

GLOBAL JOURNAL

OF HUMAN SOCIAL SCIENCES: C

Sociology & Culture



Public University in Ghana

The Rohingya Repatriation Effort

Highlights

Kamiti Maximum Security Prison

Epics and Science: A Research Portfolio

Discovering Thoughts, Inventing Future

VOLUME 25

ISSUE 3

VERSION 1.0



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: C
SOCIOLOGY & CULTURE



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: C
SOCIOLOGY & CULTURE

VOLUME 25 ISSUE 3 (VER. 1.0)

OPEN ASSOCIATION OF RESEARCH SOCIETY

© Global Journal of Human Social Sciences. 2025.

All rights reserved.

This is a special issue published in version 1.0 of "Global Journal of Human Social Sciences." By Global Journals Inc.

All articles are open access articles distributed under "Global Journal of Human Social Sciences"

Reading License, which permits restricted use. Entire contents are copyright by of "Global Journal of Human Social Sciences" unless otherwise noted on specific articles.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without written permission.

The opinions and statements made in this book are those of the authors concerned. Ultraculture has not verified and neither confirms nor denies any of the foregoing and no warranty or fitness is implied.

Engage with the contents herein at your own risk.

The use of this journal, and the terms and conditions for our providing information, is governed by our Disclaimer, Terms and Conditions and Privacy Policy given on our website <http://globaljournals.us/terms-and-condition/menu-id-1463/>

By referring / using / reading / any type of association / referencing this journal, this signifies and you acknowledge that you have read them and that you accept and will be bound by the terms thereof.

All information, journals, this journal, activities undertaken, materials, services and our website, terms and conditions, privacy policy, and this journal is subject to change anytime without any prior notice.

Incorporation No.: 0423089
License No.: 42125/022010/1186
Registration No.: 430374
Import-Export Code: 1109007027
Employer Identification Number (EIN):
USA Tax ID: 98-0673427

Global Journals Inc.

(A Delaware USA Incorporation with "Good Standing"; **Reg. Number: 0423089**)

Sponsors: *Open Association of Research Society*
Open Scientific Standards

Publisher's Headquarters office

Global Journals® Headquarters
945th Concord Streets,
Framingham Massachusetts Pin: 01701,
United States of America

USA Toll Free: +001-888-839-7392
USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

Global Journals Incorporated
2nd, Lansdowne, Lansdowne Rd., Croydon-Surrey,
Pin: CR9 2ER, United Kingdom

Packaging & Continental Dispatching

Global Journals Pvt Ltd
E-3130 Sudama Nagar, Near Gopur Square,
Indore, M.P., Pin:452009, India

Find a correspondence nodal officer near you

To find nodal officer of your country, please
email us at local@globaljournals.org

eContacts

Press Inquiries: press@globaljournals.org
Investor Inquiries: investors@globaljournals.org
Technical Support: technology@globaljournals.org
Media & Releases: media@globaljournals.org

Pricing (Excluding Air Parcel Charges):

Yearly Subscription (Personal & Institutional)
250 USD (B/W) & 350 USD (Color)

EDITORIAL BOARD

GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE

Dr. Arturo Diaz Suarez

Ed.D., Ph.D. in Physical Education Professor at University of Murcia, Spain

Dr. Prasad V Bidarkota

Ph.D., Department of Economics Florida International University United States

Dr. Alis Puteh

Ph.D. (Edu.Policy) UUM Sintok, Kedah, Malaysia M.Ed (Curr. & Inst.) University of Houston, United States

Dr. André Luiz Pinto

Doctorate in Geology, PhD in Geosciences and Environment, Universidade Estadual Paulista Julio de Mesquita Filho, UNESP, Sao Paulo, Brazil

Dr. Hamada Hassanein

Ph.D, MA in Linguistics, BA & Education in English, Department of English, Faculty of Education, Mansoura University, Mansoura, Egypt

Dr. Asuncin Lpez-Varela

BA, MA (Hons), Ph.D. (Hons) Facultad de Filología. Universidad Complutense Madrid 29040 Madrid Spain

Dr. Faisal G. Khamis

Ph.D in Statistics, Faculty of Economics & Administrative Sciences / AL-Zaytoonah University of Jordan, Jordan

Dr. Adrian Armstrong

BSc Geography, LSE, 1970 Ph.D. Geography (Geomorphology) Kings College London 1980 Ordained Priest, Church of England 1988 Taunton, Somerset, United Kingdom

Dr. Gisela Steins

Ph.D. Psychology, University of Bielefeld, Germany Professor, General and Social Psychology, University of Duisburg-Essen, Germany

Dr. Stephen E. Haggerty

Ph.D. Geology & Geophysics, University of London Associate Professor University of Massachusetts, United States

Dr. Helmut Digel

Ph.D. University of Tbingen, Germany Honorary President of German Athletic Federation (DLV), Germany

Dr. Tanyawat Khampa

Ph.d in Candidate (Social Development), MA. in Social Development, BS. in Sociology and Anthropology, Naresuan University, Thailand

Dr. Gomez-Piqueras, Pedro

Ph.D in Sport Sciences, University Castilla La Mancha, Spain

Dr. Mohammed Nasser Al-Suqri

Ph.D., M.S., B.A in Library and Information Management, Sultan Qaboos University, Oman

Dr. Giaime Berti

Ph.D. School of Economics and Management University of Florence, Italy

Dr. Valerie Zawilski

Associate Professor, Ph.D., University of Toronto MA - Ontario Institute for Studies in Education, Canada

Dr. Edward C. Hoang

Ph.D., Department of Economics, University of Colorado United States

Dr. Intakhab Alam Khan

Ph.D. in Doctorate of Philosophy in Education, King Abdul Aziz University, Saudi Arabia

Dr. Kaneko Mamoru

Ph.D., Tokyo Institute of Technology Structural Engineering Faculty of Political Science and Economics, Waseda University, Tokyo, Japan

Dr. Joaquin Linne

Ph. D in Social Sciences, University of Buenos Aires, Argentina

Dr. Hugo Nami

Ph.D.in Anthropological Sciences, Universidad of Buenos Aires, Argentina, University of Buenos Aires, Argentina

Dr. Luisa dall'Acqua

Ph.D. in Sociology (Decisional Risk sector), Master MU2, College Teacher, in Philosophy (Italy), Edu-Research Group, Zrich/Lugano

Dr. Vesna Stankovic Pejnovic

Ph. D. Philosophy Zagreb, Croatia Rusveltova, Skopje Macedonia

Dr. Raymond K. H. Chan

Ph.D., Sociology, University of Essex, UK Associate Professor City University of Hong Kong, China

Dr. Tao Yang

Ohio State University M.S. Kansas State University B.E. Zhejiang University, China

Mr. Rahul Bhanubhai Chauhan

B.com., M.com., MBA, PhD (Pursuing), Assistant Professor, Parul Institute of Business Administration, Parul University, Baroda, India

Dr. Rita Mano

Ph.D. Rand Corporation and University of California, Los Angeles, USA Dep. of Human Services, University of Haifa Israel

Dr. Cosimo Magazzino

Aggregate Professor, Roma Tre University Rome, 00145, Italy

Dr. S.R. Adlin Asha Johnson

Ph.D, M. Phil., M. A., B. A in English Literature, Bharathiar University, Coimbatore, India

Dr. Thierry Feuillet

Ph.D in Geomorphology, Master's Degree in Geomorphology, University of Nantes, France

CONTENTS OF THE ISSUE

- i. Copyright Notice
 - ii. Editorial Board Members
 - iii. Chief Author and Dean
 - iv. Contents of the Issue
-
1. Social Media and Life Partner Selection Behaviour among Undergraduate Students Unsure about who to Date in a Public University in Ghana. *1-12*
 2. Resolving Statelessness: Geopolitical and Humanitarian Dimensions of the Rohingya Repatriation Effort. *13-24*
 3. Influence of Smart-Phone as a Tool for Active Community Participation in Community Radio – A Study of Participatory Media. *25-29*
 4. Epics and Science: A Research Portfolio (Parts 1–4 + Festival Essays). *31-32*
 5. Enhancing Prison Safety and Discipline: The Role of Dynamic Security Strategies at Kamiti Maximum Security Prison, Kenya. *33-49*
 6. Industrial Activities and Pollution of the Ebrié Lagoon in the Autonomous District of Abidjan in Ivory Coast. *51-59*
-
- v. Fellows
 - vi. Auxiliary Memberships
 - vii. Preferred Author Guidelines
 - viii. Index



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: C
SOCIOLOGY & CULTURE

Volume 25 Issue 3 Version 1.0 Year 2025

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-460X & Print ISSN: 0975-587X

Social Media and Life Partner Selection Behaviour among Undergraduate Students Unsure about who to Date in a Public University in Ghana

By Anthony Edward Boakye, Nuako Angel, Derrick Anim Yeboah & Rita Tekpertey

University of Cape Coast

Abstract- Background: Ghana was home to 7.95 million social media user identities in January 2025 which is equivalent to 22.9% of the total population at the start of 2025. So far, from June 2024 - June 2025, the dominant platform was Facebook (39.44%) followed by YouTube (13.2%), then, Pinterest (10.68%), and the least was LinkedIn 1.46%.

Objective: In view of this, the current study aimed to investigate how social media influence life partner selection behaviour among undergraduate students unsure about who to date in a public university in Ghana.

Methods: Cross-sectional descriptive design was employed for the study and made use of interpretivists worldview. Data were solicited from ten (10) participants age between 18 and 24years old who voluntarily own out to share their views. The choice of the study population was supported by saturation theory. Interpretive phenomenological approach (IPA) was used to analyse the data.

Results: The study found that participants experienced varied forms of social media influence on their life partner selection behaviour which often stem from confusion, erratic decision-making, social pressure, boundary erosion, physical appearance, social status, popularity, and lifestyle portrayals on social media.

Keywords: *life partner, public university, selection behaviour, social media, undergraduate students.*

GJHSS-C Classification: LCC Code: HQ801



SOCIAL MEDIA AND LIFE PARTNER SELECTION BEHAVIOUR AMONG UNDERGRADUATE STUDENTS UNSURE ABOUT WHO TO DATE IN A PUBLIC UNIVERSITY IN GHANA

Strictly as per the compliance and regulations of:



RESEARCH | DIVERSITY | ETHICS

© 2025. Anthony Edward Boakye, Nuako Angel, Derrick Anim Yeboah & Rita Tekpertey. This research/review article is distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

Social Media and Life Partner Selection Behaviour among Undergraduate Students Unsure about who to Date in a Public University in Ghana

Anthony Edward Boakye ^α, Nuako Angel ^ο, Derrick Anim Yeboah ^ρ & Rita Tekpertey ^ω

Abstract- Background: Ghana was home to 7.95 million social media user identities in January 2025 which is equivalent to 22.9% of the total population at the start of 2025. So far, from June 2024 - June 2025, the dominant platform was Facebook (39.44%) followed by YouTube (13.2%), then, Pinterest (10.68%), and the least was LinkedIn 1.46%.

Objective: In view of this, the current study aimed to investigate how social media influence life partner selection behaviour among undergraduate students unsure about who to date in a public university in Ghana.

Methods: Cross-sectional descriptive design was employed for the study and made use of interpretivists worldview. Data were solicited from ten (10) participants age between 18 and 24 years old who voluntarily own out to share their views. The choice of the study population was supported by saturation theory. Interpretive phenomenological approach (IPA) was used to analyse the data.

Results: The study found that participants experienced varied forms of social media influence on their life partner selection behaviour which often stem from confusion, erratic decision-making, social pressure, boundary erosion, physical appearance, social status, popularity, and lifestyle portrayals on social media. Conclusion: Parents should endeavour to restrict their wards from navigating social media platforms in order for them to have a sound mind to think about who to choose as a life partner. Also, participants must uphold the virtue of conscientiousness in order to desist from navigating social media platforms in their life and should not depend solely on social media to select a life partner.

Keywords: life partner, public university, selection behaviour, social media, undergraduate students.

Corresponding Author α: Department of Health, Physical Education and Recreation, University of Cape Coast, Cape Coast, Ghana. e-mail: anthonyedward58@yahoo.com, 0000-0002-4017-8351

Contribution: Conceptualise the Study, Methodology, Formal Analysis, Data Curation, Writing – Original Draft, Proof Reading and Writing – Review & Editing.

Author ο ρ: Department of Population and Health, University of Cape Coast, Cape Coast, Ghana. e-mails: nuakoangel202020@gmail.com, derrick-yeboah721@gmail.com

Contribution: Conceptualise the Study, Methodology, Data Curation, Formal Analysis, and Writing – Review & Editing.

Author ω: Department of Biostatistics and Epidemiology, University of Health and Allied Sciences, Ho, Ghana.

e-mail: ritatekperley@gmail.com, 0009-0008-0418-3496

Contribution: Formal analysis, Writing – original draft, and proof reading.

I. INTRODUCTION

As of the start of April 2025, there were 5.31 billion social media users around the world, representing 64.7% of the total global population [1]. Globally, the available social media statistics from June 2024 - June 2025 indicates that Facebook (71.05%) was the dominant platform most used followed by Instagram (9.81%), Twitter (7.68%), Pinterest (4.66%), YouTube (4.44%), and reddit (1.33%) [2]. In Africa, social media statistics in Africa June 2024 - June 2025, the dominant was Facebook (83.3%) followed by Instagram (5.96%), YouTube (4.92%), Twitter (3.53%), Pinterest (1.58%), and LinkedIn (0.33%) [2]. with overall prevalence of over 86% [3].

Eventually, we nearly do everything online — messaging friends and family, learning new ideas, dating, shopping, reading news and events, and finding community [4]. As of 2022, users spend an average of two hours and 27 minutes per day on social media platforms like Instagram, Twitter, TikTok, and Facebook [4]. For example, in the U.S, it is noted that teens spend on average 4.8 hours a day on social media, and 87% of that time is spent on YouTube, TikTok, and Instagram [5, 6]. Besides posting memes and watching the most recent viral video, young people are also using their time on social media to form relationships [5, 7]. Evidence suggests that ever since social media entered the dating scene, it has changed the game for forming new relationships greatly [5]. But sometimes it can just be too much. Staying so highly connected and being exposed to so much content can take its toll on one's mental health, relationships, and productivity [4, 5].

During life partner selection, social media can likely cause a confusion which can ignite an erratic behaviour [8]. However, it has been established that life partner selection is a complicated psychological process, which is effectively influenced by multiple societal factors including appearance, personality and financial situation [8, 9]. More recently, this has become significantly influenced by social media where constant exposure to sexually stimulating or attractive content creates certain perceptions of reality in the young mindset, which ultimately creates confusion in terms of selecting potential life partners [8, 9].

It is noted that social media has become an integral part of our daily lives, serving various functions such as maintaining connections with peers, socialising, entertainment, and even idleness [10]. Selecting a life partner is one of the most significant decisions one makes in life. While feelings of love and attraction are essential, basing this decision solely on emotions can lead to potential pitfalls [11]. It is crucial to consider deeper, more enduring factors such as shared values and essential relationship traits [11].

Ghana witnessed a 7.95 million social media user identities, representing 22.9% of the total population at the start of 2025 [12]. So far, from June 2024 - June 2025, the dominant platform was Facebook (39.44%) followed by YouTube (13.2%), Pinterest (10.68%), and the least was LinkedIn 1.46%. [13]. Our literature search located few studies on the phenomena understudy. The few studies identified were limited in scope, coverage, and assessment. For instance; one of the studies identified, examined the effects of social media dependency on marital relationships in northern Ghana [14]; another study also looked at the role that social media communication plays in the success of marriages in a residential area in the Ashanti Region of Ghana [15]. Further, another study explored the views of Ghanaians on the use of social media campaign strategies as a political communication tool [16]. Furthermore, Tetteh and Kankam also used a combined framework of the Social Learning Theory and Media Richness Theory, as well as an exploratory descriptive design and a qualitative technique, to investigate how youth in Ghana's Tema Community 8 perceive and use media [17].

It will interest you to note that none of the above studies had its focused on the phenomena understudy which is "social media and life partner selection behaviour among undergraduate students unsure about who to date in a public university in Ghana." In view of this, the current study aimed to investigate how social media influence life partner selection behaviour among undergraduate students unsure about who to date in a public university in Ghana.

Specifically, the Study Seeks to:

1. Examine if constant exposure to romance on social media influence life partner selection behaviour among undergraduate students unsure about who to date in a public university in Ghana.
2. Assess if constant exposure to social media enhanced image influence life partner selection behaviour among undergraduate students unsure about who to date in a public university in Ghana.

II. METHODS

a) *Research Philosophy*

The study was structured in an interpretive philosophy, which assumes that social reality is not

singular or objective, but is rather shaped by human experiences and social contexts (ontology), and is therefore best studied within its socio-historic context by reconciling the subjective interpretations of its various participants (epistemology) [18]. This paradigm was used hence, we aimed to ascertain the various ways undergraduate students perceive and interpret their experiences on how social media influences their life partner selection behaviour. Interpretive research tends to rely heavily on qualitative data hence, qualitative methods became ideal for the study.

b) *Study Design and Data Source*

Cross-sectional descriptive design was used for the study. The design was deemed appropriate because it enables researchers to gather and analyze data from a population of interest at one specific point in time [19, 20]. Data were collected from undergraduate students who were unsure about who to date in a public university in Ghana through an interview guide. The interview guide was structured into three parts. The first part occupies information on participants socio-demographic characteristics. The second part contained items on social media romance, and the third part covered social media image presentation. The interview guide allowed for follow-up questions with an in-depth discussion.

c) *Study Setting and Population*

The study was conducted in a public university in Ghana. (Identity of the public university is concealed to ensure strict anonymity). The study population comprised seventeen (17) undergraduate students who were uncertain about choosing a life partner in their life prior to the study.

d) *Sample and Sampling Technique*

Information power, which reflects the nature of the research questions and the diversity of participants, was used to determine sample size [21]. It was projected that approximately 17 participants would generate a dataset that would be sufficiently rich and complex [21, 22]. Purposive and snowballing sampling technique were used to recruit the participants. Purposive was preferred hence, we intentionally wanted participants with specific characteristics or unique experiences related to the research question and can provide a rich and diverse data to enhance the research findings [23-25]. The snowball sampling technique came into the equation after we had been able to identify just a participant who met the eligibility criteria and we asked her to refer others she know they fit the requirements [26, 27]. In this regard, the sample size grows as referrals were added which created a chain-like structure. Data saturation was reached after interviewing the tenth participants, as no new themes emerged. We settled on 10 participants after reaching a saturation. We realized that the 8th, 9th, and the 10th

participants responses were repeating previous responses. So, right away we assumed no new issues were emerging. This was supported by the rule of thumb principle postulated by Hennink and Kaiser that saturation is achieved after 9–17 interviews or 4–8 focus group discussions with a population that is relatively homogenous coupled with narrowly defined objectives [22].

e) *Inclusion and Exclusion Criteria*

To be part of the study, you should be undergraduate student, uncertain about who to choose as a life partner, should spend on average four (4) hours in a day on social media platforms like (Instagram, Twitter, TikTok, YouTube, and Facebook), must be between 18-24 years and be willing to participate. However, the study excluded postgraduate students, students who were sure of who to date, students below age 18 years and above age 24 years, students who do not spend on average four (4) hours on social media and those who were not willing to take part in the study.

f) *Data Collection Procedure*

Data collection took place from 2020, August 3 to 2020, October 2 after we had received ethical clearance from the University of Cape Coast Institutional Review Board (UCCIRB) (with ID number UCCIRB/CHLS/2020/09). In all, two months were used to collect the data. During the data collection, interviews were audio-recorded based on the consent of the participants. In the field, the interviews lasted between 15 and 35 minutes and ended when both the researcher and participant approved all relevant information had been obtained and a shared understanding reached.

g) *Data Quality Concerns*

The interview guide was first giving to four postgraduate students for them to read through. These postgraduate students checked for grammatical errors and whether the interview guide was in line with the topic. Their feedback helped in restructuring the interview guide. Then, it was submitted to subject experts, the academic supervisor to also check whether they were standard to measure the problem understudy. After that, it was pre-tested on 3 participants to confirm its consistency and effectiveness. Feedback was used to refine the instruments, aligning it with the study's objectives. Bias was minimised by validating responses with some of the participants just to make sure the data was not driven by the researchers' perspective. Further, ethical clearance, oral informed consent, confidentiality, anonymity, and privacy were strictly observed to uphold research integrity.

h) *Data Processing and Analysis*

Data analysis was based on the interviews conducted in the field. Interpretive phenomenological approach was used to analyse the data based on deductive reasoning. The audio-recorded interviews

were transcribed verbatim and saved as Microsoft Word documents. We read through the transcribed transcripts for many times to identify sub-themes related to the major themes. Themes were presented with supporting narratives from the participants.

i) *Ethical Considerations*

Measures were put in place to ensure that the study adhered to UCC ethical standards. Based on this, the study protocol was submitted to the UCCIRB for approval and the Board approved and granted ethical clearance for the study (with ID number UCCIRB/CHLS/2020/09). The ethical clearance was to assure that the study adhered to UCC ethical standards. However, in the field, confidentiality, anonymity and privacy were ensured. On confidentiality, participants were informed that the information they provided will be used for academic purposes and that no any third party would have access to the data. Regarding anonymity, anything that could identify a participant to a data was devoid such as names, contact and so forth. On privacy, participants were giving the free will to choose where they deemed appropriate for the interview to be conducted. Besides, they were informed that participation was voluntary and that they reserve the right to withdraw from the study if they so wished without any victimisation. Further, oral informed consent was obtained before a participant could take part in the study.

III. RESULTS

The study comprised 60.0% females and 40.0% males. Whereas 70.0% were between 18 and 19 years, 30.0% were in the 20-24years age group. In terms of religious affiliation, the dominant category was Christianity constituting 60.0% while the least was traditional (10.0%). Whereas 40.0% were in their 2nd year, 10.0% were in their 3rd year (See Table 1).

Table 1: Socio-Demographics Characteristics of Participants

Variable	Frequency	Percentage
Sex		
Male	4	40.0
Female	6	60.0
Age		
18-19years	7	70.0
20-24years	3	30.0
Religion		
Christianity	6	60.0
Islamic	3	30.0
Traditional	1	10.0
Level of study		
Level 100	3	30.0
Level 200	4	40.0
Level 300	1	10.0
Level 400	2	20.0
Total	10	100.0

Source: Fieldwork (2020)

A thematic map of the results from the interviews is shown in Figure 1. Two themes, each with sub-themes ranging from three to four were generated.

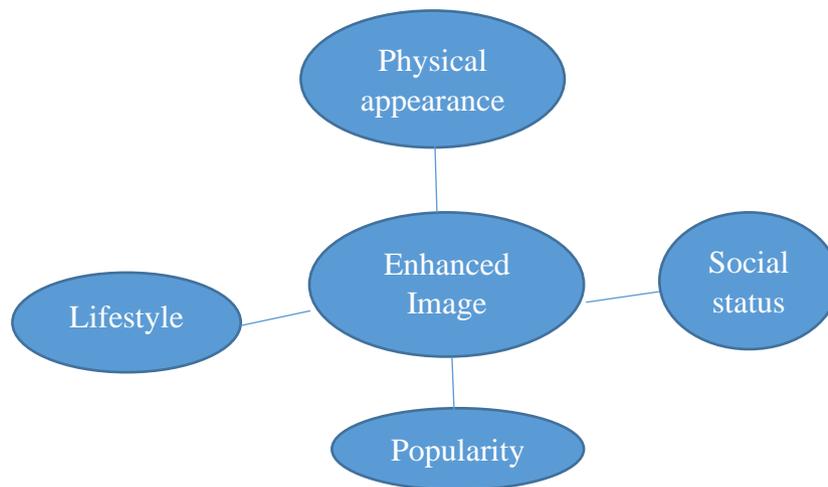


Figure 1: Thematic Map Illustrating Themes and Sub-themes

Theme 1: Romance

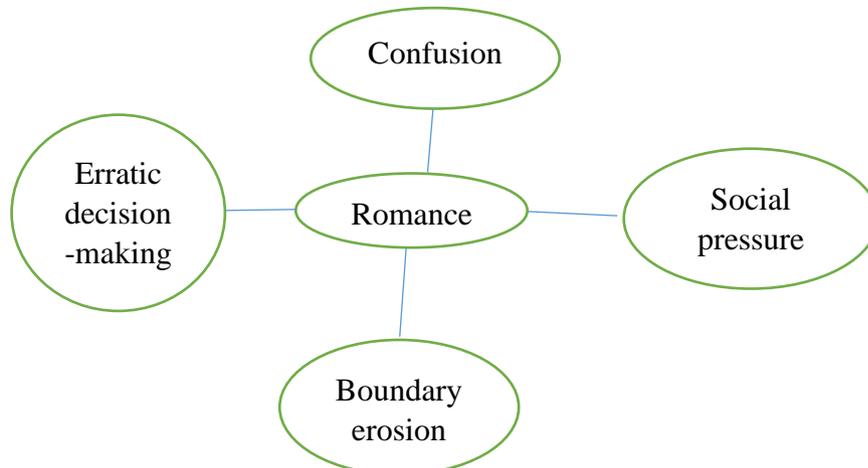


Figure 2: Thematic Map Illustrating a Theme and Four Sub-Themes

This theme has four sub-themes telling us how social media affected participants in their life partner selection behaviour in relation to confusion, social pressure, boundary erosion, and erratic decision-making.

Confusion

Life partner selection is a complex emotional process, which is influenced by numerous societal factors stemming from appearance, personality and financial situation [28-30]. Of late, this is being influenced by social media where constant exposure to attractive content creates certain perceptions of reality in the mindset of young people, which eventually creates confusion in terms of choosing a potential life partner. When faced with confusion, participants commonly described pursuance of multiple romantic interests simultaneously, coupled with unrealistic expectations, perceptions distortion, and shallower connections and fear of commitments:

P3, P4, and P7: You begin to ask yourself a lot of questions whether you are likely to find a perfect relationship compare to what is portrayed on the social media ... this often put me off the track to select a partner hence, I might fail in getting the right person whom I might be committed to forsocial media is a place where people show off and flaunt their relationships, making it look peaceful and perfect which often take its toll on a new and young adult wanting to choose a date.

P5: I tend to pursue more mate options simultaneously which invariably distorts my expectation of finding the right person for my life.

P6: I am always engulfed in a dilemma and disarray which foster me with shallower connections and instill in me fear of commitment in a relationship.

Social Pressure

Most of the participants affirmed that choice of life partner tends to be impacted by idealised relationships on the social media. These idealised relationships which are often unrealistic, push one to behave in certain ways or make specific decisions and regret later in life. Where social pressure from social media catch up on one, it makes one thinks as if his or her own relationship is not thriving. Almost all participants ascribed that:

People only show the good parts of their relationships on social media, but in reality, there are so many ups and downs one might not see. this often make you feel like something is wrong with your own relationship when it does not mimic those shown on the social media [P1, P2, P3, P5, P6, P8, & P10].

Few participants described being prioritise external expectation rather than their own desires:

P4: You choose to do something you wouldn't otherwise do, because you want to feel accepted and valued by your friends.

P9: It isn't just or always about doing something against your will for you want to please people.

Boundary Erosion

The universal nature of social media leads to a distortion of boundaries between personal and professional life, as well as between public and private interactions which invariably affects our choice of life partner. This erosion of boundaries can influence mental health, relationships, and create challenges in managing one's online presence and reputation. Hence, participants might compromise their privacy or values in an attempt to fit in with the expectations set by potential life partners. This dynamic can make it harder for participants to maintain a healthy sense of personal autonomy in their romantic choices. Many described a banter between withholding information for fear of criticism and pleasing a potential life partner, for example Participants 3 and 7 described how postings on social media resulted in a need to compromise their private life while Participants 2 and 5 explained they could only post after a thorough safeguard against future mishaps:

P3: There are times you just post things online because everyone is doing it.....you will feel like you have to share more, even though it's not what you really want to show but since you need a life partner, you post to attract attention.

P7: It's easy to lose yourself when you are always comparing and trying to keep up with what you see online.

P2: I tend to create a criterion to meet before posting anything on the internet.

P5: I for one.....I think before I post.

Erratic Decision-making

In life, a certain amount of erratic behaviour is common. High levels of erratic decision-making can make one susceptible to emotional rewards, peer pressure, and impulsive choices. When participants are continually faced with pervasiveness of social media and digital dating in their everyday live, they become expose to multiple potential mates than ever before. But the availability of popular dating apps and ease of photo enhancement/edit distorts the reality of the available pool of dating candidates. With the challenge of erratic behaviour, participants commonly described that:

P6: Due to information overload, and the promotion of unrealistic expectations on social media, I did not think deeper before I made a choice..... now.... I regret making that choice.

P9: The potential mate availability on social media skewed my judgement towards a life-partner options.....instead of considering qualities such as compatibility, I looked at the intellectual setting and glamorous look of the person which invariably made me lose the perfect partner.

Theme 2: Enhanced Image

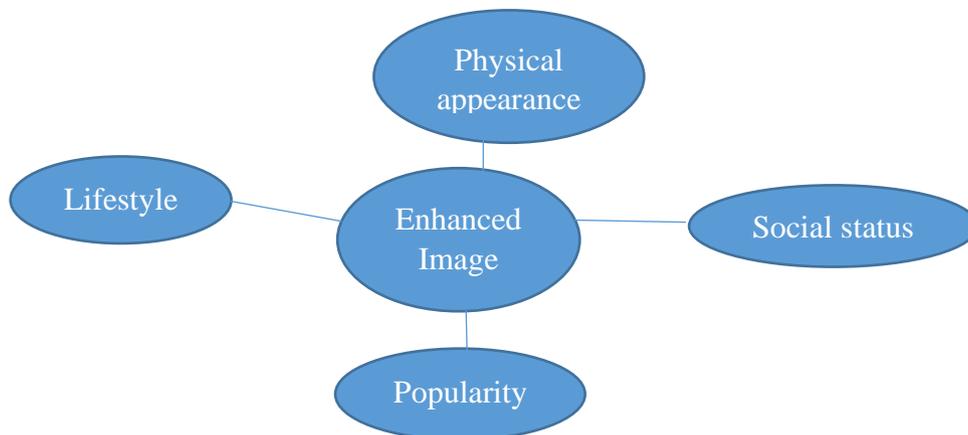


Figure 3: Thematic Map Illustrating a Theme and Four Sub-Themes

The in-depth interviews revealed that exposure to idealised and often superficial portrayals of relationships on social media tends to shift adolescents' focus toward superficial attributes, such as physical appearance, popularity, social status, and lifestyle rather than deeper qualities like emotional compatibility and shared values. This shift in priorities is driven by the frequent depiction of glamorous and idealised traits in online content, which normally overshadow the importance of more meaningful and enduring relationship qualities. This made participants to develop a skewed understanding of what constitutes an ideal partner, emphasising external features and social validation over substantial and enduring attributes.

Physical Appearance

When participants described the impact of social media on life partner section behavior, it was often in relation to making them focus on physical appearance:

P3: *What I normally consider are her vibes, her body, pictures, breast, and her buttocks.*

P10: *Though, social media puts a lot of focus on looks, but for me, it's more about how the person makes me feel..... Yes, appearance matters, but I'm more interested in how respectful and kind he is, especially when no one is watching.*

P1: *While everyone is busy looking at how guys dress or their muscles..... I pay particular attention to how they communicate..... social media can make you have diluted attention and make you focus on edited photos to surrender your treasure to a fake person which can make reality to catch up on you..... but for me, if he can't hold a good conversation or support me emotionally, it's a no.*

P7: *I usually want to be with someone who is nice looking and often has money, especially the young ladies, and most guys would also want ladies who are nice looking and exposed in terms of their appearances.*

Social Status

Many participants admitted that they are more likely to be attracted to potential partners who appear wealthy or socially popular on their social media profiles. In particular, participants described social status as a key contributor to erratic partner selection behaviour given the lack of deeper thoughts about the choice:

P8: *I always tend to look out for either footballer, politicians, pastors, and/or academicians for them because of the position they occupyif you date any of themit makes you feel you have arrived and also get recognition among your peers.*

P2: *All I seek is that the person should occupy a recognisable position.*

P3: *I for one.... I the person's socioeconomic background, education level, and career paths before I commit.*

Popularity

There was consensus among participants about often being attracted to those who are well-liked and perceived as desirable, potentially leading to a higher likelihood of pairing with popular individuals.

Several participants described their life partner selection criteria as being primarily popularity of the person, even at the expense of compatibility; as long as the suitor is well-liked, it's okay [P6]. However, for most participants, popularity was not enough. These participants described wanting their life partner be a well-liked person, romantic, caring as well as loving:

P3: *Ultimately, people are of equal value as human beings but not as potential mates. I consider the popularity of the individual in question. Then, I try to figure out if he is romantic, caring and living at the same time..... because I for one, I need him to be my friend and companion. So, that I can enjoy spending much time with him.*

Nevertheless, participants often described struggling to consistently achieve this goal due to their

erratic behavior in decision-making. When asked if compatibility was no object in mate selection, the majority described how they would switch their attention to popular people on social media:

P8: *I would have been chancing a well-liked people.*

Lifestyle

In relation to life partner selection behaviour, several participants described how they adapted their selection criteria on image enhancement, although there was inconsistency between them. While some adopted looking for partners whose lifestyle aligns with their own, or at least does not clash with their own, others described partner selection behaviour as making them to underestimate the quality of partners they can attract. For both, participants' implicit fear was that because age was not on their side, if they keep on rejecting they might not find a partner in their life time:

P7: *I for one, I tend to select a life partner whose preference for social activities, career aspirations, financial habits, and even daily routines aligns with mine.*

P2: *Me, I would like to find a mate who is self-sufficient, healthy, have a good personality, solid financial status and his way of living is environmentally friendly compare with mine.*

P4: *I despise partners who look cool and adopt a rock star lifestyle of partying every night and sleeping all day.*

P3: *Seeing couples on social media can be motivating for me. It shows me what I want in a relationship, like good communication and affection. But I also know that it's not always real, so I don't let it affect my expectations too much.*

IV. DISCUSSION

The study aimed to unravel the influences of social media on public university students unsure about who to date's partner selection behaviour. The findings reveal that inasmuch as social media assists people to find potential romantic partners, it eventually creates confusion in terms of selecting potential mating partners. This finding corroborated with previous studies which found that most young adults felt confused about their options when it comes to dating decisions [8, 31]. The plausible explanation to this finding could probably be that the constant exposure to overwhelming multiple choices available coupled with unrealistic expectations make them feel indecisive, less satisfied with potential partners, and more likely reject suitable options [32-34]. This finding suggests that participants have difficulty in processing a wide range of choices coupled with a lack of clear identity or relationship goals [33, 35].

