is liable to be rejected without any consideration.***
 - b) The sender is required to mention the following in the **SUBJECT COLUMN of the mail:**
New Manuscript for Review in the area of (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)
 - c) There is no need to give any text in the body of the mail, except the cases where the author wishes to give any **specific message** w.r.t. to the manuscript.
 - d) The total size of the file containing the manuscript is expected to be below **1000 KB**.
 - e) Only the **Abstract will not be considered for review** and the author is required to submit the **complete manuscript** in the first instance.
 - f) **The journal gives acknowledgement w.r.t. the receipt of every email within twenty-four hours** and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of the manuscript, within two days of its submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.
 - g) The author (s) name or details should not appear anywhere on the body of the manuscript, except on the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.
2. **MANUSCRIPT TITLE:** The title of the paper should be typed in **bold letters, centered and fully capitalised**.
 3. **AUTHOR NAME (S) & AFFILIATIONS:** Author (s) **name, designation, affiliation (s), address, mobile/landline number (s), and email/alternate email address** should be given underneath the title.
 4. **ACKNOWLEDGMENTS:** Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.
 5. **ABSTRACT:** Abstract should be in **fully Italic printing**, ranging between **150 to 300 words**. The abstract must be informative and elucidating the background, aims, methods, results & conclusion in a **SINGLE PARA**. **Abbreviations must be mentioned in full**.
 6. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of **five**. These should be arranged in alphabetic order separated by commas and full stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations etc.
 7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aea-web.org/econlit/jelCodes.php. However, mentioning of JEL Code is not mandatory.
 8. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER**. **It should be free from any errors i.e. grammatical, spelling or punctuation. It must be thoroughly edited at your end.**
 9. **HEADINGS:** All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
 10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.
 11. **MAIN TEXT:**

THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:**INTRODUCTION****REVIEW OF LITERATURE****NEED/IMPORTANCE OF THE STUDY****STATEMENT OF THE PROBLEM****OBJECTIVES****HYPOTHESIS (ES)****RESEARCH METHODOLOGY****RESULTS & DISCUSSION****FINDINGS****RECOMMENDATIONS/SUGGESTIONS****CONCLUSIONS****LIMITATIONS****SCOPE FOR FURTHER RESEARCH****REFERENCES****APPENDIX/ANNEXURE****The manuscript should preferably be in 2000 to 5000 WORDS, But the limits can vary depending on the nature of the manuscript.**

12. **FIGURES & TABLES:** These should be simple, crystal **CLEAR, centered, separately numbered** & self-explained, and the **titles must be above the table/figure. Sources of data should be mentioned below the table/figure. It should be ensured that the tables/figures are referred to from the main text.**
13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, left aligned with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word may be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.
14. **ACRONYMS:** These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section e.g. Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.
15. **REFERENCES:** The list of all references should be alphabetically arranged. **The author (s) should mention only the actually utilised references in the preparation of manuscript** and they may follow Harvard Style of Referencing. **Also check to ensure that everything that you are including in the reference section is duly cited in the paper.** The author (s) are supposed to follow the references as per the following:
- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
 - Use (ed.) for one editor, and (ed.s) for multiple editors.
 - When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc., in chronologically ascending order.
 - Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
 - The title of books and journals should be in italic printing. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
 - For titles in a language other than English, provide an English translation in parenthesis.
 - **Headers, footers, endnotes and footnotes should not be used in the document.** However, **you can mention short notes to elucidate some specific point**, which may be placed in number orders before the references.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

UNPUBLISHED DISSERTATIONS

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

- Garg, Bhavet (2011): Towards a New Gas Policy, Political Weekly, Viewed on January 01, 2012 <http://epw.in/user/viewabstract.jsp>

THE EFFECT OF INVESTOR DEMOGRAPHICS ON CONFIRMATION BIAS OF INDIVIDUAL TRADING DECISIONS AT THE NAIROBI SECURITIES EXCHANGE