The study found that social pressure emitted by social media affected participants to make erratic decisions about a choice of a life partner. Consistent with a previous study which found that social media can cause problems in relationships through constant distractions, comparisons to others, and reduced quality time together [36]. The plausible reason for this finding

could probably be that participants relied on the unrealistic expectations, superficial comparisons promotions, and a sense of urgency or the fear of missing out regarding relationship milestones to make a regrettable decision [37, 38]. This finding implies that maybe participants prioritised perceived social approval over genuine compatibility which invariably led to dissatisfaction and potential relationship problems [39-41].

The study found that social media made significant proportion of the participants to erode their boundary which took its toll on them during their date. This finding is in line with previous studies which found that many couples feel the need to share intimate moments online, leading to a loss of privacy in their relationship [42, 43]. The finding suggests social media use can unknowingly influence relationship dynamics and, potentially, life partner selection by blurring boundaries and leading to comparisons that can negatively affect satisfaction and trust [44, 45]. This can manifest as increased conflict, suspicion, and even relationship dissolution [44, 45]. The plausible explanation to this finding could probably be that these participants might have ever posted pictures and sexually stimulated contents on social media which might have created certain perceptions of reality in their mindset and it is haunting them now that they want to initiate dating [46].

The study found that social media influences participants to make erratic decisions regarding choice of a partner. This finding was consistent with previous studies which found that higher levels of social media usage have led to more marital problems, infidelity, conflicts, jealousy, and eventually divorce [47]. This finding implies that participants made impulsive choices which was driven by factors such as perceived attractiveness or social validation, rather than genuine connection and long-term relationship potential [48]. The reason for this finding could probably be that participants were deceived by the superficial judgements based on curated online profiles which invariably made them to potentially overlook deeper compatibility and personal qualities [49].

The study found that participants fell prey to people's deceptive/fake physical appearance on social media. Consistent with a previous study which found that people of all genders, ages, and ethnicities have all at one point fallen to the fault of fake posts picturing the "perfect body" [50]. This outcome suggests that participants struggle with the painful reality of distorted online appearances [50]. The plausible reason for this finding could probably be that participants have discovered that people use various techniques for deceiving others in social media environments, including bluffs, mimicry (such as mimicking a website), fakery (such as establishing a fake website), white lies,

evasions, exaggeration, webpage redirections (such as misleading someone to a false profile page) [51-53].

The research found that people's social status on social media instigated participants to make erratic choices which did not help them. This outcome was consistent with previous studies which found a connection between social media use and impaired risky decision-making [54, 55]. The plausible reason for this finding could probably be that these participants failed to pause to reflect deeper to ascertain the potential qualities necessary for long lasting relationships before the haste decision [56]. Further, it could also be that they had wanted to be tagged with a well-liked person which ironically did not pile out for them hence, they overlooked at the compatibility aspect of relationship. Furthermore, the reason could be a pressure to maintain a certain image or keep up with others online, leading to choices that are not aligned with their best interests [57]. This finding suggests that individuals, when exposed to others' perceived social status on social media, may make impulsive and irrational decisions that ultimately harm them, rather than help them [58].

The study found that posts on social media that often portray individuals' popularity was a potential marker of confusion in their life partner selection behaviour. This outcome corroborated with previous studies which found that social media profiles can create unattainable standards of people by showcasing perfectly manipulated profiles, with carefully selected scenes [59, 60]. This outcome implies that indeed, portrayal of popularity in social media environment can create confusion in mate selection which can hypothetically leads to individuals prioritising superficial indicators of success over genuine compatibility [8, 44]. Hence, resulting in instability in relationships as people might pursue partners based on perceived popularity rather than deeper qualities [5, 9]. The plausible explanation for this finding could probably be that participants upon constant exposure to these social media posts which showcase popularity often confuse them in life partner selection by creating a distorted view of potential partners [8, 44].

It emerged that lifestyle portrayed on social media affected participants' life partner selection behaviour. This outcome is in line with previous studies which found that high social media use is associated with a greater tendency to compare oneself with others, which in turn may heighten body image concerns [42, 61,62]. The authors further stressed that when individuals compare their real-life relationships with the seemingly perfect ones they see online, it can lead to dissatisfaction, jealousy, and even insecurity within their own relationships. This outcome implies that the constant exposure to idealised or fake lifestyle on social media often create an unrealistic expectation and foster

a comparison among individuals which invariably leads them to be dissatisfied with what they have and eventually end up making the wrong choice [63,64]. The plausible reason for this finding could be that participants tend to focus on superficial aspects of the partner in question rather than genuine compatibility and shared values [66].

V. CONCLUSIONS

The study highlights how idealised portrayals on social media led to emotional distress among participants. Based on this, the study recommends that parents should endeavour to restrict their wards from navigating social media platforms in order for them to have a sound mind to think about who to choose as a life partner. Also, undergraduate students must uphold the virtue of conscientiousness in order to desist from navigating social media platforms in their life and should not depend solely on social media to select a life partner. A major limitation of the study is that, it was structured in an interpretivists worldview and enrolled few people. Therefore, generalisability was not possible. Some participants, even though participated, they were not transparent enough to let us know the in-depth experience they had from engaging with the social media hence, they tried to conceal some important information which has also affected the findings of the study.

Declaration

Ethical Approval

Ethical clearance (with ID number UCCIRB/CH LS/2020/09) to carry out the study was obtained from the Institutional Review Board of University of Cape Coast, Cape Coast, Ghana.

Consent to Participate in the Study

In the field, verbal consent was sought before a participant could take part in the study.

Consent to Publish

Participants were informed that the study was strictly academic and that the results would be published for the purposes of contributing to building academic literature.

Competing Interests

No competing interest existed.

Funding

The study was self-funded

Availability of Data and Materials

The data is only available to the authors hence it was a primary data. However, it can be shared upon request from the corresponding author through (anthonyedward58@yahoo.cm), University of Cape Coast, Cape Coast, Ghana.

ACKNOWLEDGEMENTS

Sincerely, we are grateful to the respondents who sacrifice their time to take part in the study and the research assistants for their help during the data collection.

REFERENCES RÉFÉRENCES REFERENCIAS

1. DataReportal (2025). Global social media Statistics. Retrieved on 21/07/2025 from: <https://datareportal.com/social-media-users>
2. StatsCounter - GlobalStats (2025). Social Media Stats world June 2024 - June 2025. Retrieved on 21/07/2025 from: <https://gs.statcounter.com/social-media-stats>.
3. Idiedo, O.V., & Posigha, B.E. (2024). Perspective Chapter: The Use of Social Media in Sharing Information in Sub-Saharan Africa Region – The Types, Purpose, Benefits and Challenges. Intech Open. doi: 10.5772/intechopen.108473.
4. Kent, J.A. (2023, August 28). Need a Break from Social Media? Here's Why You Should — and How to Do It. Retrieved on 20/07/2025 from: <https://summer.harvard.edu/blog/need-a-break-from-social-media-heres-why-you-should-and-how-to-do-it/#The-Benefits-of-Social-Media>
5. Sibley, S. (2025, June 13). From “Likes” to Love: The Influence of Social Media on Forming Relationships. Retrieved on 20/07/2025 from: <https://decidetocommit.com/from-likes-to-love-the-influence-of-social-media-on-forming-relationships>
6. DeAngelis, T. (2024, April 1). Teens are spending nearly 5 hours daily on social media. here are the mental health outcomes. Monitor on Psychology.
7. Baldwin-White, A., & Gower, K. (2023). Influence of social media on how college students perceive healthy relationships and consent. *Journal of American College Health*, 71(4), 1301–1309.
8. Evans, A. (3-Jul-2024). Social media is a likely cause of 'confusion' in modern mate selection. *Society for Experimental Biology*. Retrieved on 21/07/2025 from: <https://www.eurekalert.org/news-releases/1048945>
9. Moeed, A. (July 5, 2024). Confusion in Finding Life Partner Due to Social Media, Study Says. Retrieved on 21/07/2025 from: <https://greekreporter.com/2024/07/05/confusion-finding-life-partner-social-media/#:~:text=Researchers%20found%20that%20over%20half,dating%20play%20a%20big%20role.>
10. Marzo RR, Jun Chen HW, Ahmad A, Thew HZ, Choy JS, Ng CH, Chew CLA, Heidler P, King I, Shrestha R, Rahman F, Rana JA, Khoshtaria T, Matin A, Todua N, Küçük Biçer B, Faller E, Tudy RA, Baldonado A, Penamante CA, Bahari R, Younus DA, Ismail ZM, Lotfizadeh M, Hassan SM, Iliya RS, Inyang AE, Maung Maung T, Oo WM, Myint O, Khadka A, Acharya S, Aye SS, Naing TW, Win MT, Kyaw YW, Thapa PP, Khanal J, Bhattacharya S, Abid K, Fahlevi M, Aljuaid M, El-Abasir RA, & Elsayed MEG. (2024). The evolving role of social media in enhancing quality of life: a global perspective across 10 countries. *Arch Public Health*. 82(1):28. doi: 10.1186/s13690-023-01222-z. PMID: 38449000; PMCID: PMC10918911.
11. Zam L. (2024, June 30). Choosing a Life Partner: Beyond Feelings to Values and Relationship Traits. Retrieved on 20/07/2025 from: <https://drzam.com/choosing-a-life-partner-beyond-feelings-to-values-and-relationship-traits/?srsId=AfmBOorAEBkCSGpFT9TJPvJfOTT9AQ1aJNWGyF0KvYzsdTF0gH92A9Eh>
12. Kemp, S. (2025). Digital 2025: Ghana. Retrieved on 21/07/2025 from: <https://datareportal.com/reports/digital-2025-ghana>
13. StatsCounter - GlobalStats (2025). Social Media Stats world June 2024 - June 2025. Retrieved on 21/07/2025 from: <https://gs.statcounter.com/social-media-stats-ghana>.
14. Konlan, I., Abdulai, M. & Ibrahim, H. (2025). Exploring the Effects of Social Media on Marriages in Northern Ghana. *Hu Arenas* 8, 394–413 (2025). <https://doi.org/10.1007/s42087-023-00333-x>
15. Obeng, C., Adade, J.R.D., Amos, P.M., Antwi, T., & Asiedu, B.W.K. (2023). Social Media Practices among Married Couples in a Ghanaian Residential Area. *New Media and Mass Communication*. 104, ISSN 2224-3267 (Paper) ISSN 2224-3275 (Online). DOI: 10.7176/NMMC/104-07.
16. Baba, Y. A, Lawrencia, A, Daniel, O, Stephen, T & Christopher, D. (2024). Social media and political communication in Ghana: views of inhabitants of Tema metropolis. *Information Impact: Journal of Information and Knowledge Management*, 15:1, 30-46, DOI <https://dx.doi.org/10.4314/ijikm.v15i1.4>
17. Tetteh, P. K., & Kankam, P. K. (2024). The role of social media in information dissemination to improve youth interactions. *Cogent Social Sciences*, 10(1). <https://doi.org/10.1080/23311886.2024.2334480>
18. Bhattacharjee, A. (n.d). *Social Science Research: Principles, Methods, and Practices*. University of South Florida. Retrieved on 20/07/2025 from: http://scholarcommons.usf.edu/oa_textbooks/3/. License: CCBY-NC-SA: Attribution-NonCommercial-Share Alike
19. Wang X, & Cheng Z. (2020). Cross-Sectional Studies: Strengths, Weaknesses, and Recommendations. *Chest*. 158(1S): S65-S71. doi: 10.1016/j.chest.2020.03.012. PMID: 32658654.
20. Capili B. (2021). Cross-Sectional Studies. *Am J Nurs*. 121(10):59-62. doi: 10.1097/01.NAJ.0000794280.73744.fe. PMID: 34554991; PMCID: PMC9536510.

21. Malterud, K., Siersma, V.D., & Guassora, A.D. (2015). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, 26(13), 1753-1760. doi: 10.1177/1049732315617444
22. Hennink, M., & Kaiser, B.N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science & Medicine*, 292, 114523. <https://doi.org/10.1016/j.socscimed.2021.114523>.
23. Sago (2024). Different Types of Sampling Techniques in Qualitative Research. retrieved on 21/07/2025 from: <https://sago.com/en/resources/blog/different-types-of-sampling-techniques-in-qualitative-research/#:~:text=In%20purposive%20sampling%2C%20researchers%20intentionally,to%20enhance%20the%20research%20findings>
24. Palinkas LA, Horwitz SM, Green CA, Wisdom JP, Duan N, & Hoagwood K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Adm Policy Ment Health*. 2015 Sep; 42(5):533-44. doi: 10.1007/s10488-013-0528-y. PMID: 24193818; PMCID: PMC4012002.
25. Campbell S, Greenwood M, Prior S, Shearer T, Walkem K, Young S, Bywaters D, & Walker K. (2020). Purposive sampling: complex or simple? Research case examples. *J Res Nurs*. 25(8): 652-661. doi: 10.1177/1744987120927206. Epub 2020 Jun 18. PMID: 34394687; PMCID: PMC7932468
26. Bala, S (2016). Sampling and Methods of Data Collection in Qualitative Research. *Indian Journal of Continuing Nursing Education* 17(2): 41-47.
27. Martínez-Mesa J, González-Chica DA, Duquia RP, Bonamigo RR, & Bastos JL. (2016). Sampling: how to select participants in my research study? *An Bras Dermatol*. 91(3):326-30. doi: 10.1590/abd1806-4841.20165254. PMID: 27438200; PMCID: PMC4938277
28. Devenport, S., Davis-McCabe, C. & Winter, S. (2023). A Critical Review of the Literature Regarding the Selection of Long-Term Romantic Partners. *Arch Sex Behav* 52, 3025–3042 (2023). <https://doi.org/10.1007/s10508-023-02646-y>
29. Puschmann, P., & Pujadas-Mora, J. M. (2024). The quest for a partner in the past and today: exploring trends and drivers in partner preferences and selection through new sources and approaches. *The History of the Family*, 29(4), 445–460. <https://doi.org/10.1080/1081602X.2024.2417749>
30. Karney BR. (2021). Socioeconomic Status and Intimate Relationships. *Annu Rev Psychol*. 72:391-414. doi: 10.1146/annurev-psych-051920-013658. Epub 2020 Sep 4. PMID: 32886585; PMCID: PMC8179854.
31. Melore, C. (July 03, 2024). Social media and dating app deception are leaving modern singles confused and alone. Chayan Munshi, Ethophilia Research Foundation. Retrieved on 24/07/2025 from: <https://studyfinds.org/social-media-dating-app-confused>
32. Apostolou M, Constantinidou L, & Kagialis A. (2024). Mate Choice Plurality, Choice Overload, and Singlehood: Are More Options Always Better? *Behav Sci (Basel)*. 14(8):703. doi: 10.3390/bs14080703. PMID: 39199098; PMCID: PMC11351274
33. Wu, P.L., & Chiou, W-B. (2009). More Options Lead to More Searching and Worse Choices in Finding Partners for Romantic Relationships Online: An Experimental Study. *Cyberpsychology & behavior: the impact of the Internet, multimedia and virtual reality on behavior and society* 12(3):315-8. DOI: 10.1089/cpb.2008.0182
34. D'Angelo, J.D., & Toma, C. (2016). There Are Plenty of Fish in the Sea: The Effects of Choice Overload and Reversibility on Online Daters' Satisfaction With Selected Partners. *Media Psychology* 20(1):1-27. DOI: 10.1080/15213269.2015.1121827.
35. Thomas, M.F., Binder, A., & Matthes, J. (2021). The agony of partner choice: The effect of excessive partner availability on fear of being single, self-esteem, and partner choice overload. *Computers in Human Behavior* 126(2):106977. DOI: 10.1016/j.chb.2021.106977
36. Krolikowska, A. (August 25, 2024). How Social Media Contributes to Marital Breakdowns: 8 Surprising Facts That May Shock You. Retrieved on 24/07/2025 from: <https://annaklaw.com/social-media-marital-breakdowns>
37. Gupta M, & Sharma A. (2021). Fear of missing out: A brief overview of origin, theoretical underpinnings and relationship with mental health. *World J Clin Cases*. 9(19):4881-4889. doi: 10.12998/wjcc.v9.i19.4881. PMID: 34307542; PMCID: PMC8283615
38. Abd Ellatif Elsayed H (2025) Fear of Missing Out and its impact: exploring relationships with social media use, psychological well-being, and academic performance among university students. *Front. Psychol*. 16:1582572. doi: 10.3389/fpsyg.2025.1582572
39. Lucchi B.L., & Sacco PL. (2020). What Makes a Partner Ideal, and for Whom? Compatibility Tests, Filter Tests, and the Mating Stability Matrix. *Behav Sci (Basel)*. 10(2):48. doi: 10.3390/bs10020048. PMID: 32024253; PMCID: PMC7071359
40. Regan A, Walsh LC, Horton C, Rodriguez A & Kaufman VA (2025) Contextualizing marital dissatisfaction: examining profiles of discordant spouses across life domains. *Front. Psychol*. 16:1458129. doi: 10.3389/fpsyg.2025.1458129
41. Etcheverry, P.E., Le, B., & Charania, M.R. (2008). Perceived versus reported social referent approval and romantic relationship commitment and persistence. *Personal Relationships* 15(3):281 – 295 DOI: 10.1111/j.1475-6811.2008.00199.x.

42. Boso, E.P. (Fri, 11 Jul 2025). The Impact of Social Media on Authentic Relationships and Marriages. *Modern Ghana*. Retrieved on 25/07/2025 from: <https://www.modernghana.com/news/1416176/the-impact-of-social-media-on-authentic-relationships.html>.
43. Vriens E, & van Ingen E. (2018). Does the rise of the Internet bring erosion of strong ties? Analyses of social media use and changes in core discussion networks. *New Media Soc.* 20(7):2432-2449. doi: 10.1177/1461444817724169. Epub 2017 Aug 15. PMID: 30581363; PMCID: PMC6256723.
44. Bouffard, S., Giglio, D., & Zheng, Z. (2022). Social Media and Romantic Relationship: Excessive Social Media Use Leads to Relationship Conflicts, Negative Outcomes, and Addiction via Mediated Pathways. *Social Science Computer Review* 40(6): 1523-1541 DOI: 10.1177/08944393211013566
45. Abbasi, I. (2019). Social Media and Committed Relationships: What Factors Make Our Romantic Relationship Vulnerable? *Social Science Computer Review* 37(3):425-434. DOI: 10.1177/0894439318770609
46. Verrastro V, Saladino V, Eleuteri S, Barberis N, & Cuzzocrea F. (2023). Sexting, Self-esteem, and Social Media: A Comparison among Frequent, Occasional, and Non-sexting Italian Adolescent Girls. *Psychol Russ.* 16(4):3-20. doi: 10.11621/pir.2023.0401. PMID: 38162809; PMCID: PMC10755954
47. Partner, S.P. (2025). How Social Media Affects Marriage. *Effects of Social Media Use (and Misuse) on Marriages & Relationships*. Retrieved on 25/07/2025 from: <https://www.mckinleyirvin.com/resources/digital-divorce-a-guide-for-social-media-digital/how-social-media-affects-marriage>
48. Martin LE, & Potts GF. (2009). Impulsivity in Decision-Making: An Event-Related Potential Investigation. *Pers Individ Dif.* 46(3):303. doi: 10.1016/j.paid.2008.10.019. PMID: 20126284; PMCID: PMC2663910
49. Haferkamp N, & Krämer NC. (2011). Social comparison 2.0: examining the effects of online profiles on social-networking sites. *Cyberpsychol Behav Soc Netw.* 14(5):309-14. doi: 10.1089/cyber.2010.0120. Epub 2010 Nov 30. PMID: 21117976
50. Polek, M. (4 November 2024). Social Deception - The Beacon. Retrieved on 25/07/2025 from: <https://dtbeacon.net/21029/features/social-deception>
51. Mun IB & Kim H (2021) Influence of False Self-Presentation on Mental Health and Deleting Behavior on Instagram: The Mediating Role of Perceived Popularity. *Front. Psychol.* 12:660484. doi: 10.3389/fpsyg.2021.660484.
52. Majerczak P, & Strzelecki A. (2022). Trust, Media Credibility, Social Ties, and the Intention to Share towards Information Verification in an Age of Fake News. *Behav Sci (Basel).* 12(2):51. doi: 10.3390/bs12020051. PMID: 35200302; PMCID: PMC8869166
53. Damstra, A., Boomgaarden, H. G., Broda, E., Lindgren, E., Strömbäck, J., Tsifti, Y., & Vliegenthart, R. (2021). What Does Fake Look Like? A Review of the Literature on Intentional Deception in the News and on Social Media. *Journalism Studies*, 22(14), 1947–1963. <https://doi.org/10.1080/1461670X.2021.1979423>
54. Association of American Universities (January 10, 2019). Excessive Social Media Use Linked to Poor Decision-Making. Retrieved on 25/07/2025 from: <https://www.aau.edu/research-scholarship/featured-research-topics/excessive-social-media-use-linked-poor-decision>.
55. Meshi D, Freestone D, & Özdem-Mertens C. (2021). Problematic social media use is associated with the evaluation of both risk and ambiguity during decision making. *J Behav Addict.* 10(3):779-787. doi: 10.1556/2006.2021.00047. PMID: 34329191; PMCID: PMC8997224.
56. Young, G., & Zeigler-Hill, V. (2024). The Dual-Pathway Model of Respect in Romantic Relationships. *Sexes*, 5(3), 317-334. <https://doi.org/10.3390/sexes5030024>
57. Exley CL, & Kessler JB. (2023). Information Avoidance and Image Concerns. *Econ J (London)*. 133(656):3153-3168. doi: 10.1093/ej/uead058. PMID: 37808478; PMCID: PMC10558138.
58. Lin, S.-C., & Jian, E.-T. (2022). Effects of Personality Traits Concerning Media Use Decisions on Fear of Missing Out and Social Media Use Behavior. *Behavioral Sciences*, 12(11), 460. <https://doi.org/10.3390/bs12110460>
59. Yacoub, C., Spoed, J., Cutting, R., & Hawley, D. (2018). The Impact of Social Media on Romantic Relationships. *Journal of Education and Social Development*, 2–2, 53-58. doi: 10.5281/zenodo.1490763. <http://www.ibii-us.org/Journals/JESD/>. ISBN 2572-9829 (Online), 2572-9810 (Print).
60. Pedalino F, & Camerini AL. (2022). Instagram Use and Body Dissatisfaction: The Mediating Role of Upward Social Comparison with Peers and Influencers among Young Females. *Int J Environ Res Public Health.* 19(3):1543. doi: 10.3390/ijerph19031543. PMID: 35162562; PMCID: PMC8834897
61. Nor NFM, Iqbal N, & Shaari AH. (2025). The Role of False Self-Presentation and Social Comparison in Excessive Social Media Use. *Behav Sci (Basel)*. 2025 May 14;15(5):675. doi: 10.3390/bs15050675. PMID: 40426453; PMCID: PMC12109065
62. Bonfanti, R.C., Melchiori, F., Tet, A., Albano, G., Raffard, S., Rodgers, R., & Coco, G.L. (2025). The association between social comparison in social media, body image concerns and eating disorder symptoms: A systematic review and meta-analysis.

Body Image, 52, 101841. <https://doi.org/10.1016/j.bodyim.2024.101841>

63. Adams Z, Osman M, Bechlivanidis C, & Meder B. (2023). (Why) Is Misinformation a Problem? *Perspect Psychol Sci.* 18(6):1436-1463. doi: 10.1177/17456916221141344. Epub 2023 Feb 16. PMID: 36795592; PMCID: PMC10623619
64. Ali Adeeb, R., & Mirhoseini, M. (2023). The Impact of Affect on the Perception of Fake News on Social Media: A Systematic Review. *Social Sciences*, 12(12), 674. <https://doi.org/10.3390/socsci12120674>
65. Lucchi Basili L, & Sacco PL. (2020). What Makes a Partner Ideal, and for Whom? Compatibility Tests, Filter Tests, and the Mating Stability Matrix. *Behav Sci (Basel)*. 10(2):48. doi: 10.3390/bs10020048. PMID: 32024253; PMCID: PMC7071359.
66. Regan P.C., Levin L., Sprecher S., Christopher F.S., & Gate R. (2000). Partner preferences. What characteristics do men and women desire in their short-term sexual and long-term romantic partners? *J. Psychol. Hum. Sexuality.* 12:1–21. doi: 10.1300/J056v12n03_01





GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: C
SOCIOLOGY & CULTURE
Volume 25 Issue 3 Version 1.0 Year 2025
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Resolving Statelessness: Geopolitical and Humanitarian Dimensions of the Rohingya Repatriation Effort

By Arafatur Rahaman, Farabeed Bin Faisal, Nuzhat Nawar, Farhan Mehdi Arefin,
Sudipto Sagor Neel, Sehrish Nuren Khan & Faizan Ul Hoque

Southeast University

Abstract- The Rohingya crisis exposes the ineffectiveness of the international community in preventing systematic state-sponsored persecution of vulnerable populations. Decades of exclusion and violence in Myanmar became a public crisis in 2017 when over a million people from the Rohingya minority fled to Bangladesh. This mass displacement has become one of the greatest humanitarian crises of the 21st century, placing tremendous pressure on Bangladesh's socio-economic infrastructure while exposing significant shortcomings in global systems of accountability and justice. At the heart of this crisis is Myanmar's 1982 Citizenship Law, which codified the Rohingya's statelessness, blocking access to fundamental rights and embedding patterns of violence and displacement. And little is moving forward despite global condemnation and a legal challenge involving the International Court of Justice. Myanmar's refusal to repatriate, meanwhile, has long collided with geopolitical roadblocks, including major allies' vetoes, and has effectively brought accountability and the prospect of sustainable repatriation to a standstill.

Keywords: *forced migration, rohingya crisis, refugee repatriation, human rights violations, sustainable refugee solutions.*

GJHSS-C Classification: FOR Codes: 160606



Strictly as per the compliance and regulations of:



© 2025. Arafatur Rahaman, Farabeed Bin Faisal, Nuzhat Nawar, Farhan Mehdi Arefin, Sudipto Sagor Neel, Sehrish Nuren Khan & Faizan Ul Hoque. This research/review article is distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

Resolving Statelessness: Geopolitical and Humanitarian Dimensions of the Rohingya Repatriation Effort

Arafatur Rahaman ^α, Farabeed Bin Faisal ^σ, Nuzhat Nawar ^ρ, Farhan Mehdi Arefin ^ω, Sudipto Sagor Neel [¥],
Sehrish Nuren Khan [§] & Faizan Ul Hoque ^x

Abstract- The Rohingya crisis exposes the ineffectiveness of the international community in preventing systematic state-sponsored persecution of vulnerable populations. Decades of exclusion and violence in Myanmar became a public crisis in 2017 when over a million people from the Rohingya minority fled to Bangladesh. This mass displacement has become one of the greatest humanitarian crises of the 21st century, placing tremendous pressure on Bangladesh's socio-economic infrastructure while exposing significant shortcomings in global systems of accountability and justice. At the heart of this crisis is Myanmar's 1982 Citizenship Law, which codified the Rohingya's statelessness, blocking access to fundamental rights and embedding patterns of violence and displacement. And little is moving forward despite global condemnation and a legal challenge involving the International Court of Justice. Myanmar's refusal to repatriate, meanwhile, has long collided with geopolitical roadblocks, including major allies' vetoes, and has effectively brought accountability and the prospect of sustainable repatriation to a standstill. Critically drawing on work in history, social science, and international relations, the paper examines the layers of historical, socio-economic, and geo-political complexity underlying the surface of the crisis and argues for a multi-disciplinary, multi-dimensional, rights-based countenancing of its legal implications and human cost. As such, immediate legal reforms taking place in Myanmar, fair burden-sharing, and more concerted action both internationally and regionally are necessary to bring about justice for the Rohingya people and viable pathways to resolution.

Keywords: forced migration, rohingya crisis, refugee repatriation, human rights violations, sustainable refugee solutions.

I. INTRODUCTION

The Rohingya refugee crisis is a paradigm case of human rights abuse, dispossession, and failure of global governance. This crisis was rooted in Myanmar's Rakhine State, decades in the making, and forged from fatal combinations of discrimination, exclusion, and state-sponsored violence against the Rohingya people (muslim ethnic minority group). According to the Citizenship Act of 1982, Rohingya

muslims have systematically been denied citizenship, legal recognition, restrictions on the right to movement, and suppression through the persecution of other vital citizen rights. The government of Myanmar (NLD Govt.), began a brutal crackdown in 2017 (crackdown started in 2016 with tens of thousands of Rohingya violently displaced into Bangladesh, which then further escalated in 2017) that included systemic atrocities, such as mass killings and destruction of entire villages, as well as sexual violence, which resulted in more than 740,000 Rohingya out of their native land and crossed the border into Bangladesh to join with earlier waves of refugees. This violence has traumatized the Rohingya community and the continuation of life with the uncertainty of their future as stateless people. Since then, the area of Cox's Bazar Rohingya camps has been wracked by the world's largest refugee camp, which has just made the socio-economic, environmental, and humanitarian snags of the area that much more difficult and pushed the resources of Bangladesh to the limit. The Rohingya have been subject to systematic deprivation of citizenship, legal recognition, and fundamental human rights, especially given Myanmar's 1982 Citizenship Law, which stripped the group of its entitlement to citizenship status and left it vulnerable to statelessness.

While Myanmar's activities have been widely condemned across the globe, responses internationally have been disjointed, inconsistent, and largely ineffective. Although there have been some attempts taken to initiate legal action — most notably, the action brought before the International Court of Justice (ICJ) to address accusations of genocide — the wheels of justice have ground painfully slowly, and Myanmar's refusal to accept its responsibility for the crisis has been a major obstacle to its resolution. At the same time, resettlement has floundered, while Myanmar has failed to meet the minimum conditions for safe and dignified repatriation. We hope this paper will assist them in understanding the crisis with reference to its historical origins, socio-political dimensions, and geo-political context. It will examine the international community's response, looking at the debate over intervention successes and failures of global governance. It finally argues for concrete rights-based solutions to the crisis,

Corresponding Author α: School of Business Studies, Southeast University, Bangladesh. e-mail: a.rahaman133@gmail.com

Author σ ρ ω ¥ § x: Research Assistant, Adroit Research Foundation (ARF), Bangladesh.

practical ways to align laws with the goals, better sharing of the burden between states, and a demand for enhanced regional and international cooperation. In this regard, the paper endeavors to draw a sustainable framework –the root of a viable solution to the Rohingya refugee disaster and to do a fair, if not optimum, alignment in similar kinds of humanitarian disasters in the future.

a) *Objectives of the Study*

The primary aims of this study were to gain a holistic understanding of the Rohingya refugee crisis by focusing on the effects on host populations and assessing the efficacy of humanitarian interventions for repatriations.

- ✓ Assessing Rohingya refugee camps' socio-economic, infrastructural, and environmental impacts on host communities in Bangladesh (Cox's Bazar).
- ✓ To investigate the nature of security risks as perceived by Rohingya refugees, particularly the influence of past violence experiences, statelessness fears, and group-based variation in repatriation preparedness.
- ✓ To evaluate the effectiveness of international humanitarian and development programs, including those commissioned by the UNHCR and IOM, in preparing Rohingya refugees for a voluntary and safe return.
- ✓ To investigate the barrier to repatriation and analyze legal and political obstacles in Myanmar that impede Rohingya reintegration — citizenship laws, access to justice, human rights conditions, etc.
- ✓ To demonstrate a framework for improving regional diplomatic mechanisms and cooperation to ensure sustainable solutions to the Rohingya crisis through shared responsibility and humanitarian joint initiatives.

b) *Theoretical Framework*

This study applies three theoretical frameworks, Structural Violence Theory (Galtung, 1969), Human Security Paradigm (UNDP, 1994), and Refugee Repatriation Theory (Hathaway, 2021; Chimni, 2004), with supplementary engagement from Realist International Relations Theory to explain the limited effectiveness of global action. These frameworks provide analytical tools to examine the systemic causes of the Rohingya crisis, its multi-level impacts, and the constraints of repatriations for the resolution efforts.

Structural Violence Theory: The concept of structural violence explains how impairment is embedded in legal, political, and institutional arrangements- that deny people access to fundamental rights and opportunities. The Citizenship Law 1982 of Myanmar is a paradigmatic case that legally enacted the exclusion and statelessness of the Rohingya refugees. This study uses

this framework to argue that state-sponsored exclusion is not accidental but structurally vital to the crisis.

Proposition 1: Statelessness, enforced through Myanmar's legal regime, institutionalizes harm and perpetuates cycles of violence and displacement.

Human Security Paradigm: The UNDP's human security framework expands analysis from national security to people-centered vulnerabilities, including economic, environmental, and personal safety. This study uses it to interpret the insecurity faced by both Rohingya refugees and host communities in Cox's Bazar. It emphasizes the need for holistic humanitarian responses that go beyond emergency aid.

Proposition 2: Durable solutions must address refugee and host-community vulnerabilities across all human security dimensions to avoid compounding insecurity and instability.

Refugee Repatriation Theory: Drawing on Hathaway and Chimni's work, this framework establishes that repatriation is only ethical and sustainable when it is voluntary, safe, and founded on rights restoration. The study evaluates repatriation failures through this theory, showing that without legal reform, the return of Rohingya would amount to a return to persecution.

Proposition 3: Repatriation absent legal citizenship and third-party monitoring is neither voluntary nor sustainable and thus reinforces statelessness.

Realism in International Relations: Realist theory is invoked to explain the persistent failure of global institutions to intervene meaningfully. Realism posits that states act to pursue strategic interests, not moral ideals, which helps explain the geopolitical paralysis at the UN and ASEAN.

Proposition 4: The ineffectiveness of international responses reflects power politics, not normative failure, and limits accountability mechanisms for state-led violence.

II. METHODOLOGY

This study uses a qualitative research design to analyze the Rohingya refugee crisis using both primary and secondary data. The study includes interviews with refugees and surveys with host-community members in Cox's Bazar, Bangladesh, to explore the crisis's socio-economic, environmental, and social effects and analyze barriers to repatriation through a human rights lens. Focus group discussions were run in a semi-structured format to explore socio-economic impacts, environmental issues, safety concerns, and legal obstacles of repatriations with diverse stakeholders to capture a broader range of perspectives & potential solutions. The secondary data of this study was collected from academic journals, policy reports, and UN publications to provide a broader context of this

humanitarian crisis and periods of international response. Interviews with refugees reflect their calls for citizenship, safety, and international oversight of safe repatriation. Additionally, the interviews of host communities show worries about resource strain, competition for wages, and social insecurity. Through thematic and document analysis, this paper analyzes the data to highlight the significant issues concerning both populations of Rohingya refugees and host communities. The research stresses legal change in Myanmar, regional cooperation, and global burden-sharing to help address the crisis. Finally, this study offers practitioners actual recommendations for sustainable resolutions to the Rohingya crisis, involving international engagements and effective humanitarian interventions.

III. LITERATURE REVIEW

The process of repatriating Rohingya refugees from Bangladesh to Myanmar involves factors in humanitarian, geo-political, and regional security, hence this issue is complex. This became more severe in 2017 when over 740,000 Rohingya people fled from Myanmar to Bangladesh due to rampant system-oriented violence committed by the military, which the UN called ethnic cleansing (Rahman et al., 2021; Fahim, 2022; Faisal, 2020). It is useful to place this crisis in a historical context to understand the complexities at play in repatriation efforts. The Rohingya community has experienced racism and violence for decades, which has made them one of the most oppressed ethnic minorities globally (Faisal, 2020; Rasyid et al., 2022).

Myanmar has refused to acknowledge the Rohingya as legitimate citizens, meaning that any repatriation is that much more difficult. These groups have been regularly referred to as illegal immigrants of Bangladesh by the Myanmar government, which has been denying them their citizenship and the right to return with safety and dignity (Fahim, 2022; Ali, 2020). The denial of this identity is simultaneously a barrier to the Rohingya's return and a cause for serious concern as to the safety and security of the Rohingya after repatriation. The Rohingya refugees not only experienced violence in the past but are also afraid of the violence that will greet them when they get home; it has a psychological effect that needs to be studied in the past (Frounfelker et al. 2019; Mia 2021).

Moreover, the international community has done little to promote a responsible and voluntary repatriation process. Though countries and organizations have attempted to assist from a humanitarian perspective, there has been no unified international strategy to address the root causes of the protracted crisis, which has rendered many of them effectively moot (Siregar, 2024; Komarudin, 2024). This sullies the polity, particularly because the media's

portrayal of the Rohingya crisis has axiomatically inhibited effective substantive response in the form of humanitarian assistance, leading to acute social vulnerability amongst the refugees that persists (Lee, 2021). Although the media crafts public perception and prompts policy-making, it has thus far fallen short of altering the international response to its plight (Lee, 2021).

More than 1.2 million Rohingya refugees are in Bangladesh, on the border that is strained by the influx. In the future, the government has to be responsive in repatriating these people to reduce the pressure on its resources and the concern for its infrastructure (Rahman et al., 2021; Mia, 2021). However, reunification is complicated by environmental degradation and social tensions originating from the refugee crisis. The Rohingya people are living in camps, which often have poor living conditions because they are overcrowded and with worsening conditions (Ali, 2020; Mia, 2021). The government of Bangladesh worked with Myanmar on arranging a safe and dignified return of the displaced Rohingya refugees; however, the success was limited, and therein lies the reason, Myanmar's own indifference, as Myanmar still does not see it necessary to recognize any measure the rightfulness of the claims of the Rohingya people (Islam, 2024).

What is the role of regional actors, with special emphasis on Indonesia, to resolve the Rohingya Crisis? Indonesia exercised humanitarian diplomacy and emphasized that the issue must be settled collectively (Setiawan & Hamka, 2020). But, soft diplomacy does not work effectively because of geopolitics in the region and the interests of the parties (Setiawan & Hamka, 2020; Komarudin, 2024). The international community needs to recognize that the plight of the Rohingya is linked to broader regional security challenges since the activities of Rohingya militant groups are not confined to the borders of Myanmar and Bangladesh (Halim, 2023).

The repatriation of Rohingya refugees from Bangladesh to Myanmar should be considered cautiously based on political, military, socio-economic, and humanitarian conditions. Rohingya are not just a category of illegal immigrants, and the international community must act to offer them the safety they need and legal rights. This is not only a problem for the people of the region; this is a world problem; in addition, this is a reflection of the governments burying their heads in the ground, and will all continue to suffer from its consequences until they all meet together and find a way to help open this issue.

IV. FINDINGS AND ANALYSIS

a) *Historical Roots of the Rohingya Crisis*

i. *Foundations of Division in Colonialism*

The roots of the Rohingya crisis lie in the colonial era (1824–1948) when British colonial

governance in Burma (now Myanmar) sowed the seeds for a tumultuous future by implementing policies that would have a lasting effect on the region's ethnic landscape. In order to satisfy an agricultural demand, a significant portion of Bangladeshi laborers (known then as British India) were moved by the British colonial administration from present-day Bangladesh to the Rakhine State, especially in the cultivation of rice and other cash crops. This policy, intended to stimulate economic productivity, unwittingly planted the seeds of ethnic tension. The arrival of Muslim workers, referred to as Rohingya, was seen as a threat to the habitat and livelihood of the Rakhine Buddhists, and they felt crispy competition for job opportunities.

The British worsened these tensions by adopting a 'divide and rule' approach, which meant institutionalizing ethnic divisions to retain control of the region. This policy fostered a hostile relationship among different communities of Buddhists and Muslims, in particular, exacerbated underlying divisions. As the British saw the Rohingya as an ideal source of labor, the local Rakhine regarded this demographic shift not only as inconvenient but as infiltration by 'foreigners.' After independence, these colonial remnants of social and economic inequality and ethnic animus would be inherited and exploited by successive Burmese governments to cement their rule.

Understanding these historical roots is crucial to the Rohingya crisis because they set the stage for an early precedent of ethnic fragmentation of society that would later be formalized and weaponized by the Myanmar state to achieve a common national identity.

ii. *The Marginality of Coordinators after Independence*

This had been followed by a worsening of the Rohingya's condition after Myanmar gained independence in 1948. Under the 1948 Union Citizenship Act, the Rohingya were granted the right to citizenship, an initial measure of recognition. However, identity politics in post-colonial Myanmar refracted and then undermined this recognition. The Burmese government began promoting Buddhist nationalism, an ethnic identity thoroughly at odds with the Muslim Rohingya minority. This was exacerbated by political instability and the increasing military control over civilian rule.

The military coup of 1962 marked a major shift when military leader General Ne Win implemented ethnic homogenization policies. The military regime's vision of the future of Myanmar included sidelining non-Buddhist and non-Bamar groups and strengthening the power of the majority Bamar ethnic group and Buddhism to dominate every sector of life in the country. Despite living there for centuries, the Myanmar state has never recognized the Rohingya as a considered ethnic group, a status codified in the 1974 Constitution and enabling their institutionalized persecution. This social exclusion

was symbolic and had practical consequences, depriving them of access to public services, work, and political participation.

A new military regime passed the Citizenship Law in 1982, which entrenched the Rohingya's disenfranchisement. The law classified Myanmar's citizens into three categories, but most significantly, the Rohingya were omitted from the list of recognized ethnic groups. It left them stateless and deprived them of other fundamental rights, such as the right to own property, to move freely, and to access education and health care (Cheesman 2017). It not only conditioned the Rohingya as non-belongers to Myanmar's national identity but also legally codified their energetic condition as "outsider" in their native land, legally marginalized them, and set the foundation for decades of state-enabled discrimination and violence.

iii. *Cycles of Violence and Displacement*

The Rohingya have been made stateless by cycles of violence and forced dislocation that continues to deepen and affect their lives and their history, barring them from Myanmar's national identity.

1978—Operation Naga Min: The initial mass eruption of violence against the Rohingya occurred in 1978 when Myanmar's military conducted a so-called 'Operation Naga Min' in order to expel 'illegal immigrants' from Rakhine State. Using national security as a pretext, the military singled out the Rohingya for mass killings, torture, and village destruction. Over 200,000 Rohingya fled from Burma. The government framed this operation as a step the state was obliged to take to defend itself against foreign anti-state elements in the name of national security, but this was the most recent episode in a state-designed campaign to dehumanize the Rohingya and portray them as an intrinsic external threat to the Buddhist character of the nation.

1991–1992: Persecution of the Rohingya erupted again in the early 1990s when a second military operation drove over 250,000 Rohingya to seek refuge in Bangladesh. If anything, this time, the bloodshed was more brutal, with gruesome accounts of massacres, rapes, and arbitrary detentions flooding the air. The Rohingya were re-established as 'illegal immigrants' and returned to their historical grounding in Myanmar. The international response to this second round of displacement would be no different than before, and those refugees would suffer immensely in Bangladeshi camps where resources are few.

2012–2017: The last wave of violence leading up to the 2017 'clearance operations' became one of the darkest chapters of Rohingya displacement. The violence against the Rohingya community began around 2012 when Myanmar started shifting to a quasi-democratic form of government, and an explosion of Buddhist nationalism helped exacerbate the sectarian violence.

The violence erupted in 2012 following clashes between Rohingya Muslims and Rakhine Buddhists that killed hundreds of people and displaced thousands. But in 2017, when an armed Rohingya rebel group attacked police posts, the military launched a full-scale offensive attack designed to exterminate the Rohingya. The military used tactics that included the burning of villages, sexual violence on a mass scale, and mass killings. More than 740,000 Rohingya fled to Bangladesh, and many thousands more were made refugees in Myanmar.

These cycles of violence and forced relocation are indicative of the systemic nature of the persecution the Rohingya have faced. Each cycle of violence has not just sunk their statelessness deeper but has also magnified the profound failure of the international community to act. Why, in your view, has there been no serious action by global actors to hold Myanmar accountable or to stop the violence against the Rohingya?

V. IMPACT ON BANGLADESH

Bangladesh's economy, environment, and society are three defining themes that have a lot to say about the country, especially regarding the recent influx of more than a million Rohingya refugees. As the host country for the world's largest refugee settlement, Bangladesh has been navigating challenges it has never faced before with this crisis. Such challenges go beyond the immediate delivery of humanitarian assistance; the socio-economic consequences are long-lasting, impacting the refugee population and the host communities.

a) *Economic Burden*

Bangladesh, a developing nation of over 160 million, was not prepared for the scale of the Rohingya refugee wave. It has placed a tremendous burden on the country's small public services, with the annual cost of housing and servicing this refugee population calculated well to exceed \$1.21 billion (UNDP, 2018). This includes direct financial support for housing, food, health care, education, and infrastructure and indirect costs in terms of strain on local services and administrative capacities. Furthermore, Cox's Bazar — the destination of most refugees—experiences high transformations in their local economy. Local labor markets have been disrupted, and the sheer number of refugees has intensified competition for informal jobs, which depresses wages and reduces the availability of employment for the resident population. In many regions, local employment in construction and agriculture, chopping trees, and so on, is adversely influenced as refugees flooding in are starting to enter the workforce and work for lower wages. The influx of refugees and migrants has led to increased resentment in local communities, further escalating tensions between host populations and refugees.

The tourism industry, another crucial element in the economy of Cox's Bazar, has also suffered greatly. The region, which boasts long sandy beaches and natural beauty, was one of the most popular tourist hotspots for locals and foreigners. However, the establishment of sprawling refugee camps and the strain on infrastructure have caused a dramatic fall-off in the arrival of holidaymakers — hotel occupancy rates have nosedived, and businesses are closing. An economic downturn in tourism and few other job options available have compounded the hardships that helped win over host communities and fed the resentment. Despite Bangladesh's significant international assistance in accommodating refugees, the support fails to cover the economic costs of hosting refugees in the long run. International aid for the refugee situation has similarly emboldened this feeling among local groups and local communities, who feel their socio-economic priorities are secondary to those of displaced people. The unequal distribution of aid has exacerbated social tensions between refugees and host communities.

b) *Environmental Degradation*

There has been an acute environmental toll from sheltering more than a million refugees in an overcrowded region. More than 4,800 million hectares of forest have been cleared in the Cox's Bazar region to accommodate the millions of refugees, resulting in deforestation, high levels of soil erosion, and biodiversity loss. Forests are thus destroyed, with the impact not only on the local ecosystem but also making the region more susceptible to landslides and flooding." The refugee settlements are built in hilly terrain; the area is still extremely prone to landslides in the monsoon season, meaning both the refugees and host communities are at risk. Cooking with firewood adds to the environmental cost. With research indicating alternatives to fuel are limited in the camps, the refugees frequently rely on wood, contributing to deforestation problems. Consequently, the local ecosystem has been under severe pressure, primarily from the quality of soil and water sources, from many people, and the demand for firewood and water. Local communities are also experiencing the ripple effects of these climatic invasions, while natural resource depletion is affecting access to potable water and disrupting agricultural livelihoods.

The over-exploitation of the region's water resources increases the scarcity and pollution of freshwater sources and rivers. The groundwater is highly overloaded in the refugee camps, resulting in a drop in the water table, affecting both the refugees and the host communities. Additionally, the limited waste management in the camps has led to water pollution, further aggravating health risks. In the camps, cholera and dysentery, which are both spread by contaminated

water, have proliferated, adding to the strain on a health system in the region that is already overwhelmed. The refugees and their hosts are facing an uncertain future; environmental degradation is merciless. Therefore, it is critical to implement sustainable resource management practices in the refugee camps and minimize their environmental impact to ensure the long-term sustainability of the ecosystem in the region.

c) Security Concerns

Besides, instead of fulfilling their shelter and food needs, the refugee camps in Cox's Bazar have emerged as a hub for various security threats with far-reaching negative consequences for both refugee and host communities. The absence of formal jobs and schools has left a significant part of the refugee population vulnerable to exploitation by criminal and extremist elements. The impoverished and sustainable living conditions of so many of the refugees have found themselves in circles of crime, whether it be drug, human trafficking, or arms smuggling. These criminal acts have made the camps hostile to the safety of refugees and society. These extreme groups exploit this, specifically targeting young men, whose frustrations may lead to recruitment. Law enforcement entities do not closely monitor entry to and transit between the camps, contributing to illegal activity. Another such group is the Harkat-ul-Jihad-al-Islami (HuJI), which is active in Bangladesh and the Bangladeshi-Chittagong hill tracks and has been associated with the radicalization of and attacks on the Rohingya refugees in 2020.

The increase in crime in the camps has also added to perceptions of refugee concerns in host communities, often heightening social tensions. Communities already facing the economic and environmental burden of hosting refugees are growing resentful of them, perceiving them as a potential source of insecurity. This animosity has led to violent clashes between refugees and host communities, further destabilizing the region. Cox's Bazar is a striking instance of the failures of governance and enforcement in the camps. In the absence of a solid legal architecture and the inability of the police and the security apparatus to curb criminal mafias, the space was left for the criminal syndicates, and an environment of anarchy was created. These concerns can be addressed through various measures, from improved local policing and more extensive education and vocational opportunities to greater social cohesion between refugees and host communities.

VI. BARRIERS TO REPATRIATION

The repatriation of the Rohingya, the world's largest refugee population, has also been the goal of the international community. Still, the animated movement has been hampered by a number of powerful factors,

especially the rigged position of the Myanmar government, the countries' mutual distrust between the Rohingya and the Myanmar government, and complex geo-political circumstances. These challenges constitute an obstacle to substantial advancements toward the refugees' safe, voluntary, and dignified return.

a) Myanmar's Intransigence

The Citizenship Law of 1982 of Myanmar is one of the most basic discriminatory citizenship laws. This law strips them of full citizenship status and calls them 'foreigners' or 'illegal immigrants' — despite the fact that they have been in Rakhine State for centuries. By refusing to recognize the Rohingya on Myanmar's official list of ethnic groups an act that has left them stateless and denied their rights to own land, go to school, and receive medical care — Myanmar has made many of its citizens effectively stateless.

The renunciation of this law in Myanmar has been one of the biggest hurdles to repatriation. The Myanmar government says that repatriations will be safe for the Rohingya, but without any guarantees, such assurances are little more than empty promises. The lack of legal recognition for the Rohingya suggests that repatriation, without amendment of the Citizenship Law, would merely restore a stateless citizenry susceptible to the same cycles of persecution. And the continuing military build-up in Rakhine State, where the Rohingya have faced generations of discrimination and violence, only fuels more fears among refugees about whether they could go home in safety.

The military presence in the region will not just continue to intimidate the Rohingya but also serve as a signal that Myanmar doesn't desire to afford the same rights and protection to the Rohingya as it would to other ethnic groups. The offer of safe repatriation is hollow without fundamental change to these structural problems, including legal reform and an end to militarized control. Myanmar's stubbornness on the issue reflects an intense reluctance to accept the Rohingya as full citizens of their country, and even with pressure from the outside world, there does not appear to be much will on the part of the Myanmar government to allow refugees to return.

b) Mistrust among Refugees

Another formidable barrier to repatriation is mutual distrust between the Rohingya and the Myanmar government. The Rohingya have been subject to decades of systemic persecution, including forced labor, violence, land expropriation, and widespread exclusion from political and economic life. This long history of oppression, as well as the brutal crackdown in 2017, which involved mass killings, sexual violence, and the destruction of villages, has led to a deep distrust of any guarantees from Myanmar's government among the Rohingya. The scars of the trauma they suffered in 2017

are still fresh for many, and the memory of the violence they faced has only exacerbated their fears of Myanmar under those same conditions.

The survivors of the 2017 crackdown and their families who fled have a desire that exceeds mere promises and guarantees of security. They demand citizenship rights and assurances of safety, which, in their view, are prerequisites for their voluntary return. In addition to such guarantees, many Rohingya refugees called for international monitoring of the repatriation to ensure the return of those who can do so with their dignity and safety. Without such conditions, Myanmar's pledges to repatriate are untrustworthy, as refugees fear renewed persecution or being forced to languish for years in isolated camps with restricted rights. For these reasons, without addressing their concerns around citizenship, safety, and the role of the international community, any effort to repatriate the Rohingya will likely fail. They, therefore, understandably distrust a process that offers no independent guarantees, and they are unlikely ever to return to a country that has treated them as outsiders for generations. That makes the international push for this voluntary repatriation over six years so far elusive without international action that guarantees Rohingya rights.

c) *Geo-Political Challenges*

The geopolitical factors surrounding the Rohingya crisis make the repatriation process more difficult. In addition, Myanmar enjoys several considerable diplomatic and political allies globally, notably China and Russia. Both have been key in blocking major moves to punish Myanmar at international forums, particularly the UN Security Council (UNSC). Both China and Russia have vetoed resolutions seeking to sanction Myanmar or otherwise raise the issue and hold the government to account for its treatment of the Rohingya. Their support has provided diplomatic cover for Myanmar, preventing the government from facing widespread international scrutiny and pressure. China, for its part, has strategic interests in Myanmar, viewing the country as a helpful partner in its Belt and Road Initiative (BRI) and a key access point to the Indian Ocean. Myanmar's natural resources, including oil and gas, are attractive to China as well, providing Beijing with additional motivation to maintain a close relationship with the military-led government. Similarly, Russia's geo-political antagonism to Myanmar through arms sales and military interest is reflected in its opposition to UN actions that may threaten the stability of the Myanmar regime.

These two vetoes in the UN Security Council (UNSC) have thus short-circuit any international efforts to hold Myanmar accountable for its actions or implement binding measures that might contain reform. That has guaranteed that Myanmar faces scant external pressure to address the crisis's root causes, putting a

sustainable repatriation agreement further from view. To add to the complexity, the geo-political winds in ASEAN (Association of Southeast Asian Nations) point in the other direction. ASEAN's principle of non-interference in the internal affairs of member states has rendered the regional grouping mostly impotent in exerting pressure on Myanmar to take action in resolving the Rohingya question. While some individual ASEAN member states have made statements to differing extents on the issue, the collective organization has failed to retain a clear position. These divisions have, in turn, allowed Myanmar to pursue its policies without the cost of regional diplomatic isolation or sanctions that would have pushed it to make concessions to resolve the crisis. And the geo-political impasse enforced by Myanmar's allies, and regional bodies, such as ASEAN, has left the rest of the international community with little leverage with which to persuade Myanmar to make needed changes or hold it accountable for its treatment of the Rohingya. Until the great powerbrokers of the world can find the moral resolve to volunteer a legitimate part of a coordinated global reformation, the Rohingya will continue to be unlikely to return to their families and their homes in safety and dignity.

VII. THE ROLE OF THE INTERNATIONAL COMMUNITY

However, international action has proved more complicated, comprising humanitarian assistance, legal responses, and diplomatic responses. While international organizations that address the immediate suffering of the Rohingya, such as the UN, humanitarian agencies, and regional bodies, have played crucial roles, their attempt to address the need has proved inadequate for a variety of reasons. Among these critical factors that hinder the effectiveness of the international response and action against the military are a lack of financing and financing mechanisms, a disjointed international response, Myanmar's unwillingness to respond to international pressure, and justified fear of geo-political entanglements to take meaningful action.

a) *Humanitarian Agencies and the United Nations*

The UNHCR is leading humanitarian work to assist the Rohingya people. In 2021, UNHCR provided food, shelter, health care, education, and protection services to more than one million Rohingya refugees, the majority of whom were residing in Bangladesh. It learned its lesson, and it has been very active in getting together the relief work and making international support available to ease the situation's urgency. However, the UNHCR has been essential, and yet its vital role is minimal somehow due to a series of challenges, such as the lack of funds, political limitations, and the process of working in a geopolitical pressure space.

Refugees are also faced with several debilitating challenges. While international assistance to

Bangladesh was generous initially, donor fatigue and competing international priorities over time led to dwindling funds. This has forced the UNHCR and others to scale back their programs, leaving more significant unmet needs, particularly education, health care, and livelihood support. It has not facilitated the refugee community's transition to self-sufficiency, thus transforming them into long-term beneficiaries of humanitarian assistance. Myanmar has also been uncooperative with international actors, and access to the underlying drivers of the crisis has remained impossible for the UN to address. Despite repeated appeals from the UN and other international leaders to enter into a dialogue with Myanmar, the government has not allowed international scrutiny and barred any international observers or peacekeepers from entering Rakhine State. This East-West divide has rendered it particularly difficult to create a safe space for the Rohingya, no matter where they are, be it in Myanmar or refugee camps, as humanitarian access is essential for alleviating suffering, preventing disease, and assisting citizens in need.

UNHCR's work has also become more complex, with refugees being relocated to Bhasan Char, a far-flung island in the Bay of Bengal. The Bangladeshi government views Bhasan Char as a possible solution to overcrowding in the Cox's Bazar camps, but the island has drawn both at home and abroad criticism from human rights groups. Other reports have flagged issues around safety, access to services, and the voluntariness of relocation (Islam et al., 2022), with many refugees being fearful of being displaced to a poorly serviced area with little hope for the future. These issues, combined with an absence of independent oversight of Bhasan Char's conditions and pledges from Dhaka to ensure the safety and dignity of the refugees, have underscored the failure of efforts by the international community to protect the Rohingya.

b) *Legal Interventions*

This type of silence means zero accountability mechanisms from the international community, including a case in the ICJ against Myanmar. Gambia has aggregated those efforts with its widely publicized 2019 case against Myanmar in the International Court of Justice (ICJ) — one of the most visible legal interventions. Gambia initially maintained its case with the backing of the Organisation of Islamic Cooperation (OIC), accusing Myanmar of committing genocide against the Rohingya people and that it should be held responsible for violations of the 1948 Genocide Convention. The case was an essential step in holding the government accountable at the international level for the atrocities committed against the Rohingya.

In January 2020, the ICJ prescribed provisional measures that directed Myanmar to immediately refrain from genocidal acts against the Rohingya, including the

preservation of evidence that might be relevant to any future genocidal acts, and to prevent further harm to the Rohingya people. It was a significant legal victory for the Rohingya that applied pressure on Myanmar to take concrete steps to halt the violence and persecution. That said, there are no assurances that the ICJ's provisional measures will be implemented. Myanmar has repeatedly denied the allegations of genocide, and the government has been resistant to complying with the ICJ's requests. The primary issue with the ICJ decision was accountability. While finding Myanmar responsible is better than not holding it accountable, the ruling certainly does not have a proper enforcement mechanism. Myanmar has shown that it will not comply fully with the Court. As this suggests, all the differences in the world can exist between a court ruling and a breakthrough in practice. That difference reflects the stubborn difficulties of effecting accountability through international law, especially when a member state disobeys international law without material consequence.

The importance of the international community's implementation mechanisms vis-a-vis ICJ judgments is also a testament to the largely ineffective nature of international legal infrastructures when addressing state-sponsored atrocities. The laws exist to prosecute such crimes, but the political will has not followed through, and powerful states such as China and Russia have provided diplomatic cover for Myanmar's avoidance of accountability.

c) *Regional Responses*

The reaction of regional actors has been a necessary but insufficient part of the international response to the Rohingya crisis. The Rohingyas are caught between Myanmar and Bangladesh, where the ASEAN (Association of Southeast Asian Nations) bloc, of which both countries are members, is either muting or blaming the crisis, with no substantive action undertaken. ASEAN's foundational principle of non-interference in member states' internal affairs has profoundly limited the organization's capacity to respond effectively to Myanmar's treatment of the Rohingya. While a few ASEAN statements expressed concern over the coup, the bloc did little beyond that to hold Myanmar to account or push the country to change its addiction to violence fundamentally.

Though ASEAN as a body seems reluctant to address the situation in Myanmar, member states have been more vocal in condemning the conduct of the country. These countries have also expressed strong humanitarian and condemnatory concerns, calling for international intervention to help the Rohingya and to pressure Myanmar to stop the bloodshed. ASEAN's consensus principle undermined these efforts, leading to top-down, watered-down resolutions with little concrete output. This non-documentation has reinforced

perceptions of an unwilling or unable ASEAN to critically address its members on matters of rights, leading to frustration from global actors and advocacy organizations.

The geo-political interests of ASEAN state members have also influenced the response to the region. For example, Myanmar's strategic relationship with China has served as a brake on greater regional pressure. China has significant economic and political interests in Myanmar and has provided crucial diplomatic cover for the country at the United Nations, repeatedly vetoing efforts to impose sanctions on or pressure Myanmar. The geopolitical stakes around Myanmar and its relationship with China have made ASEAN even more polarised as a bloc, dulling the region's efforts to act as one in the resulting crisis. But in the case of ASEAN's response to Rohingya refugees, this failure also highlights the limitations of regional organizations in providing support to their members in response to transnational humanitarian emergencies, where important actors in the organization are less inclined to push each other on such topical questions. This is precisely why greater regional accountability mechanisms are necessary to hold Myanmar to account and steer it towards meaningful change, whether that is done within or outside ASEAN.

VIII. RECOMMENDATIONS FOR SUSTAINABLE SOLUTIONS

The Rohingya crisis is one of the world's most grievous humanitarian catastrophes and must be treated as such- root causes, refugee and host community needs, and the role of international actors in the surrounding region must all be addressed. Legal reforms must be a priority in Myanmar, along with greater international burden-sharing, empowerment of refugees, and genuine regional cooperation. Here are recommendations outlining pathways to address this crisis, focusing on short- and long-term strategies. In order to tackle this massive humanitarian crisis, long-term and structural solutions addressing the root causes, including refugees and host communities, need to be prepared. The highest priorities for sustainable solutions must include reforms of law in Myanmar, a fairer sharing of international responsibility, empowerment of refugees, and genuine regional cooperation. What follows is a series of specific recommendations to help inform the response to this crisis, with attention to both near- and long-term strategies:

a) *Legal Reforms in Myanmar*

Legal reform in Myanmar is the linchpin for the long-term resolution of the Rohingya crisis. The 1982 Citizenship Law, which systematically denies full citizenship to the Rohingya, must be amended to recognize them as equal citizens. This law has been the backbone

of decades of systemic discrimination and persecution, and as long as it is not redrafted, repatriation attempts will be ambiguous, if not damaging. Rightfully, and to recognize their legal rights and dignity when they eventually return to Myanmar, the Rohingya require full citizenship because it would open access to education, healthcare, property rights, and freedom of movement. Without such guarantees, their citizenship will be nothing more than a mockery and yet another step toward cementing inequalities that other ethnic groups in Myanmar face in terms of citizenship rights.

In addition to legal recognition, Myanmar should establish internationally monitored safe zones within Rakhine State. These regions would provide a safe space for the voluntary and dignified repatriation of the Rohingya, devoid of fear of military retribution or religious persecution. The safe zones must also be demilitarized and monitored by international peace-keeping forces or UN-mandate observers so that the security of the returnees can be guaranteed, in addition to assurances as to the non-recurrence of abuses. This is an essential first step on the path toward rebuilding relations between Myanmar and the Rohingya, allowing refugees to go back to their home country in a secure environment. Third, Myanmar should enable international human rights organizations to evaluate, establish, and monitor permanent protection mechanisms required to safeguard the Rohingya and to incorporate them into the Myanmar social fabric.

b) *Improvements to Regional Coordination*

To eliminate the Rohingya refugee crisis and safeguard long-term regional stability, a regional policy is required. ASEAN and SAARC need to step up their bilateral cooperation in combating the crisis in an integrated manner that aligns with the overall spirit of ASEAN by helping each other out when faced with difficulty. ASEAN cannot shelter behind its founding principle of non-interference with regard to ongoing and targeted gross violations of human rights by one member against another member. Myanmar has continued as it has, with impunity. ASEAN "must stop its failure to respond to the Rohingya crisis adequately." ASEAN now has to use its diplomatic-economic leverage to help Myanmar make the legal and political changes needed to implement the agreement. In order to bring about such transformation faster, collective sanctions or incentives may be applied to Myanmar on behalf of the Rohingya so that the country internalizes a regime based on human rights.

Instead, regional cooperation would also come with a need to get China and India involved as mediators. Myanmar's most powerful ally, China, has significant sway over its political and economic directions. China has stated that it does not want to see Myanmar end up in chaos. Meanwhile, it is signing deals with the military junta, such as the Belt and Road

Initiative, and thus has a unique ability to facilitate dialogue between Myanmar and the international community. Given its long-time ties to both Bangladesh and Myanmar, India, a fellow ASEAN member, and neighboring power, can also mediate. India has already taken on diplomacy with responses of humanitarian aid and a call for accountability, and its contribution to pushing Myanmar to change its policies could greatly enhance regional diplomacy from now on. A regional concerted response would not only encourage accountability against Myanmar's perverse obstinacy but also improve the broader implications of the refugee crisis for regional security and stability. ASEAN and SAARC must act jointly to avert more human disasters in the region and force Myanmar to comply with its international obligations.

c) *Equitable Burden-Sharing*

The blatant truth is that Bangladesh, which is hosting over one million Rohingya refugees, has barely been burdened. While it is admirable that Bangladesh has carried its share of potential, it is also unsustainable that a developing nation warrants a callous burden without adequate respites from the global community. It is high time that the richest countries inject more funding into global counter-humanitarian efforts and other long-term programs designed to cushion the national infrastructure, health, and education systems from collapse to benefit all countries for future reference. Above that, countries of the Global North should also be willing to host a larger population of Rohingya through third-country resettlement. Bangladesh has provided shelter, food, and access to schools; however, providing these services does not imply that the country can host the refugees permanently. Countries such as Canada and the United States, amongst others, have programs that help to settle refugees from other nations; such programs should be reintroduced to settle the refugees to reduce the pressure on the host countries. Additionally, we could create an International fund for the refugee-hosting countries, including the frontline host countries, to promote equitable burden-sharing. This would help the frontline host countries develop their infrastructure and access to health facilities and education resources, and it would also be used to integrate refugees.

d) *Empowerment of Refugees*

The Rohingya crisis needs sustainable solutions that drive these refugees to be less dependent on humanitarian aid and that would allow for self-sufficiency. One of the key components of empowerment is education and vocational training. This renders education a fundamental human right and equips refugees with a critical means of constructing a future. Refugees, particularly refugee youth, require opportunities to learn and acquire the skills to sustain their own communities and economy, and ideally

contribute to that of Bangladesh or Myanmar or resettlement. Education is also a bulwark against extremism, giving young people a reason not to embrace violent groups.

Vocational training programs must be created to help refugees develop trades that will allow them to enter the local labor market or run a business. It's in line with the understanding that you give a man a fish, and he eats for a day, but if you teach him how to catch fish, he'll feed himself, and your local economic contribution won't take long to kick in. In Bangladesh, this could mean programs around agriculture, construction, and textiles — industries that are close to both refugee and host community needs. Broadening the types of work that refugees can do legally can also help integrate them into local economies and reduce their risk of exploitation. Refugees tend to be vulnerable to low-wage and exploitative work due to their legal status or lack of documentation, which can act as a barrier to employment. Giving refugees the right to work will be a win-win as they can contribute their experience to the local economy and secure better livelihoods for themselves.

e) *Meeting the Host-Community Needs*

This is not to downplay the needs of refugees, which is undoubtedly a priority, but the needs of host communities are equally important in ensuring long-term social cohesion. In response, host communities — already under the strain of economic pressures, especially in agriculture — have increasingly expressed frustration at the influx of refugees, aggravating resentment among the local populace. Both refugees and host communities must be extended international assistance through broadened aid programs. Partnerships in development projects with Rohingya refugees and host communities can be a means to promote social cohesion and mutual understanding between Rohingya & host communities. Individually, infrastructure development projects must be designed and implemented so that schools, healthcare facilities, and road projects serve refugee and host populations. This can also help prevent some local communities from feeling neglected while promoting intergroup contact.

Peace and stability are important, let alone compassion, so the economic program must also be built. Host communities must also see the economic benefit of the presence of refugees. Developing integrative job creation programs or promoting local business development will allow the refugee influx to integrate into the local economy, easing competition and encouraging positive interaction between groups. Building social cohesion also involves addressing the psychological and cultural dimensions of the crisis. Programs that promote understanding and dialogue between refugees and host communities can reduce prejudices and help build peace in the long run. Such

dialogue can create a more stable environment where refugees and host communities can prosper if supported by international organizations that comprehend the nuance.