SHADRACK MTURI KATANA
PRINCIPAL
YOUNG MEN CHRISTIAN ASSOCIATION
MOMBASA

ABSTRACT

The main objective of this study was to establish the effect of investor demographics on confirmation bias on individual trading decisions at the Nairobi Securities Exchange. The target population of this study was 1.67 million investors with a sample size of 60 respondents and relied on primary data sources. To conduct the study, questionnaires were issued to investors of Nairobi Securities Exchange. There was a 65% response rate that is a total of 39 respondents. Data collected for this study was analyzed using descriptive statistics and regression analysis. Regression analysis was used to analyze relationship between investor demographics and confirmation bias. The investor demographics studied were gender, age, income, experience and level of education. The results indicated that investors are affected by confirmation bias in their trading decisions. There was also no significant relationship between confirmation bias and investor demographics of the study. The study found out that there exists a negative relationship between the investor demographics and confirmation bias with $R (0.346)$. The co-efficient of the variables in the model was -0.076 for gender, -0.535 for education, -1.078 for age, -0.528 for income and only experience had a positive relationship with a value of 0.070 . The study recommends that investors should get knowledge of confirmation bias and learn how to overcome it. Finally, the study suggests that research on biases can be done in various security markets across the region.

KEYWORDS

confirmation bias, investor demographics, trading decisions.

JEL CODE

General G11

1.0 INTRODUCTION

Investors are affected by many biases as they make decisions on what to trade or what not to trade in. The confirmation bias is exhibited when investors have a biased search for information, they interpret information in a biased way or still they try to remember information that affirms to their stand point and shrug off the one that is against what they believe is true. In so doing investors are more likely not to accept new information which might even be beneficial to their investment decisions and thereby end up losing out. Investors that are not affected by confirmation bias are more open minded in their trading, they accept information even though it's against what they believe is true, change their way of viewing the trade environment and eventually are bound to make more gains in their trading.

Confirmation bias is the tendency to favor information that confirms one's beliefs or hypotheses. People display this bias when they gather or remember information selectively, or when they interpret it in a biased way. The effect is stronger for emotionally charged issues and for deeply entrenched beliefs. People also tend to interpret ambiguous evidence as supporting their existing position. Biases at the Nairobi Securities Exchange show the presence of investor irrationality. Investors trade too much (over trading) on stocks that perform; this over trading is a result of over confidence and sensation seeking. Individual investors often extrapolate recent good stock or fund performance even when it shows little to no persistence; this shows a level of bias in the trading. Also as a result of availability and familiarity of companies, investors trade in securities from companies that are local, thus showing the home bias, familiarity and even availability bias.

Investment decisions are made by investors and investment managers. Investors commonly perform investment analysis by making use of fundamental analysis, technical analysis and judgment. Investment decisions are often supported by decision tools. It is assumed that information structure and the factors in the market systematically influence individuals' investment decisions as well as market outcomes (Ritter, 2003). Investor market behaviour derives from psychological principles of decision making to explain why people buy or sell stocks. These factors focus on how investors interpret and act on information to make investment decisions. No matter how much an investor is well informed, has done research, studied deeply about the stock before investing, he also behaves irrationally with the fear of loss in the future. This different behaviour in the individual investors is caused by various factors which compromise the investor rationality. An individual investor is one who purchases generally small amounts of securities for his or her own account.

2.0 LITERATURE REVIEW

2.1 OVERVIEW OF NAIROBI SECURITIES EXCHANGE

The Nairobi Securities Exchange is the principal securities exchange in Kenya. It began in 1954 as an overseas stock exchange while Kenya was still a British Colony with permission of the London Stock Exchange. The NSE is a member of Africa Stock Association. The Nairobi Securities Exchange is self-regulating organization for listed instruments (Muga, 1974). The NSE use two indices; the NSE 20-Share Index which has been in use since 1964 and measures the performance of 20 blue chip companies with strong fundamentals and which have consistently returned positive financial results. In 2008, the Nairobi Securities Exchange All Share Index (NASI) was introduced as an alternative index. The index incorporates all traded shares of the day. Its attention is therefore on the overall market capitalization (NSE, 2010)

At the NSE, security prices move in excess of the fundamental market expectations. The most recent being the IPO where the Safaricom shares were oversubscribed by almost twice and some investors went to the extent of taking loans to purchase the shares which resulted to losses as the share price did not increase as expected. This is a case of herding in that the investors bought the shares because everybody did. This is also witnessed during the corporate earnings announcement. When the performance of the company is good the share price goes up for a short while then they fall in prices. This is attributed to disposition effect where investors rush to sell the stock when the prices are up in the fear that it may go down (Shikuku, 2014).