IX. LIMITATIONS OF THE STUDY

This study primarily relies on secondary data, limiting its ability to capture real-time dynamics between refugees and host communities. While secondary sources provide historical context, they fall short of addressing immediate challenges and lived experiences. The primary data of focus group discussions (FGDs) and interviews restricts the depth of analysis regarding the dynamic and evolving relationships between refugees and host communities, focuses solely on selected camps in Cox's Bazar, and restricts the generalizability of findings to other Rohingya contexts. Moreover, the lack of longitudinal data makes it difficult to understand the dynamics of how the crisis and its consequences progress over time. Future studies should focus more on longitudinal studies, geographical and demographic representation, and involve different stakeholders for a more holistic approach to the problem.

X. CONCLUSION

The Rohingya crisis is one of humanity's most immense tragedies, born out of decades-long, systematic discrimination, legal exclusion, and state-sponsored violence in Myanmar. The needs and challenges of the more than one million Rohingya now forced to flee are massive, as is the impact on host communities. There is an urgent need for an effective humanitarian response to alleviate the suffering of both groups. Not to mention, the crisis remains a long way from a solution, with Myanmar's intransigence, the deep-seated mistrust between refugees, and the geopolitical complexities leading the crisis to remain in limbo despite tectonic international and regional efforts to provide humanitarian or legal solutions or other initiatives in the region.

Our answer to this crisis must be multi-dimensional, rights-based, and progressive, and point to legal reform in Myanmar, including amendments to the 1982 Citizenship Law to afford full citizenship to the Rohingya. Greater regional solidarity, particularly in the form of an ASEAN approach with proactive engagement from international actors like China and India, will be key to bringing diplomatic influence to bear on Myanmar. Moreover, the burden must be equitably borne by the richer countries, while investments in the rights and livelihoods of the refugees and the development of host communities are also vital in order to relieve the economic and social burden on Bangladesh.

Let's hope that this revolutionized, functioning international audience that can act as a buffer to the Myanmar military will make sure their families, communities, and next generations look upon the repatriation of the Rohingya as safe, dignified, and as an operation that is only a part of a much larger narrative that the Rohingya are human players in. The only way to achieve sustainable resolutions to the Rohingya crisis will be through concerted action on behalf of the global community to guarantee that all impacted communities can enjoy a shared future based on peace, equality, and human rights.

Funding

No funding body in the public, commercial, or not-for-profit sectors was involved in the design or conduct of this study. The authors conducted this study as part of their commitments to their academic and institutional research agendas. The authors have no funding, financial sponsorship, or specific resources for this study.

Ethical Approval

This is not biomedical or clinical research and does not involve any procedures according to the guidelines requiring formal ethical approval.

Ethics Statement

This study did not involve human or animal participants in a way that required ethical approval from an institutional review board. However, interviews and focus group discussions conducted as part of this research adhered to strict ethical guidelines, ensuring informed consent, confidentiality, and voluntary participation. No personal identifying information was collected, and participants were assured that their responses would be used solely for academic purposes. The study complies with the ethical principles outlined in the Declaration of Helsinki and international research ethics standards.

Clinical Trial Number: Not Applicable.

Declaration of Competing Interest

The authors have no competing interests with any organization, agency, or stakeholder with a financial interest in the subject matter.

REFERENCES RÉFÉRENCES REFERENCIAS

- Galtung, J. (1969). Violence, peace, and peace research. *Journal of Peace Research*, 6(3), 167–191. <https://doi.org/10.1177/002234336900600301>
- United Nations Development Programme (UNDP). (1994). *Human development report 1994: New dimensions of human security*. Oxford University Press. <http://hdr.undp.org/en/reports/global/hdr1994>
- Hathaway, J. C. (2021). *The rights of refugees under international law*. Cambridge University Press. <https://doi.org/10.1017/9781108863537.004>

4. Chimni, B. S. (2004). From resettlement to involuntary repatriation: Towards a critical history of durable solutions. *Refugee Survey Quarterly*, 23(3), 55–73. <https://doi.org/10.1093/rsq/23.3.55>
5. Rahman, Md. M., Mohajan, H. K., & Bose, T. K. (2021). Future of rohingyas: Dignified return to Myanmar or restoring their rights or both. *IKAT: The Indonesian Journal of Southeast Asian Studies*, 4(2), 145. <https://doi.org/10.22146/ikat.v4i2.57706>
6. Fahim, Md. H. (2022). Forced migration of Rohingya refugees from Myanmar to neighboring countries. *Society & Sustainability*, 4(1), 1–10. <https://doi.org/10.38157/societysustainability.v4i1.373>
7. Faisal, M. M. (2020). The Rohingya refugee crisis of Myanmar: A history of persecution and human rights violations. *International Journal of Social, Political and Economic Research*, 7(3), 743–761. <https://doi.org/10.46291/ijospervol7iss3pp743-761>
8. Rasyid, S., Prabandari, A. P., Daren, B. C., & Simanjuntak, C. (2022). The role of Indonesian diplomacy in managing the conflict between the Myanmar government and the Rohingya Muslim ethnic. *Unnes Law Journal*, 8(1), 159–178. <https://doi.org/10.15294/ulj.v7i1.53704>
9. Ali, Md. A. (2020). Bangladesh's claim for reparation from Myanmar due to Rohingya influx: Options and challenges. *SocioEconomic Challenges*, 4(1), 65–74. [https://doi.org/10.21272/sec.4\(1\).65-74.2020](https://doi.org/10.21272/sec.4(1).65-74.2020)
10. Frounfelker, R. L., Islam, N., Falcone, J., Farrar, J., Ra, C., Antonaccio, C. M., Enelamah, N., & Betancourt, T. S. (2019). Living through war: Mental health of children and youth in conflict-affected areas. *International Review of the Red Cross*, 101(911), 481–506. <https://doi.org/10.1017/s181638312000017x>
11. Mia, B. (2021). Rohingya refugee influx in Bangladesh and repatriation process: Addressing the possible challenges. *International Journal of Social Science and Human Research*, 04(06). <https://doi.org/10.47191/ijsshr/v4-i6-11>
12. Siregar, M. P. (2024). Indonesia's response to Rohingya refugees in the perspective of international law in 2023. *The Easta Journal Law and Human Rights*, 2(02), 51–58. <https://doi.org/10.58812/eslhr.v2i02.197>
13. Komarudin, U., & Ayuningtyas, D. (2024). Indonesia's responses towards rohingya refugees: political perspective. *JWP (Jurnal Wacana Politik)*, 9(2), 112. <https://doi.org/10.24198/jwp.v9i2.54009>
14. Lee, M. J. (2021). Media influence on humanitarian interventions: Analysis of the Rohingya refugee crisis and international media coverage. *Journal of International Humanitarian Action*, 6(1), 20. <https://doi.org/10.1186/s41018-021-00108-5>
15. Islam, Md. A. (2024). Rohingya Crisis in Bangladesh: Causes, Consequences and Remedies. *Journal of Social Science (JoSS)*, 2(10), 1113–1119. <https://doi.org/10.57185/joss.v2i10.246>
16. Setiawan, A., & Hamka, H. (2020). Role of Indonesian Humanitarian Diplomacy toward Rohingya Crisis in Myanmar. *Proceedings of the Proceedings of the 2nd International Conference on Social Sciences, ICSS 2019, 5-6 November 2019, Jakarta, Indonesia. Proceedings of the 2nd International Conference on Social Sciences, ICSS 2019, 5-6 November 2019, Jakarta, Indonesia.* <https://doi.org/10.4108/eai.5-11-2019.2292481>
17. Halim, A. (2023). Protracted Rohingya Crisis in Bangladesh: Exploring National and International Security Implications. *Journal of South Asian Studies*, 11(3), 217–229. <https://doi.org/10.33687/jsas.011.03.4609>
18. Cheesman, N. (2017). How in Myanmar “National Races” Came to Surpass Citizenship and Exclude Rohingya. *Journal of Contemporary Asia*, 47(3), 461–483. <https://doi.org/10.1080/00472336.2017.1297476>
19. UNDP. (2018). *Impacts of the Rohingya Refugee.* <https://www.undp.org/sites/g/files/zskgke326/files/migration/bd/Impacts-of-the-Rohingya-Refugee-Influx-on-Host-Communities.pdf>
20. Islam, Md. M., Barman, A., Khan, M. I., Goswami, G. G., Siddiqi, B., & Mukul, S. A. (2022). Sustainable Livelihood for Displaced Rohingyas and Their Resilience at Bhashan Char in Bangladesh. *Sustainability*, 14(10), 6374. <https://doi.org/10.3390/su14106374>



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: C
SOCIOLOGY & CULTURE
Volume 25 Issue 3 Version 1.0 Year 2025
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Influence of Smart-Phone as a Tool for Active Community Participation in Community Radio – A Study of Participatory Media

By Dr. R. Bhardwaj

Abstract- After 31 July in 1995 Mobile Revolution in India, as a technological advancement in communication, the media landscape has witnessed a revolutionary transformation, linking the information system to a new trajectory of development. The present research article, with a focus on Media Participatory Theory and Development Communication Theory, examines the influence of the uses of mobile phones as tools for active participation in community media. If we consider community media, it is often viewed as a tool for development. In this context, the use of mobile phones as a powerful medium for community participation and development can significantly enhance engagement within community media. By leveraging mobile technology, community participation in media can be strengthened, fostering greater inclusivity and developmental impact. This research paper explores how mobile phone-based applications for social media platforms facilitate the transformation of community media participation from passive engagement to active involvement. The study is grounded in participatory media and development communication theories, emphasizing the role of digital tools in enhancing community participation and fostering meaningful engagement.

Keywords: community media, participatory media, development communication theory, new media, mobile phone as a media tool.

GJHSS-C Classification: LCC Code: HM1033-HM1035



Strictly as per the compliance and regulations of:



Influence of Smart-Phone as a Tool for Active Community Participation in Community Radio – A Study of Participatory Media

Dr. R. Bhardwaj

Abstract- After 31 July in 1995 Mobile Revolution in India, as a technological advancement in communication, the media landscape has witnessed a revolutionary transformation, linking the information system to a new trajectory of development. The present research article, with a focus on Media Participatory Theory and Development Communication Theory, examines the influence of the uses of mobile phones as tools for active participation in community media. If we consider community media, it is often viewed as a tool for development. In this context, the use of mobile phones as a powerful medium for community participation and development can significantly enhance engagement within community media. By leveraging mobile technology, community participation in media can be strengthened, fostering greater inclusivity and developmental impact. This research paper explores how mobile phone-based applications for social media platforms facilitate the transformation of community media participation from passive engagement to active involvement. The study is grounded in participatory media and development communication theories, emphasizing the role of digital tools in enhancing community participation and fostering meaningful engagement.

Keywords: *community media, participatory media, development communication theory, new media, mobile phone as a media tool.*

I. INTRODUCTION OF STUDY

Participatory media has consistently played a significant role in the development of society. By enabling active community engagement, it contributes to shaping public opinion and addressing the real needs of the people. Community media, particularly community radio, has long operated on the principle of being "by the people, for the people," working at the grassroots level to empower local voices and foster social development.

Traditionally, community media relied heavily on the participation of local populations, especially through community radio broadcasts tailored to specific regions. Community participation was facilitated through various means, such as live and recorded programs by local individuals, handwritten letters from listeners requesting particular content or providing feedback, and interviews or vox pops conducted by radio teams. These methods

strengthened the connection between the media and the community, making communication more relatable and impactful.

In the pre-digital era, when internet connectivity and digital literacy were limited, community radio production teams would physically visit villages to record community voices, gather local news, and document daily activities. These recordings were then processed and produced into radio programs, which were broadcast to serve the informational and developmental needs of the community.

However, the advent of mobile technology and the rise in digital literacy have transformed the landscape of community participation in media. Mobile phones, particularly smartphones, along with internet connectivity, have emerged as powerful tools for participatory communication. With the use of social media applications such as WhatsApp and Facebook, community radio stations are now able to form digital groups, share updates, and engage with their audience in real-time.

These platforms have enabled community members to actively participate in the content creation process, offer immediate feedback, and stay informed about ongoing initiatives and local developments. As a result, smartphones and social media have become integral components of participatory media strategies.

Today, it is rare to find a community radio station that does not utilize WhatsApp or Facebook to connect with its audience. These tools have not only enhanced accessibility but have also revolutionized the way community media engages with the public. Community members can now contribute to and follow their local radio content through mobile applications, making participation more convenient, immediate, and effective.

The integration of digital tools into community media practices has significantly enhanced the participatory nature of community radio. The evolution from traditional forms of engagement to digital platforms underscores the transformative impact of mobile technology and internet accessibility in strengthening community media as a vehicle for social change.

a) *Mobile Revolution in India*

In today's era, especially in 2025, it is almost impossible to imagine doing anything without a mobile

Author: Radio and TV Journalism Professionals and Media Studies Educator. e-mail: bhardwajrishabh94@gmail.com

phone. We rely on mobile phones for nearly every aspect of daily life—whether it's making online payments, shopping, or using various applications for multiple purposes.

India's mobile revolution has profoundly transformed the nation's socio-economic landscape, driven by the widespread adoption of affordable smartphones and cellular data in the 2010s. This surge in connectivity has not only bridged the digital divide but also redefined traditional barriers of language, caste, class, gender, and geography.

In 2010, India had approximately 100 million internet users. By 2015, this number had quadrupled to 400 million and was projected to surpass 600 million by 2020, according to the Internet and Mobile Association of India. This exponential growth is largely attributed to the advent of inexpensive smartphones, which for many Indians have become multifunctional devices—serving as their first personal computers, internet access points, cameras, televisions, and alarm clocks. The transformative impact of these devices is evident across various facets of daily life.

One of the most significant outcomes of this mobile proliferation is the erosion of longstanding societal barriers. Voice-enabled smartphone technology

has empowered India's 250 million illiterate individuals to access vast repositories of video and audio content online, fostering greater inclusivity. This technological democratization has enabled people from diverse backgrounds to engage with digital content, enhancing educational opportunities and access to information.

II. USE OF MOBILE PHONES IN COMMUNITY RADIO MEDIA

Mobile phones have become a powerful tool for breaking down barriers to community participation, especially at the local level. As highlighted in this research article, mobile phones serve as a key medium for fostering community engagement, with their multimedia capabilities. They enable seamless communication and help individuals stay connected with others. Through mobile internet, users can access a variety of applications—such as WhatsApp, Facebook, and other social media platforms—that support and enhance community participation. This connectivity allows people to share updates, organize events, and engage in meaningful dialogue, making mobile phones essential in strengthening community ties.



Understand the Cycle of Smartphone as a Tool for Active Community Participation

Use of mobile phone as a tool for active community participation in community media with multiple mobile application like:

WhatsApp	With the help of WhatsApp, it has become easy to stay connected with community members by creating WhatsApp groups and broadcasts to share regular updates and easy to do video calls for live participation.
Facebook	Facebook provides an excellent opportunity to create a dedicated page for community radio, allowing regular updates to be shared with the community and encouraging active participation.
YouTube	Community radio stations can also create their own YouTube channels to expand their outreach, promoting community culture and values with both national and international audiences.
Phone Call	In disaster we can make emergency call with mobile phone in the community.
Phone Message	Also able to share message in community during emergency.

This is not only way to connect with community but this is the best medium for effective community participation in community radio media. With the help of this participatory media tool we can shape the community and their community opinion for the development of the community culture and social values.

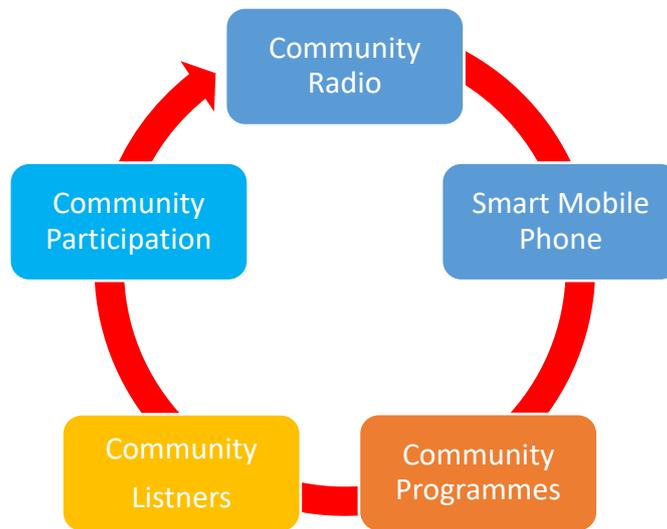
III. PARTICIPATORY MEDIA THEORY

Participatory Media Theory emphasizes the active involvement of individuals and communities in the creation and distribution of media content. Unlike traditional media systems where content is produced by professionals and consumed passively by audiences, participatory media allows users to become producers, critics, and collaborators. This theory is rooted in democratic ideals, advocating for media as a space where diverse voices, especially those from marginalized groups, can express themselves freely and influence public discourse. Scholars like Nico Carpentier argue that participation in media should not be seen as a simple act but as a deeply political and ideological process. He distinguishes between minimalist participation (limited access and influence) and maximalist participation (deep engagement and decision-making power). Participatory media challenges dominant power structures by decentralizing content creation and encouraging horizontal communication. It includes platforms such as community radio, social media, blogs, podcasts, and citizen journalism. These forms of media empower individuals to shape narratives, reflect community issues, and foster social change. Participatory media theory also draws from concepts like Deleuze and Guattari's "rhizome," suggesting media practices should be flexible, interconnected, and non-hierarchical. Ultimately, this theory promotes inclusivity, agency, and democratic engagement in the media landscape.

Participatory media functions through one of distinct theoretical approaches to broaden this

perspective, one additional *society-oriented approaches* are introduced. Participatory media as an integral part of civil society. Drawing from civil society theory—particularly the relational insights of scholars like Walzer (1998)—this model is enriched by critiques of alternative media offered by Downing (2001) and Rodriguez (2001). This metaphor emphasizes the non-linear, adaptable, and unpredictable nature of participatory media, allowing for a more flexible and complex understanding of its operations and identity.





From community radio to community participation with the help of smartphone as a tool.

Community Radio	"Regular broadcasting is essential for ensuring community participation in community radio. Consistent broadcasts have a direct impact on the community by encouraging continuous engagement and active involvement. Therefore, it is a fundamental principle of community radio that stations must maintain regular broadcasting schedules."
Community Programme	"Community radio should broadcast shows and programmes specifically designed for the local community. When radio content is tailored to the needs and interests of the community, it has a direct impact in fostering active listenership and engagement."
Community Participation	"Converting active listeners into regular participants in community radio is crucial, as it helps shape the community and contributes to the development of an informed and engaged society. Smartphones play a significant role in enabling direct and interactive participation during live shows through platforms such as WhatsApp, Facebook, YouTube, and live video calls. These tools facilitate real-time connection with the community and help broadcasters better understand the needs and demands of their audience. Community Radio WhatsApp groups, Facebook pages, and YouTube channels that provide updates and host live radio programmes are powerful resources for encouraging active community participation. These digital platforms help maintain regular contact with listeners, who often engage through phone calls, share comments, and join live video streams, thereby strengthening the station's relationship with its audience."
Smart Mobile Phones	"In the entire process—from community radio broadcasting to community participation—smartphones play a crucial role in facilitating active engagement. The integration of the internet with mobile applications serves as a highly effective medium for community interaction. These digital tools make it easier to connect with community members and act as powerful instruments for promoting active community participation."

By incorporating regular day-to-day activities, community radio stations can ensure consistent and active community participation. In this context, smartphones serve as smart tools that significantly enhance the ability of community radio systems to connect with people. This represents a transformative shift in the digital era, where evolving technologies continue to reshape modes of communication. The integration of smart technologies has proven to be both effective and

interactive, playing a vital role across various domains, including community media.

IV. DEVELOPMENT COMMUNICATION THEORY

According to communication development theory, the consistent dissemination of development-oriented content through mass media can have a significant and direct impact on societal progress. This

includes formats such as public service announcements (PSAs), vox populi (vox-pop) interviews, street theatre (Nukkad Natak), community-based one-to-one interactions, health camps, and programming focused on child and women development, as well as regional and cultural issues. In recent years, the widespread penetration of mobile phones—particularly smartphones—has further enhanced this process by enabling direct, real-time interaction between media platforms and the community. This digital connectivity allows for the timely dissemination of information, thereby strengthening community engagement and accelerating development outcomes at the grassroots level. And under this theory if community radio play regular bases development programmes in the community radio station for the community by the community its defiantly effective.

V. CONCLUSION OF THIS STUDY

This study, titled “*Influence of Smartphone as a Tool for Active Community Participation in Community Radio – A Study of Participatory Media*,” explores the transformative role of smartphones in enhancing community engagement within the realm of community radio. The findings indicate that smartphones have emerged as a significant medium for facilitating participatory communication, enabling real-time interaction between community members and radio stations.

Community radio stations are increasingly integrating smartphones into their operational frameworks, leveraging mobile technology to bridge the gap between broadcasters and listeners. Through voice calls, messaging apps, social media platforms, and audio-visual content sharing, smartphones are fostering inclusive dialogues, encouraging feedback, and empowering local voices to participate actively in the content creation and dissemination process.

This research underscores that smartphones are not only tools for communication but have evolved into participatory media platforms in themselves. They support a more dynamic and accessible model of community media that strengthens democratic discourse, amplifies marginalized voices, and enhances the overall effectiveness of community radio. As community media continues to evolve, the smartphone stands out as a key enabler of active, interactive, and sustainable community participation.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Langlois, G. (2013). Participatory culture and the new governance of communication: The paradox of participatory media. *Television & New Media*, 14(2), 91-105.

2. Lievrouw, L. A. (2002). *Media technologies and democracy*. London School of Economics and Political Science (LSE) Research Online. Retrieved from https://eprints.lse.ac.uk/3304/2/Media_technologies_and_democracy.pdf
3. Here is the APA-style reference for the article you provided:
4. Chatterjee, A. (2020, November 6). *India's mobile revolution turns 25: Tracking the high and low points*. *The Hindu*. Retrieved from <https://www.thehindu.com/sci-tech/technology/indias-mobile-revolution-turns-25-tracking-the-high-and-low-points/article61732535.ece>
5. Carpentier, N. (2007). Theoretical frameworks for participatory media. In N. Carpentier, P. Prulmann-Vengerfeldt, K. Nordenstreng, M. Hartmann, P. Vihalemm, B. Cammaerts, & H. Nieminen (Eds.), *Media technologies and democracy in an enlarged Europe: The intellectual work of the 2007 European media and communication doctoral summer school* (pp. 105–122). Tartu University Press.



This page is intentionally left blank





GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: C
SOCIOLOGY & CULTURE
Volume 25 Issue 3 Version 1.0 Year 2025
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Epics and Science: A Research Portfolio (Parts 1–4 + Festival Essays)

By Kusum Lata Shahi

Abstract- This research portfolio, Epics and Science: Mahakavya Parts 1–4, examines the Mahabharata, Ramayana, Puranic texts, and Nepali festival traditions as repositories of encoded scientific knowledge. Rather than treating them as mythological or purely devotional, the work analyzes their narratives through the lens of modern biology, genetics, neuroscience, energy science, and sociology.

Part 1 explores reproductive technologies, genetic manipulation, test-tube births, and surveillance concepts in the Mahabharata and Ramayana, showing their parallels with sperm donation, IVF, cloning, and telecommunication.

Part 2 reinterprets the Samudra Manthan as a metaphor for energy generation, chemical synthesis, and early biochemical experimentation, alongside Daksha's yajna (organ transplantation) and Jalandhar (cloning).

Part 3 investigates physiological experiments encoded in Lakshman's 14 years of wakefulness, Kumbhakarna's failed sleep-cycle experiment, and ascetic fasting practices, connecting them with modern chronobiology and metabolic science.

Part 4 analyzes Anusuya's transformation, Ashtavakra's prenatal cognition, and the symbolism of lunar energy in Shiva traditions.

Keywords: Mahabharata, Ramayana, puranas, epics, science, brain incarnation, IVF, cloning, circadian rhythm, consciousness, nepali festivals.

GJHSS-C Classification: LCC Code: BL2600



Strictly as per the compliance and regulations of:



Epics and Science: A Research Portfolio (Parts 1–4 + Festival Essays)

Kusum Lata Shahi

Abstract- This research portfolio, *Epics and Science: Mahakavya Parts 1–4*, examines the Mahabharata, Ramayana, Puranic texts, and Nepali festival traditions as repositories of encoded scientific knowledge. Rather than treating them as mythological or purely devotional, the work analyzes their narratives through the lens of modern biology, genetics, neuroscience, energy science, and sociology.

Part 1 explores reproductive technologies, genetic manipulation, test-tube births, and surveillance concepts in the Mahabharata and Ramayana, showing their parallels with sperm donation, IVF, cloning, and telecommunication.

Part 2 reinterprets the Samudra Manthan as a metaphor for energy generation, chemical synthesis, and early biochemical experimentation, alongside Daksha's yajna (organ transplantation) and Jalandhar (cloning).

Part 3 investigates physiological experiments encoded in Lakshman's 14 years of wakefulness, Kumbhakarna's failed sleep-cycle experiment, and ascetic fasting practices, connecting them with modern chronobiology and metabolic science.

Part 4 analyzes Anusuya's transformation, Ashtavakra's prenatal cognition, and the symbolism of lunar energy in Shiva traditions. It highlights "brain incarnation" — the continuity of consciousness beyond the physical body — as the ultimate hypothesis, bridging ancient spiritual inquiry with modern neuroscience.

The portfolio also extends into Nepali cultural practices such as Teej, Rishi Panchami, and Janai Purnima, demonstrating how festivals preserved survival codes, nutrition science, and socio-biological balance across centuries.

Overall, this interdisciplinary work proposes that epics and festivals were not primitive myths, but deliberate vehicles of research — embedding scientific experimentation within symbolic narratives to protect, transmit, and inspire across generations. By decoding these texts, modern science may rediscover forgotten hypotheses and open new directions in consciousness studies, biology, and human survival.

Keywords: Mahabharata, Ramayana, puranas, epics, science, brain incarnation, IVF, cloning, circadian rhythm, consciousness, nepali festivals.

PART 1: EPICS AND MODERN SCIENCE

Kunti's Mantra and Divine Conception: Parthenogenesis or Sperm Donation?

Kunti invoked deities through a mantra and conceived without physical union.

Author: Independent Researcher. e-mail: kusumshahi@hotmail.com

Possible Parallels: sperm donation, artificial insemination, or parthenogenesis.

Gandhari's Hundred Sons: Test-Tube Babies and Artificial Incubation?

A mass of flesh divided into 100 pots became the Kauravas.

Possible Parallels: IVF, artificial wombs, stem cell cultivation.

Sanjaya's "Divine Vision": Remote Surveillance?

Narrated war live to Dhritrashtra.

Possible Parallels: remote sensing, telepathy, real-time broadcast.

PART 2: SAMUDRA MANTHAN: ENERGY AND CHEMICAL SCIENCE

Tortoise = stability platform

Mountain = rotor

Serpent = flexible drive

Gods and demons = actuators

Sequence resembles modern fractionation: toxins → treasures → nectar.

Daksha's Yajna: Organ Transplant

Sati's immolation = fire-resistance trial.

Daksha revived with goat head = transplantation.

Shiva and Jalandhar: Cloning

Jalandhar born from Shiva's energy.

Parallel to cloning; unstable gene expression.

Andhakasura: Somatic Cell Cloning

Born from Parvati's sweat → cellular life creation.

III. PART 3: ANCIENT RESEARCH AND TECHNOLOGICAL EXPLORATION

Lakshman's 14 Years of Wakefulness

Mastery of circadian rhythm, melatonin control.

Tools: pranayama, meditation, herbal aids.

Kumbhakarna's Sleep – Failed Consciousness–Body Separation

Tried to rest body while keeping mind awake.

Both body and mind collapsed into six months' sleep.

Sages' Resource Utilization

Survival without food/sleep for years = induced hibernation.

Natural Parallels: bears, dolphins, giraffes, elephants.

Modern Practices

Hunger strikes, fasting records exist but don't equal epic feats.

PART 4: ANUSUYA, ASHTAVAKRA, AND BRAIN INCARNATION

Anusuya – Body Transformation and Brain Transfer

Transformed the Trimurti into infants.

Parallel: hormonal control, body transformation, partial consciousness transfer.

Lunar Energy – The Cosmic Clock

Shiva's crescent moon = time, tides, fertility cycles.

Parallel: moon phases affecting circadian and reproductive biology.

Ashtavakra – Wisdom Before Birth

Corrected mantras from the womb despite deformities.

Parallel: prenatal cognition, epigenetics.

Modern Parallels – Infinite Mind in Limited Body

Stephen Hawking, Jhamak Ghimire, Aditya Dahal.

Proof that body's limits cannot bind the brain.

Brain Incarnation – The Hypothesis

Consciousness survives beyond body.

Ancient myths suggest continuity of mind in new vessels.

Cycle: Body → Brain → Consciousness → Rebirth.

Closing Line:

"If science can one day master what myths have whispered — the transfer of a living mind — it will be humanity's greatest leap beyond the limits of flesh."

FESTIVAL ESSAYS

Teej & Rishi Panchami – From Stone Age to Modern Science

Dar (pre-feast): calorie loading before fasting.

Teej fast: discipline, survival training.

Rishi Panchami Cleansing: herbal detox, seasonal immunity boost.

Special Foods (Karkalo, Gava): blood purification, womb health for women.

Janai Purnima – Continuity of Knowledge and Civilization

Vaman–Bali Story: humility and cosmic awareness.

Rishi Tarpan: gratitude to sages; mantra + water effect on mind.

Thread as Civilization: weaving, lamps, cultural leap.

Kwati (sprouted beans): seasonal nutrition, immunity.

Three Strands: Brahma–Vishnu–Mahesh; birth–growth–death cycle.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Mahabharata (Original Sanskrit epic)
2. Ramayana (Original Sanskrit epic)
3. Puranas (Bhagavata, Devi Bhagavata, etc.)
4. Swasthani Bratakatha (Nepali oral tradition)
5. Rigveda, Atharvaveda
6. Modern genetics and IVF research
7. Chronobiology and circadian rhythm studies
8. Epigenetics and prenatal cognition research
9. Works on cosmology and consciousness

Author's Note

This work is entirely my own intellectual contribution. AI tools were used only for polishing language and formatting, not for generating research ideas.

This submission is part of a larger planned series of 20–25+ parts on Epics and Science: Ancient Research and Technology.



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: C
SOCIOLOGY & CULTURE
Volume 25 Issue 3 Version 1.0 Year 2025
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Enhancing Prison Safety and Discipline: The Role of Dynamic Security Strategies at Kamiti Maximum Security Prison, Kenya

By Otieno A. Naomi & Omboto John Onyango

Kenyatta University

Abstract- Dynamic security is a relatively new strategy in treatment of offenders and management of penal institutions. It involves inculcation of positive staff-prisoner relationships and ensuring that the staff are aware of what is going on within the prison walls through application of up to standard surveillance techniques and open communication. However, despite its introduction in Kenyan prisons, its impact on inmates' discipline and safe custody remains underexplored. A study was therefore conducted at Kamiti Maximum Security Prison to ascertain its impact on inmates' discipline and safe custody among others. Guided by the rehabilitation theory of punishment, which emphasizes reform and reintegration, the descriptive survey research targeted the prisons staff and prisoners at the facility who were both selected through probability and non-probability sampling techniques and data collected from 193 participants by use of questionnaires and key informant interviews. Descriptive statistics were used in analysing quantitative data while qualitative data were thematically analysed. The study established that the majority of both prisoners and staff reported improvements in safe custody and reductions in disciplinary cases following the implementation of Dynamic Security measures. However, it was revealed that implementation of dynamic security faces behavioural barriers and resource constraints among others. The study concluded that dynamic security is central to the attainment of imprisonment goals at the institution and recommended its progressive implementation in all corrections facilities in Kenya.

Keywords: *dynamic security strategy, inmates' safe custody, inmates' discipline, Kenya.*

GJHSS-C Classification: *LCC Code: HV8301-9920.7*



Strictly as per the compliance and regulations of:



© 2025. Otieno A. Naomi & Omboto John Onyango. This research/review article is distributed under the terms of the Attribution-NonCommercial-No Derivatives 4.0 International (CC BY-NC-ND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

Enhancing Prison Safety and Discipline: The Role of Dynamic Security Strategies at Kamiti Maximum Security Prison, Kenya

Otieno A. Naomi ^α & Omboto John Onyango ^σ

Abstract- Dynamic security is a relatively new strategy in treatment of offenders and management of penal institutions. It involves inculcation of positive staff-prisoner relationships and ensuring that the staff are aware of what is going on within the prison walls through application of up to standard surveillance techniques and open communication. However, despite its introduction in Kenyan prisons, its impact on inmates' discipline and safe custody remains underexplored. A study was therefore conducted at Kamiti Maximum Security Prison to ascertain its impact on inmates' discipline and safe custody among others. Guided by the rehabilitation theory of punishment, which emphasizes reform and reintegration, the descriptive survey research targeted the prisons staff and prisoners at the facility who were both selected through probability and non-probability sampling techniques and data collected from 193 participants by use of questionnaires and key informant interviews. Descriptive statistics were used in analysing quantitative data while qualitative data were thematically analysed. The study established that the majority of both prisoners and staff reported improvements in safe custody and reductions in disciplinary cases following the implementation of Dynamic Security measures. However, it was revealed that implementation of dynamic security faces behavioural barriers and resource constraints among others. The study concluded that dynamic security is central to the attainment of imprisonment goals at the institution and recommended its progressive implementation in all corrections facilities in Kenya.

Keywords: *dynamic security strategy, inmates' safe custody, inmates' discipline, Kenya.*

1. INTRODUCTION

Dynamic Security measures in prisons are defined as strategies that extend beyond static physical security, such as walls and locks, to include adaptive, human-centred approaches. These measures focus on staff-inmate interactions, intelligence gathering, and preventative measures based on understanding inmate behaviour (UNODC, 2015). The strategies also involve use of electronic security cameras and other surveillance technologies in penal institutions to ensure continual monitoring and early detection of any possible security breaches. This allows swift action to be taken

when need arises thus guaranteeing the safety of both the offenders, prisons staff and the public (Reisig & Parks, 2018).

The foundational elements of Dynamic Security are presence, good staff- inmates' relationships coupled with respect and empathy by prisons staff towards the inmates (Abdelsalam & Sunde (2018). It is driven by the idea that treating inmates with dignity and providing rehabilitative opportunities can enhance behavioural outcomes as opposed to harsh punitive measures. Inmates who experience positive staff interactions marked by open communication reports higher satisfaction and fewer disciplinary infractions (Johnsen et al. 2018). This assists in the attainment of the mandates of imprisonment which are safeguarding the rule of law, creation of humane social and physical environment for the offenders in custody, and preparing convicts for restoration into their societies as law abiding individuals after reformation (Avakian, 2000). To be effective Dynamic Security requires that the staff be trained, and be aware of the happenings within the penal institutions (Knopp, 2018).

The trainings aim at enhancing prison officer's professionalism and nurture good relationships between them and the inmates. They also intend to equip the officers with the skills that would enable them treat inmates with respect, and be present and accessible to communicate with them. The trainings also help in building the capacities of prison officers to gather appropriate and timely intelligence that would enhance safety within the prison by pre-empting any security breaches, and comprehending the individual circumstances of each and every inmate (UNODC, 2015).

In developed countries such as Norway, application of Dynamic Security measures has for quite some time facilitated successful reformation and rehabilitation of prisoners. One of the measures employed in the country is close involvement of the officers in prisoners' lives, for instance each individual officer is usually allocated up to three inmates to serve as the chief point of contact which helps to defuse tension among inmates through empathetic communication (Gallo-Bayiates, 2023). In United states of America, adoption of dynamic security in prisons management has according to prison officers based at

Author α: Department of Security, Diplomacy and Peace Studies, Kenyatta University, Kenya. e-mail: omiejerry13@gmail.com

Author σ: PhD, Department of Security, Diplomacy and Peace Studies, Kenyatta University, Kenya. e-mails: omboto.john@ku.ac.ke, ombotojohn2014@gmail.com

Oregon Department of Corrections helped in reducing violence among inmates, and also the need for the officers to employ physical force on the inmates because of cordial relationships. It has also increased work satisfaction for prisons staff because tension has reduced between them and prisoners, because the prisoners cooperate and willingly participate in the reformation programmes (Abdelsalam & Sunde, 2018).

In Africa, whereas there are myriads of challenges such as lack of adequate funding, poor infrastructure and ill trained prison officers in many countries, some countries have noted marked improvements in attainment of prisons mandate due to initiation of Dynamic Security strategies. In Nigeria for instance, it was observed that Dynamic Security had positive impact on safe custody, inmates' discipline and reformation among others. (Adepoju, 2017). Similarly, in South Africa, Dynamic Security made the uptake of various rehabilitation programs such as education, and job training by inmates and parolees quite successful because they cooperated in undertaking the programmes (Department of Correctional Services, 2016).

In Kenya, just like in other countries in Africa, Prisons as a criminal justice institution was introduced by the colonialists (Omboto, 2023). The prisons management in the country has from inception relied more on static security measures and use force to ensure that the inmates abide by prison rules and regulations, and participate in reformation and rehabilitation programmes. The prison environment in the country is characterized by a plethora of challenges among them overcrowding and congestion, poor sanitation, availability of contrabands in prison institutions, and insufficient government funding. The harsh prison environment more often than not incite the inmates to rebellion and general indiscipline which negates on reformation and rehabilitation thus resulting into recidivism after discharge. (Omboto, 2023). The introduction of Dynamic Security strategy in selected prison institutions therefore marked a paradigm shift from reliance on the static security measures that have remained largely unsuccessful for the penal institutions management. The strategy was introduced in the year 2017 when officers from five prison institutions were trained. The institutions were Kamiti Maximum Security Prison, Langata Women's Prison, all Shimo La Tewa prison institutions which comprise of male and female prisons, plus a juvenile institution.

Despite the introduction of Dynamic Security measures in these Kenyan prison institutions, their actual impact on inmate behaviour, discipline, and reformation remains underexplored, thus the study sought to establish their impact on among others inmates' safe custody, and discipline at Kamiti Maximum Security Prison.

II. LITERATURE REVIEW: THE IMPACT OF DYNAMIC SECURITY MEASURES ON INMATES' SAFE CUSTODY AND DISCIPLINE

The importance of Dynamic Security has been noted in various jurisdictions around the world. For instance, in the Swiss prison landscape Ajil, (2021) posits that Dynamic Security is important in dealing with various security-related phenomena such as escapes from lawful custody. The scholar argues that it is appropriate to promote the concept of Dynamic Security within prison establishments since it allows for long-term and cross-phenomenon prevention of insecurity incidences in the closed prison systems. This observation was on the Swiss prison system thus the study at Kamiti Maximum Security Prison sought to establish whether similar position is applicable in a Kenyan prison context.

In Italy, a study by Chisari (2023) noted that Dynamic Security is effective in creating effective rehabilitative environments which suggest a strong correlation between dynamic security and improved discipline. In Nigeria, Abiodun, Akinlade, & Daramola, (2021) established that lack Dynamic Security measures was among the factors that had enfeebled the Nigerian Correctional facilities' security, leading to ceaseless jailbreaks in the country. The scholars thus recommended that prison officers be trained in Dynamic Security measures such as intelligence gathering and information sharing to curb the spate of jailbreaks in the country. This study was conducted in Nigeria; therefore, it was prudent to conduct another at Kamiti Maximum Security prison - Kenya to establish if Dynamic Security measures established at the facility in the year 2017 have had positive impacts as far as safe custody and discipline is concerned.

Electronic monitoring and surveillance technologies are key aspects of Dynamic Security which are increasingly being used in prisons around the world as mechanisms of improving security and reducing custody escape rates. At Oxford Prison for instance, according to Morris & Rothman, (2002) electronic monitoring allows authorities to monitor the movements and activities of offenders outside of prison, while surveillance technologies, such as closed-circuit television (CCTV) are used to monitor activities within the prison. The study at Kamiti Maximum Security Prison, a penal institution situated in Kenya, a third world country sought to ascertain the extent to which electronic monitoring and surveillance technologies have assisted in reducing escape rates and indiscipline as is the case at Oxford Prison.

Generally, Smith, (2018) also established that electronic Dynamic Security procedures like adaptive firewalls, intrusion detection systems, and network access controls, significantly reduced the number of

security incidents in organizations. This is probably because they enable detection of the incidents before they occur, thus helps to put preventive and mitigation strategies in place before hand. If properly utilised, electronic monitoring and surveillance technology measures assist the prisons staff to be aware of the happenings within prison walls 24 hours a day. This is important in enhancing prisoners' safe custody as attempted escapes are prevented before they occur, thus remaining proactive.

On human-centered and behavioural approaches which are also key components of Dynamic Security, Andrews & Bonta, (2010) observed that understanding personality and social psychological model of human behaviour helps to identify risk and need factors thus can assist in preventing cases of insecurity within prisons. According to Steiner et al., (2016), continuous assessment of prisoners and adjusting security levels guided by their behaviour has been positively related to reductions in escape cases. However, given that Steiner et al., (2016) work was conducted in Europe, it was important to establish if the same findings apply to Kamiti Maximum security Prison in Kenya, a third world country. Similarly, King, (2018) posits that specific aspects of Dynamic Security such as risk assessments greatly assists in determining security levels in prison institutions which in the end enhances safe custody. The scholar's observation was also based on prison institutions outside Africa. In USA, Steiner & Wooldredge (2019) found that when officers engage in positive interactions with prisoners, fewer disciplinary problems are recorded. This suggests that application of Dynamic Security enhances inmate management.

That application of Dynamic Security strategies improves inmate discipline had also been confirmed by Robinson et al., (2018). However, Cullen & Latessa, (2018) argued for the need to compare the effectiveness of Dynamic Security with other security models such as static security which involves maintaining a consistent level of security for all offenders. In line with this argument, the study at Kamiti Maximum Security Prison appreciated the fact that Dynamic Security measures should be augmented with static security measures such as erection of fortified perimeter walls around penal institutions for total security against prison escapes.

Nevertheless, in line with the arguments of Cullen & Latessa, (2018), the study at Kamiti Maximum Security Prison sought to compare the impact of Dynamic Security measures on attainment of various prison mandates before the time of its inception; when the institution majorly relied on static security measure and at the period when Dynamic Security strategies were enacted. The focus of comparison was willingness to participate on reformation and rehabilitation programmes by inmates, reduced escapes from custody and enhanced discipline among prisoners. In

addition, despite the growing adoption of Dynamic Security in Western prison systems, empirical evidence of its effectiveness from African contexts, particularly Kenya, remains limited. This study addresses that gap by establishing how effective Dynamic Security strategies have been at Kamiti Maximum Security Prison.

III. THEORETICAL FRAMEWORK

The study on dynamic security and attainment of imprisonment goals at Kamiti Maximum Security Prison was guided by Rehabilitation Theory as presented by rehabilitation triad model by Brown, (2019). The theory assisted the study to evaluate dynamic security measures against attainment of imprisonment goals the at prison. This model proposes that attainment of imprisonment goals involves three key components: (1) Assessment (2) Intervention and (3) Monitoring and Evaluation. Dynamic security measures can play a role in each of these components by continuously assessing the security risks and intervention needs relevant to individual inmates, and monitoring and evaluating the effectiveness of the processes geared towards meeting the goals of imprisonment such as safe custody, convicts discipline and their reformation and rehabilitation.

In the Assessment component, Dynamic Security measures can be used to continuously evaluate the risk factors that contribute to non-attainment of the various imprisonment goals. For example, regular drug testing and behavioural assessments can help to identify individuals who are at risk of relapse, allowing for early intervention to address those risks (Johnson, 2018). This enhances participation in reformation and rehabilitation programmes, enhancement of discipline and prevention of escapes.

In the Intervention component, Dynamic Security measures can be used to address the changing security risks faced by individual prisoners. For example, regular counselling and therapy sessions can be tailored to address the specific needs of each convict, thus helps to reduce the likelihood of criminal behaviour (Smith, 2017). Such criminal behaviours include cases of escapes from custody, cases of indiscipline such as fights between inmates themselves, and inmates and prison staff, and other forms of infractions.

In the case Monitoring and Evaluation component, Dynamic Security measures can be used to continuously monitor the processes of attainment of imprisonment mandates by confirming that prisoners are actively involved in the rehabilitation programmes. The continuous monitoring can also help to identify potential problems facing imprisonment goals early enough thus allowing prompt intervention to address the challenges (Brown, 2020). In conclusion, the triad model gives a suitable framework for understanding the role of

dynamic security measures on attainment of prison mandates such as safe custody and discipline.

IV. STUDY AREA

The research was conducted at Kamiti Maximum Security Prison. This prison institution was the first penal institution to be established for custody of offenders in Kenya. It was built in 1954 by the British colonial government. The institution is situated within Nairobi County, to the North East of Nairobi City in Kenya. It is located approximately 15 kilometres from the City's Central Business District. The prison is accessed through Thika Super-Highway Road. From the highway, Kamiti is situated approximately 7 kilometres from Roysambu Roundabout. The prison was chosen because it is one of the five prison institutions where Dynamic Security strategy was introduced in the year 2017 with the training of prison officers on the same. The other institutions where the strategy was established in the same year are Shimo La Tewa complex which comprise of male and female prisons, and a juvenile institution, and Langata Women's Prison.

The study expected that the capacity of Kamiti Maximum Security Prison to achieve the goals of imprisonment had been enhanced because of the initiation of Dynamic Security strategy which the study sought to ascertain. The institution was expected to have the best infrastructure compared with the others where Dynamic Security strategy was also initiated being the largest penal institution in Kenya. Further, given that the institution holds the largest number of prisoners and staff, the study expected the institution to have both prisoners and staff members who have been in the facility before the inception of the strategy to the time of study. The institution holds capital offenders who normally serve long jail terms. At the time of the study, Kamiti had approximately 2200 prisoners under the care of about 800 prison officers. Therefore, Kamiti's size, security level, and early adoption of Dynamic Security strategies made it a suitable case for examining the long-term institutional and behavioural effects of this approach.

V. METHODOLOGY

This section presents the research design, the target population and research participants, sampling procedure, the sample size, and data collection tools.

a) *The Research Design*

In terms of the research design, the study adopted descriptive survey design to accomplish its objectives. This design according to Kothari (2010) describe a research phenomenon as it naturally exists. It entails collecting information from the target population which enables describing the characteristics of the population. This design was therefore best for the study as it helped to find out from the prison staff and

prisoners the impact of Dynamic Security strategies on attainment of imprisonment goals at Kamiti Maximum Security Prison.

b) *The Target Population and Research Participants*

The study's target population were uniformed prison personnel and convicted prisoners who had served at the prison before the year 2017 when Dynamic Security was initiated at the facility up to the time of the study. Out of the eight hundred (800) prison officers, ninety-five (95) had served at the facility before the enactment of Dynamic Security in the year 2017 to the time of the study when Dynamic Security was in place, thus they were able to compare and contrast the happenings within the two time periods. On the other hand, out of the two thousand two hundred (2200) prisoners, two hundred and forty (240) had remained in the same facility from before 2017 to the time of the study. These were the target population the study.

c) *Sampling Procedure*

On sampling procedure, the process of sampling started with the classification of the members of the target population into two separate strata comprising uniformed prison staff and convicted prisoners. Thereafter, the study used purposive sampling; anon-probability sampling method to identify both the prisoners and prison officers who had been at the facility from before 2017 to the time of the study, and later probability sampling was employed to select the respondents who finally participated in the study.

Out of the eight hundred (800) prison officers, ninety-five (95) had served at the prison before the year 2017 to the time of the study, and were the ones of interest to the study. The researcher identified these staff members with the help of the office of the officer in-charge of the prison. On the other hand, out of the two thousand two hundred (2200) prisoners who were imprisoned at the facility at the time of the study, two hundred and forty (240) had remain in the same facility from before 2017 to the time of the study. A majority of them were capital offenders who committed heinous crimes such as murder, rape, defilement and violent robberies, and were serving long imprisonment terms ranging between 15 to 40 years. The researcher managed to identify these prisoners with the help of the prisons staff working at the documentation office. These prisoners were identified based on the entries in the prisoners' admissions record.

The study also employed purposive sampling method to choose the key informants and focus group discussion members. The key informants were nine (9) senior prison officers at the prison. They were of the ranks of Superintendent of Prisons (SP) to Assistant Commissioner General of Prisons. (ACGP). All the key informants were chosen based on both seniority and length of service. The focus group discussion panel comprised of twelve (12) long serving capital prisoners

who had been in the same prison for more than fifteen (15) years before the commencement of Dynamic Security strategy in the year 2017.

d) *Sample Size*

A sample size of two hundred and twenty-four (224) respondents comprising of prisoners and prison officers who were selected through probability sampling method participated in the study. Their selection was guided by the table of Krejcie and Morgan (1970) on suitable sample sizes. In the sample were one hundred and forty-eight (148) prisoners, and seventy-six (76) prison staff. Two lists of names of all the two hundred

and forty (240) prisoners who had remain in the facility from before 2017 to the time of the study, and the ninety-five (95) prison officers were generated alphabetically and numbered, the numbers were then written on pieces of paper that were then folded and picked by one of the prison documentation staffs to randomly identify the 148 prisoners and 76 prison officers. The numbers; 148 and 76 were arrived at guided by the table of Krejcie and Morgan (1970) on suitable sample sizes for 240 and 95 objects respectively.

Table 1: Sample Size

	Population	Percentage
Prison officers	76	34%
Prisoners	148	66%
Total	224	100%

Source: Research Data (2025)

e) *Data Collection Tools*

Data was then collected using the questionnaires, key informants interview guide and focus group discussion guide.

i. *Questionnaires*

The questionnaires employed in data collection had both open-ended and closed questions. Closed ended questions assisted in getting direct and specific answers from the respondents. While open ended questions helped to elicit opinions of the respondents on various themes relevant to the study objectives. The questionnaires had various sections such as socio-demographic characteristics of the respondents, and respective themes as per the research objectives. The questionnaires were administered by the researcher and her assistant. The literate respondents filled the questionnaires on their own while the semi-literate respondents who were prisoners were assisted by the researcher and her assistant. The questionnaires were administered and filled between 8th to 20th January 2025.

ii. *Key Informant Interviews Schedules*

To gain more in-depth information on Dynamic Security and attainment of imprisonment goals, key informant interviews were conducted with selected prison officers at Kamiti Maximum Security Prison. The key informants were nine (9) senior prison officers at the prison. They were of the ranks of Superintendent of Prisons (SP) to Assistant Commissioner General of Prisons. (ACGP). All the key informants were chosen based on both seniority and length of service. The interviews were conducted on 22nd to 29th January 2025.

iii. *Focus Group Discussion Guide*

A Focus Group Discussion Guide was also used to collect information from FGD members at Kamiti

Maximum Security Prison. The focus group discussion panel comprised of twelve (12) long serving capital prisoners who had been in the same prison for more than fifteen (15) years before the commencement of the Dynamic Security strategy in the year 2017. The use of focus group discussion was informed by the fact that FGD offers a researcher the opportunity to probe deeper into the various views presented thus bringing to the fore various opinions important to the study. The discussions were held on 21st January 2025 at one of the prison's classrooms.

f) *Data Analysis*

The study employed descriptive statistics in analysing the quantitative data collected. The finding from quantitative data were then presented using tables and figures. The descriptive statistics entailed measures of central tendency like frequencies and percentages based on responses given on various statements. The qualitative data collected from non-structured responses in the questionnaires, key informant interviews and FGD were organized into major themes and thematically analysed, and some excerpts reported verbatim to corroborate the findings from the questionnaires.

VI. DISCUSSION OF FINDINGS

The following are the research findings on socio-demographic characteristics of the respondents, and on effects of dynamic security measures on inmates' safe custody, and discipline.

a) *Demographic Profile of the Prisoners and Prison Staff*

Table 2 below presents the socio-demographic characteristics of the prisoners and prison officers.

Table 2: Demographic Profile of Prisoners and Prison Staff

Gender	Prison Officers		Prisoners	
	Frequency	Percentage	Frequency	Percentage
Female	7	11.11	0	0
Male	56	88.89	130	100
Age				
18-30 years	18	28.57	24	18.462
31-40 years	23	36.51	34	26.154
41-50 years	19	30.16	30	23.077
51-60 years	3	4.76	24	18.462
Above 60 Years	0	0	18	13.846
Marital Status				
Married	51	80.95	88	67.692
Separated	2	3.17	16	12.308
Single	10	15.87	20	15.385
Divorced	0	0	6	4.615
Widowed	0	0	0	0
Education				
College Level Education	20	31.75	40	30.769
Primary Education	2	3.17	40	30.769
Secondary Education	17	26.98	40	30.769
University Education Level	24	38.1	8	6.154
No Formal Education	0	0	2	1.538
Work Experience				
11-20 Years	10	15.87	12	9.231
6-10 Years	16	25.4	18	13.846
Above 20 Years	6	9.52	12	9.231
Less than 5 Years	31	49.21	88	67.692

Source: Research Data (2025)

On the prison officers' data, gender distribution revealed a significant predominance of male prison officers, constituting 88.89% of the sample, while only 11.11% were females. This disparity aligns with established researches that have consistently documented the male-dominated nature of correctional institutions' work force (Muthaura et al., 2023). However,

being a male prison, it is expected that male prison officers outnumber their female counterparts.

The results on age distribution among the prison officers showed that the majority fall within the 31–40 years (36.51%) and 41–50 years (30.16%) brackets, with a substantial representation (28.57%) in the 18–30 years range. Only a small fraction (4.76%) is

between 51 and 60 years, and none are above 60. This suggests a workforce that is primarily young to middle-aged. This according to Kutto and Ng'eno (2023) is a reflection of recruitment strategies that favour physical agility and physical fitness. Literature on Correctional staff often highlights that such age distributions are typical, given the demanding nature of the job that can lead to high turnover rates (Kinoti, 2023).

The results on marital status indicated that a significant majority (80.95%) of Prison Officers are married, while 15.87% are single and 3.17% are separated. Researches suggests that marital status can be linked to stability and stress management in high-pressure occupations. This could potentially contribute to greater job commitment and lower absenteeism (Desa et al., 2021). The study finding aligns to local research that showed that majority of prison staff are married (Osina & Omboto, 2024)

The results on the educational background of the prison officers indicated that 38.1% had university level education, 31.75% college-level education, while 26.98% secondary education, and a marginal 3.17% primary level education. This suggests that a majority of the prison staff possess higher level of education that can help them implement Dynamic Security measures in the prison. These results are consistent with those of Kinoti, (2023) who found out that most prison officers have higher education qualifications. The unexpected high number of graduates against the fact that prison officers' level education entry is Kenya Certificate Secondary Education is probably due to the fact that a majority of prison officers in Nairobi take the opportunity to improve their academic status due to availability of several universities in Nairobi City County-Kenya.

The results on work experience revealed that nearly half (49.21%) of the prison officers have less than five years of service, with 25.4% having 6–10 years, 15.87% with 11–20 years, and only 9.52% exceeding 20 years of experience. The predominance of relatively new staff might indicate recent recruitment efforts in Kenyan Prison Service (Sunga et al., 2024).

The descriptive results for the prisoners in the table on age distribution show that the highest percentage of prisoners falls in the 31–40 years category (26.15%), followed closely by the 41–50 years group (23.08%). These findings are consistent with criminological research that indicates criminal activity typically peaks in early to mid-adulthood (Bevin et al., 2024). The presence of younger inmates (18–30 years, 18.46%) alongside those above 60 years (13.85%) suggests a diverse age range of prison population. This is also in agreement with local studies that have shown diverse prison population in Kenya (Osina & Omboto, 2024).

The results on prisoner's marital status indicated that a substantial majority at 67.69% were married while 12.31% separated, 15.39% single and

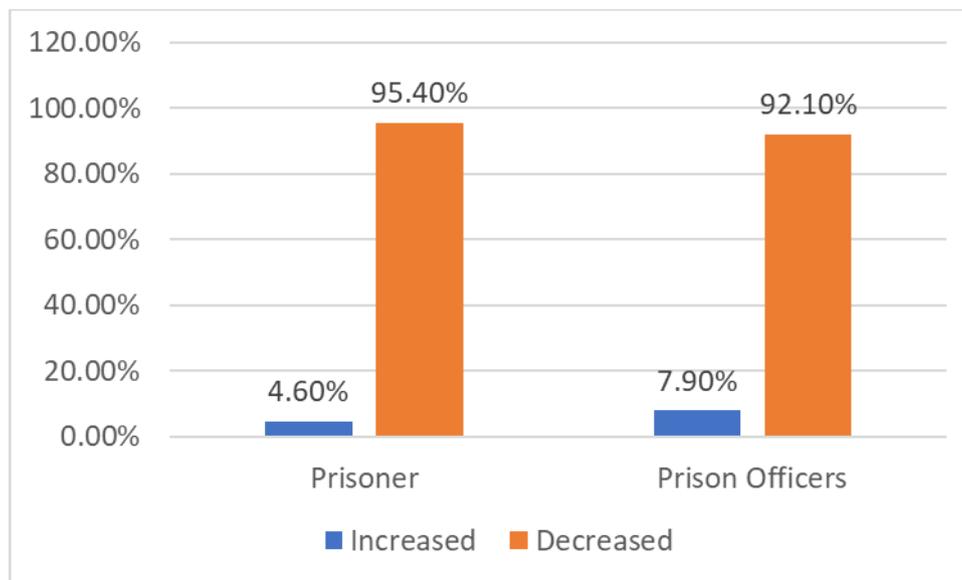
4.62% divorced. That a majority of prisoners maintain marital relationships is important because external social ties significantly influence inmates' behaviour and stability while in custody. The results are consistent with the findings of Osina & Omboto, (2024) that a majority of prisoners are married usually in marital relationships.

On education level of the prisoners, the findings revealed that those who attained college-level education, secondary level, and primary level were all at 30.77%. the university graduates were 6.15% while a minimal group of 1.54% had no formal education. From the findings, it can be deduced that most prisoners have the basic level of formal education that can assist them navigate their way in life. However, it has been established that low academic achievement is a risk factor for criminal behaviour (Parimah et al., 2021, Sunga et al., 2024).

b) *Findings on Effects of Dynamic Security Measures on Inmates' Safe Custody*

This section presents findings on how Dynamic Security measures have affected inmates' safe custody at Kamiti Maximum Prison. It dwells on frequency of escapes, and attempted escapes during the time Dynamic Security measures have been in place. The figure below presents the perspectives of prisoners and prison officers on the effects of Dynamic Security on safe custody.





Source: Research Data (2025)

Figure 1: The Perspectives of Prisoners and Prison Officers on Effects of Dynamic Security on Safe Custody

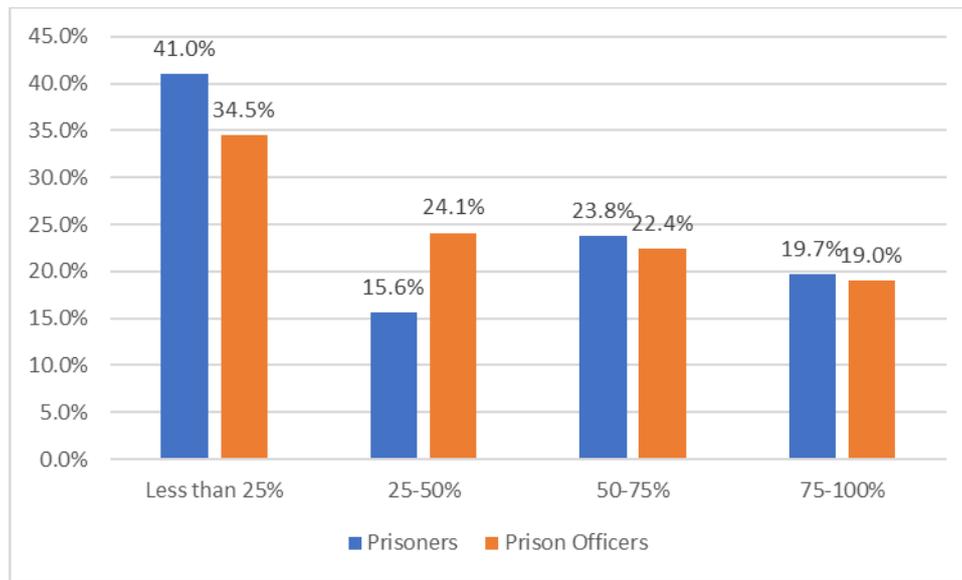
The results indicate that 92.1% of prison officers reported a decrease in cases of inmate escapes or attempted escapes at Kamiti Maximum Prison following the implementation of Dynamic Security measures, while only 7.9% noted an increase. Similarly, results from prisoners indicated that 95.4% of them were of the opinion that cases of inmate escapes or attempted escapes had decreased following the implementation of Dynamic Security measures, with only 4.6% reporting an increase. These findings from both the categories is a suggestion that dynamic security protocols have effectively contributed to improved containment within Kamiti Maximum Prison. The prison records on daily security incidents also revealed very minimal reports on escapes and attempted escapes during the period of interest. The high percentage of prison officers and prisoners reporting decreased escapes is aligned with the findings of Midtlyng, (2022) who opined that Dynamic Security measures enhance overall institutional safety. Santorso, (2021) also observed that proactive security strategies common under Dynamic Security are associated with lower incidents of escapes, and insecurity in general.

“Prisoners will escape or attempt to escape if the social and physical environment is hostile. I can confirm that the changes have made prison institutions better”

That there has been a decrease in cases of inmates escapes or attempted escapes after the implementation of dynamic security measures was further confirmed by the research participants during Key Informant Interviews and Focus Group Discussions. For instance, Key Informant -1 (KI-1), a senior prison administrator, observed that:

“Because prisons staff are these days friendly, the prisoners are not stressed up by their experiences in custody so cases of escapes are minimal.”

During focus group discussion, a member, Focus Group Member-6 (FGM-6) asserted:



Source: Research Data (2025)

Figure 2: Prisoners' and Prison Officers Views on Estimated Percentage of Decrease in Cases of Escapes and Attempted Escapes under Dynamic Security

An analysis of the prisoners' view on decrease in cases of custody escapes showed that 41.0% estimated the decrease to be less than 25%, while 15.6% reported a decrease between 25–50%, 23.8% estimated it to be between 50–75%, while 19.7% of prisoners indicated that the cases have decreased between 75–100%. This distribution suggested that although most prisoners observed an overall reduction in escape or attempted escape cases, the magnitude of this reduction varied considerably. Such variability is consistent with literature indicating that the effectiveness of dynamic security measures can be perceived differently by inmates, depending on individual experiences and contextual factors (Kilmer et al., 2023).

The analysis of the prison officers' views on the level of decreases showed that 34.5% estimated the decrease in cases of escapes or attempted escapes to be less than 25%, 24.1% believed it was between 25–

50%, 22.4% indicated a decrease of 50–75%, and 19.0% felt it was between 75–100%. These results highlight an agreement between prison officers that cases of escapes or attempted escapes have generally reduced though there is difference in opinion on the rate of reduction. Such variability in perception is consistent with Midtlyng, (2022) position that Dynamic Security measures could lead to differing assessments among prison staff depending on their roles and daily interactions with inmates.

i. Factors Behind Perceived Impact of Dynamic Security on Safe Custody

On factors responsible for the apparent impact of Dynamic Security on safe custody, both prisoners and prison officers presented their views as discussed below.

Table 3: Inmates' Reasons for Reduced Escapes under Dynamic Security Measures

Reasons	Frequency	Percentage
Trust and behavioural transformations	51	39.23
Trainings and Counselling	33	25.38
Improved security and surveillance	24	18.46
Improved Efficiency of Legal Process	9	6.92
Humanistic Welfare approach	7	5.38
Limited Visitations among inmates	6	4.62
Total	130	100

Source: Research Data (2025)

Table 3 reveals that inmates attributed the reduction in escape cases under Dynamic Security

measures to several key factors. The results showed that the predominant reason was "Trust and behavioural

transformations" which had 39.23%. Inmates justified this by noting that Dynamic Security fostered an environment of trust and mutual respect between staff and inmates, leading to behavioural transformations. This finding is consistent with Day et al. (2022) who argued that improved interactions and rehabilitative engagement can significantly enhance inmates' willingness to conform to institutional norms.

The second most cited reason was "Trainings and Counselling" which stood at 25.38%. Inmates observed that structured training sessions and counselling not only provided them with life skills and coping strategies but also instilled a greater sense of accountability. This supports Smith et al., (2024) who underscored the effectiveness of cognitive behavioural interventions in correctional settings. Such programmes, the scholar opines are known to reduce the motivation for escape by addressing underlying issues such as stress and impulsivity.

"Improved Security and Surveillance" was mentioned by 18.46% as another significant factor. Inmates indicated that monitoring and regular security checks deterred escape attempts by limiting opportunities to plan or execute escapes. This observation aligns with Imandeka et al., (2024) view that proactive surveillance measures contribute to institutional safety by detecting potential threats early enough before they occur.

A smaller proportion at 6.92% attributed the decrease to the "Improved Efficiency of Legal Process"

Inmates felt that a more streamlined legal process reduced uncertainties and delays that might otherwise foster feelings of injustice or desperation. Tyler Akoensi (2024) had earlier noted that procedural fairness is crucial for maintaining compliance and trust in institutional processes. The results also showed that only 5.38% mentioned "Humanistic Welfare Approach" as a reason. This suggests that humane treatment and welfare policies contributed to a more stable environment. This position is supported by Poudel (2023) who observed that dignity and respect in prison management can lead to better inmate behaviour.

"Limited Visitations among Inmates" (4.62%) was seen as a factor that minimised external influences and potential escape planning. By restricting the frequency and nature of contact with the outside world, the measure curtails potential collusion or assistance from external networks, which have been noted to facilitate escape attempts in correctional settings (Boppre et al., 2022). Reduced external contact limits inmates' access to escape-related resources and information, thereby reinforcing institutional control (Wolff et al., 2012).

Confirming change in prisoners' behaviour that has led to decrease in escapes and attempted escapes, a member of a Focused Group Discussion number 2 (FGM-2) observed that:

"Because prison staff these days are friendly, most prisoners have also reformed to be very cooperative"

Table 2: Prison Officer's Reasons for Reduced Escapes under Dynamic Security Measures

Reasons	Frequency	Percentage
Increase in general security and alertness/surveillance	36	57.14
Improved relationship between inmates and staff	10	15.87
Introduction of Education and Skills	10	15.87
Introduction of appeal, power of mercy and probations	4	6.35
Tough economic times	3	4.76

Source: Research Data (2025)

Results in Table 2 indicates that 57.14% of prison officers attributed reduced escape attempts to an increase in general security and alertness/surveillance. This finding suggests that there has been enhanced monitoring and proactive security protocols under Dynamic Security strategy which has played a critical role in deterring escapes. This is consistent with Kilmer et al. (2023) who argued that constant vigilance creates an environment where inmates are less likely to attempt escapes. Similarly, Abiodun et al., (2021) noted that improved surveillance correlates with a decline in security breaches.

For instance, Key Informant -3 (KI-3) observed that:

"The decrease in escapes is partly due to introduction of CCT surveillance in this institution"

Furthermore, the results show that 15.87% of officers felt that improved good relationship between inmates and staff contributed to reduced escape cases. This implies that dynamic security measures foster mutual respect and communication leading to behavioural changes among inmates. The finding is in line with Logan et al. (2022) who noted that positive staff-inmate interactions can enhance compliance and mitigate disruptive behaviours. This supports the importance of good rapport between the staffs and inmates.

Some other 15.87% of prison officers attributed the reduction of escape cases to the enhanced participation in education and skills programmes. This indicates that the inmates are aware that the

opportunities for personal development and vocational skills will be important for them to settle down into their communities after discharge. This curtails the motivation to escape, as these programmes supports their rehabilitation and future reintegration. These findings align with those of Inusa, (2021) who emphasized the importance of educational initiatives in reducing recidivism and infractions among convicts.

A portion at 6.35% of the officers credited the availability of appeals, power of mercy, and probation practices with reducing escape cases. This suggests that mechanisms for leniency and second chances may have reassured inmates, thus decreasing their need for drastic measures such as escapes. Although this was less frequently reported, it supports the theories that restorative justice practices can positively affect inmate behaviour (Perrella et al., 2024).