2.2 EFFECT OF INVESTOR DEMOGRAPHICS ON CONFIRMATION BIAS OF INDIVIDUAL TRADING DECISIONS

Rabin and Schrag (1999) Psychological research indicates that people (despite their gender, age, income, religion, race, and geographical location) have a cognitive bias that leads them to misinterpret new information as supporting previously held hypotheses. They showed in a simple model that such confirmatory bias induces overconfidence: given any probabilistic assessment by an agent that one of two hypotheses is true, the appropriate beliefs would deem it less likely to be true. Indeed, the hypothesis that the agent believes in may be more likely to be wrong than right. The study also showed that the agent may come to believe with near certainty in a false hypothesis despite receiving an infinite amount of information.

Kleinman and Knobloch-Westerwick (2012) tested the hypotheses on confirmation bias and information utility driving selective exposure prior to an election and confirmed that information utility can override a confirmation bias and motivate exposure if a government change is likely and the favored party is likely to lose the election. Klayman and Ha (1987) presented an approach that disputed the view of humans as hypothesis confirmers; they proposed that many phenomena of human hypothesis testing can be understood in terms of a general positive strategy. According to this strategy you test a hypothesis by examining instances in which the property or event is expected to occur (to see if it does occur), or by examining instances in which it is known to have occurred (to see if the hypothesized

conditions prevail). The reverse of the positive test strategy is the negative test strategy; this is when the hypothesis is falsified. Negative test strategy can also be used to test the confirmation bias.

2.3 CONFIRMATION BIAS

According to Nickerson (1998) Confirmation bias implies the seeking or interpreting of evidence in ways that are partial to existing beliefs, expectations or a hypothesis at hand. It connotes a less explicit, less consciously one-sided case building process. It refers usually to unwittingly selectivity in the acquisition and use of evidence. The line between deliberate selectivity in the use of evidence and unwitting molding of facts to fit hypotheses or beliefs is a difficult one to draw in practice, but the distinction is more meaningful conceptually and confirmation bias has more to do with the latter than the former.

An investor will exhibit confirmation bias if they have the tendency to selectively search for and consider information that confirms one's beliefs. They would trade in stocks that endorse their beliefs, thus repeating past trading patterns. When an investor has a strong, emotional belief about something, say company X, they see everything that confirms it, and their mind skips over what contradicts it.

2.4 FACTORS AFFECTING DEMOGRAPHICS IN INDIVIDUAL TRADING

Amount of investment (wealth) the total resources owned by the investor is a demographic that may influence trading of an investor. The increase in wealth raises the quantity demand on an asset. Also the disposable income will determine how investors spend as more income might lead to careless expenditure. More income would translate to more trading at the Stock Market.

Education also is expected to play a role in the investor decision making since more educated investors are expected to employ decision making tools such as Technical Analysis when trading as compared to the less educated investors. On Gender, women are expected to trade more than men and (Onsomu, 2014) are affected more by Confirmation Bias than men. On Age younger traders are expected to have an appetite for risk than older traders. Experienced investors tend to be keener on what they invest in, as they have a firsthand experience on trading than those that are starting out.

3.0 IMPORTANCE OF STUDY

Understanding behavioral factors that underlie individual decision making will help investment managers to set better investment outcome and achieve a better advisory relationship with their clients. The study will assist existing and potential investors to make investment decisions soberly now that they would know other factors influencing their behavior. The study will also assist the practitioners and government agencies to develop programs that will rectify any distortions or anomalies that are in the bourse and which investors encounter while making investment decisions. This will be through policy formulation and regulation by the Capital Markets Authority and the Nairobi Securities Exchange.

4.0 STATEMENT OF THE PROBLEM

Investors are affected by many biases as they make decisions on what to trade or what not to trade in. The confirmation bias is exhibited when investors have a biased search for information, they interpret information in a biased way or still they try to remember information that affirms to their stand point and shrug off the one that is against what they believe is true. In so doing investors are more likely not to accept new information which might even be beneficial to their investment decisions and thereby end up losing out. Investors that are not affected by confirmation bias are more open minded in their trading, they accept information even though it's against what they believe is true, change their way of viewing the trade environment and eventually are bound to make more gains in their trading. Biases at the NSE show the presence of investor irrationality. Investors trade too much (over trading) on stocks that perform; this over trading is a result of over confidence and sensation seeking. Individual investors often extrapolate recent good stock or fund performance even when it shows little to no persistence; this shows a level of bias in the trading. Also as a result of availability and familiarity of companies, investors trade in securities from companies that are local, thus showing the home bias, familiarity and even availability bias. Most studies set out to establish the existence of irrationality at the NSE and the determination of the behavioral factors affecting the investment decisions of investors at the NSE. From review of studies no study has been done to directly show the effect of investor demographics on confirmation bias on individual investor trading decisions.

5.0 OBJECTIVES

Studies found out that there are five behavioral factors affecting the investment decisions of individual investors at the Nairobi Securities Exchange: Herding, Market Prospect, Overconfidence, gambler's fallacy, and Anchoring-availability bias. These studies set out to establish the existence of irrationality at the Nairobi Securities Exchange and the determination of the behavioral factors affecting the investment decisions of investors at the Nairobi Securities Exchange. Therefore, the research sought to find out the effect of investor demographics on the relationship between confirmation bias and the individual trading decisions at the Nairobi Securities Exchange.

6.0 HYPOTHESES

Confirmation bias is shown when the investors give more weight to information that affirms what they consider to be true. They gather and remember information that confirms what they think and when they approach new information they interpret it in a biased way. It was therefore necessary to conduct this study to investigate the effect of demographics on investor trading decisions at the Nairobi Securities Exchanges.

7.0 METHODOLOGY

The study utilized a descriptive research design, descriptive studies provide information about the demographics, behavior, attitudes or other characteristics of a particular group. The population of the study comprised all the individual investors at the NSE. In the determination of Sample size, Roscoe (1975) suggests that studies involving two or more variable quantities (multivariate), the sample size should be at least ten times larger than the number of variables being considered. The variables studied were; Confirmation Bias, Age of Investors, Education Level, Experience, Gender and Income Level. Since these variables are six then the sample size was 60.

A sample of 60 individual investors from the population was selected to represent all individual investors in the country. The sample was obtained by presenting 6 questionnaires to 10 identified stock brokerage firms. This sample is appropriate as the variability of retail investors is usually deemed to be low. The systematic sampling technique was used to randomly select 6 respondents from each of the 10 brokerage firms. The study was based on primary data which was collected using questionnaires. A semi-structured questionnaire was prepared consisting of closed ended questions to elicit information from respondents. MS Excel was then used for data analysis. The data was analyzed using Regression Analysis. Tables were also used in data presentation because of their ability to bring up a relative form to the otherwise abstract nature of results. Means, frequencies and percentages was computed.

8.0 RESULTS AND DISCUSSION

8.1 RELATIONSHIP BETWEEN CONFIRMATION BIAS AND DEMOGRAPHICS

A composite score for confirmation bias was computed by recoding the various factors under; investors buying stocks for the first time from a company, when investors were selling a performing stock after negative comments from analysts and when making an investment decision at the stock market after collecting information. The following tables show the findings.