A smaller proportion at 4.76% cited tough economic times as a contributing factor, implying that external economic pressures may have indirectly influenced inmates' decisions not to escape and face difficult life in the society. Though not directly linked to Dynamic Security, this observation aligns with the views of Yin et al., (2022) that broader socio-economic circumstances can affect institutional behaviour.

A comparative analysis of prisoners' and prison officers' views reveal both convergence and divergence

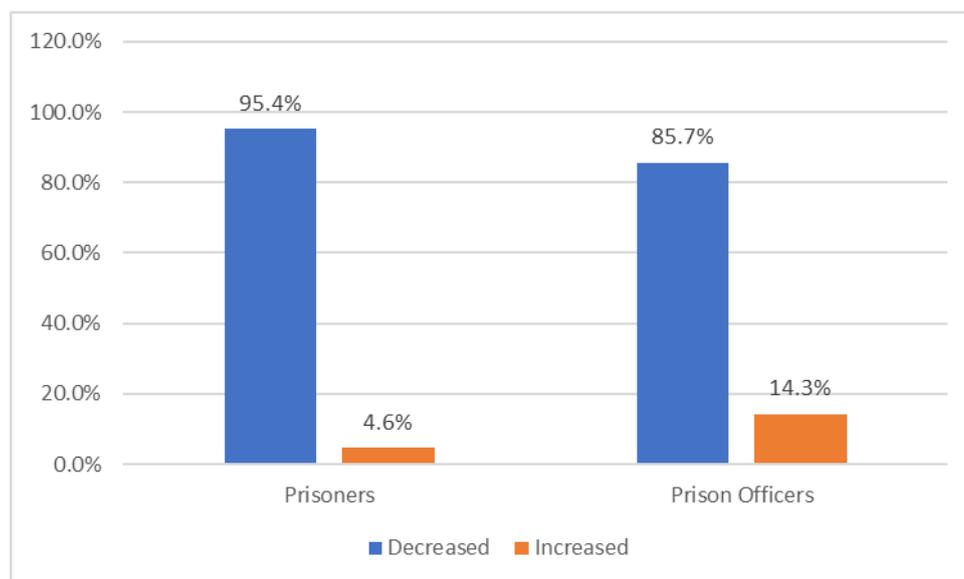
in perceived factors responsible for reduced escape cases and attempted escapes under Dynamic Security. Prison officers predominantly attributed the decrease to enhanced security and surveillance, reflecting a focus on operational control and vigilance. In contrast, prisoners emphasized personal transformation, with reformed behaviour, cooperation, trainings and counselling as the key factors which focuses on the role of rehabilitative interventions. While both groups acknowledged improved security measures, prison officers appeared to focus on surveillance, whereas to the inmates it is psychological support and opportunities for self-improvement as the cause of less escapes.

c) *Impact of Dynamic Security Measures on Discipline of Prisoners*

This section presents an analysis of the opinions of prisoners and the prisons staff on the impact of Dynamic Security measures on the discipline of prisoners at Kamiti Maximum Prison- Kenya.

i. *Views on Inmates Disciplinary Cases after Implementation of Dynamic Security Measures*

The figure below represents the views of prisoners and prison officers on whether the inmates' disciplinary cases have increased or decreased after implementation of Dynamic Security measures.



Source: Research Data (2025)

Figure 3: Prisoners and Prison Officers Views on Inmate Disciplinary Cases after Implementation of Dynamic Security Measures

The results indicated that 85.7% of prison officers reported a decrease in inmates' disciplinary cases after the implementation of Dynamic Security measures. The disciplinary cases in question include fights between prisoners, breaking of prison rules and regulations, and possession of contrabands among others. This decrease can be interpreted to be as a

result of enhanced surveillance and reporting, and amicable resolution of problems that arise due to adoption of Dynamic Security strategies. The decrease may also be as a result of improved rapport and cooperation between prisoners and prison staff. It is indicative of improved accountability and stricter adherence to institutional rules. This is consistent with



Abiodun et al., (2021) assertion that Dynamic Security enhances rule compliance. However, 14.3% of prison officers noted an increase in disciplinary cases. This suggests to them; the measures have not resulted into positive behavioural change.

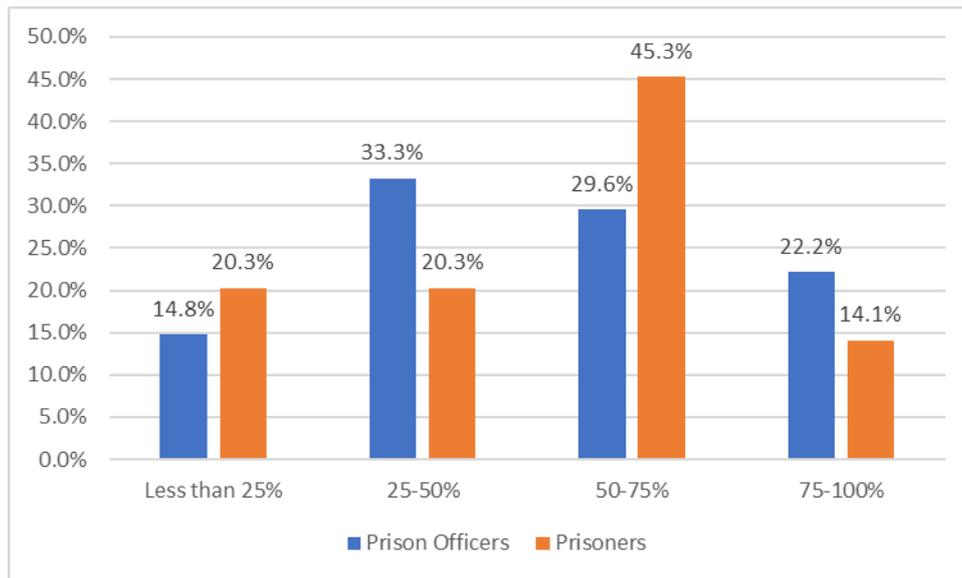
To the prisoners, 95.4% reported that after Dynamic Security measures were implemented there had been a decrease in inmates' disciplinary cases such as fights between prisoners, breaking of prison rules and regulations, and possession of contrabands among others. Only 4.6% indicated that there had been an increase. The prisoners attributed the decrease to enhanced staff-inmate good rapport and a more structured environment which reinforce accountability. This observation aligns with Steiss, (2019) who noted that Dynamic Security practices often lead to significant behavioural improvements. Furthermore, this finding is consistent with Osina & Omboto, (2024) who noted that proactive security approaches lead to improved discipline.

During Focus Group Discussion, the focus group number 2 (FGM-2) put it aptly:

"Because of changes which came with dynamic security measures, prisoners are very polite and disciplined because prison officers are cordial. Cases of confrontations have greatly declined compared to pre-dynamic security period."

On the proximate percentage of decrease in the disciplinary cases, 14.8% of the 54 prison officers who reported a decline estimated the decrease to be less than 25%, 33.3% of the officers opined that the decrease was 25–50%, and 29.6% of the officers estimated it to be between 50–75%, while 22.2% estimated that the disciplinary cases have reduced by 75–100%. This suggests that majority estimate decreases in disciplinary cases to be between 25–75% which implies that prison security management under dynamic security have managed to ensure inmates discipline by reducing infractions.

To the prisoners, 20.3% estimated the decrease to be less than 25%, another 20.3% estimated it to be 25–50% reduction, while 45.3% opined that the decline is 50–75%, which is substantial. Those who felt the reduction in disciplinary cases is 75–100% were 14.1%. The findings from both the prisoners and prison officers show a concurrence that dynamic security measures had significantly improved discipline in the correctional facility. Figure 2 presents the proximate percentage of decrease in the disciplinary cases by both the prison officers and prisoners.



Source: Research Data (2025)

Figure 4: Prisoners and Prison Officers' Views on the Proximate Percentage of Decrease in the Disciplinary Cases after Dynamic Security Measures' Implementation

ii. *Factors Behind Perceived Impact of Dynamic Security Measures on Discipline of Inmates*

Both prison officers and prisoners were requested to outline the factors behind perceived impact of dynamic security measures on discipline. The findings are as follows.

Table 3: Prison Officers Reasons for the Impact of Dynamic Security Measures on Inmates' Discipline at Kamiti Maximum Prison

Factors Responsible for the Decline	Frequency	Percentage (%)
Behavioural Improvement and Cooperation	25	45.45
Focus on rehabilitation Programs	16	29.09
Security and Contraband Reduction	7	12.73
Humanistic and Proactive Approaches	7	12.73
Total (Positive Responses)	55	100

Source: Research Data (2025)

The Prison Officers reported that dynamic security measures had led to notable behavioural improvement and enhanced cooperation among inmates, with 45.45% attributing positive disciplinary outcomes to this factor. This demonstrates that Dynamic Security measures have promoted self-discipline and mutual respect, resulting into fewer disruptive incidents. This observation may be interpreted as evidence that inmates had internalised behavioural norms through direct interactions with staff based on good rapport. This position is supported by Chisari (2023) who opined that improved behavioural standards are often a direct result of proactive security measures which are common under Dynamic Security. Further, Milićević (2021) observed that cooperation is linked to lower recidivism as indicated by the prison officers' perceptions. These findings highlight the potential of Dynamic Security measures to transform inmates conduct thereby contributing to reduced cases of indiscipline.

Further, under Dynamic Security, approximately 29.09% of prison officers indicated that heightened focus on rehabilitation programs by inmates had significantly contributed to improved discipline. This suggests that under Dynamic Security, rehabilitation programmes equip inmates with a better understanding of acceptable conduct. According to Logan et al., (2022), Dynamic Security measures not only equip inmates with knowing the consequences of misconduct but also provide pathways for personal growth and behavioural change. Further, Kilmer et al., (2023) noted that when inmates willingly participate in rehabilitation initiatives, it leads to reduction of disciplinary cases and promotion of self-regulation.

A smaller proportion of prison officers at 12.73% attributed the improved discipline to enhanced security

measures and a reduction in contraband smuggling. The prisoners reported that Dynamic Security protocols had not only ensured strict surveillance on prisoners but also curtailed the circulation of illegal items within the prison. This reduction in contrabands is a critical factor in maintaining order. When contrabands are reduced, opportunities for illicit activities are minimized which in the end reduces potentials for disruption of discipline. This position is confirmed by Alshafey et al. (2022) who opines that technological advancements such as use of CCTV cameras, and rigorous checks play a vital role in preserving institutional security. The prison officers' views that a secure environment under Dynamic Security contributes significantly to improved inmates good conduct and overall discipline resonate with these findings.

Further, some 12.73% of Prison Officers believed that a humanistic and proactive approach under dynamic security had positively impacted inmate discipline. The staff observed that treating inmates with dignity and offering proactive support helped reduce aggression and fostered a more respectful atmosphere. It was observed that Dynamic Security measures balance punitive measures with rehabilitative care which in the end enhances cooperation from the inmates thus reduces disobedience among prisoners. This had earlier been confirmed by Poudel, (2023) who observed that a humanistic approach can lead to improved outcomes by reducing recidivism and encouraging positive behaviour. This is consistent with prison officers' perceptions that humane treatment of inmates positively transforms their behaviour.

Table 4: Prisoners View on Reasons for Perceived Impact of Dynamic Security Measures on Inmates' Discipline at Kamiti Maximum Prison

Factors Responsible for the Decline	Frequency	Percentage (%)
Improvement and Cooperation	20	17.54
Rehabilitation and Skill Development	48	42.11
Security and Control Measures	32	28.07
Relational and Welfare Approaches	4	3.51
Legal and External Outcomes	10	8.77
Total	114	100

Source: Research Data (2025)

Some 17.54% prisoners reported that Dynamic Security measures led to significant cooperation among inmates themselves, and between inmates and prison officers, which they attributed to improved discipline. This is an indication that Dynamic Security measures instituted an environment where inmates internalized the rules and norms of the institution which positively impacted their conduct. This might have been as a result of increased friendly interactions with Correctional staff. According to Karimullah, (2023) good inmate-staff relations can lead to lasting positive changes. Further, Øster & Rokkan (2018) established that enhanced cooperation among inmates reduces disciplinary incidents.

A substantial 42.11% of the prisoners attributed the positive impact of Dynamic Security on discipline to willingness by prisoners to partake rehabilitation and skills development programs introduced under Dynamic Security era. The prisoners reported that the programmes offered them the opportunities for learning and self-improvement, which in turn led to better self-regulation and a reduction in disciplinary issues. This observation is in line with Sachitra and Wijewardhana (2020) who noted that engaging in vocational and educational programs help inmates to develop new skills, reduce idleness, and promote productive behaviour. Jolley (2018) postulated that rehabilitative programs are associated with lower infractions in custody and reduced recidivism rates. The emphasis on skill development as a means of promoting discipline resonates with the opinion of Mbatha, (2019) who noted that active reformation fosters accountability and compliance with institutional rules.

However, 28.07% of prisoners credited improved discipline to enhanced security and control measures. This corresponds with Omane-Addo and Ackah (2021) who had earlier observed that stricter surveillance and enforcement minimize opportunities for rule violations, and creates an environment where misconduct is actively deterred. This implies that constant presence of robust security protocols appears to instil a sense of accountability among inmates thus promotes self-regulation. This corresponds with the position of Midtlyng, (2022) who observed that robust control mechanisms are instrumental in reducing prison infractions.

But to some 3.51% of prisoners, improvement in discipline is due to relational and welfare approaches. These convicts reported that due to Dynamic Security initiatives interpersonal relationships, and provision of welfare support had increased thus created a more positive institutional climate which in turn led to a reduction in hostilities, and improvement in overall good conduct by inmates. This perspective corresponds with the opinion of Ugelvik, (2016) who emphasized the importance of humane treatment in fostering better behaviour in prisons. The opinion of these few convicts

as supported by the scholars highlights the critical role emotional and social support plays in the rehabilitation process. Thus, the need for investments in welfare approaches to complement rigorous security measures.

The findings also revealed that 8.77% of prisoners believed that legal and external factors have positively influenced their discipline. For instance, because commission of crimes while in prison may lead to re-prosecution and re-conviction, they avoid being found on the wrong side of the law thus remain disciplined. There are also punishments for infractions which they avoid by being disciplined when serving their jail sentences. This perception is based on the idea that when inmates understand the consequences of their actions, they are more likely to conform to institutional rules. This is in line with the arguments of Boppre et al. (2022) who observed that perceptions of procedural justice significantly affect compliance and discipline.

VII. CONCLUSIONS AND RECOMMENDATIONS

The study made the following conclusions and recommendations on effects of dynamic security measures on inmates' safe custody, and discipline.

a) *Conclusions of the Study*

The findings indicated that Dynamic Security measures at Kamiti Maximum Security Prison in Kenya just like in other countries in Europe, and in Nigeria and South Africa had positively impacted inmates' safe custody and discipline. It was established that escapes and attempted escape rates had declined just as cases of indiscipline greatly reduced.

To the prisoners the positive impact of Dynamic Security was attributed to good rapport between prison officers and prisoners, engagement in rehabilitation programmes, and better access to counselling programmes. However, the prison staff observed that strengthened surveillance, rigorous operational protocols, and proactive security practices had effectively bolstered containment and enhanced discipline.

b) *Recommendations*

To enhance application of Dynamic Security, the study recommended that the government of Kenya and the prison authorities should continue and expand training programs for prison officers on interpersonal skills and intelligence gathering, strengthen surveillance technologies in conjunction with human-centered approaches, and finally implement continuous monitoring and assessment frameworks to evaluate the long-term effects of Dynamic Security measures.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Abdelsalam. S & Sunde H. M (2018) Enhancing the Role of Correctional Officers in American Prisons Federal Sentencing Reporter Vol. 31, No. 1 (October

- 2018), Pp. 67-74 (8 Pages) Published By: University of California Press.
2. Abiodun, D. T. F., Akinlade, M. T., Onyi, A. B., & Daramola, A. A. (2021). Recurrent waves of jailbreak in Nigeria: The imperatives of prison intelligence and dynamic security strategies in managing the Nigerian correctional facilities. *Advances in Social Sciences Research Journal*, 8(5), 229–250.
 3. Adepoju, A. (2017). The impact of dynamic security rehabilitation on recidivism rates in Africa. *African Journal of Criminology and Justice Studies*, 11(2), 23-30.
 4. Ajil Ahmed (2021) Handbook on Dynamic Security in Penal Settings. University of Lausanne.
 5. Alshafey, I. A., Ahmed, H. A., & Hussein, H. S. (2022). Smart Prisons and The Ability to Achieve Goals and Standards of The Facility in Terms of Raising Its Humanitarian and Security Efficiency. *Journal of Positive School Psychology*, 6(9), 1407–1444.
 6. Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct* (5th ed.). Springer.
 7. Avakian, S (2000) Dynamic Security -Journal of Correctional Education (1974-) Vol. 51, No. 1 , pp. 183-188. Correctional Education Association
 8. Boppre, B., Dehart, D., & Shapiro, C. J. (2022). "The Prison System Doesn't Make It Comfortable to Visit": Prison Visitation from the Perspectives of People Incarcerated and Family Members. *Criminal Justice and Behavior*, 49(10), 1474–1494. <https://doi.org/10.1177/00938548221094823>
 9. Brown, B. (2019). The rehabilitation triad model: A framework for understanding the role of dynamic security measures in the rehabilitation of offenders. *Journal of Rehabilitation*, 11(3), 260-265.
 10. Brown, B. (2020). The impact of dynamic security measures on the rehabilitation process for individuals with a history of criminal behaviour. *Journal of Rehabilitation*, 10(2), 120-125.
 11. Chisari, C. (2023). Transitioning from dynamic security in Italian prisons: Assessing the influence of perceived insecurity on prison management. *Rassegna Italiana Di Criminologia*, 3, 240–251.
 12. Department of Correctional Services (South Africa). (2016). *The use of electronic monitoring in the management of parolees*. Pretoria: Department of Correctional Services.
 13. Cullen, F. T., & Latessa, E. J. (2018). *The Oxford Handbook of Criminological Theory and Crime Prevention*. Oxford University Press. King, R. A. (2018). The Importance of Risk Assessment in Dynamic Security: An Exploratory Study. *Journal of Offender Rehabilitation*, 57(6), 357-369.
 14. Day, A., Daffern, M., Woldgabreal, Y., & Currie-Powell, N. (2022). Rehabilitative progress in prison: Some challenges and possibilities. *Aggression and Violent Behaviour*, 67, 101783.
 15. Desa, N. M., Asaari, M. H. A. H., & Senafi, M. H. A.-A. (2021). Work satisfaction and affective commitment among state prison officers. *European Scientific Journal*, 17(13), 78–97.
 16. Gallo-Bayiates. G (2023) Research Summary: Norwegian Correctional Service Dynamic Security Model of Correctional Supervision-Norwegian Correctional Service (NCS).
 17. Imandeka, E., Hidayanto, A. N., Putra, P. O. H., Suhartanto, H., & Pidanic, J. (2024). Unlocking the Potential of Smart Security and Surveillance Technology in Prisons: A Brief Review. *Revue d'Intelligence Artificielle*, 38(3).
 18. Inusa, D. (2021). Perceived impact of vocational skills acquisition on reformation and reduction of recidivism by ex-convicts of Gombe Central Correctional Centre. *Kashere Journal of Education*, 2(2), 120–126.
 19. Johnsen, S., Watts, B., & Fitzpatrick, S. (2020). Rebalancing the rhetoric: A normative analysis of enforcement in street homelessness policy. *Urban Studies*, 58(2), 355-371. <https://doi.org/10.1177/0042098019898369> (Original work published 2021)
 20. Johnson, J. (2018). Dynamic security measures in the intervention component of the rehabilitation process. *Journal of Rehabilitation*, 9(2), 140-145.
 21. Jolley, M. (2018). Rehabilitating prisoners: The place of basic life skills programmes. *Safer Communities*, 17(1), 1–10.
 22. Karimullah, S. S. (2023). Prison System Transformation: Delving into Restorative Justice, Rehabilitation, and Religious Life based on Islamic Law. *FITRAH: Jurnal Kajian Ilmu-Ilmu Keislaman*, 9(2), 201–224.
 23. Kilmer, A., Abdel-Salam, S., & Silver, I. A. (2023). "The Uniform's in the Way": Navigating the Tension Between Security and Therapeutic Roles in a Rehabilitation-Focused Prison in Norway. *Criminal Justice and Behaviour*, 50(4), 521–540. <https://doi.org/10.1177/00938548221143536>
 24. Kinoti, L. K. (2023). *Influence of Human Capital Management Practices on the Performance of Prisons in Kenya* [PhD Thesis, KeMU]. <http://41.89.31.5/handle/123456789/1613>
 25. Knopp, F. (2018). The role of technology in the rehabilitation of offenders. *Criminal Justice and Behaviour*, 45(2), 177-189.
 26. Kothari, C. R. (2010). *Research Methodology: Methods and Techniques*. New Delhi, New Age International Publishers.
 27. KPS, (2013) Guideline on Dynamic Security and Prison Intelligence for corrections officers-GOK
 28. Krejcie, R. & Morgan, D. (1970). *Determining sample size for research activities*. New York Free Press.
 29. Kutto, S. C., & Ng'eno, W. K. (2023). Effects of Counselling Programmes and Performance of Prison Officers in Kenya: A Case of Nakuru Women

- Prison. *International Journal of Public Administration and Management Research*, 8(5), 64–74.
30. Logan, M. W., Jonson, C. L., Johnson, S., & Cullen, F. T. (2022). Agents of Change or Control? Correlates of Positive and Negative Staff-inmate Relationships among a Sample of Formerly Incarcerated Inmates. *Corrections*, 7(3), 175–195. <https://doi.org/10.1080/23774657.2020.1749181>
 31. Mbatha, C. M. (2019). *How effective is vocational education and training for rehabilitation in Kenyan prisons? A study protocol*. <http://41.89.164.27/handle/123456789/1039>
 32. Midtlyng, G. (2022). Safety rules in a Norwegian high-security prison: The impact of social interaction between prisoners and officers. *Safety Science*, 149, 105690.
 33. Milićević, M. (2021). Dynamics of Staff–Prisoner Relationships: A Narrative Literature Review 1. *Prison Life Organization and Security: Criminological, Penological, Sociological, Psychological, Legal, And Security Aspects*_, 233.
 34. Morris, N., & Rothman, D. (2002). *The Oxford history of the prison: The practice of punishment in western society*. Oxford: Oxford University Press.
 35. Muthaura, P., Kirigia, P., & Mbithi, S. M. (2023). Effect of organizational communication on implementation of strategic change at Kenya prisons Service: A survey of medium prisons in Kilifi County. *International Academic Journal of Human Resource and Business Administration*, 4(3), 1–22.
 36. Omane-Addo, F., & Ackah, D. (2021). A Study of Internal Controls System of the Ghana Prisons Service. *Dama International Journal of Researchers*. <https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=23436743&AN=153282694&h=Ld5HolH1OaiboXxveORGwguza0jX7aKHAjw5d3D0MvPYi85%2BYxur9dlnKqRb3BFBUEmM3fvqhWSUjzwOeHrXTg%3D%3D&crl=c>
 37. Omboto John Onyango, (2023) Curse or Blessing in Reformation of Convicts? An Analysis of Imprisonment as a form of Punishment. *London Journal of Research in Humanities and Social Sciences*. Volume 23, Issue 3.
 38. Osina, O. D., & Omboto, J. O. (2024). Availability of Prisoners Reformation Programmes and Uptake Determinants at Kitengela Prison in Kenya. *Open Journal of Social Sciences*, 12(12), 467–482.
 39. Øster, M. K., & Rokkan, T. (2018). The Norwegian approach to electronic monitoring. *Federal Sentencing Reporter*, 31(1), 75–84.
 40. Parimah, F., Owusu, J. O., & Appiah-Honny, S. A. (2021). A Study of Drug Use and Socio-Demographic Characteristics of Male Prisoners in Ghana. In H. C. Chan & S. Adjorlolo (Eds.), *Crime, Mental Health and the Criminal Justice System in Africa* (pp. 283–305). Springer International Publishing. https://doi.org/10.1007/978-3-030-71024-8_13
 41. Perrella, L., Lodi, E., Lepri, G. L., & Patrizi, P. (2024). Use of restorative justice and restorative practices in prison: A systematic literature review. *Rassegna Italiana Di Criminologia*, 1, 069–082.
 42. Poudel, P. (2023). Rehabilitation Programs in Prison: Helping the Self wounded to Heal. *Literary Studies*, 36(1), 193–204.
 43. Reisig, M. D., & Parks, R. B. (2018). Dynamic security and the rehabilitation of offenders: An examination of electronic monitoring. *Criminal Justice and Behaviour*, 45(7), 954-970
 44. Robinson, P. K., Holsinger, A. M., & Robinson, M. K. (2018). Dynamic security and the quality of life of offenders in prison. *Criminal Justice and Behaviour*, 45(2), 200-213.
 45. Sachitra, V., & Wijewardhana, N. (2020). The road to develop prisoners' skills and attitudes: An analytical study of contemporary prison-based rehabilitation programme in Sri Lanka. *Safer Communities*, 19(1), 15–34.
 46. Santorso, S. (2021). Rehabilitation and dynamic security in the Italian prison: Challenges in transforming prison officers' roles. *The British Journal of Criminology*, 61(6), 1557–1574.
 47. Smith, A., Roberts, A., Krzemieniewska-Nandwani, K., Eggins, E., Cook, W., Fox, C., Maruna, S., Wallace, S., & Szifris, K. (2024). Revisiting the effectiveness of cognitive-behavioural therapy for reducing reoffending in the criminal justice system: A systematic review. *Campbell Systematic Reviews*, 20(3), e1425. <https://doi.org/10.1002/cl2.1425>
 48. Smith, S. (2017). Dynamic security measures in the assessment component of the rehabilitation process. *Journal of Rehabilitation*, 8(3), 180-185.
 49. Smith, S. (2018). The effect of dynamic security measures on reducing security incidents in organizations. *Journal of Information Security*, 8(2), 75-80.
 50. Steiner, B., & Wooldredge, J. (2019). *Understanding and reducing prison violence: An integrated social control-opportunity perspective*. Routledge. <https://www.taylorfrancis.com/books/mono/10.4324/9781315148243/understa>
 51. Steiner, B., Grinnell, R., & Shipley, T. (2016). Dynamic Security and Offender Change: An Analysis of the Impact of Dynamic Security on Recidivism. *Journal of Offender Rehabilitation*, 55(7), 463-477.
 52. Steiss, A. W. (2019). *Strategic management for public and nonprofit organizations*. Routledge. <https://www.taylorfrancis.com/books/mono/10.4324/9781482275865/strategic-management-public-nonprofit-organizations-jack-rabin-alan-steiss>
 53. Sunga, S., Mbirianjau, L. W., & Gathara, P. M. (2024). Prison Reforms and Strategies to Improve

Practices of Education Offered to Prisoners in Kamiti Maximum Prisons, Nairobi City County, Kenya. *Msingi Journal*, 8(2), 72–80.

54. Ugelvik, T. (2016). Prisons as welfare institutions? Punishment and the Nordic model. In *Handbook on prisons* (pp. 388–402). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315797779-26/prisons-welfare-institutions-thomas-ugelvik>
55. UNODC, (2015) Handbook on Dynamic Security and Prison Intelligence- Criminal Justice Handbook Series. United Nations-New York.
56. Yin, E. T., Boateng, W., & Kofie, N. (2022). Family acceptance, economic situation, and faith community: The lived experiences of ex-convicts in Ghana. *Social Sciences & Humanities Open*, 5(1), 100240.



This page is intentionally left blank





GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: C
SOCIOLOGY & CULTURE
Volume 25 Issue 3 Version 1.0 Year 2025
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Industrial Activities and Pollution of the Ebrié Lagoon in the Autonomous District of Abidjan in Ivory Coast

By Kouman Koffi Mouroufié Clément & Tra Fulbert

Félix Houphouët Boigny University

Abstract- Pollution of the watercourse of Abidjan, the capital of Ivory Cost, is a major phenomenon affecting the aquatic ecosystem, biodiversity and the health of the population. Although industry contributes to the city's economic growth, it is a major factor in the pollution of the Lagune Ébrié.

This article shows the impact of industrial activities on water quality by identifying the main cause of pollution and analyzing the consequences. The article also proposes a solution to reduce this problem and ensure better management of water resources in Abidjan.

Keywords: *industrial activities, pollution, ebrie lagoon, Abidjan-Ivory Coast.*

GJHSS-C Classification: *LCC Code: TD427.I57*



Strictly as per the compliance and regulations of:



© 2025. Kouman Koffi Mouroufié Clément & Tra Fulbert. This research/review article is distributed under the terms of the Attribution-NonCommercial-No Derivatives 4.0 International (CC BY-NC-ND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

Industrial Activities and Pollution of the Ebrié Lagoon in the Autonomous District of Abidjan in Ivory Coast

Kouman Koffi Mouroufié Clément ^α & Tra Fulbert ^σ

Abstract- Pollution of the watercourse of Abidjan, the capital of Ivory Coast, is a major phenomenon affecting the aquatic ecosystem, biodiversity and the health of the population. Although industry contributes to the city's economic growth, it is a major factor in the pollution of the Lagune Ébrié.

This article shows the impact of industrial activities on water quality by identifying the main cause of pollution and analyzing the consequences. The article also proposes a solution to reduce this problem and ensure better management of water resources in Abidjan.

Keywords: industrial activities, pollution, ebrié lagoon, Abidjan-Ivory Coast.

Summary- Water pollution in Abidjan, the economic capital of Côte d'Ivoire, is a growing phenomenon affecting aquatic ecosystems, biodiversity, and human health. Industry, while contributing significantly to the city's economic growth, is a major source of pollution for the Ébrié Lagoon.

This article examines the impact of industrial activities on water quality, identifying the main sources of pollution and analyzing the environmental and health consequences. Solutions are proposed to reduce this impact and ensure sustainable management of water resources in Abidjan.

Keywords: industrial activities, pollution, ebrié lagoon, Abidjan-Ivory Coast.

I. INTRODUCTION

The Industrialization is a very essential step for the economic development of countries, it consists of developing a diversified industrial base, capable of producing manufactured goods with high added value and creating jobs for the population.

Abidjan, the second largest city in West Africa, is a hub of industry and commerce in Côte d'Ivoire. Since Côte d'Ivoire gained independence, Ivorian political authorities have made industrialization one of their major concerns. Indeed, the Ivorian government, in its development policy, has established a veritable industrial fabric based on the development of agricultural and forestry resources for their local processing. (Coulibaly Aboubakar et al 2022)

Abidjan, the economic capital of Côte d'Ivoire, is experiencing rapid industrial development in two stages, from 1960 to 1970 and from 1970 to 1980 (SETTIE,

1997). This development has contributed considerably to its economic growth. The city of Abidjan alone accounts for 70% of the country's industries and 60% of jobs in the modern sector. (Coulibaly Aboubakar et al 2022).

Its geographical location, located on the Ébrié Lagoon, makes this area a rich aquatic ecosystem. However, rapid population growth and industrial expansion have exacerbated the pollution of waterways. This pollution generated by these various factors directly impacts water quality, the aquatic ecosystem, and the health of local and surrounding populations.

Industrial companies located around the Ébrié Lagoon, including chemical, textile, agri-food, and petrochemical plants, often dump their production waste into the lagoon without proper prior treatment. This environmental situation leads to a progressive degradation of the aquatic environment, thus endangering biodiversity and human life.

II. METHODOLOGY

a) The Framework of the Study

Located in the Grands Ponts region in the southeast of Ivory Coast, the autonomous district of Abidjan has become a decentralized entity since 2011. It covers an area of 2,119 km² and is made up of the ten communes of the former city of Abidjan, to which the sub-prefectures of Songon, Bingerville, and Anyama have been added since 2001.

Abidjan did not exist at the beginning of the 20th century. In 1950, it had just passed the threshold of 50,000 inhabitants (end of 1948). To reach one million inhabitants by the end of 1975, it had to grow by 10 to 12% per year, which corresponds to a doubling every six or seven years. But the curve abruptly changed with the crisis of the 1980s.

It can be assumed that, in the last twenty years of the century, Abidjan's population growth rate will have fluctuated in a range of 3 to 6%. Natural growth has taken precedence over migratory inflows. Flows remain substantial, but departures partly offset arrivals. Positive migratory flows brought, in the year preceding the 1988 census, 80,000 people, of whom 50,000 came from the Ivorian regions and 30,000 from abroad. From Côte d'Ivoire came mainly Akans (southeast, 48%), then

Author ^α σ: Félix Houphouët Boigny University.
e-mails: clementkouman@outlook.fr, fulberttra@yahoo.fr

Mandé (northwest, 24%) and Krou (southwest, 20%). From abroad arrived Burkinabé (30%), Malians (22%), Ghanaians (19%), Nigerians (11%), and Guineans (9%). These statistics refer to the entire nation, not to Abidjan. Among non-Africans, the Lebanese outnumber Europeans, and the French outnumber all other Europeans combined. All together, non-Africans represented just 3% of Abidjan's population before the June 8, 2004, white-dominated hunt, but it was still a record for the region.

A census of the country's population was conducted in 1998. It indicated 2,877,948 inhabitants for the city. Figures for 2006 estimate the population of Abidjan at 3,796,677 inhabitants. In 2006, the Abidjan metropolitan area had 5,060,858 inhabitants. This population increase is mainly due to war displaced persons since the events of September 2002. The city welcomes many inhabitants looking for both jobs and safer accommodation. A new census was conducted in 2008.

According to the 2014 census conducted by the National Institute of Statistics, Abidjan's total population was 4,395,243. This figure has increased over a seven-year period. According to the latest Ivorian general population census of 2021, Abidjan's population is estimated at 6,321,017.

b) *The Environmental Framework of the Study*

Abidjan benefits from its openness to the Atlantic Ocean and a dense hydrographic network, marked by the presence of the Ébrié Lagoon, which crosses several of the city's municipalities. However, due to industrial waste and the use of toxic products for fishing, the Ébrié Lagoon is increasingly polluted. Algae and other aquatic plants are now proliferating. According to Côte d'Ivoire's 2009 Poverty Reduction Strategy Paper, Abidjan's industries emit 70 tons of sulfur dioxide, 21 tons of nitrogen oxide, and 12 tons of toxic dust daily. This report also highlights that vehicles contribute to the city's pollution by producing just over 6 tons of sulfur dioxide, 22 tons of nitrogen oxide, and 15 tons of toxic dust per day.

In 2022, plastic waste production was 40,000 to 100,000 tons per year and only 5 to 20% of this waste was recycled while the rest of the waste is dumped in the streets or in waterways. (CIAPOL 2022). This situation represents a health and environmental obstacle.

Furthermore, the lack of sanitation and wastewater disposal systems has an impact on the quality of the environment, the living environment, and the health of the population. Indeed, a morbidity analysis indicates that diseases linked to an unhealthy environment, such as malaria, acute respiratory infections, and diarrhea, are the most recurrent in the municipalities. In Abidjan, children under five years of age constitute the most vulnerable segment of the population. The incidence of

malaria in 2009 was 239.52 per 1,000 children, which is above the national average (222.13 per 1,000 children). The incidence of diarrhea for the same year was 76.61 per 1,000, compared to an incidence of 44.54 per 1,000 at the national level. The incidence of acute respiratory infections was 151.15 per 1000, which is higher than the national average of 87.45 per 1000.

c) *Data and Methods*

The search for information for the realization of our research work, led us to the central library of the Felix Houphouët Boigny University of Cocody, to the National Institute of Statistics (INS) for the consultation of documents such as master's dissertations, theses. Also we used digital platforms such as Google, Google scholar, HAL SHS, to consult journals, methodological works, specific, study reports, courses related to the phenomenon studied.

The documentary research and the first field survey allowed us to construct the object of study (the problem), to lay the methodological and theoretical bases of this, and even to circumscribe the work.

Beyond the role of documentary research in developing the theoretical framework, understanding the phenomenon studied could not be based solely on documentary research. We therefore had to carry out fieldwork, which consisted of visiting the populations concerned by our study to observe the manifestation of the social fact and collect data.

The investigation for this study was carried out in two phases, namely the exploratory investigation and the definitive investigation, the field investigation itself.

- *The exploratory survey*, is the phase of making contact and getting to know the field. It allowed us to meet the actors in the field, observe the manifestation and the evolution of the phenomenon studied in order to obtain information on its existence and the feasibility of carrying out the survey.
- *The field survey*, this is the stage of the final survey. During this phase, we contacted all the social actors, namely the populations residing in the industrial zones of Vridi Koumassi and Yopougon, the actors of the health system, local elected officials and Ministries in order to collect as much information as possible relating to our research. This stage took place between December 2023 and January 2024. The survey of the local populations took place on weekends because these were the periods considered suitable for free access to the populations. As for the institutional actors, the interviews took place on working days of the week in order to access the premises or services for data collection.

Therefore, we interviewed residents living in Abidjan's industrial zones (Koumassi, Yopougon, and

Vridi), as well as institutional stakeholders (CIAPOL, the Ministry of the Environment, Sustainable Development, and Ecological Transition, health centers, town halls, etc.) and industrialists to understand the manifestation of the phenomenon studied. In total, we interviewed 147 people during our final survey.

Table 1: Recap Interview of Institutional Actors

Institutions	Direction	Service	Number	Status of Investigations
Port-Bouet Town Hall	Technical Management	Environment and Living Environment Service	2	Heads of Environment and Living Environment Departments
Koumassi Town Hall	Technical Management	Sub-Directorate of the Environment	1	Deputy Director of the Environment
Yopougon Town Hall	Technical Service	Environmental Service	1	Environmental Officer
National Institute of Statistics (INS)	Sales Department	IT Department	1	Statistical Computer Scientist
Ivorian Anti-Pollution Center (CIAPOL)	Central Environmental Laboratory	Inspection	1	Inspector, responsible for industrial companies
Ministry of the Environment	Human Resources Department	Human Resources	1	Human Resources
National Institute of Public Hygiene (INHP)	Emergency Operations Center	Deputy Director Secretariat SEIGHER	1	Deputy Director SEIGHER
Vridi Canal Community Health Center	Community Health Center Management	General medicine	1	General practitioner
TECHNO Medical Clinic	Human Resources Department	Chief Physician	1	General practitioner

Table 2: Summary table of Individual Interviews carried out with Manufacturers

	Businesses	Services	Number	Statutes
Vridi Industrial Zone	Chemical manufacturing company	HQSE	2	Environmental quality manager, fire chief
Koumassi Industrial Zone	Sandal manufacturing company	Technical Service	1	Head of Control
Yopougon Industrial Zone	Plastic manufacturing company	Production unit	1	Production Manager

Source: Field survey Kouman Clément, T. 2023

Table 3: Summary Table of Individual Interviews and Focus Groups with Populations

Communes	Statutes of Interviewees	Number of Surveys	Focus Group
VRIDI	Community leaders, family leaders, youth leaders, CGQ representatives, residents (men, women and young people)	48	Association of Youth of Vridi Canal
KOUMASSI	Burkinabe community leader Head of family Residents (Man, Woman and Youth)	40	Grouping of young mechanics and factory employees
YOPOUGON	Head of the Banco and Micao neighborhood Head of the family Residents (Man, Woman and Youth)	45	Banco II Restaurateurs' Association

Source: Field survey Kouman C. Fulbert T.2023

III. LITERATURE REVIEW

The consultation of the documents that allowed the development of this article, is structured around the types of industries and their locations in the autonomous district of Abidjan. Then, the effects of these industries on the waterways, in particular the Ebrié lagoon and finally the consequences of lagoon pollution on the environment and the health of the populations.

a) Industrial Installations in the Autonomous District of Abidjan

Industrial estates, sometimes euphemistically called "business parks," are places that house the manufacturing and shipping activities of so-called modern civilization. Long before the Industrial Revolution, it was common to locate the noisiest, most smelly, and dangerous workshops (tanneries, foundries, slaughterhouses, and the like) far from the city walls, and no one wanted to live near these facilities. Inevitably, transportation mechanisms evolved to move raw materials and manufactured goods from these locations, and today, industrial estates are hubs with highways, airports, ports, and railways.

Industrial zones are communities of production and entrepreneurial services located together on a common ground. By setting up in these zones, companies seek to improve their performance by benefiting from multiple synergies offered by the coexistence of several industrial units in the same geographical area. They thus constitute the cradle of industrial development, hence their strategic importance and the place of choice they occupy within the framework of industrial development policies. Thus, the quality of management, governance and sanitation of industrial zones constitute keystones of the industrial progress of each nation. On the other hand, industrial land policy appears as an essential element of strategies for attracting direct investments from foreign actors and industrial promotion strategies in general.

Industrial zones constitute a whole whose operation and environmental performance depend largely on the efficiency of the various equipment and infrastructures serving the activities installed there.

Abidjan has several industrial zones, three of which occupy a total area of 885 hectares (Vridi, Koumassi and Yopougon). For our study, we are interested in the presentation of these three industrial zones, which constitute the representative areas of the framework of our study.

– The industrial zone of Port-Bouët (Vridi)

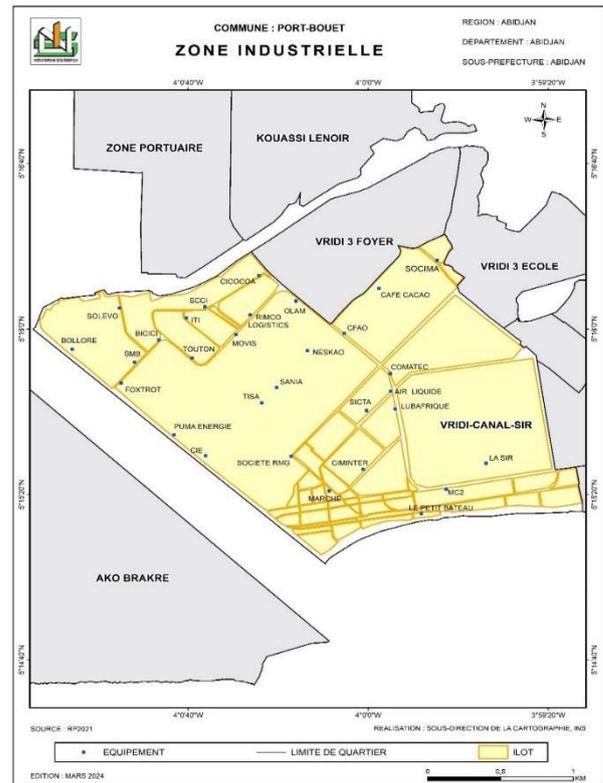
The municipality of Port-Bouët boasts a high density of industrial facilities covering an area of 120 hectares, with a high proportion of mining industries estimated at 46.90%. These include gas, oil, electricity, etc. This makes the Vridi industrial zone the seat of heavy industries and therefore a very sensitive area in

terms of industrial risks. This industrial zone has a low rate of textile industries (03.54%). Also, the Vridi industrial zone shares its space with precarious neighborhoods, where many people working in industries live (Akoissi et al 2022).

This strong presence of housing increases the vulnerability of the populations. The area is surrounded by urban land and significant commercial activities. From an environmental point of view, the area suffers from several problems, especially in the presence of agri-food activities and a cement factory and the lack of maintenance and environmental management. Indeed, the poor condition of the sanitation networks promotes the stagnation of rainwater mixed with polluted industrial waste in several places, mainly causing the degradation of the roads and the formation of bad odors and the proliferation of insects. On the other hand, the failure of the household and similar waste management system greatly degrades the quality of life and the health of the area. The presence of waste disposal points has been noted in several places.

Generally speaking, the environmental situation in the area is degraded, especially in terms of sanitation and liquid discharges.

Mapping of the Port-Bouët industrial zone



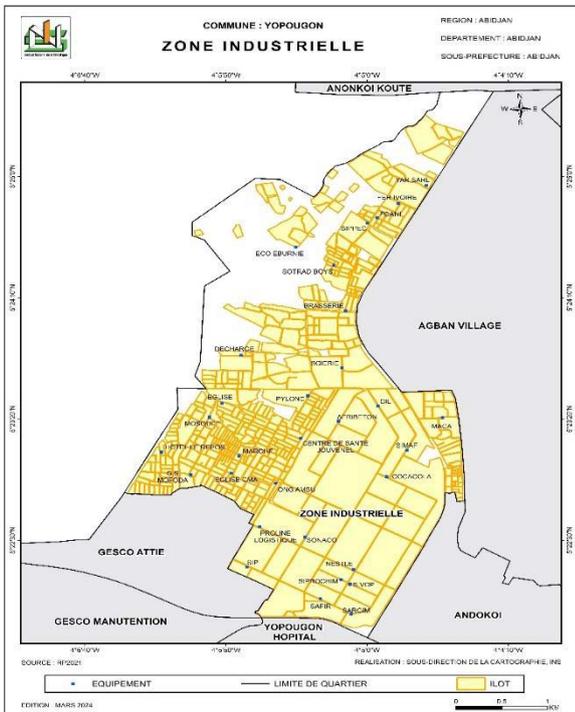
Source: Field data, mapping produced by INS 2024

– The Yopougon industrial zone

The Yopougon industrial zone covers an area of 645 hectares, containing approximately 200 industries operating in different activities and directly and indirectly

employing more than 80,000 people. 23% of the area is occupied by housing, especially precarious. The environmental situation is alarming in the area, especially in terms of sanitation and liquid discharges. In this area, there are several solid waste disposal points, some of which are incinerated and others causing the scattering of light and flying waste all around. Industrial wastewater discharges are channeled into a combined network with overflows in some manholes and even at the level of the transfer pipe of these waters.

Mapping of the Yopougon industrial zone



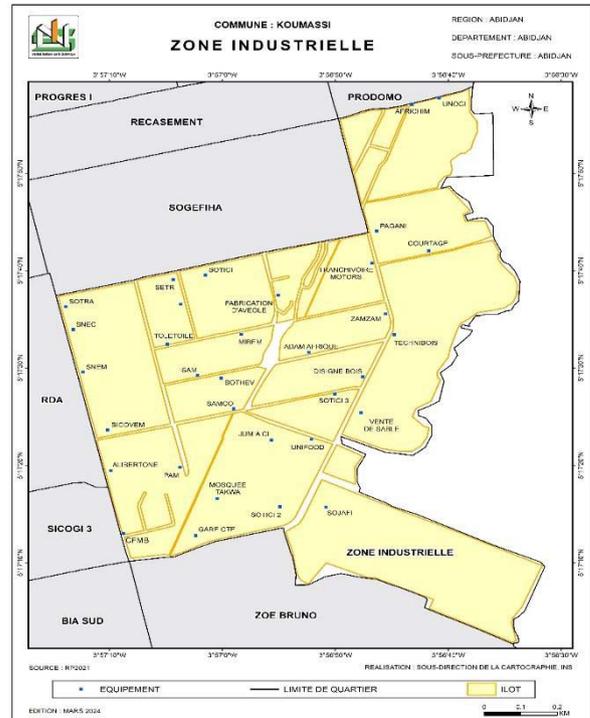
Source: Field data, mapping produced by INS 2024

– The Koumassi industrial zone

The commune of Koumassi is home to one of the largest industrial zones in Abidjan. It covers an area of 120 hectares, consisting of agri-food, plastics processing, and household goods manufacturing industries. According to the AGEDI census in 2019, the Koumassi industrial zone has 236 companies (AGEDI, 2019, p. 123).

In a study of the Kabyle agglomeration (Algeria), carried out by Hadjem M. & Khaled G. (2019), they counted 27 textile units. And these different industries in their operation produce solid and liquid waste.

Mapping of the Koumassi industrial zone



Source: Field data, mapping produced by INS 2024

The industrial zones of the autonomous district of Abidjan face enormous environmental challenges in terms of waste management. Industrial units produce solid, liquid, and hazardous waste, which requires proper disposal.

However, there is a lack of infrastructure, or even a lack of infrastructure, for waste management, which very often leads to illegal dumping or inappropriate disposal of waste, which can have a negative impact on environmental and human health.

b) Presentation and Environmental Situation of the Ebrié Lagoon

The Ébrié Lagoon, formerly known as the Ahizi Lagoon, is a brackish water lagoon located in Côte d'Ivoire. The country's economic capital, Abidjan, is built around this lagoon. With a maximum width of 7 km, a maximum depth of 20 m, an average depth of 4.8 m, and a length of 130 km, the Ébrié Lagoon covers an area of approximately 560 km². It is connected to the Gulf of Guinea by the Vridi Canal, which was built to open the port of Abidjan to the Atlantic Ocean.

The lagoon system plays a vital role in local biodiversity, housing a wide variety of plant and animal species. Unfortunately, the Ébrié Lagoon faces enormous environmental challenges. Also, accelerated urbanization around the city of Abidjan, with industrial and residential development, is leading to the dumping of industrial and household waste into the lagoon, including industrial chemicals, untreated wastewater,

and solid waste. This has a direct impact on water quality and aquatic flora and fauna.

According to the 2021 report by the French Institute for Research and Development (IRD), 200 tonnes of waste are dumped into the Ebrié lagoon every day, 80% of which is plastic and 20% is composed of organic and industrial liquids. In March 2024, nearly 2 tonnes of fish affected by lagoon pollution washed up on the shores of Biétry Bay, increasingly calling into question the environmental situation of the Ebrié lagoon and, in particular, the health of the population.

Industrial enterprises located on the Ebrié Lagoon frequently produce liquid and solid waste containing chemicals and toxic substances. When not properly treated, this effluent can contaminate surrounding waterways and impact aquatic species and even the health of the general population.

IV. RESULTS

The results of this study focus on the environmental impact of pollution of the Ebrié lagoon and the consequences on the health of local populations.

a) *Impact of Lagoon Pollution by Industries*

The results of our research show that industrial pollution of the Ebrié rivers and lagoon mainly consists of heavy metals, organic chemicals, and hydrocarbons. These pollutants are largely the result of uncontrolled discharges into the rivers and lagoon, sometimes from poorly equipped factories or through inadequate waste management practices. Concentrations of heavy metals, particularly lead and mercury, are particularly high in certain areas near industrial complexes.

In terms of water pollution, wastewater discharged by industries accounts for 6.7% of the total water discharged by all industries in the country. However, only 11.7% of the wastewater discharged by industrial enterprises meets the national cleanliness standard. After treatment, the percentage can increase to 28%, which means that 72% of the wastewater discharged directly into the environment by industries is poorly treated or even untreated. This situation tends to worsen due to less stringent and less effective control in the countryside.

In this wastewater discharged from industrial units, a large amount of toxic products such as cyanide and volatile phenol were discovered. It appears that 15.6% of the water polluted by cyanide and 42.6% by volatile phenol come from industries. Dan Eude et al (2022).

Coastal industries are largely responsible for lagoon pollution. They discharge toxic products such as glycerin from soap factories, pigments from textile industries, soda, acids, and mineral oils into these waters through sewers. The food and textile industries are dominant sources of industrial pollution. They

produce nearly 95% of pollutant loads and 85% of waste volume. In the autonomous district of Abidjan, approximately 2,600 m³ of wastewater are discharged into the Ebrié lagoon by industries and approximately 4.4 million m³ per year of residual discharges from industries and households (Ivorian State Report on the Environment 2021).

According to Boukary Sawadogo (2018), industrial wastewater includes all the water that is in principle discharged by the factory into the external environment, after having contributed to manufacturing, cleaning, transport, cooling. Wastewater contains approximately 1% of colloidal and dissolved suspended solids and 99% water.

The consequences of the emission of poorly treated or untreated wastewater can be classified into three categories:

- Negative impacts on the living environment
- *Harmful effects on human health*
- *Adverse repercussions on economic activities.*

For the author, industry is the human activity that generates the most wastewater. The composition and concentration of industrial effluents vary greatly depending on the type of industry. Thus, each industrial operation generates specific quantities and qualities of wastewater that can contain considerable pollutant loads. Beyond organic, phosphorus, or nitrogenous matter, it can notably contain toxic products, such as solvents, heavy metals, hydrocarbons, and organic micropollutants. Some of this water can be toxic to aquatic species, plants, and humans.

The environmental situation of the Ebrié lagoon and the surrounding waterways remains a major challenge because most industrial units very often produce liquid waste containing untreated chemicals and toxic substances which are discharged directly into the lagoon through the wastewater drainage channels which are directly connected between these companies and the lagoon. There are in industrial zones of the district of Abidjan, a panoply of industry which does not have adequate mechanism for the treatment of water used in their production system, for maintenance or cleaning of machines. Thus, the Ebrié lagoon which is the largest brackish water basin in Africa and a central element of the economic capital is becoming more and more polluted and this pollution affects such as fishing leading to risks of poisoning for consumers of aquatic products.

The Ivorian State Report on the Environment (2021) states that water pollution is a major source of biodiversity degradation. Indeed, many aquatic species are victims of pollution by heavy metals such as mercury, copper, zinc, lead, or organochlorines (insecticides, pesticides, etc.), which cause serious disorders that can affect certain vital functions, including reproduction and orientation. Pollution of waterways

leads to the death of fish and crustaceans, and also causes the disappearance of certain aquatic species.

In terms of biodiversity, the consequences of lagoon pollution are worrying. Aquatic fauna and flora, primarily fish and aquatic plants, are directly impacted by the effects of pollution, causing a decrease in biodiversity. Some fish species have disappeared, while others exhibit physiological and pathological abnormalities, posing a danger to human consumption. This degradation also affects human populations, who depend on lagoon water for irrigation, consumption, and fishing.

While water is a vital source for human beings, it also represents a potential vector of diseases, some of which can be fatal (Pierre André et al 2003). According to WHO 1992 estimates on child mortality, four million children under five die each year from diarrhea transmitted by biologically contaminated water.



Source: Clément Kouman, Fulbert Tra 2023

Photo No. 1: Discharge of Wastewater



Source: Clément Kouman, Fulbert Tra 2023

Photo No. 2: Discharge of Wastewater and Waste solids

These shots above were taken during our field survey in the industrial zones of Vridi and Yopougon. During this survey, we noted that several industrial companies have connected their sewers for evacuating production water to the pipelines leading directly to the Ebrié lagoon. This water, which is discharged into the

lagoon, does not undergo any prior treatment before being discharged. As the images show, the discharge of this industrial wastewater into the waterways will undeniably impact the quality of the lagoon's water and endanger the environmental situation, the consequences of which will have repercussions on the health of the population.

b) *Impact of Lagoon Pollution on the Health of Populations*

According to Boukary Sawadogo (2018), industry is the human activity that generates the most wastewater. The composition and concentration of industrial effluents are extremely variable depending on the type of industry. Each industrial activity generates specific quantities and qualities of wastewater that can contain considerable loads of pollutants and, apart from organic matter, nitrogen or phosphorus, can also contain toxic products, such as solvents, heavy metals, hydrocarbons and organic micropollutants, some of which can be toxic to aquatic species, plants and humans.

According to Meinck (1956), cited by Coulibaly et al (2022), the contamination of the central installation of a water distribution network cost the lives of seven infants and made 200 people sick because polluted water from an acetylene generator released toxic substances into the water distribution plant. The pollution of the Ebrié lagoon has direct consequences on the health of local populations, particularly through the transmission of waterborne diseases. Poisoning by heavy metals such as lead and mercury, present in industrial waste, ends up in the food chain through aquatic species, as well as the lack of wastewater treatment infrastructure which increases the risks of infectious diseases such as: typhoid fever, cholera, and parasitic diseases. When these products are ingested by aquatic species, they can constitute a source of contamination for humans.

For Dongo, et al (2013), 62.93% of the Abidjan population are victims of malaria due to pollution, of which 13.62% suffer from diarrheal diseases and 23.45% from acute respiratory infections.

These metals are highly toxic and can cause serious health problems, including neurological disorders when exposure to mercury, for example, affects the nervous system, leading to cognitive impairment, memory deficits, and developmental disorders in children. Similarly, kidney problems can occur with the accumulation of heavy metals in the kidneys through the consumption of infested aquatic products, causing kidney dysfunction and other complications related to vital organs. Better still, one of the more serious consequences is the development of certain carcinogenic diseases through long-term ingestion of fish contaminated with heavy metals, which

increases the risk of cancers, particularly of the liver and kidneys.

According to Aboubakar et al (2022), the consequences of industrial activity on the health of populations can range from a simple olfactory problem to the development of cancer. Indeed, even if the effects of these chemicals are only present in trace amounts, certain metallic and organic elements can prove to be very dangerous, toxic or even carcinogenic. This is, for example, the case of chemicals such as cadmium, mercury, lead, chromium, hydrocarbons, etc. Despite the laws on environmental protection in Côte d'Ivoire, the pollution of the Ebrié lagoon is a social reality that endangers the health of the local populations and remains a considerable challenge for the state and the populations.

V. DISCUSSION

The Ebrié Lagoon, Abidjan's lagoon ecosystem, plays a vital role as an interface, as it is a place of passage and exchange between water and marine waters. This environment is an urban, port, and industrial complex, a populated area. It also offers significant tourism opportunities. However, water quality is influenced by demographic change and the phenomenon of industrialization. Thus, the Ebrié Lagoon faces a pollution problem.

This pollution is of organic, microbial and chemical origin. Organic pollution results from the food industry, domestic waste and fertilizer residues in agriculture. As for microbial pollution, it most often comes from organic waste from sewers and involves pathogens. As for chemical pollution, it comes from industrial effluents (hydrocarbons, dyes, acids, heavy metals) etc. Dan Eude et al (2022). According to Danièle Maurer (1978), Biétri Bay is one of the many bays on the shores of which the main industrial center is built, most of whose wastewater, domestic and industrial, is discharged into the lagoon without prior treatment. Industrial waste discharges into Biétri Bay are numerous and significant, estimated at 18,000 m³ per day (approximately 1/1000th) of the volume of the bay's water, including 3,607 kg of oxidizable material from the oil, soap, and dyeing industries and the Port-Bouët slaughterhouse.

As for Fatima Zhora et al (2006), the contamination of the marine environment by chromium, a non-essential metal, lies in its capacity to accumulate in living beings, since, like other toxic metals, it has no known biological role, and is practically not subject to known chemical or biological degradation reactions; in addition, this metal is harmful. Chromates can, as strong oxidants, cause burns and ulcers of the skin and mucous membranes as well as irritation of the upper respiratory tract. Absorption can cause damage to the liver, kidneys and digestive system. Cr compounds have

been shown to be carcinogenic in animal tests. The lethal dose in humans is 0.5 g; it is toxic to fish from 52 mg/l, and to algae from 5 mg/l, depending on the acidity of the soil and the potential. Chromium is mainly used in the tannery and oil mill industries, and in alloys with iron, nickel or cobalt.

The pollution of the Ebrié Lagoon has far-reaching and widespread consequences that affect both the environment and the health of populations. The health impacts of pollution are of concern, as heavy metals and other pollutants present in the water lead to neurological diseases, immune system disorders, and certain carcinogenic diseases. In addition, populations living in the most exposed areas are often subject to health problems related to the consumption of unclean water.

Industrial activities, combined with a lack of strict regulations and insufficient monitoring of industrial discharges, are major contributors to this situation. The Ébrié Lagoon, essential for local ecosystems and local populations, is threatened by the loss of its biodiversity and the accumulation of chemical pollutants.

VI. CONCLUSION

The pollution of waterways in Abidjan, particularly the Ébrié Lagoon, poses a serious threat to the environment and public health. This environmental situation in the Ébrié Lagoon is a significant reality that has a significant impact on the productivity and survival of aquatic species. One of the major consequences of this lagoon pollution is the health problems it could have on the entire population, who are faced not only with the inhalation of unbearable odors but also with health problems due to the consumption of products from this polluted lagoon environment.

In view of this environmental and health reality, although efforts have been made through institutions working for the protection of the environment and the living environment and various stakeholders to regulate industrial activities and improve waste management, stricter measures and wastewater treatment initiatives would therefore be necessary because it is crucial to adopt an integrated approach to water and industry management in order to reduce pollution of the lagoon, preserve aquatic ecosystems and protect the health of the population. Therefore, a long-term commitment and collaboration between local and political authorities, industries and communities are essential to reverse this trend and ensure a healthy environmental situation, sustainable health for the population in order to restore this environmental radiance to the city of Abidjan which was otherwise called the pearl of the lagoons.

BIBLIOGRAPHY

1. Akoissi Ida Natacha Yao-Assahi, Kouassi Paul ANOH (2022). Industries and urbanization in

- southern Abidjan (Abidjan-Ivory Coast), consulted on 10/21/2022 at 3:16 p.m.
2. Audrey Garric (2012). Industrial pollution wreaks as much havoc on health as malaria, *lemonde.fr*.
3. Blacksmith Institute (2012). The World's Worst Pollution Problems: Assessing Health Risks at Hazardous Waste Sites
4. Boukary Sawadogo, doctoral thesis (2018). Treatment of industrial wastewater by membrane processes in a Sahelian climate: the case of brewery wastewater in Burkina Faso.
5. ECOWAS (2021). Environmental Profile <https://environnement.gouv.ci/wp-content/uploads/2015/08/Profil-Environnemental-de-la-Cote-dIvoire-Juillet-2021.pdf>, accessed on 07/27/2024 at 8:47 p.m.
6. Charles Simard. (2022). Pollution in West Africa: Critical State, accessed August 23, 2024 at 2:50 a.m., <https://perspective.usherbrooke.ca/bilan/servelet/BMAAnalyse/3259>
7. Coulibaly Aboubakar (2022). State of the environment of industrial zones in the district of Abidjan: case of the industrial zone of Koumassi (Ivory Coast)
8. Coulibaly Aboubakar, Kassi Kadjo Jean Claude, Aloko N'guessan Jérôme (2022) state of the environment of industrial zones in the district of Abidjan: case of the industrial zone of Koumassi (Ivory Coast) » *International Researcher's Review* « Volume 3: Number 2 » pp: 521 – 542
9. Dan Eude Kpannieu, Kouakou Norbert Kouadio, Ignace Christian M'Bra, Coulibaly.
10. Nagnonta Hippolyte, Lacina Coulibaly, S. Ouffouet (2022). Physico-chemical pollution and trophic state of Biétry Bay (Ebrié Lagoon, Abidjan, Ivory Coast), *Journal of Materials Science and Chemical Engineering*, 2022, 10, 87-99
11. Danièle Maurer (1978). Phytoplankton and pollution of the Ebrié lagoon (Abidjan) in the Cortiou sector (Marseille), 3rd cycle doctoral thesis, *Biological oceanography*.
12. DRIRE PACA (2006). Industrial environment and impacts on health.
13. Emmanuel ADLER et al (2010). Waste treatment and health effects.
14. Environmental assessment of hazardous waste - RA-SINDRA (2012). Rhône-Alpes waste observatory, consulted on 08/09/2021 at 3:29 p.m.
15. Fatima Zohra Bouthir, Salah Souabi, Abdelghani Chafik, Samir Benbrahim1 and Mustapha Sifeddine (2006). Impact of industrial discharges on the environment: case of chromium accumulation in different aquatic compartments along the Casablanca – Mohammadia coast.
16. Galal-Gorchev (1994). The effects of chemical pollution on health (encyclopedia of occupational safety and health, 3rd French edition).
17. Hakim Khelfaou, Hicham Chaffai, Azzedine Hani and Rabah Laouan (2012). Impacts of industrial discharges on the waters of the Barrahal region (Northeast Algeria).
18. Kablan N'guessan Hassy Joseph et al (2013). Environmental impact of the industrial-port zone of Abidjan.
19. Kra Kouamé Raphaël (2012). Doctoral thesis, industrial waste and environmental policy in Ivorian law.
20. Metongo BS, Kouassi AM, Kaba N. (2013). Quantitative and qualitative assessment of effluents and pollutants: the case of Ivory Coast and the city of Abidjan.
21. Ministry of the Environment and Sustainable Development of Côte d'Ivoire (2011). National environmental policy, consulted on 01/06/2021 at 5:33 p.m.
22. Ministry of Environment and Sustainable Development of Côte d'Ivoire (2020). State of the environment in Côte d'Ivoire.
23. Nader Abbes (2013). The Environment: A Public or Private Good? In *Responsible Business*, consulted on August 20, 2024 at 6:40 a.m., <https://www.cairn.info/l-entreprise-responsable--9782343004648-page-13.htm>
24. Savadogo Boukary, doctoral thesis, (2021)
25. Social logic of maintaining populations in risk areas: the case of the commune of Attécoubé in the autonomous district of Abidjan.
26. Zongxia CAI, Institute of Geography, Chinese Academy of Sciences, Industry in the countryside and its consequences on the environment in China, consulted on August 27, 2021 at 2:10 p.m. (<https://popus.uliege.be>).



GLOBAL JOURNALS GUIDELINES HANDBOOK 2025

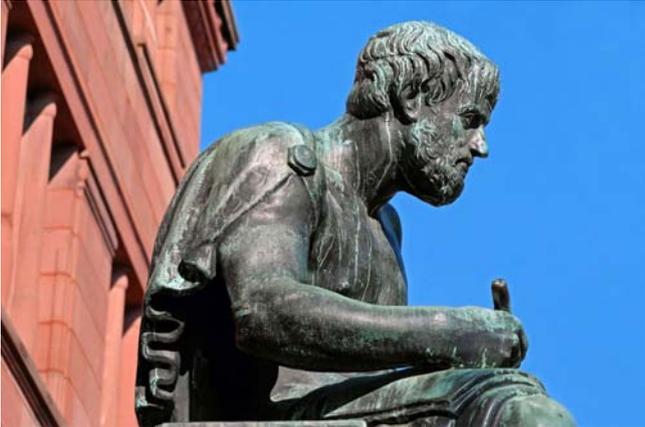
WWW.GLOBALJOURNALS.ORG

MEMBERSHIPS

FELLOWS/ASSOCIATES OF SOCIAL SCIENCE RESEARCH COUNCIL

FSSRC/ASSRC MEMBERSHIPS

INTRODUCTION



FSSRC/ASSRC is the most prestigious membership of Global Journals accredited by Open Association of Research Society, U.S.A (OARS). The credentials of Fellow and Associate designations signify that the researcher has gained the knowledge of the fundamental and high-level concepts, and is a subject matter expert, proficient in an expertise course covering the professional code of conduct, and follows recognized standards of practice. The credentials are designated only to the researchers, scientists, and professionals that have been selected by a rigorous process by our Editorial Board and Management Board.

Associates of FSSRC/ASSRC are scientists and researchers from around the world are working on projects/researches that have huge potentials. Members support Global Journals' mission to advance technology for humanity and the profession.

FSSRC

FELLOW OF SOCIAL SCIENCE RESEARCH COUNCIL

FELLOW OF SOCIAL SCIENCE RESEARCH COUNCIL is the most prestigious membership of Global Journals. It is an award and membership granted to individuals that the Open Association of Research Society judges to have made a 'substantial contribution to the improvement of computer science, technology, and electronics engineering.

The primary objective is to recognize the leaders in research and scientific fields of the current era with a global perspective and to create a channel between them and other researchers for better exposure and knowledge sharing. Members are most eminent scientists, engineers, and technologists from all across the world. Fellows are elected for life through a peer review process on the basis of excellence in the respective domain. There is no limit on the number of new nominations made in any year. Each year, the Open Association of Research Society elect up to 12 new Fellow Members.



BENEFITS

TO THE INSTITUTION

GET LETTER OF APPRECIATION

Global Journals sends a letter of appreciation of author to the Dean or CEO of the University or Company of which author is a part, signed by editor in chief or chief author.



EXCLUSIVE NETWORK

GET ACCESS TO A CLOSED NETWORK

A FSSRC member gets access to a closed network of Tier 1 researchers and scientists with direct communication channel through our website. Fellows can reach out to other members or researchers directly. They should also be open to reaching out by other.

Career

Credibility

Exclusive

Reputation



CERTIFICATE

CERTIFICATE, LOR AND LASER-MOMENTO

Fellows receive a printed copy of a certificate signed by our Chief Author that may be used for academic purposes and a personal recommendation letter to the dean of member's university.

Career

Credibility

Exclusive

Reputation



DESIGNATION

GET HONORED TITLE OF MEMBERSHIP

Fellows can use the honored title of membership. The "FSSRC" is an honored title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., FSSRC or William Walldroff, M.S., FSSRC.

Career

Credibility

Exclusive

Reputation

RECOGNITION ON THE PLATFORM

BETTER VISIBILITY AND CITATION

All the Fellow members of FSSRC get a badge of "Leading Member of Global Journals" on the Research Community that distinguishes them from others. Additionally, the profile is also partially maintained by our team for better visibility and citation. All fellows get a dedicated page on the website with their biography.

Career

Credibility

Reputation

FUTURE WORK

GET DISCOUNTS ON THE FUTURE PUBLICATIONS

Fellows receive discounts on future publications with Global Journals up to 60%. Through our recommendation programs, members also receive discounts on publications made with OARS affiliated organizations.

Career

Financial



GJ ACCOUNT

UNLIMITED FORWARD OF EMAILS

Fellows get secure and fast GJ work emails with unlimited forward of emails that they may use them as their primary email. For example, john [AT] globaljournals [DOT] org.

Career

Credibility

Reputation



PREMIUM TOOLS

ACCESS TO ALL THE PREMIUM TOOLS

To take future researches to the zenith, fellows receive access to all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Financial

CONFERENCES & EVENTS

ORGANIZE SEMINAR/CONFERENCE

Fellows are authorized to organize symposium/seminar/conference on behalf of Global Journal Incorporation (USA). They can also participate in the same organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent. Additionally, they get free research conferences (and others) alerts.

Career

Credibility

Financial

EARLY INVITATIONS

EARLY INVITATIONS TO ALL THE SYMPOSIUMS, SEMINARS, CONFERENCES

All fellows receive the early invitations to all the symposiums, seminars, conferences and webinars hosted by Global Journals in their subject.

Exclusive



PUBLISHING ARTICLES & BOOKS

EARN 60% OF SALES PROCEEDS

To take future researches to the zenith, fellows receive access to all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Exclusive

Financial

REVIEWERS

GET A REMUNERATION OF 15% OF AUTHOR FEES

Fellow members are eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get a remuneration of 15% of author fees, taken from the author of a respective paper.

Financial

ACCESS TO EDITORIAL BOARD

BECOME A MEMBER OF THE EDITORIAL BOARD

Fellows may join as a member of the Editorial Board of Global Journals Incorporation (USA) after successful completion of three years as Fellow and as Peer Reviewer. Additionally, Fellows get a chance to nominate other members for Editorial Board.

Career

Credibility

Exclusive

Reputation

AND MUCH MORE

GET ACCESS TO SCIENTIFIC MUSEUMS AND OBSERVATORIES ACROSS THE GLOBE

All members get access to 5 selected scientific museums and observatories across the globe. All researches published with Global Journals will be kept under deep archival facilities across regions for future protections and disaster recovery. They get 10 GB free secure cloud access for storing research files.

ASSOCIATE OF SOCIAL SCIENCE RESEARCH COUNCIL

ASSOCIATE OF SOCIAL SCIENCE RESEARCH COUNCIL is the membership of Global Journals awarded to individuals that the Open Association of Research Society judges to have made a 'substantial contribution to the improvement of computer science, technology, and electronics engineering.

The primary objective is to recognize the leaders in research and scientific fields of the current era with a global perspective and to create a channel between them and other researchers for better exposure and knowledge sharing. Members are most eminent scientists, engineers, and technologists from all across the world. Associate membership can later be promoted to Fellow Membership. Associates are elected for life through a peer review process on the basis of excellence in the respective domain. There is no limit on the number of new nominations made in any year. Each year, the Open Association of Research Society elect up to 12 new Associate Members.



BENEFITS

TO THE INSTITUTION

GET LETTER OF APPRECIATION

Global Journals sends a letter of appreciation of author to the Dean or CEO of the University or Company of which author is a part, signed by editor in chief or chief author.



EXCLUSIVE NETWORK

GET ACCESS TO A CLOSED NETWORK

A ASSRC member gets access to a closed network of Tier 2 researchers and scientists with direct communication channel through our website. Associates can reach out to other members or researchers directly. They should also be open to reaching out by other.

Career

Credibility

Exclusive

Reputation



CERTIFICATE

CERTIFICATE, LOR AND LASER-MOMENTO

Associates receive a printed copy of a certificate signed by our Chief Author that may be used for academic purposes and a personal recommendation letter to the dean of member's university.

Career

Credibility

Exclusive

Reputation



DESIGNATION

GET HONORED TITLE OF MEMBERSHIP

Associates can use the honored title of membership. The "ASSRC" is an honored title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., ASSRC or William Walldroff, M.S., ASSRC.

Career

Credibility

Exclusive

Reputation

RECOGNITION ON THE PLATFORM

BETTER VISIBILITY AND CITATION

All the Associate members of ASSRC get a badge of "Leading Member of Global Journals" on the Research Community that distinguishes them from others. Additionally, the profile is also partially maintained by our team for better visibility and citation.

Career

Credibility

Reputation

FUTURE WORK

GET DISCOUNTS ON THE FUTURE PUBLICATIONS

Associates receive discounts on future publications with Global Journals up to 30%. Through our recommendation programs, members also receive discounts on publications made with OARS affiliated organizations.

Career

Financial



GJ ACCOUNT

UNLIMITED FORWARD OF EMAILS

Associates get secure and fast GJ work emails with 5GB forward of emails that they may use them as their primary email. For example, john [AT] globaljournals [DOT] org.

Career

Credibility

Reputation



PREMIUM TOOLS

ACCESS TO ALL THE PREMIUM TOOLS

To take future researches to the zenith, fellows receive access to almost all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Financial

CONFERENCES & EVENTS

ORGANIZE SEMINAR/CONFERENCE

Associates are authorized to organize symposium/seminar/conference on behalf of Global Journal Incorporation (USA). They can also participate in the same organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent. Additionally, they get free research conferences (and others) alerts.

Career

Credibility

Financial

EARLY INVITATIONS

EARLY INVITATIONS TO ALL THE SYMPOSIUMS, SEMINARS, CONFERENCES

All associates receive the early invitations to all the symposiums, seminars, conferences and webinars hosted by Global Journals in their subject.

Exclusive





PUBLISHING ARTICLES & BOOKS

EARN 60% OF SALES PROCEEDS

Associates can publish articles (limited) without any fees. Also, they can earn up to 30-40% of sales proceeds from the sale of reference/review books/literature/publishing of research paper.

Exclusive

Financial

REVIEWERS

GET A REMUNERATION OF 15% OF AUTHOR FEES

Associate members are eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get a remuneration of 15% of author fees, taken from the author of a respective paper.

Financial

AND MUCH MORE

GET ACCESS TO SCIENTIFIC MUSEUMS AND OBSERVATORIES ACROSS THE GLOBE

All members get access to 2 selected scientific museums and observatories across the globe. All researches published with Global Journals will be kept under deep archival facilities across regions for future protections and disaster recovery. They get 5 GB free secure cloud access for storing research files.



ASSOCIATE	FELLOW	RESEARCH GROUP	BASIC
<p>\$4800 lifetime designation</p> <hr/> <p>Certificate, LoR and Momento 2 discounted publishing/year Gradation of Research 10 research contacts/day 1 GB Cloud Storage GJ Community Access</p>	<p>\$6800 lifetime designation</p> <hr/> <p>Certificate, LoR and Momento Unlimited discounted publishing/year Gradation of Research Unlimited research contacts/day 5 GB Cloud Storage Online Presense Assistance GJ Community Access</p>	<p>\$12500.00 organizational</p> <hr/> <p>Certificates, LoRs and Momentos Unlimited free publishing/year Gradation of Research Unlimited research contacts/day Unlimited Cloud Storage Online Presense Assistance GJ Community Access</p>	<p>APC per article</p> <hr/> <p>GJ Community Access</p>



PREFERRED AUTHOR GUIDELINES

We accept the manuscript submissions in any standard (generic) format.

We typeset manuscripts using advanced typesetting tools like Adobe In Design, CorelDraw, TeXnicCenter, and TeXStudio. We usually recommend authors submit their research using any standard format they are comfortable with, and let Global Journals do the rest.

Alternatively, you can download our basic template from <https://globaljournals.org/Template.zip>

Authors should submit their complete paper/article, including text illustrations, graphics, conclusions, artwork, and tables. Authors who are not able to submit manuscript using the form above can email the manuscript department at submit@globaljournals.org or get in touch with chiefeditor@globaljournals.org if they wish to send the abstract before submission.

BEFORE AND DURING SUBMISSION

Authors must ensure the information provided during the submission of a paper is authentic. Please go through the following checklist before submitting:

1. Authors must go through the complete author guideline and understand and *agree to Global Journals' ethics and code of conduct*, along with author responsibilities.
2. Authors must accept the privacy policy, terms, and conditions of Global Journals.
3. Ensure corresponding author's email address and postal address are accurate and reachable.
4. Manuscript to be submitted must include keywords, an abstract, a paper title, co-author(s) names and details (email address, name, phone number, and institution), figures and illustrations in vector format including appropriate captions, tables, including titles and footnotes, a conclusion, results, acknowledgments and references.
5. Authors should submit paper in a ZIP archive if any supplementary files are required along with the paper.
6. Proper permissions must be acquired for the use of any copyrighted material.
7. Manuscript submitted *must not have been submitted or published elsewhere* and all authors must be aware of the submission.

Declaration of Conflicts of Interest

It is required for authors to declare all financial, institutional, and personal relationships with other individuals and organizations that could influence (bias) their research.

POLICY ON PLAGIARISM

Plagiarism is not acceptable in Global Journals submissions at all.

Plagiarized content will not be considered for publication. We reserve the right to inform authors' institutions about plagiarism detected either before or after publication. If plagiarism is identified, we will follow COPE guidelines:

Authors are solely responsible for all the plagiarism that is found. The author must not fabricate, falsify or plagiarize existing research data. The following, if copied, will be considered plagiarism:

- Words (language)
- Ideas
- Findings
- Writings
- Diagrams
- Graphs
- Illustrations
- Lectures



- Printed material
- Graphic representations
- Computer programs
- Electronic material
- Any other original work

AUTHORSHIP POLICIES

Global Journals follows the definition of authorship set up by the Open Association of Research Society, USA. According to its guidelines, authorship criteria must be based on:

1. Substantial contributions to the conception and acquisition of data, analysis, and interpretation of findings.
2. Drafting the paper and revising it critically regarding important academic content.
3. Final approval of the version of the paper to be published.

Changes in Authorship

The corresponding author should mention the name and complete details of all co-authors during submission and in manuscript. We support addition, rearrangement, manipulation, and deletions in authors list till the early view publication of the journal. We expect that corresponding author will notify all co-authors of submission. We follow COPE guidelines for changes in authorship.

Copyright

During submission of the manuscript, the author is confirming an exclusive license agreement with Global Journals which gives Global Journals the authority to reproduce, reuse, and republish authors' research. We also believe in flexible copyright terms where copyright may remain with authors/employers/institutions as well. Contact your editor after acceptance to choose your copyright policy. You may follow this form for copyright transfers.

Appealing Decisions

Unless specified in the notification, the Editorial Board's decision on publication of the paper is final and cannot be appealed before making the major change in the manuscript.

Acknowledgments

Contributors to the research other than authors credited should be mentioned in Acknowledgments. The source of funding for the research can be included. Suppliers of resources may be mentioned along with their addresses.

Declaration of funding sources

Global Journals is in partnership with various universities, laboratories, and other institutions worldwide in the research domain. Authors are requested to disclose their source of funding during every stage of their research, such as making analysis, performing laboratory operations, computing data, and using institutional resources, from writing an article to its submission. This will also help authors to get reimbursements by requesting an open access publication letter from Global Journals and submitting to the respective funding source.

PREPARING YOUR MANUSCRIPT

Authors can submit papers and articles in an acceptable file format: MS Word (doc, docx), LaTeX (.tex, .zip or .rar including all of your files), Adobe PDF (.pdf), rich text format (.rtf), simple text document (.txt), Open Document Text (.odt), and Apple Pages (.pages). Our professional layout editors will format the entire paper according to our official guidelines. This is one of the highlights of publishing with Global Journals—authors should not be concerned about the formatting of their paper. Global Journals accepts articles and manuscripts in every major language, be it Spanish, Chinese, Japanese, Portuguese, Russian, French, German, Dutch, Italian, Greek, or any other national language, but the title, subtitle, and abstract should be in English. This will facilitate indexing and the pre-peer review process.

The following is the official style and template developed for publication of a research paper. Authors are not required to follow this style during the submission of the paper. It is just for reference purposes.



Manuscript Style Instruction (Optional)

- Microsoft Word Document Setting Instructions.
- Font type of all text should be Swis721 Lt BT.
- Page size: 8.27" x 11", left margin: 0.65, right margin: 0.65, bottom margin: 0.75.
- Paper title should be in one column of font size 24.
- Author name in font size of 11 in one column.
- Abstract: font size 9 with the word "Abstract" in bold italics.
- Main text: font size 10 with two justified columns.
- Two columns with equal column width of 3.38 and spacing of 0.2.
- First character must be three lines drop-capped.
- The paragraph before spacing of 1 pt and after of 0 pt.
- Line spacing of 1 pt.
- Large images must be in one column.
- The names of first main headings (Heading 1) must be in Roman font, capital letters, and font size of 10.
- The names of second main headings (Heading 2) must not include numbers and must be in italics with a font size of 10.

Structure and Format of Manuscript

The recommended size of an original research paper is under 15,000 words and review papers under 7,000 words. Research articles should be less than 10,000 words. Research papers are usually longer than review papers. Review papers are reports of significant research (typically less than 7,000 words, including tables, figures, and references)

A research paper must include:

- a) A title which should be relevant to the theme of the paper.
- b) A summary, known as an abstract (less than 150 words), containing the major results and conclusions.
- c) Up to 10 keywords that precisely identify the paper's subject, purpose, and focus.
- d) An introduction, giving fundamental background objectives.
- e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition, sources of information must be given, and numerical methods must be specified by reference.
- f) Results which should be presented concisely by well-designed tables and figures.
- g) Suitable statistical data should also be given.
- h) All data must have been gathered with attention to numerical detail in the planning stage.

Design has been recognized to be essential to experiments for a considerable time, and the editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned unrefereed.

- i) Discussion should cover implications and consequences and not just recapitulate the results; conclusions should also be summarized.
- j) There should be brief acknowledgments.
- k) There ought to be references in the conventional format. Global Journals recommends APA format.

Authors should carefully consider the preparation of papers to ensure that they communicate effectively. Papers are much more likely to be accepted if they are carefully designed and laid out, contain few or no errors, are summarizing, and follow instructions. They will also be published with much fewer delays than those that require much technical and editorial correction.

The Editorial Board reserves the right to make literary corrections and suggestions to improve brevity.



FORMAT STRUCTURE

It is necessary that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

All manuscripts submitted to Global Journals should include:

Title

The title page must carry an informative title that reflects the content, a running title (less than 45 characters together with spaces), names of the authors and co-authors, and the place(s) where the work was carried out.

Author details

The full postal address of any related author(s) must be specified.

Abstract

The abstract is the foundation of the research paper. It should be clear and concise and must contain the objective of the paper and inferences drawn. It is advised to not include big mathematical equations or complicated jargon.

Many researchers searching for information online will use search engines such as Google, Yahoo or others. By optimizing your paper for search engines, you will amplify the chance of someone finding it. In turn, this will make it more likely to be viewed and cited in further works. Global Journals has compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

Keywords

A major lynchpin of research work for the writing of research papers is the keyword search, which one will employ to find both library and internet resources. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining, and indexing.

One must be persistent and creative in using keywords. An effective keyword search requires a strategy: planning of a list of possible keywords and phrases to try.

Choice of the main keywords is the first tool of writing a research paper. Research paper writing is an art. Keyword search should be as strategic as possible.

One should start brainstorming lists of potential keywords before even beginning searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in a research paper?" Then consider synonyms for the important words.

It may take the discovery of only one important paper to steer in the right keyword direction because, in most databases, the keywords under which a research paper is abstracted are listed with the paper.

Numerical Methods

Numerical methods used should be transparent and, where appropriate, supported by references.

Abbreviations

Authors must list all the abbreviations used in the paper at the end of the paper or in a separate table before using them.

Formulas and equations

Authors are advised to submit any mathematical equation using either MathJax, KaTeX, or LaTeX, or in a very high-quality image.

Tables, Figures, and Figure Legends

Tables: Tables should be cautiously designed, uncrowned, and include only essential data. Each must have an Arabic number, e.g., Table 4, a self-explanatory caption, and be on a separate sheet. Authors must submit tables in an editable format and not as images. References to these tables (if any) must be mentioned accurately.



Figures

Figures are supposed to be submitted as separate files. Always include a citation in the text for each figure using Arabic numbers, e.g., Fig. 4. Artwork must be submitted online in vector electronic form or by emailing it.

PREPARATION OF ELETRONIC FIGURES FOR PUBLICATION

Although low-quality images are sufficient for review purposes, print publication requires high-quality images to prevent the final product being blurred or fuzzy. Submit (possibly by e-mail) EPS (line art) or TIFF (halftone/ photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Avoid using pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings). Please give the data for figures in black and white or submit a Color Work Agreement form. EPS files must be saved with fonts embedded (and with a TIFF preview, if possible).

For scanned images, the scanning resolution at final image size ought to be as follows to ensure good reproduction: line art: >650 dpi; halftones (including gel photographs): >350 dpi; figures containing both halftone and line images: >650 dpi.

Color charges: Authors are advised to pay the full cost for the reproduction of their color artwork. Hence, please note that if there is color artwork in your manuscript when it is accepted for publication, we would require you to complete and return a Color Work Agreement form before your paper can be published. Also, you can email your editor to remove the color fee after acceptance of the paper.

TIPS FOR WRITING A GOOD QUALITY SOCIAL SCIENCE RESEARCH PAPER

Techniques for writing a good quality homan social science research paper:

1. Choosing the topic: In most cases, the topic is selected by the interests of the author, but it can also be suggested by the guides. You can have several topics, and then judge which you are most comfortable with. This may be done by asking several questions of yourself, like "Will I be able to carry out a search in this area? Will I find all necessary resources to accomplish the search? Will I be able to find all information in this field area?" If the answer to this type of question is "yes," then you ought to choose that topic. In most cases, you may have to conduct surveys and visit several places. Also, you might have to do a lot of work to find all the rises and falls of the various data on that subject. Sometimes, detailed information plays a vital role, instead of short information. Evaluators are human: The first thing to remember is that evaluators are also human beings. They are not only meant for rejecting a paper. They are here to evaluate your paper. So present your best aspect.

2. Think like evaluators: If you are in confusion or getting demotivated because your paper may not be accepted by the evaluators, then think, and try to evaluate your paper like an evaluator. Try to understand what an evaluator wants in your research paper, and you will automatically have your answer. Make blueprints of paper: The outline is the plan or framework that will help you to arrange your thoughts. It will make your paper logical. But remember that all points of your outline must be related to the topic you have chosen.

3. Ask your guides: If you are having any difficulty with your research, then do not hesitate to share your difficulty with your guide (if you have one). They will surely help you out and resolve your doubts. If you can't clarify what exactly you require for your work, then ask your supervisor to help you with an alternative. He or she might also provide you with a list of essential readings.

4. Use of computer is recommended: As you are doing research in the field of homan social science then this point is quite obvious. Use right software: Always use good quality software packages. If you are not capable of judging good software, then you can lose the quality of your paper unknowingly. There are various programs available to help you which you can get through the internet.

5. Use the internet for help: An excellent start for your paper is using Google. It is a wondrous search engine, where you can have your doubts resolved. You may also read some answers for the frequent question of how to write your research paper or find a model research paper. You can download books from the internet. If you have all the required books, place importance on reading, selecting, and analyzing the specified information. Then sketch out your research paper. Use big pictures: You may use encyclopedias like Wikipedia to get pictures with the best resolution. At Global Journals, you should strictly follow [here](#).



6. Bookmarks are useful: When you read any book or magazine, you generally use bookmarks, right? It is a good habit which helps to not lose your continuity. You should always use bookmarks while searching on the internet also, which will make your search easier.

7. Revise what you wrote: When you write anything, always read it, summarize it, and then finalize it.

8. Make every effort: Make every effort to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in the introduction—what is the need for a particular research paper. Polish your work with good writing skills and always give an evaluator what he wants. Make backups: When you are going to do any important thing like making a research paper, you should always have backup copies of it either on your computer or on paper. This protects you from losing any portion of your important data.

9. Produce good diagrams of your own: Always try to include good charts or diagrams in your paper to improve quality. Using several unnecessary diagrams will degrade the quality of your paper by creating a hodgepodge. So always try to include diagrams which were made by you to improve the readability of your paper. Use of direct quotes: When you do research relevant to literature, history, or current affairs, then use of quotes becomes essential, but if the study is relevant to science, use of quotes is not preferable.

10. Use proper verb tense: Use proper verb tenses in your paper. Use past tense to present those events that have happened. Use present tense to indicate events that are going on. Use future tense to indicate events that will happen in the future. Use of wrong tenses will confuse the evaluator. Avoid sentences that are incomplete.

11. Pick a good study spot: Always try to pick a spot for your research which is quiet. Not every spot is good for studying.

12. Know what you know: Always try to know what you know by making objectives, otherwise you will be confused and unable to achieve your target.

13. Use good grammar: Always use good grammar and words that will have a positive impact on the evaluator; use of good vocabulary does not mean using tough words which the evaluator has to find in a dictionary. Do not fragment sentences. Eliminate one-word sentences. Do not ever use a big word when a smaller one would suffice.

Verbs have to be in agreement with their subjects. In a research paper, do not start sentences with conjunctions or finish them with prepositions. When writing formally, it is advisable to never split an infinitive because someone will (wrongly) complain. Avoid clichés like a disease. Always shun irritating alliteration. Use language which is simple and straightforward. Put together a neat summary.

14. Arrangement of information: Each section of the main body should start with an opening sentence, and there should be a changeover at the end of the section. Give only valid and powerful arguments for your topic. You may also maintain your arguments with records.

15. Never start at the last minute: Always allow enough time for research work. Leaving everything to the last minute will degrade your paper and spoil your work.

16. Multitasking in research is not good: Doing several things at the same time is a bad habit in the case of research activity. Research is an area where everything has a particular time slot. Divide your research work into parts, and do a particular part in a particular time slot.

17. Never copy others' work: Never copy others' work and give it your name because if the evaluator has seen it anywhere, you will be in trouble. Take proper rest and food: No matter how many hours you spend on your research activity, if you are not taking care of your health, then all your efforts will have been in vain. For quality research, take proper rest and food.

18. Go to seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.

Refresh your mind after intervals: Try to give your mind a rest by listening to soft music or sleeping in intervals. This will also improve your memory. Acquire colleagues: Always try to acquire colleagues. No matter how sharp you are, if you acquire colleagues, they can give you ideas which will be helpful to your research.

19. Think technically: Always think technically. If anything happens, search for its reasons, benefits, and demerits. Think and then print: When you go to print your paper, check that tables are not split, headings are not detached from their descriptions, and page sequence is maintained.



20. Adding unnecessary information: Do not add unnecessary information like "I have used MS Excel to draw graphs." Irrelevant and inappropriate material is superfluous. Foreign terminology and phrases are not apropos. One should never take a broad view. Analogy is like feathers on a snake. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Never oversimplify: When adding material to your research paper, never go for oversimplification; this will definitely irritate the evaluator. Be specific. Never use rhythmic redundancies. Contractions shouldn't be used in a research paper. Comparisons are as terrible as clichés. Give up ampersands, abbreviations, and so on. Remove commas that are not necessary. Parenthetical words should be between brackets or commas. Understatement is always the best way to put forward earth-shaking thoughts. Give a detailed literary review.

21. Report concluded results: Use concluded results. From raw data, filter the results, and then conclude your studies based on measurements and observations taken. An appropriate number of decimal places should be used. Parenthetical remarks are prohibited here. Proofread carefully at the final stage. At the end, give an outline to your arguments. Spot perspectives of further study of the subject. Justify your conclusion at the bottom sufficiently, which will probably include examples.

22. Upon conclusion: Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium through which your research is going to be in print for the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects of your research.

INFORMAL GUIDELINES OF RESEARCH PAPER WRITING

Key points to remember:

- Submit all work in its final form.
- Write your paper in the form which is presented in the guidelines using the template.
- Please note the criteria peer reviewers will use for grading the final paper.

Final points:

One purpose of organizing a research paper is to let people interpret your efforts selectively. The journal requires the following sections, submitted in the order listed, with each section starting on a new page:

The introduction: This will be compiled from reference matter and reflect the design processes or outline of basis that directed you to make a study. As you carry out the process of study, the method and process section will be constructed like that. The results segment will show related statistics in nearly sequential order and direct reviewers to similar intellectual paths throughout the data that you gathered to carry out your study.

The discussion section:

This will provide understanding of the data and projections as to the implications of the results. The use of good quality references throughout the paper will give the effort trustworthiness by representing an alertness to prior workings.

Writing a research paper is not an easy job, no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record-keeping are the only means to make straightforward progression.

General style:

Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear: Adhere to recommended page limits.



Mistakes to avoid:

- Insertion of a title at the foot of a page with subsequent text on the next page.
- Separating a table, chart, or figure—confine each to a single page.
- Submitting a manuscript with pages out of sequence.
- In every section of your document, use standard writing style, including articles ("a" and "the").
- Keep paying attention to the topic of the paper.
- Use paragraphs to split each significant point (excluding the abstract).
- Align the primary line of each section.
- Present your points in sound order.
- Use present tense to report well-accepted matters.
- Use past tense to describe specific results.
- Do not use familiar wording; don't address the reviewer directly. Don't use slang or superlatives.
- Avoid use of extra pictures—include only those figures essential to presenting results.

Title page:

Choose a revealing title. It should be short and include the name(s) and address(es) of all authors. It should not have acronyms or abbreviations or exceed two printed lines.

Abstract: This summary should be two hundred words or less. It should clearly and briefly explain the key findings reported in the manuscript and must have precise statistics. It should not have acronyms or abbreviations. It should be logical in itself. Do not cite references at this point.

An abstract is a brief, distinct paragraph summary of finished work or work in development. In a minute or less, a reviewer can be taught the foundation behind the study, common approaches to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Use comprehensive sentences, and do not sacrifice readability for brevity; you can maintain it succinctly by phrasing sentences so that they provide more than a lone rationale. The author can at this moment go straight to shortening the outcome. Sum up the study with the subsequent elements in any summary. Try to limit the initial two items to no more than one line each.

Reason for writing the article—theory, overall issue, purpose.

- Fundamental goal.
- To-the-point depiction of the research.
- Consequences, including definite statistics—if the consequences are quantitative in nature, account for this; results of any numerical analysis should be reported. Significant conclusions or questions that emerge from the research.

Approach:

- Single section and succinct.
- An outline of the job done is always written in past tense.
- Concentrate on shortening results—limit background information to a verdict or two.
- Exact spelling, clarity of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else.

Introduction:

The introduction should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable of comprehending and calculating the purpose of your study without having to refer to other works. The basis for the study should be offered. Give the most important references, but avoid making a comprehensive appraisal of the topic. Describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will give no attention to your results. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here.



The following approach can create a valuable beginning:

- Explain the value (significance) of the study.
- Defend the model—why did you employ this particular system or method? What is its compensation? Remark upon its appropriateness from an abstract point of view as well as pointing out sensible reasons for using it.
- Present a justification. State your particular theory(-ies) or aim(s), and describe the logic that led you to choose them.
- Briefly explain the study's tentative purpose and how it meets the declared objectives.

Approach:

Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done. Sort out your thoughts; manufacture one key point for every section. If you make the four points listed above, you will need at least four paragraphs. Present surrounding information only when it is necessary to support a situation. The reviewer does not desire to read everything you know about a topic. Shape the theory specifically—do not take a broad view.

As always, give awareness to spelling, simplicity, and correctness of sentences and phrases.

Procedures (methods and materials):

This part is supposed to be the easiest to carve if you have good skills. A soundly written procedures segment allows a capable scientist to replicate your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order, but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt to give the least amount of information that would permit another capable scientist to replicate your outcome, but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section.

When a technique is used that has been well-described in another section, mention the specific item describing the way, but draw the basic principle while stating the situation. The purpose is to show all particular resources and broad procedures so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step-by-step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

Materials may be reported in part of a section or else they may be recognized along with your measures.

Methods:

- Report the method and not the particulars of each process that engaged the same methodology.
- Describe the method entirely.
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures.
- Simplify—detail how procedures were completed, not how they were performed on a particular day.
- If well-known procedures were used, account for the procedure by name, possibly with a reference, and that's all.

Approach:

It is embarrassing to use vigorous voice when documenting methods without using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result, when writing up the methods, most authors use third person passive voice.

Use standard style in this and every other part of the paper—avoid familiar lists, and use full sentences.

What to keep away from:

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings—save it for the argument.
- Leave out information that is immaterial to a third party.



Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part as entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Use statistics and tables, if suitable, to present consequences most efficiently.

You must clearly differentiate material which would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matters should not be submitted at all except if requested by the instructor.

Content:

- Sum up your conclusions in text and demonstrate them, if suitable, with figures and tables.
- In the manuscript, explain each of your consequences, and point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation of an exacting study.
- Explain results of control experiments and give remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or manuscript.

What to stay away from:

- Do not discuss or infer your outcome, report surrounding information, or try to explain anything.
- Do not include raw data or intermediate calculations in a research manuscript.
- Do not present similar data more than once.
- A manuscript should complement any figures or tables, not duplicate information.
- Never confuse figures with tables—there is a difference.

Approach:

As always, use past tense when you submit your results, and put the whole thing in a reasonable order.

Put figures and tables, appropriately numbered, in order at the end of the report.

If you desire, you may place your figures and tables properly within the text of your results section.

Figures and tables:

If you put figures and tables at the end of some details, make certain that they are visibly distinguished from any attached appendix materials, such as raw facts. Whatever the position, each table must be titled, numbered one after the other, and include a heading. All figures and tables must be divided from the text.

Discussion:

The discussion is expected to be the trickiest segment to write. A lot of papers submitted to the journal are discarded based on problems with the discussion. There is no rule for how long an argument should be.

Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implications of the study. The purpose here is to offer an understanding of your results and support all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of results should be fully described.

Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact, you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved the prospect, and let it drop at that. Make a decision as to whether each premise is supported or discarded or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."



Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work.

- You may propose future guidelines, such as how an experiment might be personalized to accomplish a new idea.
- Give details of all of your remarks as much as possible, focusing on mechanisms.
- Make a decision as to whether the tentative design sufficiently addressed the theory and whether or not it was correctly restricted. Try to present substitute explanations if they are sensible alternatives.
- One piece of research will not counter an overall question, so maintain the large picture in mind. Where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

Approach:

When you refer to information, differentiate data generated by your own studies from other available information. Present work done by specific persons (including you) in past tense.

Describe generally acknowledged facts and main beliefs in present tense.

THE ADMINISTRATION RULES

Administration Rules to Be Strictly Followed before Submitting Your Research Paper to Global Journals Inc.

Please read the following rules and regulations carefully before submitting your research paper to Global Journals Inc. to avoid rejection.

Segment draft and final research paper: You have to strictly follow the template of a research paper, failing which your paper may get rejected. You are expected to write each part of the paper wholly on your own. The peer reviewers need to identify your own perspective of the concepts in your own terms. Please do not extract straight from any other source, and do not rephrase someone else's analysis. Do not allow anyone else to proofread your manuscript.

Written material: You may discuss this with your guides and key sources. Do not copy anyone else's paper, even if this is only imitation, otherwise it will be rejected on the grounds of plagiarism, which is illegal. Various methods to avoid plagiarism are strictly applied by us to every paper, and, if found guilty, you may be blacklisted, which could affect your career adversely. To guard yourself and others from possible illegal use, please do not permit anyone to use or even read your paper and file.



CRITERION FOR GRADING A RESEARCH PAPER (COMPILATION)
BY GLOBAL JOURNALS

Please note that following table is only a Grading of "Paper Compilation" and not on "Performed/Stated Research" whose grading solely depends on Individual Assigned Peer Reviewer and Editorial Board Member. These can be available only on request and after decision of Paper. This report will be the property of Global Journals

Topics	Grades		
	A-B	C-D	E-F
<i>Abstract</i>	Clear and concise with appropriate content, Correct format. 200 words or below	Unclear summary and no specific data, Incorrect form Above 200 words	No specific data with ambiguous information Above 250 words
<i>Introduction</i>	Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited	Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter	Out of place depth and content, hazy format
<i>Methods and Procedures</i>	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
<i>Result</i>	Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake	Complete and embarrassed text, difficult to comprehend	Irregular format with wrong facts and figures
<i>Discussion</i>	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
<i>References</i>	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring



INDEX

A

Adversely · 5
Anonymity · 2, 3
Arbitrary · 4

B

Bulwark · 10

C

Concealed · 2

D

Desirable · 2
Desist · 1, 3
Disarray · 2
Dispossession · 1
Disrupted · 5
Distortion · 2
Dysentery · 6

E

Enduring · 2
Equivalent · 1
Erratic · 1, 2, 3
Escalated · 1

G

Grievous · 9

H

Hostile · 4, 6

I

Immense · 11
Impulsive · 2, 3
Interpretive · 2

M

Merciless · 6

N

Nosedived · 5

O

Obstinacy · 10
Offensive · 5
Oppressed · 3

P

Pervasiveness · 2
Plausible · 2, 3
Prerequisites · 7
Pursuance · 2

R

Reconciling · 2
Reluctant · 9
Repatriations · 2, 6
Repositories · 2, 3
Rigged · 6

S

Scrutiny · 7, 8
Severe · 3, 5
Solicited · 1
Sprawling · 5

U

Unravel · 2

W

Whispered · 2
Wracked · 1

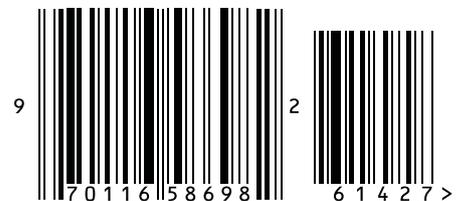


save our planet



Global Journal of Human Social Science

Visit us on the Web at www.GlobalJournals.org | www.SocialScienceResearch.org
or email us at helpdesk@globaljournals.org



ISSN 975587

© Global Journals