TABLE 8.1: CO-EFFICIENTS OF THE MODEL

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
Constant	34.023	5.612		6.063	.000		
Gender (X ₁)	-0.076	1.298	-.011	-.059	.954	.720	1.389
Education (X ₂)	-.535	.965	-.186	-.554	.583	.236	4.236
Age (X ₃)	-1.078	.682	-.304	-1.582	.123	.721	1.387
Income (X ₄)	-0.528	.922	-.208	-.572	.571	.201	4.971
Experience (X ₅)	.070	.521	.026	.134	.894	.699	1.430

From the Table 8.1, the Regression Model was as follows:

$$\text{Confirmation Bias} = 34.023 - 0.076X_1 - 0.535X_2 - 1.078X_3 - 0.528X_4 + 0.070X_5$$

From this model it can be deduced that gender, education, age and income relate negatively with confirmation bias except experience.

Gender affected confirmation bias negatively, an increase in one unit leads to a decrease in confirmation bias by 0.076 units. There exists a negative relationship between confirmation bias and education implying that the more an investor gets educated the less they will exhibit confirmation bias, as an increase in one unit of education results in a decrease of confirmation bias by 0.535 units. Age affects confirmation bias negatively implying that the older an investor gets the less confirmation bias they will exhibit, as an increase in one unit of years results in a decrease of confirmation bias by 1.078. Income also affects confirmation bias negatively and the more income an investor has the less confirmation bias they would exhibit an increase in one unit of income leads to a decrease in confirmation bias by 0.528. Lastly there exists a positive relationship between confirmation bias and experience implying that increase in one year of experience will result in an increase in 0.070 units of confirmation bias.

8.2 TESTS OF SIGNIFICANCE

TABLE 8.2: MODEL SUMMARY FOR CONFIRMATION BIAS AND INVESTOR DEMOGRAPHICS

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.346	.120	-.013	3.34641	1.802

The value of R (0.346) indicates a positive but weak relationship between confirmation bias and investor demographics. Table indicates that predictor variables only influenced 12 % of variations in confirmation bias as indicated by the R square statistic 0.120. The R-square value can be interpreted to mean that 12% of the variability in confirmation bias can be explained by the investor demographics. Overall, this means that investor demographics do not explain very much of the confirmation bias, given that 88% of the variability is unaccounted for. In other words, the variable confirmation is like better explained by the combination of different unobserved variables.

From above Table testing the significance of the coefficients, reveals all coefficients of the variables are insignificant since the values 0.954, 0.583, 0.123, 0.571, 0.894 are all greater than 0.05 representing Gender, Education, Age, Income and Experience respectively.

8.3 MULTICOLLINEARITY AND AUTOCORRELATION

Multicollinearity of predictor variables was tested using variance inflation factors (VIFs). Multicollinearity is the undesirable situation where the correlations among the independent variables are strong. It Exists in the model if $VIF \geq 10$. The VIF for Gender was 1.389, VIF for education is 4.236, VIF for age was 1.387, VIF for Income was 4.971 and VIF for experience was 1.430. This meant that variance inflation factors for all predictor variables were less than 10 hence Multicollinearity was not in existence.

Autocorrelation was tested using Durbin-Watson value. From table 8.2, the value of Durbin- Watson was 1.802 hence there was no existence of autocorrelation since the value was far below the threshold for autocorrelation of 7.

9.0 FINDINGS

9.1 DEMOGRAPHICS AND CONFIRMATION BIAS

The study found out that females would wait for more information if they receive information that is opposite to what they think is true while male investors would reject any information that is contrary to what they think is true. Therefore, male investors show higher levels of confirmation bias than female investors. Older investors exhibited confirmation bias in decision making than younger investors. Investors with more than three years' investment experience were more infected by confirmation bias than investors with less than three years' experience. Investors with less income showed more confirmation bias than those with more income. Investors who were graduates were undecided when asked whether they would analyze the company first then buy the stock, an instance where they are buying stock for the first time.

The study found that in the model, investor demographics (gender, education, age, income and experience) influenced 12% of variations in investor confirmation bias as depicted by the R square statistic of 0.120 (refer to table 8.2). The bulk of the variation (in confirmation bias) being accounted for by residuals/ other exogenous factors (88.0%). The study, however, found investor demographics to be insignificantly related to confirmation bias.

Gender had a negative relationship with confirmation bias with a value of -0.076 from the model. Education also had a negative relationship with confirmation bias with a value of -0.535 implying that the more an investor is educated the less confirmation bias they would show. Also age had a negative relationship with confirmation bias with a value of -1.078, showing that with age investors tend to exhibit less confirmation bias, income related negatively with confirmation bias with a value of -0.528. Experience related positively with confirmation bias with a value of 0.070

10.0 RECOMMENDATIONS

From the findings in the study, confirmation bias influences the individual investor trading decisions. Investor advisors should help the investors in this regard and they should organize different training programs to minimize this bias. Investor advisors should also consider investment biases and personality traits as important factors in designing investment programs so that the desired investment objectives can be achieved.

The study recommends that investors should be aware of the existence of the confirmation bias in trading decisions and that it should be provided for in the decision making process.

11.0 CONCLUSIONS

The study found out that, investors at the NSE exhibit confirmation bias in their individual trading decisions. Since they are affected by confirmation bias in their decision making despite their diversity in demographics.

The study found out that there is a relationship between confirmation bias and investor demographics. This relationship was also found to be positive, weak and insignificant.

12.0 LIMITATIONS

The availability of the required data was a challenge since most respondents were reluctant to divulge sensitive information especially on the average monthly income. The study concentrated on the investors who are based in Mombasa County. This could have limited the study since it was confined to a small geographical area compared to the whole country.

13.0 SCOPE FOR FURTHER RESEARCH

Further research can be done by having a larger sample size. This would increase the coverage to more respondents. The study can also be replicated in other countries in Africa, especially in the East African region, Tanzania's Dar es salaam Stock Exchange, Uganda Securities Exchange.

ACKNOWLEDGEMENT

Glory to the Almighty God for the strength and good health He has provided to the author without which we could not have moved an inch. We also wish to extend our sincere gratitude to our lecturers at University of Nairobi specifically my post graduate lecturer.

REFERENCES

1. Klayman, J., & Ha, Y. (1987) Confirmation, disconfirmation and information in Hypothesis testing. *Psychological Review*, 94,211-228
2. Kleinman, S. and Knobloch-Westerwick, S (2012) Pre-election Selective Exposure: Confirmation Bias versus Informational Utility. *Communication Research Journal*.Vol 39 (2) 170- 193
3. Muga N. (1974): "The Nairobi Stock Exchange, its history organization and role in Kenya economy". Thesis, University of Nairobi, Nairobi.
4. Nickerson, S. R., (1998) "Confirmation Bias: A Ubiquitous Phenomenon in many Guises" Educational Publishing Foundation. *Review of General Psychology*. Vol 2 No. 2 pp 175-220
5. Onsomu Z.N., (2014) "The impact of Behavioural biases on investor decisions in Kenya: Male vs Female." *Impact Journals*. Vol. 2 (6) 87-92.
6. Rabin, M., and Schrag J., (1999) "First impressions matter: a model of confirmatory bias". *Quarterly journal of Economics* University of California. February (1) pp 37-82
7. Ritter, J., (2003). "Behavioral Finance". *Pacific-Basin Finance Journal*, 11(4), 429-437
8. Roscoe, J, (1975) *Fundamental Research Statistics for the Behavioral Sciences*. 2nd Edition York: Holt Rinehart New & Winston
9. Shikuku C, (2014): "The Effect of Behavioral Factors On Individual Investor Choices at The Nairobi Securities Exchange". Thesis, University of Nairobi, Nairobi.

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Computer Application & Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue, as well as on the journal as a whole, on our e-mail infoijrcm@gmail.com for further improvements in the interest of research.

If you have any queries, please feel free to contact us on our e-mail infoijrcm@gmail.com.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-

Co-ordinator

DISCLAIMER

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publishers/Editors. Publication does not constitute endorsement by the journal. Neither the Journal nor its publishers/Editors/Editorial Board nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, neither its publishers/Editors/ Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal are exclusively of the author (s) concerned.

ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals

