



UPM
UNIVERSITI PUTRA MALAYSIA

**FAKULTI
EKOLOGI MANUSIA**
FACULTY OF HUMAN ECOLOGY
فاكولتي ايكولوجي ماانسي

MJHE

MALAYSIAN JOURNAL OF HUMAN ECOLOGY

Volume 6 (2), 2025



A scientific journal published by
Faculty of Human Ecology



facebook.com/UPMEco



@fem_upm



instagram.com/fem_upm



Faculty of Human Ecology

PERTANIAN • INOVASI • KEHIDUPAN

BERILMU BERBAKTI
WITH KNOWLEDGE WE SERVE

www.eco1.upm.edu.my

MALAYSIAN JOURNAL OF HUMAN ECOLOGY



The Malaysian Journal of Human Ecology (MJHE) is published by Faculty of Human Ecology, Universiti Putra Malaysia. MJHE is an open-access journal and published once a year, in December. The aim of MJHE is to provide the platform for research paper publication and for public references, especially in human ecology.

MJHE accepts contribution from all discipline of social sciences such as childhood & adolescent development, adulthood & ageing, family well-being, community development, social psychology, politics & government, philosophy and civilization, consumer well-being, family economics & finance, music & well-being.

Malaysian Journal of Human Ecology Volume 5 2024 eISSN 2773-4951

A scientific journal published by Faculty of Human Ecology, Universiti Putra Malaysia

The Malaysian Journal of Human Ecology (MJHE) is published by Faculty of Human Ecology, Universiti Putra Malaysia. MJHE is an open-access journal and published once a year, in December. The aim of MJHE is to provide the platform for research paper publication and also for public references, especially in human ecology.

MJHE accepts contribution from all discipline of social sciences such as childhood & adolescent development, adulthood & ageing, family well-being, community development, social psychology, politics & government, philosophy and civilization, consumer well-being, family economics & finance, music & well-being.

Chief Editor

Professor Dr. Sarjit Singh a/l Darshan Singh Universiti Putra Malaysia

Executive Editor

Dr. Puvaneswaran a/l Kunasekaran Universiti Putra Malaysia

Managing Editor

Dr. Ayuni Nabilah Alias Universiti Putra Malaysia

Copy Editor

Dr. Nur Aqilah Amalina Jaafar Universiti Putra Malaysia

Editorial Board

Professor Dr. Ismi Ariff Ismail, Universiti Putra Malaysia

Professor Dr. Abdul Haris Wahab, Universiti Malaya

Professor Dr. Neethiahnathan Ari Ragavan, Taylor's University

Professor Dr. Mohd Fazli Sabri, Universiti Putra Malaysia

Professor Dr. Novel Lydon, Universiti Kebangsaan Malaysia

Professor Dr. S. Mostafa Rasoolimanesh, Edith Cowan University

Professor Dr. Tom Baum, University of Strathclyde

Professor Dr. Sandeep R Walia, Charutar Vidya Mandal University (CVM)

Professor Dr. Steven Ratuva, University of Canterbury

Professor Dr. Mohd Hafiz Mohd Hanafiah, Universiti Teknologi Mara (UiTM)

Associate Professor Dr. Nurdeng Deuraseh, Universiti Islam Sultan Sharif Ali (UNISSA)

Associate Professor Dr. Hanina H. Hamsan, Universiti Putra Malaysia

Associate Professor Dr. Nik Ahmad Sufian Burhan, Universiti Putra Malaysia

Associate Professor Dr. Bilveer Singh, National University of Singapore

Associate Professor Dr. Hassan Sadeghi Naeini, Iran University of Science and Technology

Associate Professor Dr. Gancar Candra Premananto, Universitas Airlangga

Dr. Karen Guilléna, Universidad San Ignacio de Loyola

Dr. Lilibeth C. Aragon, Lyceum of the Philippines University

Dr. Chuah Hui Wen, Stephanie Universiti Kebangsaan Malaysia

Dr. Tan Jo Pei, Manchester Metropolitan University

MALAYSIAN JOURNAL OF HUMAN ECOLOGY (MJHE)
VOLUME 6 (2), 2025

CONTENTS

Pages

Original Articles

- | | |
|--|-----|
| Perceived Recreational Impacts and Hikers Acceptance in Shaping Hiking Experience at Gunung Nuang
<i>Nurfarhana Khairi, Azita Ahmad Zawawi, Azlyn Ahmad Zawawi</i> | 1 |
| Nurturing The Heart, Building the Ummah: The 3As Model and Communiversity in Practice
<i>Ratna Roshida Ab Razak, Zainal Abidin Sanusi</i> | 20 |
| Economic Empowerment Among Silver Women Entrepreneurs in Linfen City, China
<i>Wang Bin, Askiah Jamaluddin, Wan Munirah Wan Jaafar</i> | 49 |
| Understanding Successful Ageing: A Theoretical Exploration and Comparative Analysis
<i>Yeshulavani Rajeswaran, Mohammad Mujaheed Hassan, Azlina Mohd Khir, Asmidawati Ashari</i> | 69 |
| Shift Work and Adult Well-Being in an Ageing Workforce: Evidence from Security Guards in Malaysia
<i>Shridev Nair Thamotheran, Shamsul Bahri Md Tamrin</i> | 78 |
| Socio-Economic Implications of Banditry and Kidnapping in Northern Nigeria: Dimensions and Solutions
<i>Abdulkadir Mamman Saba</i> | 107 |
| Psychosocial Effects of Institutionalization on Education and Well-Being of Vulnerable Youths: Insights from Northeastern Nigeria
<i>Sule Idi, Azlina Mohd Khir, Arfah Ab Majid</i> | 119 |
| Impact Of Corruption and Integrity on Contemporary Human Civilization in South Asia
<i>Hussain Mazin, Adlina Ab Halim</i> | 133 |
| Interactive Problem-Solving, Emotion Regulations and Conflict Management: Perspectives from Armed Banditry in North-West, Nigeria
<i>Tukur Ibrahim Talasse, Azlina Mohd Khir, Wan Munira Wan Jaafar, Mohammad Mujaheed Hassan</i> | 161 |

MALAYSIAN JOURNAL OF HUMAN ECOLOGY

Journal Homepage: https://eco1.upm.edu.my/malaysian_journal_of_human_ecology_mjhe-3740

PERCEIVED RECREATIONAL IMPACTS AND HIKERS ACCEPTANCE IN SHAPING HIKING EXPERIENCE AT GUNUNG NUANG

Nurfarhana Khairi¹, Azita Ahmad Zawawi^{2*}, Azlyn Ahmad Zawawi³

¹Faculty of Forestry and Environment, Universiti Putra Malaysia, 43400, Seri Kembangan, Selangor, Malaysia.
email: nfrhanakhayr@gmail.com

²Faculty of Forestry and Environment, Universiti Putra Malaysia, 43400, Seri Kembangan, Selangor, Malaysia
email: azitazawawi@upm.edu.my

³Faculty of Administrative Science and Polity, Universiti Teknologi MARA Kedah Branch
email: azlyn@uitm.edu.my

ABSTRACT

In today's society, an increasing number of individuals are acknowledging the importance of maintaining a healthy lifestyle. Engaging in physical activities such as hiking provides a wide array of benefits, enhancing both physical fitness and mental well-being. However, a substantial rise in hiker numbers on a mountain can lead to negative consequences, impacting natural resources and influencing how hikers perceive these effects, which in turn can shape their overall hiking experience. Previous studies have revealed that recreational activities have had an adverse impact on the resources in Gunung Nuang. This research aims to investigate the relationship between hikers' perceptions of recreational impacts and their acceptance of the overall hiking experience at Gunung Nuang. A total of 191 responses were gathered through questionnaires utilizing purposive sampling techniques, and data analysis was performed using SPSS 20.0 and SmartPLS 4. The results indicate that the social effects of recreational impact have a direct influence on experiential engagement. Additionally, the acceptance of social impacts significantly affects both experiential and reflective engagement during hiking. This study concludes that social impacts are interconnected with the hiking experience, influencing various facets of it.

Keywords: Recreational impacts; hiking activity; acceptance; hiking experience; Gunung Nuang

Corresponding author:

Azita Ahmad Zawawi (Phd)

Email: azitazawawi@upm.edu.my

INTRODUCTION

Recreational activities in natural settings offer individuals the chance to connect with the outdoors during their leisure time. Participation in outdoor recreation is increasingly recognized for its positive impact on both physical and mental well-being, which contributes to its appeal among many individuals. In contemporary society, there is a notable trend towards embracing healthy lifestyles, reflecting a broader awareness of the benefits of outdoor activities (Eigenschenk et al., 2019; Coon et al., 2011). However, the rapid growth of these activities has also contributed to environmental impacts that affect both ecological and social dimensions. Such effects can significantly influence hikers' perceptions and subsequently shape their overall experience in the hiking environment. Over the past few decades, numerous studies on recreation impacts have been conducted and published, highlighting significant concerns among researchers, managers, and relevant stakeholders. Most of these studies focus on topics related to outdoor recreation, natural resources, and recreation ecology (Buckley, 1991; Leung & Marion, 2000; Zawawi, 2009; Monz et al., 2010; Rosenthal et al., 2022).

This research was conducted at Gunung Nuang in Selangor, Malaysia, at an elevation of 1,493 meters above sea level, the mountain peak is recognized as the second highest peak in Selangor and has been tagged as a popular spot for hikers. Unjah et al. (2021) highlighted that soil erosion has been observed along hiking trails as a result of hiking activities. Consequently, issues such as soil compaction, erosion, root exposure, and loss of vegetation cover can adversely affect the hikers' experience (Moore et al., 2012). Furthermore, this research also

focused on exploring hikers' acceptance towards the recreational impact. Previous study suggested that hikers have varying standards for what they find acceptable in natural settings, which are often less restrictive than anticipated (Bookhari et al., 2022). This demonstrates that different levels of acceptance do not necessarily lead to environmental disruption. It is important to recognize that findings may differ across various study areas, given that conditions, impacts, and challenges are influenced by the distinct characteristics and background of each setting.

Effective recreational impacts management require attention from resource manager and responsible stakeholder in preventing further deterioration of the affected areas. However, previous study has reported that managers responsible for decision-making often facing lack of sufficient knowledge on recreational resource impacts (Leung & Marion, 2000). Additional research is essential to gather valuable insights covering the hikers' perception and acceptance of the recreational impacts and their influence towards hiking experience. Information obtained from the study is beneficial to support managers in addressing recreational impacts, ensuring the preservation and proper maintenance of the forest resources. The research findings will significantly influence policymakers and national ecotourism strategies by providing evidence-based data that balances conservation efforts with recreational demands. The research delivers concrete data on environmental impacts—including soil erosion, vegetation loss, and wildlife disturbance—as well as social factors such as visitor experience, and user conflicts. Policymakers can leverage this information to formulate informed regulations and management plans for national parks and protected areas.

LITERATURE REVIEW

Outdoor recreation and the growth of hiking activity

Outdoor recreation can be defined as an activity or experience selected by an individual during their leisure time to fulfil a personal desire, primarily for their own satisfaction (Yukic, 1970), which encompasses a variety of activities based on water, air, and land. Hiking is a widely recognized outdoor activity that encompasses both short and long walks in natural environments. Its purposes include enjoyment, physical exercise, contemplation, and similar experiential pursuits. (Svarstad, 2010; Nordbo et al., 2014). According to Dunlap & Heffernan (1975), hiking can be classified as appreciative recreational activities, where it provides physical and mental health benefits. The growing awareness of healthy lifestyle practices among Malaysians and the improved living standards of citizens have made hiking activities more popular and robust (Hairom, 2020). Hiking offers individual or groups to explore the beauty of a place in natural settings. In Malaysia, mountainous regions boast spectacular attractions such as wildlife, rivers, waterfall, moss, rocks, and caves (Nordin & Jamal, 2021). A variety of hiking locations are documented in both Peninsular Malaysia and East Malaysia, encompassing a wide range of trail characteristics and levels of difficulty. Hiking is a highly accessible activity as it requires minimal skills and equipment. Participants are able to select routes that match their preferred terrain difficulty and pace, making it suitable for individuals of diverse experience levels (Mitten et al., 2016).

Recreational impact

By definition, recreational impact can easily be understood by any unfavourable

biophysical changes of wilderness resource resulting from visitor activity (Leung & Marion, 2000). Impacts due to recreation activity can occur due to several factors such as frequency, duration, proximity, and pattern of usage and resilience of the natural resource (Cole, 2004). Recreational impact can be divided into two categories which are ecological impact and social impact (Moore & Driver, 2005). The ecological impact is more related to natural resource; however, social impact is involving the depreciative behaviour of the visitors and the conflict occurred during the recreation activity. Soil, water, wildlife and vegetation are among the affected resource due to recreational activities. The recreational impact on the resource is deemed detrimental and necessitates a period of recovery. Besides, the impact towards the resource can occur directly and indirectly (Leung & Marion, 2000). For example, trampling by visitors can directly cause soil compaction and erosion. In contrast, erosion, in turn, may generate more flow and sediment down the hill, which is considered an indirect impact (Moore & Driver, 2005). Other negative impacts that commonly occurred are root exposure, lost vegetation cover, improper disposal of food waste/ human waste, and approaching wildlife or threatening them. In social impacts, which related to human cause or conflicts is crowding, conflict between other visitors, vandalism, and littering.

Hikers' acceptance of the recreational impacts

A previous study mentioned that more than half of the analyzed studies do not offer a definition of acceptance (Busse & Siebert, 2018). The authors assume that the term acceptance is commonly understood, which seems to be practical and does not require

an explicit definition (Lucke, 1995). However, the definition of the term seems inconsistent. Schenk et al. (2007) indicate that no comprehensive theory related to acceptance has been established. In this study, acceptance can be defined as the personal judgment of things that are influenced by various conditions. Due to the severe impact on the forest's resources, it can affect the acceptance of hikers, which can be positive or negative depending on certain factors or conditions. One of the factors that can influence a hiker's acceptance is based on the individual's experience level and experience-use history (Schreyer et al., 1984). Additionally, Floyd et al. (1997) noted that individuals with a higher level of environmental concern are less accepting of environmental impacts. Furthermore, different situational contexts can influence an individual's standard of impact acceptability (Hammit & Bixler, 1994). For example, seeing litter on a trail is likely to be evaluated more negatively than litter in a parking lot. The environment affects how hikers perceive and accept the impact of recreation. Acceptance is also interrelated with an individual's tolerance of the recreational impact. Floyd et al. (1997) found that groups with the highest level of environmental concern showed the least tolerance for ecological impacts. Environmental concerns can be developed through education and personal experience in natural areas, which is an important value for individuals who engage in recreational activities, especially hiking.

Hiking experience

Experience plays a crucial role in enhancing recreational activities, as it deepens one's appreciation and enjoyment.

Engaging in these activities becomes more rewarding when individuals draw upon their past adventures, skills, and knowledge, allowing for a more fulfilling and immersive experience. According to Weng et al. (2022), experience involved personal thoughts, emotions, feelings, knowledge, and skills developed through participation of activity. Additionally, experience is a personal mental state triggered by a specific activity (Poulsen & Kale, 2004). Chen (1988) outlined components of recreation experience, including satisfaction level, a combination of memory, preference, motivation, demand, and intention. The development of each component varies according to an individual's surrounding environment, goals, and attitudes. Ballantyne et al. (2011) categorize the recreation experience into two constructs: experiential engagement and reflective engagement. Three phases are involved in the experience: pre-experience, on-site experience, and post-experience (Tynan & McKechnie, 2009). In hiking activities, individual experiences can vary based on personal factors, the specific locations, and their goals. Additionally, differing backgrounds in terms of education and available time may influence an individual's hiking experience.

The research gap

Research conducted in Malaysia and the surrounding region indicates that while hikers appreciate natural environments, they often lack awareness of ecological impacts, such as soil erosion and vegetation loss, particularly when compared to site managers and experts. Hikers generally show a higher tolerance for minor environmental issues but express greater

concern about more conspicuous problems, such as litter and vandalism. Studies in various protected areas of Malaysia, including Taman Negara National Park and Gunung Nuang, have identified numerous environmental and social impacts associated with hiking and camping activities. However, there is a notable lack

of research addressing hikers' acceptance of these impacts and how this influences their experience. Most existing studies primarily concentrate on physical impacts, benefits, and motivations of hikers, highlighting a significant gap in the research from a Malaysian perspective.

METHODOLOGY

Research design

A well-defined research design is a fundamental component of every research activity, providing a structured approach to data collection and analysis (Creswell & Creswell, 2018). This study employed a multi-phase research involving biophysical assessment and visitor survey-based research to examine the recreational impacts and the hikers' acceptance of the impacts on Gunung Nuang. A rapid appraisal method was used to evaluate the recreational impact along the Kem Lolo to Gunung Nuang summit and selected campsite along the trails. The evaluation was structured into three sections of trails based on significant ecological and recreational factors, including soil erosion, water quality, wildlife disturbance, vegetation impact, depreciative activities, and recreational conflict. The biophysical measurement technique was adapted from standard methods used in environmental impact studies of outdoor recreation, ensuring the reliability and consistency of the analysis. The second phase involved the development and distribution of a structured questionnaire to quantify visitor perceptions and experiences of recreational impact. The survey instrument was content-validated and reliability-tested prior to data

collection to ensure measurement accuracy (Babbie, 2020; Hair et al., 2021). The questionnaire was distributed online using a purposive sampling technique, targeting hikers who had trekked Gunung Nuang through Pangsun between 2021 and 2023. A total of 191 responses were collected, and 189 valid responses were kept for further analysis after undergoing data cleaning procedures. Descriptive analysis was conducted using SPSS, while SmartPLS-4 was utilized to perform structural equation modelling (SEM) analysis to test the variable relationships (Hair et al., 2021). The results from both tools provided a deeper understanding of the recreational impact determinants in the study area.

Research instruments

A structured questionnaire was used to gather data on different aspects of hikers' experiences, perceptions, and evaluations of the recreational impacts at Gunung Nuang. The questionnaire was carefully organized into several sections, each focusing on a specific aspect of the study. These sections included hikers' backgrounds, perceived recreational impacts, hikers' acceptance of these impacts, and the factors that influence hikers' experiences.

Section A: Respondents' hiking background

This section gathered information on respondents' general hiking background and specific details about their visits to Gunung Nuang. Key variables included hiking frequency, hiking companions, professional recognition, primary motivations, and purpose of hiking at Gunung Nuang. These factors were analysed to establish a baseline of respondents' familiarity and engagement with the hiking environment.

Section B: Perceived Recreational Impact

This section assessed hikers' perceptions of recreational impacts on the natural and social environment. The ecological impact dimension included concerns about soil erosion, vegetation degradation, water pollution, and wildlife disturbance, while the social impact dimension examined aspects comprised of trail congestion, noise pollution, and conflicts among hikers. The items were assessed using a five-point Likert scale ranging from 1 = Not a Problem to 5 = Very Serious Problem. The scale was adapted from Bookhari et al. (2022) and White et al. (2008) to ensure consistency with established measurement frameworks in outdoor recreation studies.

Section C: Hikers' Acceptance of Recreational Impact

This section evaluated hikers' acceptance of various recreational impacts they

encountered during their hiking experience at Gunung Nuang. The instrument was adapted from Floyd et al. (1997) and utilized a five-point Likert scale, where 1 = Totally Unacceptable, 2 = Unacceptable, 3 = Moderate, 4 = Acceptable, and 5 = Perfectly Acceptable.

Section D: Factors influencing hikers' experience

This section aims to evaluate the hikers' experience in Gunung Nuang. The constructed factors involved experiential engagement and reflective engagement. This section was adapted from Ballantyne et al. (2011).

Research framework

Figure 1 illustrates the research framework that also represents the hypotheses of the study. This study examines the relationship between perceived recreational impact and hikers' acceptance towards hiking experience. In this framework, perceived recreational impact and hikers' acceptance serve as independent variables, each categorized into ecological impact and social impact. The hiking experience, which functions as the dependent variable, is further divided into two dimensions: experiential engagement and reflective engagement.

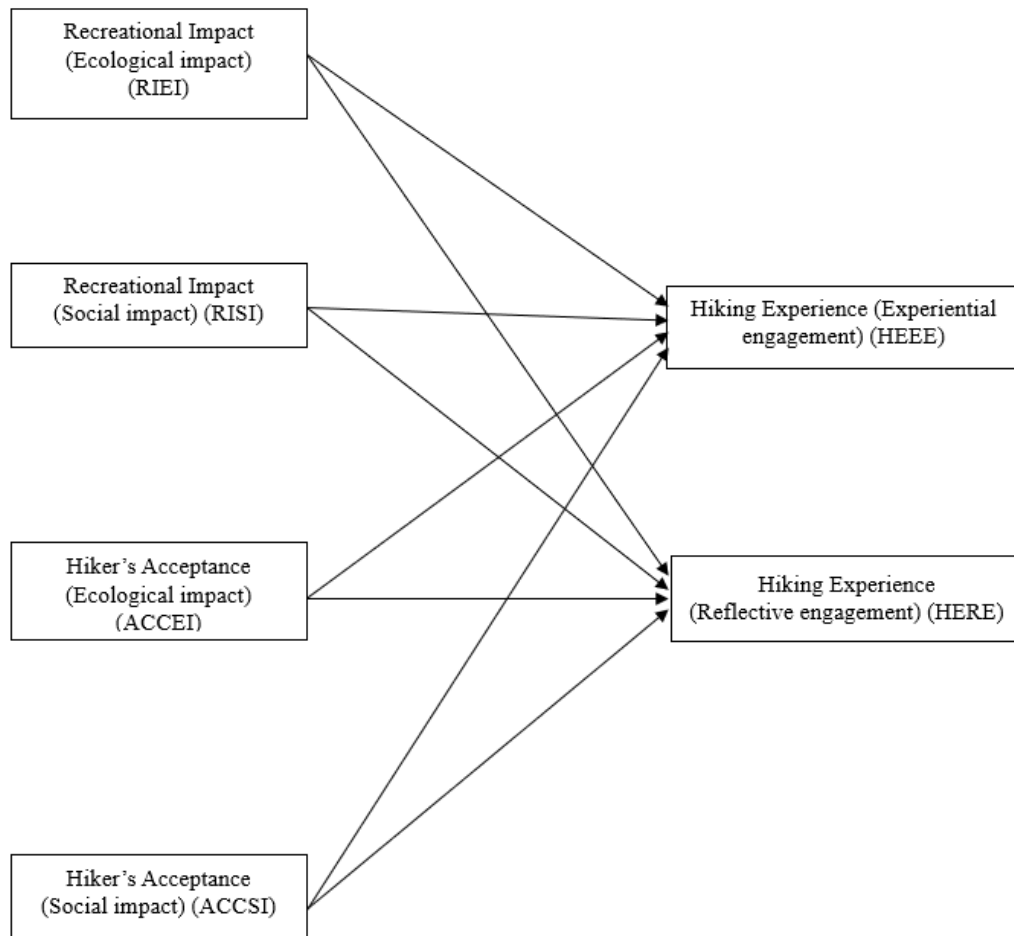


Figure 1. Research framework

RESULTS AND DISCUSSIONS

Respondents' demographic profile

Table 1 shows the demographic profile of the respondents comprising age, gender, highest educational level, and type of employment. Data reported that 37.6% of the respondents were among female hikers, with the remaining 62.4% being male hikers. The majority of respondents were aged 25 to 34 years (38.1%), followed by those aged 35 to 44 years (31.2%), which was only slightly lower. The smallest age group was 55 to 64 years, comprising just 3.7% of the respondents. Quite more than half of the respondents were a degree holder (52.4%) with minority of them possessed PhD (1.1%). Additionally, 101

respondents (53.4%) were employed in the private sector and only four respondents (2.1%) were retired. The highest number of respondents have more than five years of experience (46.6%, 88 respondents) in hiking activity and went to hike at least once a week (50.8%, 96 respondents). About 26.5% of respondents have experienced and climbed more than 25 mountains. The result reveals that a significant portion of the respondents (38.1%, 72 respondents) had only one-time experienced hiking at Gunung Nuang. Only 4.8% reported having hiked at Gunung Nuang between 8 to 10 times. However, a noteworthy 20.1% of respondents indicated having hiked more than 10 times at Gunung Nuang. Previous research suggests that

individuals with greater experience and environmental education are more inclined to develop and promote strong environmental values (Finger, 1994). Furthermore, the respondents indicated that they hiked at Gunung Nuang for leisure and stamina training, with a percentage of 47.1% (89 respondents) and 44.4% (84 respondents), respectively. However, a

prior study has found that health as the most significant reason for their motive to hike in general (Geiger et al., 2023). The respondents also expressed that trail challenge (32.4%, 151 respondents) and self-reward (28.5%, 133 respondents) is the main driving factor for them to go hiking at Gunung Nuang.

Table 1. Respondents' demographic characteristics and hiking background ($n = 191$)

Characteristics	Distribution	Frequency (n)	Percentage (%)
Age	18 to 24 years old	25	13.2
	25 to 34 years old	72	38.1
	35 to 44 years old	59	31.2
	45 to 54 years old	26	13.8
	55 to 64 years old	7	3.7
Gender	Male	118	62.4
	Female	71	37.6
Highest educational level	SPM	26	13.8
	STPM	5	2.6
	Diploma	41	21.7
	Degree	99	52.4
	Master	16	8.5
	PhD	2	1.1
Type of employment	Government	38	20.1
	Private	101	53.4
	Self-employment	20	10.6
	Student	21	11.1
	Non-employee	5	2.6
	Retired	4	2.1
Experience in hiking by year	Less than 1 year	33	17.5
	2 to 5 years	68	36
	More than 5 years	88	46.6
Hiking frequency (general)	Often (at least once a week)	96	50.8

	Sometimes (At least once a month)	60	31.7
	Rarely (Several times a year)	27	14.3
	Seldom (one or twice a year)	6	3.2
Number of mountains climbed	Less than 5 mountains	38	20.1
	6-12 mountains	48	25.4
	13-18 mountains	30	15.9
	19-24 mountains	23	12.2
	More than 25 mountains	50	26.5
Frequency of hiking in Gunung Nuang	Only once	72	38.1
	2 to 4 times	54	28.6
	5 to 7 times	16	8.5
	8 to 10 times	9	4.8
	More than 10 times	38	20.1
Purpose of hiking	Research	2	1.1
	Hiking for leisure	89	47.1
	Hiking for stamina training	84	44.4
	Structured program	4	2.1
Motivation to hike Gunung Nuang	Scenery	71	15.2
	Trail challenge	151	32.4
	Peer influence	46	9.9
	Self-reward	133	28.5
	Accessibility	37	7.9
	Safety	28	6

Assessment of measurement model

Several steps in the reflective measurement model must be performed to evaluate the reliability and validity of the construct measures (Hair et al., 2017). Table 2 presents the reliability of the constructs, including outer loadings, Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE).

The reliability of internal consistency was assessed using Cronbach's alpha and composite reliability. The results indicate that Cronbach's alpha values for all constructs fall within the acceptable and good range, as categorized by Konting et al. (2009). However, Cronbach's alpha has limitations, as it assumes that all indicators contribute equally to reliability. In contrast, PLS-SEM prioritizes indicators based on

their individual reliability (Hair et al., 2017). Therefore, composite reliability was recommended to supplement Cronbach's alpha in evaluating internal consistency. The results show that CR values range from 0.70 to 0.90, which is considered satisfactory, particularly in advanced research stages (Hair et al., 2014, 2017).

Convergent validity was also assessed in this study. According to Hair et al. (2017), convergent validity refers to the extent to which a construct adequately explains the variance of its indicators. It evaluates whether multiple indicators measuring the same theoretical concept exhibit high correlations. To establish convergent validity, outer loadings of the constructs should exceed 0.70 (Hair et al., 2017), and the AVE should be greater than the 0.50

threshold. However, if the CR value exceeds 0.60, the construct is still considered reliable even if the AVE falls below the suggested threshold. Items with outer loadings below 0.60 were removed, except for certain items in RIEI and ACCSI, which were retained for theoretical reasons (Cool et al., 1989).

Low factor loadings may arise due to poorly worded items, the inclusion of inappropriate items, or the improper adaptation of items from one context to another (Hulland, 1999). In this study, the AVE values ranged from 0.403 to 0.298. While two constructs (RIEI and ACCSI) recorded AVE values below the 0.50 threshold, their composite reliability values exceeded 0.70, supporting their overall construct validity.

Table 2. Reliability of the Constructs

Construct	Item	Loading	Cronbach's alpha	CR	AVE
Recreational Impact (Ecological Impact)	RIEI_1	0.399	0.88	0.909	0.403
	RIEI_2	0.703			
	RIEI_3	0.707			
	RIEI_4	0.707			
	RIEI_5	0.624			
	RIEI_6	0.700			
	RIEI_7	0.659			
	RIEI_8	0.683			
	RIEI_9	0.629			
	RIEI_10	0.649			
	RIEI_11	0.651			
	RIEI_12	0.540			
	RIEI_13	0.598			
	RIEI_14	0.593			
	RIEI_15	0.610			
RISI	RISI_1	0.645	0.92	0.937	0.715
	RISI_2	0.806			
	RISI_4	0.895			
	RISI_5	0.926			
	RISI_6	0.912			

RISI_7	0.857			
ACCEI_12	0.797	0.90	0.923	0.602
ACCEI_13	0.771			
ACCEI_14	0.863			
ACCEI_15	0.866			
ACCEI_16	0.642			
ACCEI_24	0.728			
ACCEI_27	0.766			
ACCEI_28	0.751			
ACCSI_1	0.501	0.72	0.706	0.298
ACCSI_2	0.559			
ACCSI_7	0.448			
ACCSI_8	0.445			
ACCSI_10	0.413			
ACCSI_12	0.810			
HEEE_1	0.862	0.89	0.917	0.689
HEEE_3	0.877			
HEEE_4	0.789			
HEEE_5	0.902			
HEEE_6	0.705			
HERE_1	0.829	0.79	0.860	0.607
HERE_2	0.802			
HERE_3	0.666			
HERE_4	0.809			

Furthermore, the HTMT results provide empirical evidence that the constructs are not only theoretically distinct but also statistically differentiable within the model. Discriminant validity is a critical criterion in Partial Least Squares Structural Equation Modeling (PLS-SEM), as it ensures that constructs measure unique theoretical concepts rather than overlapping with one another (Henseler et al., 2015). To further validate discriminant validity, the confidence intervals of the HTMT values were examined through bootstrapping procedures (Table 3). None of the confidence intervals included the value of 1, indicating that the constructs are not

highly correlated and thereby confirming discriminant validity (Voorhees et al., 2016). The findings suggest that the measurement model maintains both conceptual and statistical distinction among constructs, reinforcing the structural integrity of the study's theoretical framework. Given the satisfactory results from the HTMT analysis, the measurement model is considered appropriately specified for further evaluation of the structural model. This enables robust hypothesis testing and path analysis, ensuring the reliability of the study's findings in assessing the recreational impact and hikers' perceptions at Gunung Nuang.

Table 3. Discriminant validity

	ACC EI	ACC SI	HE EE	HE RE	RI EI	RI SI
ACC EI						
ACC SI	0.773					
HE EE	0.164	0.394				
HE RE	0.209	0.347	0.843			
RI EI	0.268	0.254	0.148	0.206		
RI SI	0.203	0.234	0.184	0.216	0.674	

Assessment of structural model

The assessment of the structural model was conducted once the constructs were confirmed to be reliable and valid. Figure 2 shows the path diagram of the research

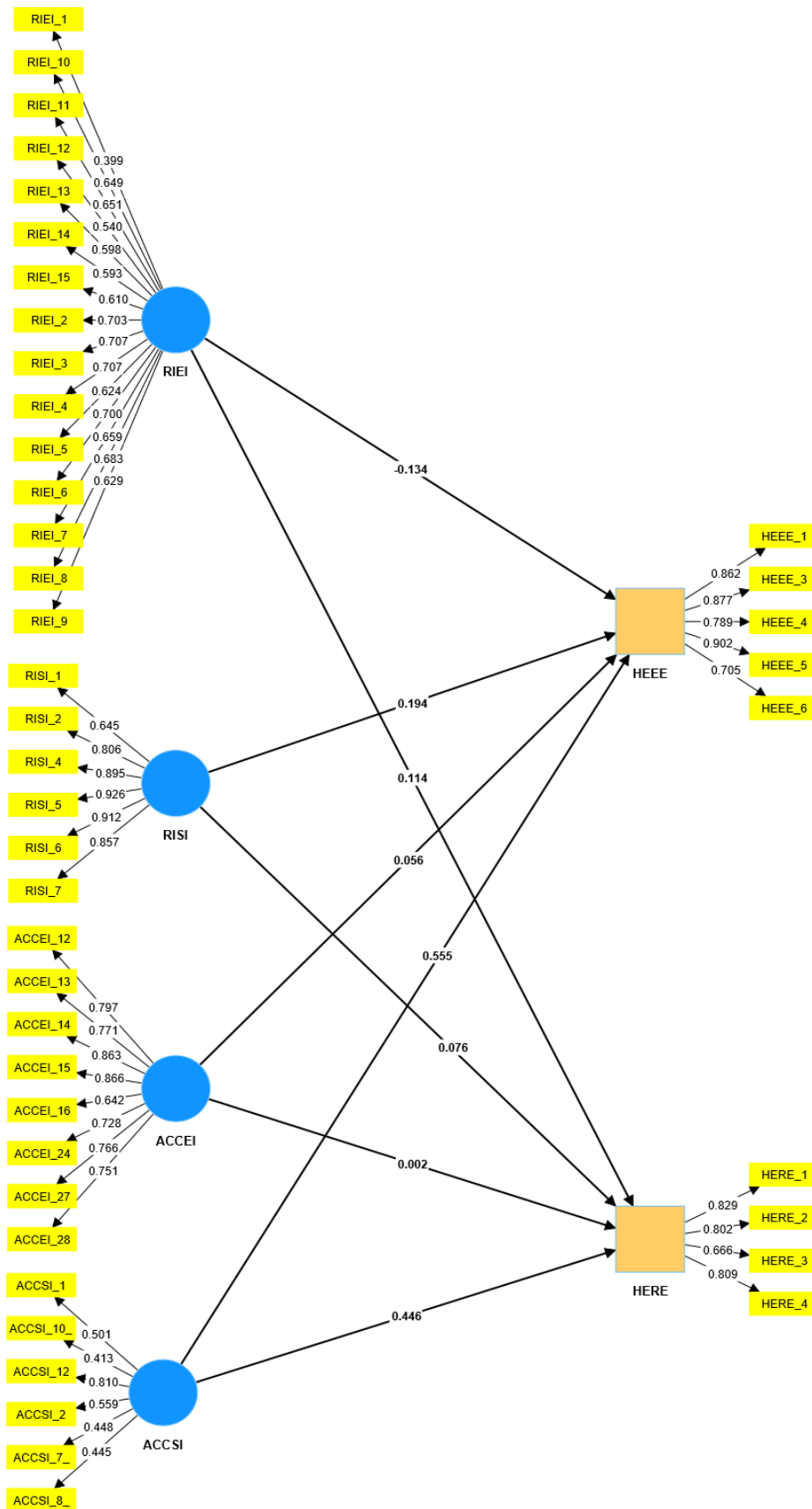


Figure 2. PLS-SEM framework of this research.

The direct relationships in the model were assessed using path coefficients. The bootstrapping method was employed to analyse all constructs, ensuring robust statistical validation. A total of eight hypotheses were tested, of which three were found to be statistically significant and supported ($p < 0.001$). As shown in Table 4, Hypothesis 3, Hypothesis 7, and Hypothesis 8 were supported by the results. Both Hypothesis 3 and Hypothesis 7 share the same dependent construct, namely experiential engagement in hiking experience (HEEE). Specifically, Hypothesis 3 examined the direct relationship between social impacts (RISI) and experiential engagement (HEEE) ($\beta =$

0.194; $t = 2.209$; $p = 0.027$), indicating a statistically significant positive effect. Meanwhile, Hypothesis 7 focused on the direct relationship between social impact on hikers' acceptance (ACCSI) and experiential engagement (HEEE) ($\beta = 0.555$; $t = 7.658$; $p = 0.000$), demonstrating a strong and significant association. Additionally, Hypothesis 8 examined the direct relationship between social impact on hikers' acceptance (ACCSI) and reflective engagement (HERE). The results confirmed a statistically significant positive effect ($\beta = 0.446$; $t = 5.914$; $p = 0.000$), further supporting the hypothesized relationship.

Table 4. Direct Relationships Hypotheses Testing

Hypotheses	Beta	t-values	p-values	Decision
RIEI->HEEE	-0.134	1.079	0.281	Not supported
RIEI->HERE	0.114	1.019	0.308	Not supported
RISI->HEEE	0.194	2.209	0.027	Supported
RISI->HERE	0.076	0.918	0.359	Not supported
ACCEI->HEEE	0.056	0.630	0.530	Not supported
ACCEI->HERE	0.002	0.024	0.981	Not supported
ACCSI->HEEE	0.555	7.658	0.000	Supported
ACCSI->HERE	0.446	5.914	0.000	Supported

Note: RIEI = Ecological Impact (Recreational Impact); RISI = Social Impact (Recreational Impact); ACCEI = Ecological Impact (Acceptance); ACCSI = Social Impact (Acceptance); HEEE = Experiential Engagement (Hiking Experience); HERE = Reflective Engagement (Hiking Experience)

Table 5 presents the results for goodness of fit (GoF), a crucial metric for evaluating how well statistical models fit observed data. GoF assessments play a vital role in hypothesis testing for both discrete and continuous data (Maydeu-Olivares & García-Forero, 2010). The GoF value obtained in this study is 0.40, indicating a substantial level of model fit. This result confirms the validity and relevance of the structural model, supporting its applicability in the context of this research.

Table 5. Goodness of fit

Construct	AVE	R ²
ACCEI	0.60	
ACCSI	0.30	
RIEI	0.40	
RISI	0.72	
HEEE	0.69	0.33
HERE	0.61	0.24
Average	0.55	0.29
Average AVE * Average R ²		0.16
GoF = $\sqrt{\text{Average AVE} * \text{Average R}^2}$		0.40

The rising popularity of hiking activities has sparked concerns regarding their impact on natural resources. This study, conducted at the beautiful Gunung Nuang via Pangsun, aimed to examine the relationship between recreational impact and hikers' acceptance of their hiking experiences. The findings offer valuable insights into the factors that significantly influence hikers' overall experiences.

The result revealed that social impacts have a significant influence on both experiential engagement and reflective engagement in the hiking experience. Notably, hikers' acceptance of these social impacts markedly affects both forms of engagement. Conversely, the social effects associated with recreational impact only influence experiential engagement. Furthermore, the results show that ecological impacts related to recreation and acceptance do not affect the hiking experience at Gunung Nuang. The findings align with a prior study by Vistad (2003), which indicated that people generally show

greater tolerance for ecological impacts than for social ones, particularly when examining real-world issues like littering. Additionally, the hiking experience can differ widely from one person to another, as each hiker has unique preferences and perspectives.

According to Farrell et al. (2001), an individual's response to environmental impacts is often shaped by their prior wilderness experiences, personal objectives, and the perspectives of their peers. This idea is bolstered by previous research suggesting that a majority of visitors view the presence of others on the trail as a negative aspect; however, some may have a more positive interpretation (Dorwart et al., 2009). Hikers with a negative perception frequently cite issues such as others attempting to pass them, a lack of personal space, and an invasion of privacy. In addition to these social effects and conflicts with fellow users, environmental factors such as tree damage (for instance, carvings) and littering

significantly impact the wilderness experience (Roggenbuck et al., 1993). Hikers tend to focus primarily on human-related conditions like litter rather than on problems such as soil compaction (Stankey, 1973). Notably, around 90% of respondents indicated that litter reduces their sense of solitude (Lynn & Brown, 2003). This observation is closely related to the concept of experiential engagement, which refers to an individual's personal involvement with an activity or experience in a specific environment.

Reflective engagement in hiking experiences highlights both emotional connections and environmental awareness, particularly the feelings of sadness associated with environmental or recreational impacts (Ballantyne et al., 2011). This introspection enables hikers to process their emotions regarding these impacts, ultimately enhancing their appreciation for nature and their own personal growth. Previous research indicates that intentions to revisit arise when individuals view their hiking experiences as extraordinary and find the trail features appealing (Mohd Taher et al., 2015). In this study, 2% of respondents reported hiking Gunung Nuang multiple times, with visit frequencies ranging from at least twice to over ten times. However, their motivation to return was primarily driven by the challenges presented by the trail, rather than worries about ecological impacts. Instead, these impacts were perceived as an inherent aspect of the challenges faced at Gunung Nuang via Pangsun. This perspective contributes to a deeper understanding of the interaction between human activities and environmental conditions.

It is crucial to address recreational impacts and implement measures such as carrying capacity planning to ensure that Gunung Nuang via Pangsun can support activities over the long term. While this study offers valuable insights, it is important to acknowledge certain limitations. For instance, it primarily assesses hiking experience through experiential and reflective engagement. Future research should aim to provide a more comprehensive understanding of hiking experiences. Additionally, this study focuses on a single hiking destination, Gunung Nuang via Pangsun, specifically examining the trail from Kem Lolo to the mountain's peak. Expanding the research to include a variety of hiking locations in Malaysia could enhance the understanding of recreational impacts and hiker acceptance, while also providing valuable comparative insights. For a managerial context, both stakeholders and hikers play essential roles in preserving environmental resources. Hikers should strive to develop a deep understanding of the ecological and social repercussions of their activities, as both aspects are critical and warrant careful consideration. Similarly, stakeholders must be well-versed in the decision-making processes related to resource planning and management. Striking a balance between enjoying the hiking experience and minimizing its impact on the natural environment is vital to ensuring that both the environment and the hiking experience are preserved for future enjoyment.

CONCLUSION

This study explored the relationship between recreational impacts and hikers' acceptance of their hiking experiences at Gunung Nuang. The findings indicated that

social impacts significantly influence experiential engagement, while the acceptance of these social impacts also plays a crucial role in shaping the overall hiking experience, encompassing both experiential and reflective engagement. Hikers tend to exhibit greater tolerance for ecological impacts than for social ones, such as conflicts with other users and issues stemming from inappropriate behavior. This tendency may arise from a lack of awareness and concern among hikers regarding recreational impacts. The implications of these findings underscore the importance of hikers enhancing their awareness of recreational impacts and adopting low-impact practices. The insights obtained can assist stakeholders in formulating guidelines for educational and awareness programs. Furthermore, these results can serve as a valuable reference for stakeholders in the effective management and planning of recreational resources.

ACKNOWLEDGEMENT

The authors wish to express their gratitude to the Forestry Department of Peninsular Malaysia and all respondents who contributed to the research process. Additionally, we extend our appreciation to the reviewers for their invaluable feedback, which significantly enhanced the quality of the manuscript.

CONFLICT OF INTEREST

There is no conflict of interest .

AUTHOR CONTRIBUTION STATEMENTS

Nurfarhana Khairi (Conceptualization, data collection, analysis, writing), Azita Ahmad Zawawi (Conceptualization, project administration, research design, writing, review), Azlyn Ahmad Zawawi (Data analysis, result interpretation, writing, review).

REFERENCES

Ballantyne, R., Packer, J., & Falk, J. (2011). Visitors' learning for environmental sustainability: Testing short- and long-term impacts of wildlife tourism experiences using structural equation modelling. *Tourism Management*, 32(6), 1243–1252.

Bookhari, S. N., Hashim, Z., Khalid, M. M., & Jamaludin, M. A. (2022). The Insides of Outdoor Recreation Users towards Recreation Resource Impacts at Taman Negara Pahang, Kuala Tahan. In *IOP Conference Series: Earth and Environmental Science*, 1019(1): 012040. IOP Publishing.

Buckley, R. (1991). Environmental Impacts of Recreation in Parks and Reserves. In: *Perspectives in Environmental Management*. Springer, Berlin, Heidelberg.

Busse, M., & Siebert, R. (2018). Acceptance studies in the field of land use—a critical and systematic review to advance the conceptualization of acceptance and acceptability. *Land Use Policy*, 76, 235–245.

Cole, D. N. (2004). Environmental impacts of outdoor recreation in wildlands. *Society and resource management: A summary of knowledge*, 107-116.

Coon T. J., Boddy K., Stein K., Whear R., Barton J., Depledge M.H. (2011) Does Participating in Physical Activity in

- Outdoor Natural Environments Have a Greater Effect on Physical and Mental Wellbeing than Physical Activity Indoors? A Systematic Review. *Environmental Science and Technology*, 45,1761–1772.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th ed.). SAGE Publications.
- Dorwart, C. E., Moore, R. L., & Leung, Y.-F. (2009). Visitors' perceptions of a trail environment and effects on experiences: A model for nature-based recreation experiences. *Leisure Sciences*, 32(1), 33–54.
- Dunlap, R. E., & Heffernan, R. B. (1975). Outdoor Recreation and Environmental Concern: An Empirical Examination. *Rural Sociology*, 40, 19-30.
- Eigenschenk, B, Thomann, A, McClure, M, Davies, L, Gregory, M, Dettweiler, U, Inglés, E. (2019). Benefits of Outdoor Sports for Society. A Systematic Literature Review and Reflections on Evidence. *International Joournal of Research and Public* , 16 (6), 937
- Farrell, T., Hall, T. E., & White, D. D. (2001). Wilderness Campers' perception and evaluation of campsite impacts. *Journal of Leisure Research*, 33(3), 229–250.
- Finger, M. (1994). From knowledge to action? exploring the relationships between environmental experiences, learning, and behavior. *Journal of Social Issues*, 50(3), 141–160.
- Floyd, M. F., Jang, H., & Noe, F. P. (1997). The relationship between environmental concern and acceptability of environmental impacts among visitors to two U.S. National Park Settings. *Journal of Environmental Management*, 51(4), 391–412.
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185-214.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). A primer on partial least squares structural equation modeling (PLS-SEM). Thousand Oaks, CA: Sage.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). Thousand Oaks, CA: Sage.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (3rd ed.). SAGE Publications.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2022). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)., 3rd Ed., Thousand Oakes, CA: Sage.
- Hairom, N. (2020). Pendaki bukan sekadar jadi pelancong gunung. Analisis Sinar, 1–7. <https://www.sinarharian.com.my/article/61373/Analisis-Sinar/Pendaki-bukan-sekadar-jadi-pelancong-gunung>
- Hulland, J. (1999). Use of partial least squares (PLS) in Strategic Management Research: A review of four recent studies. *Strategic Management Journal*, 20(2), 195–204.
- Kline, R. B. (2015). Principles and practice of structural equation modeling. Guilford Publications.

- Konting, M. M., Kamaruddin, N., & Man, N. A. (2009). Quality Assurance in Higher Education Institutions: Exist Survey among Universiti Putra Malaysia Graduating Students. *International Education Studies*, 2(1), 25-31
- Leung, Yu-Fai & Marion, Jeffrey. (2000). Recreation Impacts and Management in Wilderness: A State-of-Knowledge Review.
- Lucke, D. (1995) Akzeptanz. Legitimität in der Abstimmungsgesellschaft Leske Budrich, Opladen
- Lynn, N. A., & Brown, R. D. (2003). Effects of recreational use impacts on hiking experiences in natural areas. *Landscape and Urban Planning*, 64 (1-2), 77–87.
- Maydeu-Olivares, A., & García-Forero, C. (2010). Goodness-of-Fit Testing. 190-196.
- Mohd Taher, S. H., Jamal, S. A., Sumarjan, N., & Aminudin, N. (2015). Examining the structural relations among hikers' assessment of pull-factors, satisfaction and revisit intentions: The case of mountain tourism in Malaysia. *Journal of Outdoor Recreation and Tourism*, 12, 82–88.
- Monz, C. A., Cole, D. N., Leung, Y. F., & Marion, J. L. (2010). Sustaining visitor use in protected areas: future opportunities in recreation ecology research based on the USA experience. *Environmental management*, 45(3), 551-562.
- Moore, R. L., & Driver, B. L. (2005). *Introduction to outdoor recreation: Providing and managing natural resource-based opportunities*. Venture Pub.
- Nordbø, I., & Prebensen, N. (2015). Hiking as Mental and Physical Experience. Ingeborg M. Nordbø and Nina K. Prebensen er godkjent for publisering in *Advances in Hospitality and Leisure*, 11, 169-186
- Nordin, M. R., & Jamal, S. A. (2021). Hiking Tourism in Malaysia: Origins, Benefits and Post Covid-19 Transformations. *International Journal of Academic Research in Business and Social Sciences*, 11(13), 88–100.
- Poulsson, S. H. G., & Kale, S. H. (2004). The experience economy and commercial experiences. *The Marketing Review*, 4, 267 277.
- Roggenbuck, J. W., Williams, D. R., & Watson, A. E. (1993). Defining acceptable conditions in wilderness. *Environmental Management*, 17(2), 187–197.
- Tynan, C., & McKechnie, S. (2009). Experience marketing: A review and reassessment. *Journal of Marketing Management*, 25(5–6), 501–517.
- Unjah, T., Yusry, M., & Simon, N. (2021). Identification and characterization of geoheritage resources at Hulu Langat, Selangor. *Bulletin of The Geological Society of Malaysia*, 72, 191–204.
- Rosenthal, J., Booth, R., Carolan, N., Clarke, O., Curnew, J., Hammond, C., Jenkins, J., McGee, E., Moody, B., Roman, J., Rossi, K., Schaefer, K., Stanley, M., Ward, E., Weber, L (2022). The impact of recreational activities on species at risk in Canada. *Journal of Outdoor Recreation and Tourism* 40,100567
- Schenk, A., Hunziker, M., & Kienast, F. (2007). Factors influencing the acceptance of nature conservation measures—a qualitative study in Switzerland. *Journal of Environmental Management*, 83(1), 66–79.

Stankey, G. H. (1973a). Visitor perception of wilderness recreation carrying capacity. Intermountain Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture.

Svarstad. (2010). Why Hiking? Rationality and Reflexivity Within Three Categories of Meaning Construction. *Journal of Leisure Research*. 42. 91-110.

Yukic. T. S. (1970) Fundamentals of Recreation. 2nd edn, New York, Harper & Row, p. 5.

Vistad, O. I. (2003). Experience and management of recreational impact on the ground – a study among visitors and managers. *Journal for Nature Conservation*, 11(4), 363–369.

Weng, L., Zhu, Y., Xu, X., Yang, J., Zheng, S., Liu, H., Wang, H., & Zhu, L. (2022). The influence of visitors' recreation experience and environmental attitude on environmentally responsible behavior: A case study of an urban forest park, China. *Forests*, 14(1), 24.

White, D. D., Virden, R. J., & Van Riper, C. J. (2008). Effects of place identity, place dependence, and experience-use history on perceptions of recreation impacts in a natural setting. *Environmental Management*, 42(4), 647–657.

Zawawi, A.A., Hamid, A.H., Hamzah, M.Z., Salleh, M.N., Mohd-Nazre., & Hassan-Zaki, P. (2009). Impacts of recreation activities on growth and physiological characteristics of upper mountain vegetation. *Journal of Sustainable Development* 2 (2), 114-119

MALAYSIAN JOURNAL OF HUMAN ECOLOGY

Journal Homepage: https://eco1.upm.edu.my/malaysian_journal_of_human_ecology_mjhe-3740

NURTURING THE HEART, BUILDING THE UMMAH: THE 3As MODEL AND COMMUNIVERSITY IN PRACTICE

Ratna Roshida Ab Razak^{1,*} Zainal Abidin Sanusi²

¹Faculty of Human Ecology, Universiti Putra Malaysia, 43400, Seri Kembangan, Selangor, Malaysia.

²Sejahtera Centre for Sustainability and Humanity, International Islamic University Malaysia.

ABSTRACT

Contemporary higher education increasingly prioritizes technical competencies and market-driven outcomes, often resulting in the fragmentation of cognitive learning from ethical formation, spiritual development, and community engagement. This disconnection has contributed to crises of meaning, moral disorientation, and a weakening of social responsibility among graduates. The challenge is particularly significant within Muslim-majority contexts, where education is expected to cultivate both intellectual excellence and character grounded in spiritual and communal values.

This study aims to examine the 3As Model (Awareness–Awaken–Action) as a heart-centered educational framework and to explore its practical implementation through the Communiversity initiative at the International Islamic University Malaysia (IIUM), specifically via the mandatory course Usrah in Action. Anchored in Islamic pedagogy, human ecology, and transformative learning theory, the 3As Model conceptualizes education as an integrative journey that connects critical awareness, moral and spiritual awakening, and value-driven action.

Using an exploratory qualitative approach, data were collected from reflective responses of 50 engineering graduates who participated in the course. The data were thematically analyzed and organized according to the three dimensions of the 3As Model to examine students' cognitive, affective, and practical learning outcomes.

The findings indicate that the course effectively fostered a multidimensional awareness of social, ethical, and environmental issues; facilitated the development of values such as compassion, responsibility, and integrity; and enabled students to translate their learning into concrete, community-based actions. These results demonstrate the applicability of the 3As Model as an operational framework that integrates intellect, heart, and praxis within higher education.

This study contributes to the existing literature by offering an empirically informed Islamic educational framework that bridges transformative learning, human ecology, and community engagement. It further

¹Corresponding author:

Ratna Roshida Abdul Razak

Email:ratna_razak@upm.edu.my

positions the 3As-driven Communiversity model as a viable approach for nurturing holistic graduates and strengthening ummah-building efforts in the context of sustainable higher education.

Keywords: 3As Model; Communiversity; Islamic pedagogy; human ecology; transformative education;

INTRODUCTION

Higher education is currently at a pivotal moment. One side is influenced by global dynamics, rapid technological advancements, artificial intelligence, and market demands, which urge universities to act as production centers for credentials and job-ready graduates. Conversely, the fundamental aim of education, as envisioned by various cultures, advocates for the development of well-rounded individuals equipped with wisdom, compassion, and a sense of service. The clash between these two perspectives has led to what Syed Muhammad Naquib al-Attas (1991) referred to as the loss of *adab*: the separation of knowledge from its true purpose and hierarchy, confusing personal, social, and even civilizational contexts.

In the case of Malaysia, as with many Muslim societies, this issue is especially pressing. The process of building a nation cannot rely solely on technical skills; it necessitates the cultivation of the heart, the restoration of meaning, and the incorporation of education within a moral and spiritual framework. In light of globalization, environmental emergencies, and social disintegration, there is an urgent requirement for educational systems that harmonize intellect with spirituality, knowledge with ethics, and theory with practice. Conventional education models,

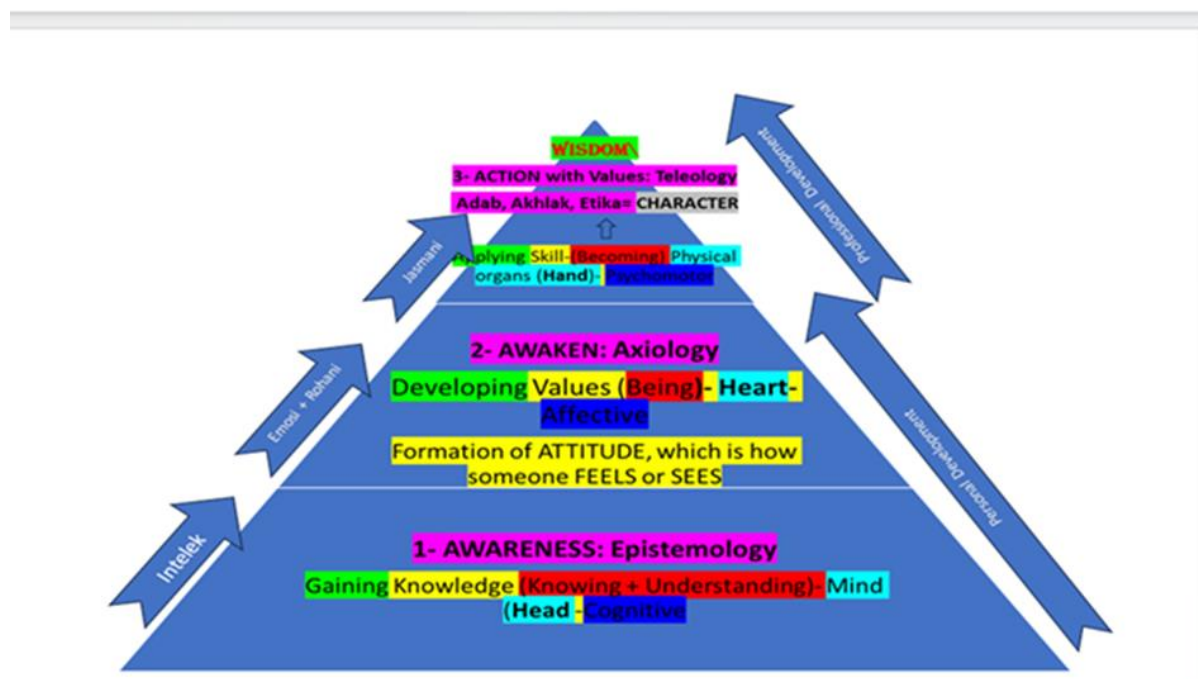
especially those shaped by Western secular thought, have predominantly focused on the cognitive aspects of learning. Theories like Mezirow's transformative learning highlight the importance of critical reflection, while Kohlberg's moral development theory centers on logic-based moral reasoning. Although these frameworks offer useful insights, they are primarily cognitive and centered on the individual. They do not adequately address the heart, the inner self, or the communal aspects of human wellbeing. At the same time, Islamic traditions of education, rich with concepts such as *tazkiyatun nafs* (purification of the soul), *adab* (discipline of the self), and *'ilm al-'umran* (the science of human society, per Ibn Khaldun), are often sidelined in contemporary educational practice. These traditions emphasize the integration of knowledge, spirituality, and social responsibility, but are rarely translated into frameworks that can dialogue with modern educational theory and practice. This fragmentation leaves students suspended between technical mastery and moral confusion, between professional success and spiritual emptiness.

In this pressing educational environment, the 3As Model (Awareness, Awaken, Action) alongside the vision of Communiversity stands out as a crucial framework for renewal. The 3As Model

starts with Awareness, aiding learners in grasping the knowledge shared by their instructors while encouraging them to pause, reflect, and acknowledge the truths within themselves and their communities. This is succeeded by Awaken, where a more profound stirring of conscience and heart occurs, linking knowledge with significance, faith, and moral intent. Lastly, Action translates this transformation into practical experience, allowing learners to embody values through service, problem-solving, and ethical leadership. At the International Islamic University Malaysia (IIUM), this integration is tangibly realized through 'Usrah in Action', a mandatory

course for all students and a key platform through which the concept of Communiversity is put into practice. In this setting, the university transcends its traditional role and acts as an engaged partner with the community, collaboratively generating knowledge, fostering resilience, and tackling genuine societal issues. Together, the 3As and Communiversity, as expressed through 'Usrah in Action', provide a cohesive path to cultivate the heart, align education with life's greater purposes, and reconstruct the ummah on the principles of wisdom, compassion, and active involvement.

The 3As Model: A Framework for Integration



The 3 Triad Model of 3As

The 3As Model: Awareness, Awaken, Action, introduced by Ratna (2023), emerges as a solution to fragmentation in education. This model, crafted by reflecting on Qur'anic teachings and modern educational discussions, positions learning as a comprehensive journey. Awareness encompasses the cognitive and critical aspects, wherein learners engage the intellect to gain understanding and knowledge, while also acknowledging their inner emotions, assumptions, and social contexts (*tafakkur*). Awaken pertains to the moral and spiritual aspects, where the emotions are stirred and values like compassion, integrity, and justice become ingrained (*tadabbur*). Action involves the practical and ethical components, where knowledge and values are practiced in real-life actions and service (*'amal ṣāliḥ*).

This model transcends theory by providing a practical framework for educators to design curricula, for students to participate in transformative learning, and for institutions to connect their missions with both local values and global issues. Importantly, it aligns with the Qur'anic goal of cultivating *ulu al-albāb*, individuals who integrate sound reasoning with pure hearts.

LITERATURE REVIEW

Islamic Philosophy of Education: Integrating Heart, Intellect, and Society

Islamic educational philosophy has consistently emphasized the holistic development of the human being, integrating intellect (*'aql*), heart (*qalb*), and ethical action (*'amal*). Knowledge (*'ilm*) in Islam is not value-neutral; rather, it is

intrinsically connected to moral responsibility and spiritual refinement (tazkiyat al-nafs). Classical scholars such as al-Ghazālī argued that the ultimate purpose of knowledge is the purification of the heart and nearness to God, warning against forms of learning that inflate the ego without cultivating virtue. Similarly, Syed Muhammad Naquib al-Attas conceptualized education as the process of instilling adab, understood as the recognition and proper ordering of knowledge, self, and society.

From a civilizational perspective, Ibn Khaldūn expanded the scope of education beyond individual piety to include social cohesion and collective well-being through his concept of ‘ilm al-‘umrān. Human beings, as inherently social entities, require educational processes that connect intellectual development with communal responsibility. Contemporary Islamic scholars, notably Malik Badri, have revived this integrative vision by critiquing the secularization of psychology and education, arguing that neglecting the spiritual dimension produces incomplete understandings of the human self. Collectively, these perspectives establish a robust philosophical foundation for educational models that unite cognition, spirituality, and social responsibility.

Transformative Learning and Moral Development in Western Scholarship

Within Western educational thought, transformative learning theory has significantly influenced adult and higher education. Mezirow’s theory highlights critical reflection as a mechanism for perspective transformation, enabling learners to reassess assumptions and

reconstruct meaning. While influential, this approach has been widely critiqued for its heavy emphasis on rational-cognitive processes and its limited engagement with emotions, spirituality, and communal dimensions of learning.

Similarly, Kohlberg’s theory of moral development prioritizes rational moral reasoning structured around justice-based principles. Although foundational in moral psychology, it has been criticized for cultural bias and for marginalizing relational, care-based, and spiritual ethics. In response, scholars such as Dirkx, Cranton, and Illeris have expanded transformative learning to include affective, imaginative, and relational dimensions. Recent advances in moral psychology and neurobiology further emphasize that moral development is embodied, emotional, and relational, resonating with long-standing Islamic insights that ethical behavior is rooted in the heart as much as in reason. Nevertheless, Western frameworks continue to struggle to articulate learning in relation to transcendent meaning or spiritual purpose.

Human Ecology, Sustainability, and Community-Engaged Education

Human ecology provides an interdisciplinary lens for examining the interconnected relationships between individuals, communities, and their socio-environmental systems. It promotes systems thinking and highlights the interdependence of human and ecological well-being. Within education, this perspective is reflected in global movements such as Education for Sustainable Development, which

emphasizes values, competencies, and responsible action. However, human ecology and sustainability education are often framed in secular and technocratic terms, leaving ethical and spiritual motivations under-theorized.

Community-engaged learning and university–community partnerships have emerged as responses to this limitation, seeking to bridge academic knowledge with societal needs. The Communiversity approach exemplifies this shift by emphasizing reciprocal partnerships, co-creation of knowledge, and long-term social impact. In the Malaysian context, IIUM’s Communiversity initiative represents a deliberate move away from ranking-driven models of higher education toward values-based engagement aligned with societal well-being and sustainability.

Research Gap and Contribution of the Current Study

The literature reveals several important gaps. First, while Islamic educational philosophy offers rich conceptual resources for integrating intellect, spirituality, and ethics, these principles are seldom operationalized into structured pedagogical frameworks that can be empirically examined within contemporary higher education. Second, Western transformative learning and moral development theories provide systematic models of learning and change but often marginalize spiritual purpose and communal responsibility. Third, although human ecology and Communiversity initiatives highlight interconnectedness and community engagement, they frequently lack an explicit moral and spiritual framework to guide educational practice.

This study addresses these gaps by proposing and empirically illustrating the 3As Model (Awareness–Awaken–Action) as a heart-centered educational framework grounded in Islamic epistemology while remaining dialogical with transformative learning and human ecology. By examining its implementation through the Communiversity-based course *Usrah in Action*, the study contributes an integrative model that systematically connects cognitive awareness, spiritual and moral awakening, and value-driven action. In doing so, it extends existing scholarship by offering a culturally grounded yet transferable framework for rethinking higher education as a holistic, community-engaged, and ethically anchored enterprise.

Transformative Learning and Moral Development in Western Thought

In parallel to Islamic educational thought, Western theories on education have sparked significant discussions around transformative learning and moral growth. Jack Mezirow’s (2000) theory of transformative learning identifies critical reflection as fundamental to adult education. Learners experience a shift in perspective by examining their assumptions and reconstructing their understanding of the world. Although this method has greatly influenced higher education, it is largely cognitive and rational, often overlooking emotional, spiritual, and communal aspects.

Lawrence Kohlberg’s (1981) stages of moral development similarly emphasize rational moral reasoning, progressing from obedience and conformity to universal ethical principles. This framework has advanced moral psychology; however, it

has faced criticism for cultural partiality, overemphasizing justice reasoning, and disregarding relational and spiritual ethics (Narvaez, 2019). Scholars like Dirkx (2012) and Cranton (2016) have advocated for a more holistic perspective, acknowledging the significance of affect, imagination, and spirituality in transformative learning. Emerging findings in neurobiology and moral psychology (Narvaez, 2019) underscore the embodied and relational aspects of moral reasoning, aligning with enduring insights from Islam that the heart plays a crucial role in ethical behavior. Likewise, Illeris (2014) broadens the transformative learning theory by incorporating cognitive, emotional, and social elements. Despite these advancements, Western theories still often struggle to connect learning with higher or spiritual goals, revealing a conceptual gap that Islamic pedagogy can effectively bridge.

Human Ecology and the Search for Holistic Frameworks

Human ecology is an interdisciplinary domain that examines the relationships between humans and their natural, social, cultural, and increasingly technological environments. Its strength is in promoting systems thinking and emphasizing interconnectedness (Folke et al., 2016). Nevertheless, in its common representations, human ecology often remains technical and descriptive, typically missing a clear spiritual or ethical foundation. The Education for Sustainable Development Goals by UNESCO (2017) encourages learners to develop mindsets, values, and skills related to sustainability. Although these approaches are beneficial, they are primarily presented in secular

language, without addressing the profound existential and spiritual aspects that inspire ethical responsibility. This is where the Islamic educational philosophy and the 3As Model can enhance human ecology by integrating awareness, values, and actions into a higher moral framework.

The Communiversality Approach in Malaysia

The idea of Communiversality (community + university), introduced by IIUM in 2023, embodies the partnership between universities and local communities rather than just a process of outreach; it emphasizes shared advantages such as applied research and social services. This concept illustrates the collaborative interactions between educational institutions and their adjacent communities. (Coper, 2014) It signifies more than mere outreach or extension; it embodies a reciprocal partnership in generating knowledge and solving problems. Communiversality initiatives bring together academic expertise and the lived experiences of community members to jointly develop solutions for social, emotional, economic, and civic issues. Such collaboration necessitates a long-term commitment, trust-building efforts, and respect across generations. In Malaysia, the International Islamic University Malaysia (IIUM) initiated its community-university project in 2018, consciously shifting focus away from global rankings and league tables that often reflect a WEIRD (Western, Educated, Industrialized, Rich, Democratic) model of higher education. Instead, IIUM aimed to realize the Sustainable Development Goals (SDGs) through "living laboratories," where students actively collaborate with

communities to co-create sustainable solutions. This model positions the university as a collaborator in promoting both human and ecological well-being rather than as a remote authority on knowledge (MacGregor, 2023).

The Communiversity framework, which underscores the collaborative creation of knowledge between universities and their surrounding communities, strongly aligns with the 3As Model. Both approaches reject the idea of education as a one-way transfer of knowledge. Instead, they emphasize education as a transformative, heart-centered journey rooted in values, relationships, and purposeful action.

In the Awareness stage, students and faculty foster an understanding of community issues, becoming aware of urgent concerns such as poverty, environmental harm, mental health struggles, and social inequality. This phase corresponds with the Communiversity's priority on attuning to and comprehending local needs instead of imposing solutions from outside. The Awaken stage signifies a more profound transformation of the heart and values.

Engaging with communities transcends being just a technical endeavor; it embodies a spiritual and ethical dimension that nurtures empathy, compassion (rahmah), integrity, and a collective sense of purpose. In this context, students and scholars start to embrace Heart-Centred Spirituality (HCS) as their guiding moral framework for engagement, ensuring that collaborations are rooted in sincerity, humility, and justice (adl). Ultimately, the Action stage transforms awareness and enlightenment into tangible initiatives. This

is where the vision of Communiversity becomes a reality: collaboratively creating projects focused on sustainable agriculture, health enhancement, emotional well-being, and economic empowerment. These activities, anchored in values, allow universities to truly act as catalysts for nation-building and societal change.

Through Communiversity initiatives, students and faculty directly tackle issues within local communities such as environmental protection, social entrepreneurship, health, and cultural conservation. These initiatives raise awareness of pressing real-world challenges, nurture appreciation for shared values like compassion (rahmah) and justice ('adl), and motivate action through collaborative solutions. This aligns with the structure of the 3As Model, allowing Communiversity to serve as a practical testing ground for these principles. By framing the university as a collaborator in human ecology rather than a distant ivory tower, Communiversity echoes Ibn Khaldun's perspective of knowledge as socially interconnected and Freire's (1970) concept of conscientization in education. It integrates intellectual exploration, value development, and hands-on involvement, thereby presenting a Malaysian innovation with implications on a global scale.

The Conceptual Gap: From Fragmentation to Integration

Although both Islamic and Western traditions have their strengths, and initiatives like Communiversity hold promise, there persists a notable conceptual disparity. Western educational theories provide structured frameworks for learning and moral development, but frequently

overlook spirituality and emotional aspects. On the other hand, Islamic traditions prioritize spirituality and ethics, yet they are infrequently translated into contemporary educational models. Human ecology highlights the concept of interdependence, but it may risk maintaining a neutral stance on values.

The 3As Model aims to bridge this divide by merging the strengths of these traditions into a cohesive, practical, and spiritually-centered framework. It is in harmony with Qur'anic pedagogy, including *tilāwah* (recitation), *tafakkur* (reflection), *tadabbur* (deep contemplation), and *'amal* (action), while also incorporating transformative learning theory, moral psychology, and ecological perspectives. In this way, it serves as both a conceptual link and a practical instrument for rethinking higher education in Malaysia and beyond.

The analysis indicates that although there are rich traditions in educational philosophy within both Islamic and Western frameworks, a degree of fragmentation remains. Education tends to be confined to cognitive aspects, often separated from emotional engagement and practical application. While human ecology highlights the importance of interconnectedness, it frequently lacks a guiding ethical framework. Communiversity offers a hopeful approach, yet it needs a more robust theoretical foundation to fully realize its transformative capabilities. The 3As Model tackles these challenges by presenting a structured progression from awareness (cognition) to awakening (values) to action (practice). It integrates intellect and

emotion, theory and practice, as well as university and community dynamics. By doing so, it not only facilitates the advancement of Islamic education discourse but also enriches global discussions on transformative learning, sustainability, and human ecology.

METHODOLOGY

This study involved a group of 50 engineering graduates, primarily aiming for exploratory insights rather than definitive conclusions. The limited sample was selected to offer initial perspectives on how the 'Usrah in Action' course implements the 3As Model and the Communiversity framework specific to the IIUM environment. Consequently, the research focused on capturing qualitative depth instead of aiming for statistical representativeness. To ensure clarity and rigor, the responses from students were analyzed thematically and classified into the three aspects of the 3As Model (Awareness, Awaken, and Action). In this exploratory research, the results were thematically categorized according to the three components of the 3As Model (Awareness, Awaken, and Action). Although the themes are not displayed in a tabular form, this organization provides a structured approach to understanding student feedback and demonstrates the model's practical application. Given the small number of participants, the findings should be considered initial, indicating pathways for further investigation with larger participant groups and mixed-method strategies.

In keeping with the 3As Model, the questions were structured into three thematic stages: (i) Awareness, which

focused on students' self-reported development in critical thinking, global awareness, and self-understanding; (ii) Awaken, which included reflections on values, spirituality, and personal growth throughout their university experience; and (iii) Action, which provided examples of how they applied their knowledge through community service, leadership roles, or

making ethical choices. The responses were qualitatively analyzed, concentrating on recurring themes that either supported or contradicted the 3As framework. This small, yet significant data set highlights the model's applicability in empirical settings and sets the foundation for future, larger-scale research endeavors.

RESULTS AND DISCUSSIONS

Awareness: The Beginning of Transformation

Awareness embodies the cognitive and reflective aspect of the model. It involves gaining consciousness about one's internal states, beliefs, and the external environment. Drawing from Qur'anic pedagogy, this phase aligns with tafakkur (reflection) and tilawah (recitation with understanding). The Qur'an frequently urges individuals to notice the signs of God within creation: "Indeed, in the creation of the heavens and the earth, and the alternation of the night and the day, are signs for people of understanding" (Qur'an 3:190).

In the context of education, awareness entails providing learners with critical thinking abilities, exposure to various viewpoints, and an understanding of global issues such as environmental decline, technological changes, and social disparities. For example, in the Communiversities model, students start by engaging with their community's realities, listening to local perspectives, observing social conditions, and recognizing systemic issues.

The feedback indicates that students have attained a significant degree of awareness that transcends mere theoretical understanding and encompasses practical, ethical, and social aspects. They demonstrate an awareness of interpersonal relationships, ethical values in giving and service, program management, problem-solving, ecological responsibility, and empathy towards marginalized communities. This implies that the 'Usrah in Action' course fosters a holistic type of awareness—cognitive, moral, social, and practical—creating a foundation for deeper realization and transformative engagement.

The responses to the question about the knowledge or understanding related to community service gained from the 'Usrah in Action' course can be categorized and analyzed as follows:

Categorization of Responses

Interpersonal Skills and Community Interaction

"Cara berinteraksi dengan orang tua dengan berhikmah" (Ways to interact wisely with elderly people)

<p>"Cara bergaul dengan orang ramai" (Ways to socialize with the public)</p>	<p>"Menolong masyarakat dalam keperluan adalah amat bagus untuk perkembangan masyarakat tersebut"</p>
<p>"Cara bergaul dengan orang lebih tua" (Ways to interact with older people)</p>	<p>(Helping communities in need is beneficial for their development)</p>
<p>Philosophical and Ethical Understanding</p>	<p>Practical Skills</p>
<p>"Giving as much as you can, for you are giving to yourself" (The value of giving back to the community)</p>	<p>"Teknik berkebun cara moden" (Modern gardening techniques)</p>
<p>"Sentiasa ada orang yg memerlukan bantuan" (There are always people who need help)</p>	<p>The results reveal that the 'Usrah in Action' course has effectively cultivated a wide range of awareness among students, covering interpersonal, ethical, social, environmental, and practical aspects. On an interpersonal level, students became more aware of how to engage respectfully and wisely with various groups, especially the elderly, demonstrating an understanding of cultural and social norms. On a deeper philosophical and ethical front, they acknowledged the inherent value of giving and the persistent existence of communities in need, indicating an awareness of social responsibility and moral duty.</p> <p>Equally important is the increased awareness of program management and problem-solving, as students grasped the significance of planning, execution, and placing community issues within a broader context. An emerging environmental consciousness was also noted, with students recognizing their responsibility to care for the environment as part of their role as caretakers of the earth. The course also fostered empathy and social insight, particularly concerning the challenges faced by underprivileged groups and the necessity of contributing to their progress. Finally, gaining practical knowledge, such as modern gardening techniques,</p>
<p>Program Management and Problem-Solving</p>	
<p>"Bagaimana menguruskan satu program daripada mula hingga akhir" (How to manage a program from start to finish)</p>	
<p>"Program management and understanding the big picture of some problem" (Program management and understanding the broader context of problems)</p>	
<p>Environmental Awareness</p>	
<p>"Kepentingan menjaga alam sekitar" (Importance of environmental care)</p>	
<p>Social Awareness and Empathy</p>	
<p>"Terdapat banyak golongan yang kurang bernasib baik. tidak dapat exposure yang luas tentang pelajaran" (There are many underprivileged communities lacking access to broad educational exposure)</p>	

underscores the understanding that service learning encompasses both conceptual and skill-oriented elements.

The ‘Usrah in Action’ course reveals significant promise in cultivating awareness that transcends mere theoretical understanding. By linking knowledge with real-life experiences, it provides students with the essential consciousness needed for advanced levels of awakening and action, as outlined in the 3As Model. This level of awareness establishes the foundation for students to evolve into compassionate, responsible, and values-oriented individuals who view community service not just as a duty, but as a fundamental aspect of their personal and spiritual growth.

Awaken: The Illumination of the Heart

The second stage, Awaken, emphasizes the moral and spiritual awakening of the heart. If awareness opens the eyes, awakening opens the heart. This stage corresponds to *tadabbur* (deep contemplation) and *tazkiyatun nafs* (purification of the soul). It is here that learners move from intellectual recognition to inner transformation, internalizing values such as compassion (*rahmah*), justice (*‘adl*), integrity (*amanah*), and humility (*tawāḍu’*). The Qur’an stresses that reflection without awakening can lead to stagnation: “Do they not reflect upon the Qur’an, or are there locks upon their hearts?” (Qur’an 47:24). Awakening, therefore, requires breaking the “locks” of the heart, overcoming ego, arrogance, or apathy, to allow values to emerge.

The responses to the question about the values related to community service gained

from the ‘Usrah in Action’ course can be categorized and analyzed as follows:

Categorization of Responses

1. Interpersonal Values

- "*Saling bekerjasama antara satu sama lain dan juga hormat menghormati*" (Mutual cooperation and respect)
- "*Hormat menghormati*" (Respect)
- "*Kerjasama*" (Cooperation)

2. Social Responsibility and Empathy

- "*Keprihatinan*" (Concern)
- "*Mengambil berat tentang orang lain*" (Caring about others)
- "*Tolak ansur, memahami*" (Tolerance and understanding)

3. Reciprocal Support

- "*Nilai tolong-menolong antara satu sama lain*" (Mutual aid)
- "*Tolong menolong*" (Helping one another)

4. Practical Values

- "*Kerajinan*" (Diligence)
- "*We don't give what we expect people need to have, but we give something that they actually need*" (Providing what is truly needed)

At the awaken level, the findings reveal that ‘Usrah in Action’ has nurtured an inner transformation in students, where knowledge of community service is translated into lived values. The repeated emphasis on cooperation, mutual respect, and reciprocal support reflects a shift from individual to collective consciousness, showing that students are awakening to the relational and communal essence of

service. Values such as empathy, tolerance, and concern for others signify a deepening of the moral compass, where the heart begins to guide intention and behavior. The recognition that service must respond to ‘what communities truly need’ rather than external assumptions points to a critical awakening, linking compassion with discernment. Together, these insights suggest that the course fosters an awakening of the heart and conscience, preparing students to embody values that sustain both personal growth and collective well-being.

Action: Knowledge in Practice

The final stage, Action, represents the embodiment of knowledge and values in concrete deeds (*‘amal ṣāliḥ*). The Action stage calls learners to translate awareness and awakening into ethical practices, community service, leadership, and sustainable living. Within the Communiversality framework, this stage manifests in collaborative projects, such as youth-led sustainability initiatives, interfaith dialogues, or AI ethics workshops, that address real-world issues in society. Action is not merely activity; it is value-infused praxis that leaves a lasting impact on both individuals and communities.

The responses to the question about the skills related to community service gained from the ‘Usrah in Action’ course can be categorized and analyzed as follows:

Categorization of Responses

1. Communication Skills

- "*Berkomunikasi dengan lebih berani*" (Communicating more boldly)

- "*Kemahiran berkomunikasi*" (Communication skills)
- "*Kemahiran bertutur*" (Public speaking skills)
- "*Bercakap*" (Speaking)
- "*Komunikasi bersama masyarakat*" (Communication with the community)

2. Interpersonal and Social Skills

- "*Cara bergaul dengan orang lebih berusia*" (Ways to interact with older people)
- "*Kemahiran untuk berinteraksi dengan org lain*" (Skills to interact with others)

3. Program Management and Organizational Skills

- "*Koordinasi program*" (Program coordination)
- "*Time management, problem solving, program management*"

4. Educational Engagement Skills

- "*Cara handle dan upaya untuk menarik minat mereka (pelajar sekolah rendah) untuk belajar*" (Ways to engage and motivate primary school students to learn)

At the action level, the findings indicate that ‘Usrah in Action’ successfully equips students with a diverse set of practical skills essential for meaningful community engagement. Strong emphasis on communication, ranging from public speaking to confidence in interacting with various community groups, demonstrates the ability to translate ideas and values into

dialogue and connection. Interpersonal and social skills, particularly in engaging respectfully with elders and diverse populations, reflect the practice of empathy and adab in real settings. Program management, time management, and problem-solving skills highlight students' growing capacity to design, coordinate, and sustain community initiatives. Furthermore, the ability to creatively engage schoolchildren underscores an educational dimension, where students not only serve but also inspire others. Together, these responses show that students have moved beyond awareness and awakening into concrete action, developing the competencies to embody service, strengthen communities, and contribute to the broader ummah.

Interconnected and Cyclical Dynamics

Although presented sequentially, the three stages of the 3As Model are deeply interconnected and cyclical. Awareness stimulates awakening, awakening fuels action, and action, in turn, generates new awareness. For example, when students engage in a community project (action), they often develop new insights into social realities (awareness), which further deepen their values (awakening). The model therefore reflects the organic and iterative nature of human development, aligning with both ecological systems thinking (Folke et al., 2016) and Qur'anic pedagogy, which repeatedly cycles between knowledge, reflection, and practice.

In essence, the 3As Model operationalizes the Qur'anic vision of holistic human development, ensuring that education nurtures not only workers or innovators but also human beings who embody wisdom, humility, and responsibility. It provides the

philosophical and practical foundation for Communiversality, making it a living practice of ummah-building through the integration of awareness, awakening, and action. Communiversality projects demonstrate that the 3As Model is not linear but cyclical. After action is taken, new awareness emerges: successes and failures provide lessons, which awaken deeper values, leading to renewed and improved action. For example, a digital literacy program may reveal new inequalities in access, prompting reflection on systemic issues, awakening a stronger sense of justice, and motivating broader policy engagement.

This cyclical nature ensures that Communiversality is sustainable and adaptive, capable of responding to emerging challenges such as climate crises, technological disruption, and moral erosion in society.

Relevance to Contemporary Challenges

Communiversality, grounded in the 3As Model provides a holistic response to both global and local challenges by ensuring that education remains rooted in values while engaging with contemporary realities. In the face of artificial intelligence and technological change, the model embeds technology education within a framework of awareness and awakening, enabling students not only to master AI tools but also to evaluate their ethical and social implications.

Within the context of globalization, it equips learners with intercultural awareness while anchoring them in spiritual and ethical values, thus preventing the erosion of identity amidst global flows. Against the risks of moral fragmentation, the heart-centered dimension of Awaken ensures that

moral and spiritual concerns are not sidelined by materialist pursuits, but instead serve as guiding principles in decision-making. Finally, by emphasizing Action, Communiversity projects nurture community resilience, strengthening societies from within and enhancing their capacity to withstand social, economic, and ecological pressures. In this way, the integration of the 3As Model and Communiversity offers a transformative framework that connects education with the higher purpose of nurturing ethical individuals and resilient communities.

Ultimately, the 3As-driven Communiversity is a vehicle for ummah-building. It cultivates graduates who are not only competent professionals but also compassionate stewards and responsible citizens. It empowers communities to participate in shaping knowledge and development, reducing the gap between academia and society.

This vision resonates with Qur'anic calls to enjoin good and forbid evil (Qur'an 3:110), making the ummah "the best community raised for mankind." Through Communiversity, the university becomes a true *menara cahaya* (tower of light), guiding society toward justice, compassion, and sustainability.

Implications

The integration of the 3As Model with the Communiversity concept offers a profound rethinking of the role of universities in the 21st century. It redefines education as not only the pursuit of knowledge but as a transformative journey of the mind, heart, and action. This section discusses the theoretical, practical, and policy implications of this approach before

concluding with its significance for ummah-building.

The first major implication is the reorientation of higher education away from being a purely technocratic or utilitarian system toward becoming a humanizing and value-centered ecosystem. Universities often face pressure to produce graduates who meet industry demands and contribute to economic competitiveness. While these goals are important, they risk reducing education to an instrumental function, producing workers rather than nurturing whole human beings.

The 3As Model provides a corrective by positioning learning as a holistic journey that integrates intellect, values, and practice. 'Awareness' ensures that students are critically conscious of both global and local realities, equipping them not merely to absorb information but to question assumptions, systems, and structures that shape society. 'Awaken' emphasizes connecting knowledge to values, ethics, and spirituality, fostering moral and emotional maturity as well as a deeper sense of purpose. 'Action' grounds this process by ensuring that learning is embodied in real-world application, producing graduates who are not only employable but also socially responsible and spiritually anchored. When applied within the Communiversity paradigm, the 3As Model transforms universities into centers of living wisdom—spaces where academic expertise meets community needs, knowledge creation is dialogical rather than hierarchical, and education becomes a mutual process of enrichment between the university and society.

The Communiversity model bridges the longstanding gap between universities and communities, countering the perception of higher education institutions as “ivory towers” detached from everyday realities. When integrated with the 3As Model, community engagement is reframed into a transformative process. First, engagement shifts from outreach to co-creation, where communities are not passive recipients of university initiatives but active co-creators of knowledge, an approach grounded in *awareness* that begins by listening to and validating lived experiences. Second, the focus moves from aid to empowerment, with universities fostering dignity, values, and self-efficacy within communities rather than imposing top-down solutions, an *awakening* process that honours human potential and shared responsibility. Third, collaboration evolves from short-term projects to sustainable action, where *action* is embodied in long-term, value-based initiatives such as environmental stewardship, ethical entrepreneurship, or socially responsible digital literacy. Through this reframing, the Communiversity becomes more than a model of collaboration; it emerges as a holistic framework that unites intellect, values, and practice to cultivate resilient communities and nurture a wisdom-based ummah.

At the policy level, adopting the 3As-driven Communiversity framework aligns with Malaysia’s aspirations of becoming a knowledge society rooted in values. The National Education Philosophy, which emphasizes holistic development, intellectual, spiritual, emotional, and physical, finds practical realization in this integrative model. Similarly, the Madani framework, with its emphasis on

sustainability, compassion, and justice, resonates deeply with the heart-centered orientation of the 3As Model.

From an Islamic perspective, Communiversity can be viewed as a modern manifestation of the Qur’anic principle of *amr bil ma’rūf wa nahy ‘an al-munkar* (enjoining good and forbidding evil). By nurturing awareness, awakening values, and fostering action, the university becomes an instrument for cultivating an ummah that is balanced, ethical, and resilient. Theologically, this approach also responds to the Qur’anic vision of *ulū al-albāb*, people of deep reflection, wisdom, and ethical commitment (Qur’an 3:190–191). By integrating intellectual inquiry with heart-based awakening and ethical action, universities can help form graduates who embody this Qur’anic archetype.

The 3As + Communiversity framework is especially relevant in addressing contemporary challenges such as Artificial Intelligence (AI), globalization, and moral fragmentation. In the realm of AI and technology, where the danger lies in reducing education to mechanical and transactional processes, the 3As Model provides a value-oriented compass: students become aware of both risks and opportunities, are awakened to ethical principles, and learn to act wisely in integrating technology for human flourishing (UNESCO, 2019; Selwyn, 2021). In the context of globalization, while new opportunities emerge, cultural and spiritual anchors are often eroded; here, the Communiversity approach ensures that learners engage with global knowledge while remaining firmly rooted in local traditions and Islamic values (Zembylas, 2016; Al-Attas, 1991). Finally, in the face

of moral fragmentation driven by individualism and consumerism, the awakening of the heart is indispensable so that education nurtures not only critical thinkers but also compassionate citizens and ethical leaders (Badri, 2000; Narvaez, 2019). In this way, the integrated framework equips graduates not merely to survive in a rapidly changing world, but to lead transformation with wisdom.

The proposed Model 3As uniquely combines intellectual awareness, spiritual awakening, and practical action within a culturally grounded context. Unlike many existing holistic or spiritual development frameworks, which may remain largely theoretical or generic, our model emphasizes the dynamic interplay between cognitive understanding, heart-based spiritual values, and concrete social practices aimed at sustainable transformation. The model's uniqueness lies in its explicit cultural and spiritual positioning, operationalized through specific educational and community interventions rooted in lived Islamic values. This specificity enhances both transferability and relevance to Muslim-majority contexts and beyond.

Limitations and Future Directions

This study offers a coherent integrative framework but lacks empirical validation to test its effectiveness. Future research should focus on developing a Hikmah Index to measure how awareness, awakening, and action manifest among students and communities, as well as conducting case studies of Communiversities projects across diverse contexts, rural, urban, and international to evaluate their impact. In addition, employing mixed-method approaches such as surveys,

interviews, and action research would provide a more comprehensive assessment of how the 3As Model influences learning outcomes, moral development, and community resilience. By moving toward empirical validation, the framework has the potential to establish itself not only as a scholarly contribution but also as a practical tool for educators, policymakers, and community leaders.

CONCLUSION

The integration of the 3As Model with the Communiversities paradigm offers more than a reformist idea in education; it provides a vision that is both practical and transformative for Malaysia and the wider world. It shifts the focus of higher learning away from the narrow pursuit of producing graduates armed only with technical expertise, towards a richer purpose: nurturing the heart, cultivating wisdom, and empowering communities. At its core, the model begins with Awareness, where learners are guided to see reality with critical consciousness and to acknowledge the struggles, possibilities, and responsibilities around them. Awaken follows as a stage where knowledge is not treated as neutral information but infused with values, spirituality, and ethical clarity. Finally, Action ensures that education does not remain in theory but blossoms into lived practice, where ideas become legacy, and compassion translates into sustainable service. This vision becomes clearer when we observe real experiences. In one instance, a group of university students participated in a Communiversities programme. What emerged was not a one-way transfer of university knowledge but a dialogue, where academic insights met community wisdom, producing outcomes that were both humane and sustainable.

Examples such as this remind us that true education is not merely the transmission of information. It is about shaping balanced human beings and building resilient communities, for the good of the ummah and all of humanity. In this sense, the 3As + Communiversity framework seeks to reclaim the soul of the university. It transforms the university from being only a *menara ilmu* (tower of knowledge) into a *menara cahaya* (tower of light), where intellectual pursuits are guided by wisdom, ethics, and spiritual depth. This approach resonates strongly with Malaysia's aspiration for holistic, value-driven development, while also contributing to wider global conversations on transformative learning and sustainable education. By uniting the nurturing of the heart with the building of the ummah, the model speaks powerfully to the needs of our time, particularly in an age shaped by both the promises and the anxieties of artificial intelligence and globalization.

ACKNOWLEDGEMENT

The author would like to express sincere gratitude to Universiti Putra Malaysia (UPM) for granting research leave, and to the Sejahtera Centre for Sustainability and Humanity, International Islamic University Malaysia (IIUM) for providing an academic attachment and support during this research.

CONFLICT OF INTEREST

All authors have no financial, personal, or professional conflicts of interest that could influence the work reported in the manuscript.

AUTHOR CONTRIBUTION STATEMENTS

R.R.A.R. (Ratna Roshida Ab Razak): Conceptualization, data collection, analysis, writing—original draft preparation, and editing.

Z.A. (Zainal A.): Mentorship, supervision, critical review, and guidance throughout the research process.

- Selwyn, N. (2021). *Education and technology in uncertain times*.
- Sterling, S. (2020). *Sustainable education and transformative learning*.
- Zembylas, M. (2021). *Emotion, spirituality, and ethical education*.
- UNESCO (2019 / 2023) – AI, sustainability, human-centered education
- Recent journal articles on community-based learning / civic engagement

REFERENCES

Reference to a Book

Al-Attas, S. M. N. (1991). *The concept of education in Islam: A framework for an Islamic philosophy of education*. ISTAC.

Al-Ghazālī. (2015). *Iḥyā' 'ulūm al-dīn* [Revival of the religious sciences]. Dar al-Kotob al-Ilmiyyah.

Badri, M. (2000). *The dilemma of Muslim psychologists*. IIIT.

Badri, M. (2013). *Abu Zayd al-Balkhi's sustenance of the soul*. IIIT.

Cranton, P. (2016). *Understanding and promoting transformative learning* (3rd ed.). Stylus.

Cooper, Kotval-K, Kotval & Mullin, MDPI, (2014). “University Community Partnerships”

Freire, P. (1970). *Pedagogy of the oppressed*. Continuum.

Illeris, K. (2014). *Transformative learning and identity*. Routledge.

Kohlberg, L. (1981). *The philosophy of moral development*. Harper & Row.

Mezirow, J. (2000). *Learning as transformation*. Jossey-Bass.

Narvaez, D. (2019). *Neurobiology and the development of human morality*. W. W. Norton.

Reference to a Chapter in a Book

Dirkx, J. M. (2012). Nurturing soul in adult learning. In E. W. Taylor & P. Cranton (Eds.), *Handbook of transformative learning* (pp. 116–130). Jossey-Bass.

Reference to a Journal Publication

Dzulkifli Abdul Razak, & Moten, A. R. (2025). Towards sustainable education: The need for ‘communiversity’. *Research*, 1–15.

<https://doi.org/10.1177/09734082251366111>

Folke, C., Biggs, R., Norström, A. V., Reyers, B., & Rockström, J. (2016). Social-ecological resilience and biosphere-based sustainability science. *Ecology and Society*, 21(3), Article 41.

Reference to a Website / Web Resource

Ratna Roshida Ab Razak. (2023). *The3AsModel of Heart-Centered Spirituality* (Copyright No. LY2024W02905). Registered with MyIPO, Malaysia.

UNESCO. (2017). Education for sustainable development goals: Learning objectives. UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf000247444>

MALAYSIAN JOURNAL OF HUMAN ECOLOGY

Journal Homepage: https://eco1.upm.edu.my/malaysian_journal_of_human_ecology_mjhe-3740

ECONOMIC EMPOWERMENT AMONG SILVER WOMEN ENTREPRENEURS IN LINFEN CITY, CHINA

Wang Bin¹, Askiah Jamaluddin², Wan Munira Wan Jaafar³

^{1,2,3}Faculty of Human Ecology, Universiti Putra Malaysia, 43400, Seri Kembangan, Selangor, Malaysia.
email: nfrhanakhayr@gmail.com

ABSTRACT

This study aims to explore the effects of entrepreneurial intention on economic empowerment among silver women entrepreneurs aged 50 and above in Linfen City, China. Against the backdrop of an aging population and shifting socio-economic conditions, these silver women entrepreneurs play a vital role in not only fostering local economic resilience and preserving cultural knowledge but also increasing their life quality and achieving well-being. A survey has been administered to identify the influence of entrepreneurship and the effects of entrepreneurial intention on economic empowerment among silver women entrepreneurs. In the study, the sample n=411 was collected to explore the indicators of economic empowerment among silver women entrepreneurs, as well as the relationship between economic empowerment and entrepreneurial intention. Findings reveal that entrepreneurship is a powerful tool in enhancing women's economic empowerment. Silver women believe that entrepreneurship is one of the easiest ways to become an entrepreneur, which in turn empowers them in different social issues. The research highlights that entrepreneurial intention has strong, direct, and significant effects on women's economic empowerment. This implies that economic empowerment is driven by the motivation to become an entrepreneur.

Keyword: Economic Empowerment, Silver women, Silver women entrepreneurs, Entrepreneurship, Well-being

INTRODUCTION

China is experiencing one of the fastest demographic transitions in the world, with its population aging at an unprecedented rate. According to the National Bureau of Statistics, more than 300 million of the Chinese population is now aged 50 and above, and this proportion is projected to rise sharply in the coming decades. This demographic shift not only raises challenges related to social welfare, pensions, and healthcare but also highlights the need to reconsider the roles of older adults in society and the economy.

Within this context, the economic plight of silver women in China is reflected in inadequate pensions and social security. Due to women's widespread early retirement, low labor force participation rates, and lower incomes during their working lives, their pensions are significantly lower than those of men. In rural areas, in particular, many older women have never entered the formal employment system and face inadequate pension insurance coverage, forcing them to rely on meager basic pensions or support from their children. This situation makes them particularly vulnerable to rising medical expenses and the cost of living. Furthermore, older women are at a disadvantage in the distribution of property and resources, lacking protected property and inheritance rights, further undermining their economic independence and decision-making in the family.

Meanwhile, silver women face widespread age and gender discrimination in the labor market. With limited formal employment opportunities, they rely on informal economic activities such as street vendors, domestic workers, and odd jobs. These jobs

not only provide unstable income but also lack social security. Furthermore, traditional culture places strong family responsibilities on women. While they shoulder the burden of caring for grandchildren or ailing husbands, they lack adequate financial support. This combined economic dependence and the pressure of caregiving further hinders their ability to realize their self-worth and participate in society, further decreasing their family status, decision-making in the family, asset ownership and family resources.

Entrepreneurship provides silver women with opportunities to generate income and enhance economic independence. Compared to relying on pensions or financial support from children, entrepreneurship enables them to create a steady cash flow through their own labor. For example, running a small restaurant, operating a market stall, engaging in domestic services, or selling handicrafts not only brings them additional income but also improves the family's capacity to spend on education, healthcare, and daily consumption. Through entrepreneurship, silver women can regain control over resource allocation, strengthen their economic position within the household, and reduce dependence on family members. In addition, entrepreneurial activities are often low-threshold and allow flexible working hours and arrangements according to their physical condition, making them well-suited to the health and lifestyle needs of elderly women.

The concept of economic empowerment has been widely theorized within development and gender studies, with

scholars such as Kabeer (1999) and Sen (1999) emphasizing empowerment as the process of expanding resources, enhancing agency, and achieving valued outcomes. Within this framework, women's economic empowerment has been linked to access to income, control over assets, and greater participation in decision-making at both household and community levels (Duflo, 2012; Cornwall & Edwards, 2010). Recent literature highlights that empowerment is not only about financial independence but also about self-realization, recognition, and the ability to influence family and societal dynamics (Malhotra & Schuler, 2005).

Parallel to this, the entrepreneurship literature has increasingly focused on women's participation in business as a pathway to empowerment. Women entrepreneurs are seen as critical contributors to family well-being, social development, and inclusive growth (Minniti & Naudé, 2010; Brush & Cooper, 2012). However, much of the scholarship has concentrated on younger or middle-aged women, often overlooking the growing demographic of silver women—sometimes referred to as silver entrepreneurs—who re-engage in economic activity after retirement. Studies on silver entrepreneurship suggest that older adults often pursue business activities for diverse motivations, including financial necessity, social participation, self-fulfillment, and intergenerational support (Kautonen, 2013; Curran & Blackburn, 2001). For silver women, these motivations are frequently shaped by both gendered responsibilities and cultural expectations of care, making their entrepreneurial pathways distinct from those of men.

In the Chinese context, research on women's economic roles has largely

emphasized the struggles of rural women, migrant laborers, or younger female entrepreneurs navigating market reforms (Liu, 2014; Zhao & Zhou, 2019). Less attention has been paid to retired women who continue to engage in small-scale entrepreneurial activities, despite the fact that China is facing a rapidly aging population. With more than 300 million of the population aged 50 and above (National Bureau of Statistics, 2022), the emergence of silver entrepreneurs is both a demographic trend and a social necessity. Literature on aging in China often frames older adults as dependents requiring care (Phillips & Feng, 2015), yet emerging studies suggest that older women are redefining their roles by contributing to household economies, maintaining small businesses, and sustaining intergenerational support systems (Sun & Chen, 2020).

Roomi and Parrott (2008) found that women's entrepreneurial participation increases their access to financial resources, decision-making power, and social networks, which collectively contribute to empowerment. Similarly, Brush et al. (2019) emphasized that entrepreneurship provides women with income stability and a platform for leadership, challenging traditional gender roles. Moreover, Sharma (2018) highlighted that entrepreneurship enhances women's social capital, allowing them to contribute more effectively to community and economic development.

The intersection of aging, gender, entrepreneurial intention and economic empowerment thus creates a critical gap in the literature. While women's economic empowerment has been well theorized globally, and silver entrepreneurship is gaining attention in Western contexts, few

studies systematically examine silver women entrepreneurs in China. This population is uniquely positioned at the crossroads of demographic aging, cultural traditions of filial piety, and evolving gender norms. Their businesses are often modest in scale but deeply significant in terms of empowerment outcomes, ranging from enhanced decision-making power in

Objective of the study

The objective of the study is :

1. To examine the relationship between entrepreneurial intention and economic empowerment among silver women.

LITERATURE REVIEW

Silver women entrepreneurs

With demographic transitions toward aging societies, particularly in countries like China, older women are not only living longer but also seeking ways to remain economically active, socially engaged, and psychologically fulfilled (Wang & Kong, 2021). Entrepreneurship provides them with a viable pathway to supplement income, enhance their social status, and maintain independence. However, the phenomenon remains underexplored, particularly in developing economies, where silver women face unique challenges rooted in socio-cultural norms, health, education levels, and family responsibilities.

Research variously refers to “silver entrepreneurs” and “senior entrepreneurs”. While cut-offs vary, the label typically covers 50+ or 55+ founders, sometimes distinguished into pre-retirement (50–59) and post-retirement (60+) cohorts (OECD,

families to improved self-worth and social participation. Addressing this gap, the present study explores the case of silver women entrepreneurs in Linfen City, China, situating their experiences within broader debates on women’s empowerment, entrepreneurship, and aging.

This objective focuses on testing whether higher levels of entrepreneurial intention are associated with greater economic empowerment

2. To provide insights for policies and programs that support silver women entrepreneurs.

2012; Maritz, 2015). Population aging, longer healthy lifespans, and pension system pressures underpin the growth of later-life entrepreneurship globally (OECD/European Commission, 2019; Kautonen, 2012). Women comprise a rising share, though participation remains lower than men’s and skews toward micro and necessity-oriented ventures (GEM, 2016; Brush et al., 2019).

In the entrepreneurship literature, the concept of “silver entrepreneurs” refers broadly to individuals aged 50 years and above who engage in business ventures, either to remain active after retirement or to respond to financial necessity (Kautonen, 2012; Kibler et al., 2015). Within this group, silver women entrepreneurs are a more specific category, combining the dynamics of both age and gender in entrepreneurship research. They are defined as women aged 50 and above who initiate or manage entrepreneurial activities, often on a micro- or small-scale, either independently or in partnership with

family members (Weber & Schaper, 2004; Maritz et al., 2021).

Entrepreneurial intention

Entrepreneurial intention (EI) is generally defined as an individual's conscious state of mind that directs attention, experience, and action toward starting a business (Bird, 1988; Krueger et al., 2000). For women, EI is shaped not only by cognitive and motivational factors but also by social, cultural, and gendered contexts, making it distinct from male entrepreneurial pathways (Brush et al., 2019). Theory of Planned Behavior (TPB) (Ajzen, 1991) is used to understand women's EI. Contextualizes EI within structures such as cultural norms, access to resources, and discriminatory practices that disproportionately affect women (Welter et al., 2014). Women with higher entrepreneurial self-efficacy (belief in their ability to perform entrepreneurial tasks) are more likely to have stronger EI (Wilson et al., 2007). Women are often motivated by family–work balance and community impact (De Bruin et al., 2007). Parental entrepreneurship or spousal encouragement positively affects EI (Zellweger et al., 2011). Necessity-driven EI dominates due to unemployment, weak pensions, and income insecurity. Here, women frequently enter family business continuity or small-scale trading (Liu, 2020).

In China, Studies highlight strong family influence, Confucian gender norms, and growing opportunities in e-commerce for older and younger women alike (Xie & Wu, 2022). Women's EI is often necessity-driven (income supplementation, retirement insecurity, family well-being) rather than purely opportunity-driven (Hu,

2016). Social approval plays a stronger role in shaping women's EI, as entrepreneurship is often evaluated through family and community lenses (Wang, 2019). Digital platforms (e.g., WeChat, Taobao, Douyin) have provided women, especially older ones, new entrepreneurial channels that blend economic activity with caregiving and social roles (Sun, 2021). Policies, tax incentives, and microfinance schemes play an important role in encouraging EI (Zhao & Li, 2019). Women's EI is shaped by both empowerment through education and persistent gender role expectations, where entrepreneurship must often be balanced with caregiving (Zhang, 2017).

Women's economic empowerment

Women's economic empowerment is commonly defined as women's ability to participate in, contribute to, and benefit from economic life — having access to resources, the agency to make and act on choices, and outcomes (achievements) that reflect improved well-being and influence (Kabeer, 1999). Sen's Capability Approach (1999) focuses on substantive freedoms (capabilities) — what women can do and be (e.g., to earn, to work, to move). Empowerment is evaluated by the expansion of capabilities rather than just outcomes.

Key dimensions of economic empowerment include resources, agency, and achievement. Under Kabeer, Resources are the endowments that expand options— physical assets (land, housing), financial assets (savings, credit), human capital (education, skills), and social capital (networks, reputation). Without sufficient resources, agency is severely constrained (Kabeer, 1999; Deere & Doss, 2006). Asset

ownership (especially titled land or property) is consistently associated with increased bargaining power and access to credit (Deere & Doss, 2006). Access to financial services (savings, microcredit, mobile money) can improve women's liquidity and investment choices, though impacts on empowerment are heterogeneous and often contingent on complementary support (Morduch & Haley, 2002; Duvendack et al., 2011). Education and vocational training raise perceived efficacy and the ability to adopt new business practices (Malhotra et al., 2002).

Agency is the heart of empowering women's capacity to define goals and act on them. It includes decision-making in the household and enterprise, mobility, control over income use, bargaining power, and psychological aspects (self-efficacy aspirations) (Kabeer, 1999; Zimmerman, 1995). Increases in women's income often led to greater voice in routine household decisions (food daily purchases) but not necessarily in strategic ones (land purchase and business investment) (Agarwal, 1997; Doss, 2013). Psychological empowerment (self-efficacy, aspirations) predicts persistence in entrepreneurship and willingness to adopt innovations (Spreitzer, 1995). Social norms mediate translation of resources into agency; where patriarchal norms are strong, resource gains may not produce corresponding agency increases (Jejeebhoy, 2000).

Achievements are realized outcomes reflecting expanded choices: increased income, asset accumulation, food security, children's education, health, and subjective well-being (Kabeer, 1999). Microfinance and business training often lead to modest increases in business revenue and

household consumption but not large, sustained income gains for all participants (Morduch & Haley, 2002; Duvendack et al., 2011). Matched grants and combined packages (finance + training + market linkages) show stronger economic effects (Karlán & Valdivia, 2011). Many microenterprises sustain livelihoods but have low growth potential; survival rates improve with market access and mentoring (Bruton et al., 2013). Interventions that increase women's control over income frequently improve children's schooling and nutrition (Duflo, 2012). Business participation and income control consistently correlate with enhanced self-esteem, reduced isolation, and greater life satisfaction among women (Spreitzer, 1995; Zimmerman, 1995).

Studies grounded in behavioral and empowerment frameworks consistently show that when women form strong intentions to engage in entrepreneurial activities, they are more likely to take actual steps toward business creation and economic participation. This is aligned with the Theory of Planned Behavior, which posits that intention is the most proximal predictor of behavior, with attitudes, perceived control, and norms shaping entrepreneurial engagement (Ajzen, 1991). Empirical evidence demonstrates that women's entrepreneurial self-efficacy and perceived behavioral control—key antecedents of entrepreneurial intention—are positively related to entrepreneurial action and subsequent economic outcomes (e.g., self-employment, income generation, and decision-making power) in female populations across diverse contexts (e.g., Sharahiley, 2020; Gieure et al., 2020). While much of the research focuses on

university and early-career populations, similar mechanisms have been documented among adult female entrepreneurs, indicating that intention predicts actual venture creation and associated economic benefits, such as financial independence and enhanced household decision authority (Lamichhane & Lama, 2024). Furthermore, studies in developing economies emphasize that economic empowerment itself can reinforce entrepreneurial intention by strengthening self-confidence and access to resources, suggesting a reciprocal

relationship in which intention and empowerment mutually reinforce one another (Problems and Perspectives in Management, 2025)

In summary, these literatures support the hypothesis that entrepreneurial intention has a significant effect on economic empowerment among silver women, as it initiates the transition from motivation to action and enables women to acquire income, resource control, and agency.

METHODOLOGY

The research objective is to explore the relationship between entrepreneurial intention and women's economic empowerment. The quantitative approach is applied in this study. The quantitative research provides evidence on how entrepreneurial intention affects economic empowerment among silver women entrepreneurs. In this study, entrepreneurial intention is the independent variable, while women's economic empowerment is the dependent variable. A comprehensive questionnaire was developed to collect the data required for this study. The use of a questionnaire was chosen to ensure an orderly, systematic, and structured approach to data gathering, enabling the researcher to capture standardized information across a relatively large number of respondents (McDaniel & Gates, 2001).

For survey research, obtaining a sufficient sample size is essential to ensure the reliability and generalizability of the findings. A sample that is too small may not accurately reflect the characteristics of the population under study, leading to biased or

misleading results (Creswell & Creswell, 2018). Without an adequate sample size, it becomes difficult to make valid inferences or to apply the results beyond the specific group surveyed. In the study, according to Krijcie and Morgan (1970), a sample size of 400 was deemed sufficient. In line with Krejcie and Morgan's (1970) framework, this approach guarantees a confidence level of 95% with a margin of error of approximately 5%, which is acceptable in social science research (Sekaran & Bougie, 2016).

In this study, the target population is silver women entrepreneurs aged 50 and above. To ensure representativeness, a four-stage multistage sampling technique was applied. First, Linfen City, which consists of sixteen districts, was divided into four geographical clusters. From each cluster, one district was randomly selected, resulting in four study districts: Yaodu, Daning, Huozhou, and Houma. Second, based on Linfen Statistics (2022), there are 277 markets citywide. From each selected district, five markets were randomly chosen. Third, within each market, 20 silver women entrepreneurs were selected. Finally, considering that senior women entrepreneurs are mostly

concentrated in five business categories (food, meat, vegetables, fruits, and aquatic products), four participants were selected from each category ($5 \times 4 = 20$). This process resulted in a total sample size of approximately 400 respondents.

To analyze the effect of entrepreneurial intention on economic empowerment among silver women, linear regression is conducted. The independent variable is entrepreneurial intention, while the dependent variable is economic empowerment among silver women. They are both continuous. Linear regression analysis is a statistical method used to model the relationship between a dependent variable and one or more independent variables by fitting a linear equation to observed data (Peck & Vining, 2021).

Linear regression analysis was employed in this study to examine the relationship between entrepreneurial intention (EI) and women’s economic empowerment (WEE). This method was chosen for several reasons. First, both the dependent variable (WEE) and the independent variable (EI) were measured using multi-item Likert-type scales, which were aggregated into mean scores and treated as continuous variables. Linear regression is particularly suitable for modeling the effect of one or
 Table 1: Reliability Results of the Constructs

Variable	Cronbach’s Alpha
Entrepreneurial Intention	0.943
Women’s Economic Empowerment	0.947

All variables demonstrate excellent internal reliability, with Cronbach’s Alpha values ranging from 0.943 to 0.947, well above the recommended threshold of 0.70. This

more continuous independent variables on a continuous dependent variable. Second, unlike simple correlation, which only indicates the strength and direction of association, linear regression allows the estimation of predictive relationships. It quantifies how much change in the dependent variable can be expected from a one-unit change in the independent variable, while also providing tests of statistical significance. Third, regression analysis provides additional information such as the regression coefficients (B , β), which indicate the strength and direction of influence, and the coefficient of determination (R^2), which indicates the proportion of variance in WEE explained by EI. In this study, the regression model showed that entrepreneurial intention significantly predicted women’s economic empowerment, explaining approximately 33% of its variance. Therefore, linear regression is appropriate for the study.

In the study, Cronbach’s Alpha was applied to assess the internal consistency of the questionnaire constructs. As suggested by Hair et al. (2009) and DeVellis (1991), a reliability coefficient above 0.70 indicates acceptable internal consistency. The results are presented in Table 1.

indicates that the measurement items for entrepreneurial intention and women’s economic empowerment are highly

consistent and reliable for further statistical analysis.

monthly household income, educational background, age at business entry, marital status, and business skills to understand their actual demographics.

RESULTS

Findings and Analysis are presented below based on the questions of the questionnaire used in this study:

Demographics of Respondents:

At the beginning of data collection, I categorized respondents based on age,

Table2: Respondent Age Distribution:

Age	Frequen cy	Percentage (%)
50–54	79	19.2%
55–59	98	23.8%
60–64	84	20.4%
65–69	103	25.1%
70–72	47	11.4%
Total	400	100.0%

From table2, it is shown that the age distribution of respondents is concentrated between 55 and 69 years (68.1%), with the largest proportion in the 65–69 age group (25.1%), while the oldest group (70–72 years) is the least represented (11.4%).

In Table 3, the majority of respondents (37.7%) have three children, followed by 33.3% with one child and 29.0% with two children. Educational attainment is diverse but generally low to moderate. About 17.8% of respondents have no formal education, while 18.9% completed primary school, the largest group. Only 14.6% attained higher education, showing limited access to advanced education in the sample. Married respondents form the largest group

(36.0%). A relatively high share of respondents is divorced (32.1%), while 31.9% fall into “other” categories (single, widowed, separated, etc.). The distribution suggests marital instability is notable in this population. Respondents are nearly evenly distributed across categories of health. About 39% reported poor health, while 41% reported good health. The largest single group is healthy (23.4%), while the smallest is poor (16.1%).

Table3 : Respondents Demographic Characteristics

Variable	Option	Frequenc y	Percentag e (%)	Cumulative Percentage (%)
Numbers of Children	1	137	33.3	33.3
	2	119	29	62.3
	3	155	37.7	100

Variable	Option	Frequency	Percentage (%)	Cumulative Percentage (%)
Respondent Education Level	Not educated	73	17.76	17.76
	Primary School	78	18.98	36.74
	Middle School	63	15.33	52.07
	High School	63	15.33	67.40
	Certificate	74	18.00	85.40
	Higher Education	60	14.60	100.00
	Marital Status	Married	148	36.01
Others		131	31.87	67.88
Divorced		132	32.12	100.00
Health Condition	Very Poor	94	22.87	22.87
	Poor	66	16.06	38.93
	Fair	83	20.19	59.12
	Healthy	96	23.36	82.48
	Very Healthy	72	17.52	100.00
Total		400	100.0	100.0

From table 4, it is found that the age distribution shows that more than half of the respondents (53%) are within the 26–35 years age range, with the largest group being 31–35 years (27.7%), while the older segment (46–47 years) is the least represented (10.5%).

Table 4: Respondents’ age venture into business

Age	Frequency	Percentage (%)
26–30	104	25.3%
31–35	114	27.7%
36–40	75	18.3%
41–45	75	18.3%
46–47	43	10.5%
Total	400	100.0%

Besides, based on Table 5, the descriptive results reveal that respondents rated themselves moderately in overall

management (M = 3.30), communication (M = 3.17), and negotiation skills (M = 3.17), suggesting relative strengths in

interpersonal and general management competencies. In contrast, lower ratings were recorded for market laws and regulations ($M = 2.51$), production quality ($M = 2.54$), and creating marketing opportunities ($M = 2.58$), indicating gaps in

technical knowledge and strategic business development. These findings suggest that while respondents demonstrate adequate soft skills, they require further capacity-building in legal, production, and market innovation areas.

Table 5 : Descriptive analysis of respondents' business management skills and competences

In your opinion, you are	Mean	SD
1. In terms of the overall management of your business	3.30	1.181
2. In terms of the financial management of your business	3.03	1.522
3. In terms of marketing your business's products	2.92	1.159
4. In terms of communication skills	3.17	1.295
5. In terms of establishing a good relationship with your business networks	2.94	1.298
6. In terms of negotiation skills	3.17	1.297
7. In terms of production quality	2.54	0.978
8. In terms of market laws and regulations	2.51	0.912
9. In terms of packaging creativity and innovation	2.84	0.953
10. In terms of creating marketing opportunities	2.58	1.022

Respondents' entrepreneurial intention

Respondents' entrepreneurial intention is measured by self-efficacy, perceived benefits of entrepreneurship, need for achievement and family support. Table 6 shows that respondents provided moderately positive assessments across all four variables (means ranging from 3.51 to 3.72). Among them, PBE recorded the highest average ($M = 3.72$, $SD = 0.95$),

while SF was slightly lower ($M = 3.51$, $SD = 0.88$). Variability across variables was relatively low, as reflected in coefficients of variation around 0.25. The distributions were slightly negatively skewed, suggesting a tendency toward higher ratings, and all variables exhibited platykurtic characteristics, indicating flatter-than-normal distributions.

Table 6 : Descriptive analysis of entrepreneurial intention

variable name	Sample size	Maximum	Minimum	average value	Standard deviation	median	variance	Kurtosis	Skewness	Coefficient of variation (CV)
SF	400	4.875	1.5	3.513	0.879	3.625	0.773	-1.055	-0.384	0.25
PBE	400	5	1	3.723	0.949	4	0.9	-0.089	-0.819	0.255
NA	400	5	1.75	3.623	0.965	3.75	0.931	-1.139	-0.228	0.266
FS	400	5	1.333	3.543	0.908	3.667	0.825	-0.947	-0.291	0.256

Economic empowerment among silver women

Economic empowerment among silver women is measured by self-independence, economic freedom, decision-making in the family, control over asset ownership, and control over family resources (Hossain, 2018). In Table 7, the descriptive results show that all five variables were rated moderately positively, with means ranging between 3.55 and 3.66. SI recorded the highest mean (M = 3.66, SD = 0.92), while

EF and CRF were the lowest (M = 3.55). Although the average values are similar, the degree of variability differed: EF displayed the greatest dispersion (CV = 0.285), suggesting heterogeneous perceptions, whereas CRF showed the least dispersion (CV = 0.219), indicating consistent ratings across respondents. All variables were slightly negatively skewed and platykurtic, suggesting distributions flatter than normal with a tendency toward higher ratings.

Table 7 : Descriptive analysis of economic empowerment among silver women

variable name	Sample size	Maximum	Minimum	average value	Standard deviation	median	variance	Kurtosis	Skewness	Coefficient of variation (CV)
SI	400	5	1.5	3.66	0.923	3.75	0.852	-0.959	-0.321	0.252
DMF	400	5	1.4	3.608	0.979	3.8	0.959	-0.874	-0.397	0.271
EF	400	5	1	3.55	1.011	3.75	1.023	-0.807	-0.348	0.285
AO	400	5	1.333	3.57	0.948	3.667	0.899	-0.878	-0.227	0.266
CRF	400	5	2	3.553	0.777	3.5	0.604	-0.957	-0.068	0.219

Effects of entrepreneurial intention on economic empowerment among silver women

The linear regression analysis revealed that entrepreneurial intention (EI) had a significant positive effect on economic empowerment among silver women (B = 0.574, $\beta = 0.574$, $t = 6.948$, $p < 0.001$). The

model explained approximately 33% of the variance in economic empowerment among silver women ($R^2 = 0.33$, Adj. $R^2 = 0.323$), indicating a moderate explanatory power. The F-statistic further confirmed the overall model significance ($F = 48.275$, $p < 0.001$). These findings suggest that higher levels of entrepreneurial intention are strongly

associated with higher economic empowerment among silver women.

The linear regression analysis demonstrated that entrepreneurial intention (EI) significantly predicted economic empowerment among silver women (EEASW). The estimated regression model was:

$$EEASW = 1.542 + 0.574(EI)$$

The results in Table 8 indicate that a one-unit increase in EI led to a 0.574-unit increase in EEASW. The model was

statistically significant ($F(1,98) = 48.275, p < 0.001$), explaining 33% of the variance in EEASW ($R^2 = 0.33, \text{Adj. } R^2 = 0.323$). The standardized coefficient ($\beta = 0.574, t = 6.948, p < 0.001$) confirmed the positive and moderate-to-strong predictive effect of EI. The effect size calculation ($f^2 = 0.49$) revealed a large effect, suggesting that EI is a substantial determinant of EEASW. Therefore, entrepreneurial intention has a positive effect on economic empowerment among silver women.

Table 8 : Effects of entrepreneurial intention on economic empowerment among silver women

Linear regression analysis results n=400									
	Unstandardized coefficients		Standardized coefficient	t	P	VIF	R ²	Adjusted R ²	F
	B	Standard error	Beta						
constant	1.542	0.301	-	5.119	0.000***	-	0	0.323	F=48.275
EI	0.574	0.083	0.574	6.948	0.000***	1	0.33		P=0.000**

Dependent variable: WEE

Note: ***, **, and * represent 1%, 5%, and 10% significance levels, respectively.

CONCLUSION

The results of this study provide strong empirical evidence that entrepreneurial intention exerts a positive and significant effect on the economic empowerment of silver women. The regression analysis confirmed that higher levels of entrepreneurial intention are associated with greater economic empowerment, suggesting that when women express a stronger motivation and readiness to engage in entrepreneurial activities, they are more likely to achieve improvements in their economic well-being.

This finding is consistent with the theory of planned behavior, which emphasizes intention as a critical predictor of actual

behavior. For silver women who often face unique challenges such as age-related stereotypes, limited access to formal employment opportunities, and reduced social capital, entrepreneurial intention becomes a powerful internal driver of empowerment. By actively considering entrepreneurship as a viable path, these women enhance their ability to generate income, access markets, and make independent financial decisions.

The study highlights that entrepreneurial intention is not merely an abstract psychological construct but a practical mechanism that translates into tangible empowerment outcomes. Silver women with stronger entrepreneurial aspirations

are more likely to experience financial independence, improved decision-making power within households, and increased participation in community and economic life. This aligns with previous research that links entrepreneurship with enhanced autonomy, self-confidence, and improved living standards for women in later life.

From a policy and practice standpoint, the positive relationship between entrepreneurial intention and economic empowerment underscores the need for targeted interventions that encourage entrepreneurial aspirations among older women. Training programs, mentorship opportunities, access to microfinance, and supportive legal and social environments can play a pivotal role in transforming intention into action. By strengthening entrepreneurial motivation and reducing barriers, policymakers and stakeholders can create pathways for silver women to achieve sustainable economic empowerment.

In conclusion, this study confirms that entrepreneurial intention catalyzes economic empowerment among silver women. Strengthening entrepreneurial aspirations not only enhances their personal and household economic resilience but also contributes to broader goals of inclusive growth, gender equality, and social development. The results reinforce the importance of viewing silver women not as passive recipients of welfare but as active economic agents who, through entrepreneurship, can significantly contribute to community and national development.

The study confirms that entrepreneurial intention has a positive effect on economic empowerment among silver women, which

aligns with existing research suggesting that intention is a strong predictor of entrepreneurial behavior and income-generating activities (Sharahiley, 2020; Gieure et al., 2020). This finding supports the Theory of Planned Behavior, indicating that when older women possess confidence, motivation, and perceived control, they are more likely to engage in entrepreneurial ventures, thereby increasing financial independence, resource ownership, and decision-making power. It also complements women's empowerment literature, which argues that entrepreneurship enables women to transform resources into agency and achievements (Kabeer, 1999). However, the contribution of the study would be further strengthened by expanding comparative discussions with prior studies, highlighting how silver women may differ from younger entrepreneurs in motivation, risk tolerance, and family role expectations.

In terms of policy implications, the results suggest that targeted support for senior women entrepreneurs is essential. Policymakers could enhance empowerment outcomes by improving access to microfinance, offering age-friendly loan schemes, providing digital and business training tailored to older adults, and creating community-based entrepreneurship support networks. In addition, simplifying administrative procedures, reducing regulatory barriers, and offering tax incentives for micro-businesses could encourage more silver women to pursue entrepreneurship. Strengthening social protection policies, such as pension-compatible earnings or support in balancing caregiving responsibilities, could further sustain

empowerment outcomes. A stronger integration of findings with policy recommendations would enhance the practical value of the research and guide

REFERENCES

Agarwal, B. (1997). Bargaining and gender relations: Within and beyond the household. *Feminist Economics*, 3(1), 1–51.

<https://doi.org/10.1080/135457097338799>

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)

Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442–453. <https://doi.org/10.5465/amr.1988.4306970>

Brush, C., & Cooper, S. (2012). Female entrepreneurship and economic development: An international perspective. *Entrepreneurship & Regional Development*, 24(1–2), 1–6. <https://doi.org/10.1080/08985626.2012.637340>

Brush, C., Greene, P. G., Balachandra, L., & Davis, A. E. (2019). The gender gap in venture capital—Progress, problems, and perspectives. *Venture Capital*, 21(4), 1–23. <https://doi.org/10.1080/13691066.2019.1569333>

Bruton, G. D., Khavul, S., Siegel, D., & Wright, M. (2013). New financial alternatives in seeding entrepreneurship: Microfinance, crowdfunding, and peer-to-peer innovations. *Entrepreneurship Theory*

programs aimed at improving the economic participation and well-being of senior women.

and Practice, 37(5), 5–15. <https://doi.org/10.1111/etap.12017>

Cornwall, A., & Edwards, J. (2010). *Introduction: Negotiating empowerment*. Zed Books.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Curran, J., & Blackburn, R. (2001). Older people and the enterprise society: Age and self-employment propensities. *Work, Employment & Society*, 15(4), 889–902. <https://doi.org/10.1177/095001701400438128>

De Bruin, A., Brush, C., & Welter, F. (2007). Advancing a framework for coherent research on women's entrepreneurship. *Entrepreneurship Theory and Practice*, 31(3), 323–339. <https://doi.org/10.1111/j.1540-6520.2007.00176.x>

Deere, C. D., & Doss, C. R. (2006). The gender asset gap: What do we know and why does it matter? *Feminist Economics*, 12(1–2), 1–50. <https://doi.org/10.1080/13545700500508056>

Doss, C. (2013). Intrahousehold bargaining and resource allocation in developing countries. *The World Bank Research Observer*, 28(1), 52–78. <https://doi.org/10.1093/wbro/lkt001>

- Duflo, E. (2012). Women's empowerment and economic development. *Journal of Economic Literature*, 50(4), 1051–1079. <https://doi.org/10.1257/jel.50.4.1051>
- Duvendack, M., Palmer-Jones, R., Copestake, J. G., Hooper, L., Loke, Y., & Rao, N. (2011). What is the evidence of the impact of microfinance on the well-being of poor people? EPPI-Centre, University of London.
- GEM. (2016). *Global Entrepreneurship Monitor 2015/2016 Global Report*. Global Entrepreneurship Research Association.
- Hossain, M. (2018). Women's empowerment and economic development: An empirical analysis. *World Development*, 102, 33–45. <https://doi.org/10.1016/j.worlddev.2017.09.013>
- Hu, X. (2016). Necessity-driven entrepreneurship in China: The role of family and gender. *Asian Business & Management*, 15(5), 327–350. <https://doi.org/10.1057/abm.2016.15>
- Jejeebhoy, S. J. (2000). Women's autonomy in rural India: Its dimensions, determinants, and the influence of context. In H. Presser & G. Sen (Eds.), *Women's empowerment and demographic processes* (pp. 204–238). Oxford University Press.
- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30(3), 435–464. <https://doi.org/10.1111/1467-7660.00125>
- Karlan, D., & Valdivia, M. (2011). Teaching entrepreneurship: Impact of business training on microfinance clients and institutions. *The Review of Economics and Statistics*, 93(2), 510–527. https://doi.org/10.1162/REST_a_00074
- Kautonen, T. (2012). *Senior entrepreneurship: Background paper for OECD Centre for Entrepreneurship*. OECD Publishing.
- Kautonen, T. (2013). *Senior entrepreneurship in the EU: Background paper for European Commission*. OECD Publishing.
- Kibler, E., Wainwright, T., Kautonen, T., & Blackburn, R. (2015). Can social exclusion prevent the unemployed from becoming self-employed? *International Small Business Journal*, 33(8), 931–953. <https://doi.org/10.1177/0266242613496248>
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5–6), 411–432. [https://doi.org/10.1016/S0883-9026\(98\)00033-0](https://doi.org/10.1016/S0883-9026(98)00033-0)
- Liu, S. (2014). Gender, migration, and entrepreneurship in China: A case study of migrant women. *Journal of Chinese Women's Studies*, 3(2), 45–62.
- Liu, Y. (2020). Family business continuity and necessity-driven entrepreneurship among Chinese women. *Small Enterprise Research*, 27(2), 173–188. <https://doi.org/10.1080/13215906.2020.1763921>
- Malhotra, A., & Schuler, S. R. (2005). Women's empowerment as a variable in

- international development. In D. Narayan (Ed.), *Measuring empowerment: Cross-disciplinary perspectives* (pp. 71–88). World Bank.
- Malhotra, A., Schuler, S. R., & Boender, C. (2002). *Measuring women's empowerment as a variable in international development*. World Bank.
- Maritz, A. (2015). Senior entrepreneurship in Australia: An exploratory study. *International Journal of Organizational Innovation*, 8(2), 35–44.
- Maritz, A., Perenyi, A., Waal, G. A., & Buck, C. (2021). Senior entrepreneurship: The emerging field. *Journal of Small Business and Enterprise Development*, 28(3), 333–350. <https://doi.org/10.1108/JSBED-08-2019-0263>
- McDaniel, C., & Gates, R. (2001). *Marketing research essentials* (3rd ed.). South-Western College Publishing.
- Minniti, M., & Naudé, W. (2010). What do we know about the patterns and determinants of female entrepreneurship across countries? *The European Journal of Development Research*, 22(3), 277–293. <https://doi.org/10.1057/ejdr.2010.17>
- Morduch, J., & Haley, B. (2002). *Analysis of the effects of microfinance on poverty reduction*. NYU Wagner.
- National Bureau of Statistics of China. (2022). *Statistical communique of the People's Republic of China on the 2021 national economic and social development*. <http://www.stats.gov.cn/>
- OECD. (2012). *Policy brief on senior entrepreneurship: Entrepreneurial activities in Europe*. OECD Publishing.
- OECD/European Commission. (2019). *Policy brief on women's entrepreneurship*. OECD Publishing.
- Peck, R., & Vining, G. (2021). *Introduction to linear regression analysis* (7th ed.). Wiley.
- Phillips, D., & Feng, W. (2015). Demographic transitions in China: Implications for the family and society. *Annual Review of Sociology*, 41, 471–486. <https://doi.org/10.1146/annurev-soc-073014-112428>
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach* (7th ed.). Wiley.
- Sen, A. (1999). *Development as freedom*. Knopf.
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38(5), 1442–1465. <https://doi.org/10.2307/256865>
- Sun, H. (2021). Women's entrepreneurship in China's digital platforms. *Asian Journal of Innovation and Policy*, 10(1), 1–21. <https://doi.org/10.7545/ajip.2021.10.1.1>
- Sun, J., & Chen, Y. (2020). Aging, intergenerational support, and women's economic roles in China. *Journal of Aging Studies*, 54, 100870. <https://doi.org/10.1016/j.jaging.2020.100870>

- Weber, P., & Schaper, M. (2004). Understanding the grey entrepreneur. *Journal of Enterprising Culture*, 12(2), 147–164. <https://doi.org/10.1142/S0218495804000087>
- Welter, F., Brush, C., & De Bruin, A. (2014). The gendering of the entrepreneurship context. *Entrepreneurship Theory and Practice*, 38(1), 1–20. <https://doi.org/10.1111/etap.12099>
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, 31(3), 387–406. <https://doi.org/10.1111/j.1540-6520.2007.00179.x>
- Xie, L., & Wu, S. (2022). Digital entrepreneurship and gender in China: Evidence from e-commerce platforms. *Information Systems Journal*, 32(4), 678–704. <https://doi.org/10.1111/isj.12354>
- Zellweger, T., Sieger, P., & Halter, F. (2011). Should I stay or should I go? Career choice intentions of students with family business background. *Journal of Business Venturing*, 26(5), 521–536. <https://doi.org/10.1016/j.jbusvent.2010.04.001>
- Zhang, Y. (2017). Gender, entrepreneurship, and balancing work-family roles in China. *Gender in Management: An International Journal*, 32(3), 217–233. <https://doi.org/10.1108/GM-07-2016-0143>
- Zhao, W., & Li, J. (2019). Policy support and women’s entrepreneurship in China: Evidence from microfinance programs. *Asian Economic Policy Review*, 14(2), 314–335. <https://doi.org/10.1111/aepr.12238>
- Zhao, Y., & Zhou, M. (2019). Migrant women and entrepreneurship in Chinese cities. *Urban Studies*, 56(14), 2916–2934. <https://doi.org/10.1177/0042098018793469>
- Zimmerman, M. A. (1995). Psychological empowerment: Issues and illustrations. *American Journal of Community Psychology*, 23(5), 581–599. <https://doi.org/10.1007/BF02506983>

MALAYSIAN JOURNAL OF HUMAN ECOLOGY

Journal Homepage: https://eco1.upm.edu.my/malaysian_journal_of_human_ecology_mjhe-3740

UNDERSTANDING SUCCESSFUL AGEING: A THEORETICAL EXPLORATION AND COMPARATIVE ANALYSIS

Yeshulavani Rajeswaran¹, Mohammad Mujaheed Hassan², Azlina Mohd Khir³,
Asmidawati Ashari⁴

¹*Institute for Social Science Studies, Universiti Putra Malaysia, 43400, Seri Kembangan, Selangor, Malaysia.
email: nfrhanakhayr@gmail.com*

^{2,3,4}*Faculty of Human Ecology, Universiti Putra Malaysia, 43400, Seri Kembangan, Selangor, Malaysia
email:*

ABSTRACT

This article critically examines five foundational theories of successful ageing: Disengagement Theory, Activity Theory, Continuity Theory, Rowe and Kahn's model, and the Selective Optimisation with Compensation (SOC) framework, to evaluate their conceptual assumptions, explanatory strengths, and limitations in contemporary ageing contexts. Through a comparative theoretical analysis, the paper highlights key differences in how these frameworks conceptualise engagement, adaptability, health, and social inclusion, while also identifying shared limitations related to cultural universality, environmental constraints, and structural inequality. A matrix-based comparison is employed to systematically assess the extent to which each model addresses psychological adaptation, social participation, and contextual resilience. The analysis reveals that dominant models of successful ageing remain overly individualistic and insufficiently responsive to emerging challenges such as digital exclusion, environmental vulnerability, and socioeconomic disparity. Drawing on these insights, the article argues for a more integrative and adaptive conceptualisation of successful ageing that better reflects the lived experiences of diverse older populations. The paper contributes to gerontological theory by synthesising classical and contemporary perspectives and offers directions for developing more inclusive frameworks aligned with current policy and societal realities.

Keywords: *successful ageing theories; resilience; adaptability; gerontology; psychosocial ageing; theoretical frameworks*

INTRODUCTION

Ageing is a universal and inevitable aspect of the human condition, encompassing a wide range of experiences shaped by cultural, social, psychological, and biological factors (Abdullah et al., 2024). As global life expectancy continues to rise, scholarly and policy attention has increasingly shifted from a narrow concern with longevity toward a broader emphasis on quality of life in later years. This shift reflects a growing recognition that ageing well involves not only physical survival but also psychological well-being, social participation, autonomy, and a sense of meaning across the life course (Abolfathi Momtaz & Ibrahim, 2011).

Within this context, the concept of *successful ageing* has emerged as a central yet contested construct in gerontological research. Rather than representing a singular or fixed outcome, successful ageing is widely understood as a multidimensional and evolving process, shaped by diverse theoretical traditions and disciplinary perspectives (Andrews, 2009). Contributions from psychology, sociology, and gerontology have generated a range of models that seek to explain how older adults adapt to age-related changes and maintain well-being over time (Baltes & Baltes, 1990). Early theories, such as Disengagement Theory and Activity Theory, offer contrasting views on social roles and participation in later life, while later frameworks, including Continuity Theory, Rowe and Kahn's model of successful ageing, and the Selective Optimisation with Compensation (SOC) framework, provide more nuanced accounts of adaptation, engagement, and functional maintenance.

Despite their substantial influence on research agendas, policy frameworks, and intervention strategies, these theories have been subject to sustained critique. Scholars have questioned their underlying assumptions, particularly their tendency to privilege normative, individualistic, and often Western-centric conceptions of ageing (Badache et al., 2023). Many models emphasise personal agency, activity, or functional capacity while paying

limited attention to structural inequalities, environmental constraints, cultural diversity, and emerging challenges such as digital exclusion and socio-environmental vulnerability. As a result, the applicability of classical successful ageing frameworks to diverse populations and contemporary social realities remains contested.

In response to these concerns, this article undertakes a critical examination of five prominent theories of successful ageing: Disengagement Theory, Activity Theory, Continuity Theory, Rowe and Kahn's model, and the Selective Optimisation with Compensation (SOC) framework. Rather than presenting these models descriptively, the article adopts a comparative analytical approach to evaluate their conceptual foundations, strengths, and limitations. By systematically contrasting how each theory conceptualises engagement, adaptability, health, and inclusion, the analysis highlights both areas of convergence and persistent theoretical gaps, particularly in relation to mental health, social participation, and resilience in later life.

The relevance of this theoretical re-examination is especially pronounced within the Malaysian and broader ASEAN context, where population ageing is accelerating rapidly. Malaysia's National Policy for Older Persons (2011) and the Action Plan for Older Persons (2011–2020) emphasise active participation, lifelong learning, and intergenerational solidarity as key pillars of well-being in later life. Similarly, the ASEAN Strategic Framework on Social Welfare and Development (2021–2025) promotes a regional vision of "healthy, active, and productive ageing." While these policy agendas resonate with principles found in Activity Theory, Continuity Theory, and the SOC framework, their effective implementation requires theoretical models that are sensitive to contextual, cultural, and structural realities.

Accordingly, this article seeks to contribute to the literature on successful ageing by critically synthesising classical and contemporary

theoretical perspectives and assessing their relevance to present-day ageing challenges. By identifying conceptual limitations and proposing directions for more inclusive and

adaptive frameworks, the paper aims to advance a more nuanced understanding of what it means to age successfully in an increasingly complex and diverse world.

Theoretical Frameworks of Successful Ageing

2.1 Activity Theory (Havighurst, 1961)

Proposed by Robert J. Havighurst in the early 1960s, Activity Theory represents one of the earliest and most influential frameworks linking social participation to successful ageing. The theory posits that life satisfaction, conceptualised as a subjective sense of well-being and fulfilment, serves as a key indicator of successful ageing, and that older adults can maintain psychological and physical well-being by remaining actively engaged in socially valued and personally meaningful activities (Havighurst, 1961).

Grounded in a life-course perspective, Activity Theory acknowledges that later life is often characterised by significant role transitions, including retirement, bereavement, and declining physical capacity. According to Havighurst, such transitions do not inherently diminish well-being; rather, their impact depends on individuals' capacity to replace lost roles with alternative forms of engagement. In contrast to Disengagement Theory, which conceptualises ageing as a process of social withdrawal, Activity Theory emphasises continued participation in social, cognitive, and physical activities as a means of preserving self-concept, competence, and social integration. Empirical and applied interpretations of the theory highlight activities such as volunteering, participation in community or religious organisations, caregiving, and lifelong learning as pathways to sustained life satisfaction in later life.

Subsequent theoretical extensions have broadened Activity Theory beyond behavioural participation to include existential and spiritual dimensions of ageing. McCarthy (2011) argues that meaningful activity fosters transcendence by promoting generativity, connectedness, and a sense of purpose, rather than activity for its own sake. From this perspective, successful ageing involves not only maintaining engagement but also reinterpreting life experiences through reflection, spirituality, and relational depth. Such interpretations align Activity Theory with contemporary discussions of resilience and psychological growth in later life.

Despite its enduring influence, Activity Theory has been criticised for its implicit assumption that opportunities for engagement are universally accessible. By prioritising activity as a normative standard of successful ageing, the theory risks marginalising individuals who face health limitations, caregiving responsibilities, socioeconomic disadvantage, or environmental barriers that constrain participation. Moreover, the theory provides limited guidance on how structural and contextual factors shape access to meaningful activities. These limitations suggest that while Activity Theory offers valuable insights into engagement and well-being, it requires integration with broader frameworks that account for inequality, context, and adaptive capacity, concerns that are addressed more explicitly in later theories of ageing.

2.2 Disengagement Theory (Cumming & Henry, 1961)

Disengagement Theory, proposed by Cumming and Henry (1961), presents a functionalist interpretation of ageing, conceptualising later life as a process of gradual and mutually beneficial withdrawal from social roles and responsibilities. According to this perspective, disengagement is viewed as a natural and adaptive adjustment that allows older adults to prepare for the end of life while enabling younger generations to assume central societal roles.

While the theory offers a structured explanation of role transition in later life, it has been widely criticised for its reductive and deterministic assumptions. By framing withdrawal as both inevitable and desirable, Disengagement Theory overlooks the heterogeneity of ageing experiences and underestimates older adults' agency, preferences, and capacity for continued contribution. Critics argue that the theory reinforces deficit-oriented representations of ageing by equating reduced participation with successful adjustment, thereby neglecting the psychological and social costs of enforced disengagement (Saha & Zaman, 2020).

One of the most contested aspects of Disengagement Theory concerns its justification of institutional practices such as mandatory retirement. Although proponents suggest that retirement affords older adults opportunities for rest and personal fulfilment, empirical evidence indicates that abrupt role loss often leads to diminished self-esteem, social isolation, and psychological distress (Cumming & Henry, 2008). Furthermore, the theory fails to account for gendered ageing trajectories, as women's social roles and pathways to disengagement have historically differed due to caregiving responsibilities and informal labour contributions (Cheng & McCarthy, 2013). These omissions highlight

the theory's limited applicability across diverse social and cultural contexts.

In addition, Disengagement Theory has been criticised for perpetuating ageist assumptions by framing older adults as less productive or valuable within social and economic systems. Such perspectives risk overlooking the contributions of older individuals as mentors, caregivers, volunteers, and knowledge holders, thereby reinforcing structural exclusion rather than promoting intergenerational integration.

Overall, while Disengagement Theory contributed to early theoretical debates on ageing, its emphasis on withdrawal and functional role replacement renders it insufficient for explaining contemporary ageing experiences. In contrast to more dynamic models, the theory inadequately captures the adaptive, participatory, and context-dependent nature of ageing, underscoring the need for frameworks that balance continuity, change, and agency, concerns that are further explored in Continuity Theory.

2.3 Continuity Theory (Atchley, 1989)

Building on earlier debates concerning engagement and withdrawal in later life, Atchley's Continuity Theory offers a perspective that emphasises stability and consistency in ageing. The theory proposes that older adults adapt to age-related changes by maintaining established patterns of behaviour, values, and social relationships, thereby preserving a coherent sense of identity over time (Atchley, 1989). From this standpoint, continuity. Rather than disengagement or constant activity, it serves as a primary mechanism through which individuals achieve psychological well-being in later life.

Continuity Theory contributes to the successful ageing discourse by recognising ageing as an adaptive process rather than a period of inevitable decline. Unlike Activity Theory, which prioritises participation as a normative standard, Continuity Theory acknowledges that maintaining familiar roles and routines can provide emotional security and meaning. This emphasis is particularly relevant for individuals who derive satisfaction from long-standing relationships, habits, or identities, suggesting that successful ageing may involve preserving valued aspects of the self rather than continuously seeking new forms of engagement.

However, the theory has been criticised for its tendency to portray ageing as an overly stable and linear process. By privileging continuity, the model underestimates the capacity and, in some cases, the necessity for change in later life. Empirical evidence indicates that many older adults actively redefine their roles and priorities following life disruptions such as widowhood, illness, or retirement, often engaging in new activities that enhance well-being and social connection (Hocking & Meltzer, 2016). These adaptive transformations challenge the assumption that continuity alone sufficiently explains successful ageing.

Furthermore, Continuity Theory does not adequately address the role of declining health and structural constraints in shaping ageing trajectories. As physical or cognitive capacity diminishes, maintaining prior patterns of activity may no longer be feasible, requiring substantial behavioural and psychological adjustment (Asper, 2018). By insufficiently accounting for these realities, the theory risks oversimplifying the emotional and practical challenges associated with later-life transitions.

Despite its substantial impact, Rowe and Kahn's model has attracted considerable criticism for its narrow and exclusionary

In sum, while Continuity Theory offers valuable insight into identity maintenance and psychological stability, its limited attention to disruption, agency, and contextual constraints restricts its explanatory power. These limitations underscore the need for frameworks that integrate both continuity and adaptation, concerns that are addressed more explicitly in multidimensional models of successful ageing, such as that proposed by Rowe and Kahn.

2.4 Rowe and Kahn's Model of Successful Ageing

Rowe and Kahn's model of successful ageing, developed through the MacArthur Studies of Successful Ageing, represents one of the most influential and widely operationalised frameworks in gerontology (Depp et al., 2012; Rowe & Kahn, 1987). In contrast to earlier theories that focused primarily on social roles or psychological adaptation, this model introduced a biomedical and functional perspective that sought to distinguish "successful ageing" from "usual ageing" within the broader ageing process.

At the core of Rowe and Kahn's framework are three interrelated components: (1) the absence of disease and disease-related disability, (2) high cognitive and physical functioning, and (3) active engagement with life. This model was particularly significant in shifting attention toward modifiable risk factors and preventive strategies, thereby influencing public health initiatives and clinical research aimed at extending functional independence in later life (Kusumastuti et al., 2016; Lowry et al., 2012).

criteria. By equating successful ageing with the absence of illness and functional decline, the model implicitly marginalises individuals

living with chronic conditions, disabilities, or age-related impairments, experiences that are increasingly common in ageing populations. This biomedical emphasis risks framing successful ageing as an exceptional rather than attainable state, thereby reinforcing normative ideals that many older adults cannot realistically meet.

Moreover, although the model acknowledges active engagement with life, it provides limited insight into how social, economic, and environmental factors shape opportunities for participation. Similar to Activity Theory, Rowe and Kahn's framework largely prioritises individual responsibility while underplaying the influence of structural inequalities, cultural variation, and contextual constraints on ageing outcomes.

Consequently, while Rowe and Kahn's model offers a clear and measurable conceptualisation of successful ageing, its emphasis on optimal functioning limits its relevance to diverse and heterogeneous ageing experiences. These shortcomings highlight the need for more flexible and adaptive models that recognise ageing as a process of balancing gains and losses, an orientation that is central to the Selective Optimisation with Compensation framework.

2.5 Selective Optimisation with Compensation (SOC) Theory

The Selective Optimisation with Compensation (SOC) theory, developed by Baltes and Baltes (1990), represents a significant advancement in conceptualising successful ageing as a dynamic process of adaptation across the life span. Unlike models that define success in terms of specific outcomes, the SOC framework focuses on the strategies individuals use to manage age-related changes by balancing gains and losses

through goal adjustment and resource allocation.

The SOC model comprises three interrelated processes: selection, optimisation, and compensation. Selection involves prioritising goals that align with available resources and personal values; optimisation refers to investing effort and resources to enhance performance in selected domains; and compensation entails adopting alternative strategies when functional losses threaten goal attainment. Together, these processes describe a flexible system of self-regulation that enables individuals to maintain functioning and well-being despite age-related constraints (Baltes & Baltes, 1990; Freund & Baltes, 2002).

One of the key strengths of the SOC framework lies in its emphasis on plasticity and diversity in ageing trajectories. By acknowledging that successful ageing does not require the absence of loss, the model accommodates a wide range of physical, cognitive, and emotional experiences. Empirical research has linked SOC strategies to positive psychological outcomes, including resilience, emotional regulation, and life satisfaction, underscoring the model's relevance to mental health and well-being in later life (Tadic, 2017; Zajac-Lamparska, 2021).

Nevertheless, the SOC model is not without limitations. Similar to other individual-level frameworks, it places primary emphasis on personal coping strategies, offering limited consideration of how environmental, technological, and socioeconomic factors enable or constrain the use of SOC processes. For individuals facing systemic disadvantage or restricted access to resources, the capacity to engage in optimisation or compensation may be significantly constrained.

Despite these limitations, the SOC framework provides one of the most conceptually inclusive accounts of successful ageing by integrating objective and subjective criteria and recognising adaptation as an ongoing process. Compared with earlier theories, SOC offers a more realistic and context-sensitive foundation for understanding ageing in contemporary societies, particularly when complemented by broader structural and policy perspectives.

3. Comparative Analysis of Theoretical Frameworks of Successful Ageing

A comparative examination of theoretical frameworks of successful ageing is essential for understanding how ageing has been conceptualised across disciplines, historical periods, and sociocultural contexts. While early gerontological theories tended to emphasise normative or universal ageing trajectories, contemporary scholarship increasingly recognises ageing as a heterogeneous, context-dependent, and dynamic process (Doyle et al., 2012). Theoretical models such as Disengagement Theory, Activity Theory, Continuity Theory, Rowe and Kahn's Successful Ageing model, and the Selective Optimisation with Compensation (SOC) model each offer distinct lenses through which ageing is interpreted. However, these frameworks differ substantially in their underlying assumptions, normative orientations, and capacity to accommodate diversity in health, ability, and environment (Badache et al., 2023).

This section critically compares these five models along three key analytical dimensions: (1) assumptions about ageing as decline, adaptation, or opportunity; (2) cultural and socioeconomic relevance; and (3) inclusivity with respect to health status, functional ability, and environmental variability. By systematically examining these dimensions, the analysis highlights both the conceptual contributions and the limitations of each

framework in capturing the complex realities of ageing in contemporary societies.

3.1 Assumptions about Ageing: Decline, Adaptation, or Opportunity

Theoretical perspectives on ageing are fundamentally shaped by how ageing itself is conceptualised, whether as an inevitable decline, a process of adaptation, or an opportunity for continued growth. Disengagement Theory represents the most decline-oriented perspective among the models examined. It conceptualises ageing as a natural and mutually beneficial withdrawal from social roles, framing disengagement as both inevitable and functional (Cumming & Henry, 1961). While historically influential, this assumption has been widely criticised for portraying older adults as passive actors and for normalising social exclusion under the guise of natural ageing (Barman et al., 2024).

In contrast, Activity Theory offers a markedly optimistic counterpoint by conceptualising ageing as an opportunity for sustained engagement and fulfilment. According to this perspective, continued participation in socially meaningful activities is central to maintaining life satisfaction and well-being in later life (Ibanez-Perez & Martinez-Moreno, 2020). However, despite its positive orientation, Activity Theory implicitly advances a normative ideal that equates successful ageing with productivity and engagement, thereby marginalising those unable to meet these expectations due to health or structural constraints.

Continuity Theory occupies an intermediate position, conceptualising ageing primarily as a process of adaptation grounded in stability. It posits that older adults strive to preserve internal dispositions and external life patterns, using continuity as a coping mechanism in the face of change (Atchley, 1989). While this

framework acknowledges resilience and agency, it assumes that past roles and routines remain viable reference points, an assumption that may not hold in the presence of major life disruptions.

The SOC model advances a more dynamic and process-oriented view of ageing. Rather than privileging stability or activity per se, it conceptualises ageing as a strategic process in which individuals actively select goals, optimise available resources, and compensate for losses (Baltes & Baltes, 1990). This model reframes ageing as an adaptive endeavour, allowing for both growth and decline without reducing either to failure.

Rowe and Kahn's model represents the most aspirational conceptualisation of ageing, defining successful ageing through high physical and cognitive functioning, active engagement, and the absence of disease or disability (Rowe & Kahn, 1987). While influential, this framework establishes stringent benchmarks that implicitly construct successful ageing as exceptional rather than attainable for the majority, raising concerns about its normative and exclusionary implications (Doyle et al., 2012).

Historical figures such as Stephen Hawking and Franklin D. Roosevelt exemplify the potential for successful ageing despite severe physical limitations. Hawking maintained extraordinary intellectual productivity, while Roosevelt continued political leadership despite mobility challenges. These cases highlight that ageing should not be narrowly defined by physical decline but understood through adaptability, engagement, and resource optimisation, as proposed by the SOC and Activity theories.

3.2 Cultural Relevance across Diverse Contexts

The applicability of ageing theories is closely tied to their cultural and socioeconomic assumptions. Disengagement Theory reflects a predominantly Western, individualistic worldview in which autonomy and role exit are viewed as normative. This perspective is poorly aligned with collectivist societies, where interdependence, family embeddedness, and continued social participation are culturally valued. In such contexts, disengagement may be perceived as socially detrimental rather than adaptive (Saha & Zaman, 2020).

Activity Theory demonstrates greater cultural flexibility by emphasising engagement rather than withdrawal. However, it assumes the availability of social, economic, and institutional resources that enable participation. In low-resource settings or contexts marked by inequality, older adults may lack access to age-friendly infrastructure, organised activities, or supportive networks, limiting the theory's cross-cultural applicability (Saha & Zaman, 2020).

Continuity Theory offers moderate cultural adaptability by allowing individuals to age in ways consistent with their earlier life patterns. Nevertheless, its emphasis on stability may be less applicable in societies experiencing rapid social change, migration, conflict, or economic precarity, where continuity is difficult to sustain (Asper, 2018).

Rowe and Kahn's model has achieved global prominence but remains culturally constrained by its biomedical and individualistic orientation. Its focus on optimal health and functioning reflects assumptions more feasible in high-income contexts with robust healthcare systems. As a result, it risks marginalising older adults in disadvantaged settings where structural barriers, rather than personal choices, shape ageing outcomes (Badache et al., 2023).

By contrast, the SOC model demonstrates substantial cultural and socioeconomic flexibility. It does not prescribe specific outcomes but instead emphasises adaptive strategies that can be tailored to varying contexts. By recognising constraints and resource limitations as integral to the ageing process, the SOC framework offers a more globally relevant and context-sensitive model of ageing (Baltes & Baltes, 1990).

3.3 Inclusivity: Health, Ability, and Environmental Variability

Inclusivity represents a critical benchmark for evaluating ageing theories, particularly in light of growing recognition of health disparities and functional diversity in later life. Disengagement Theory is the least inclusive, as it advances a singular ageing trajectory centred on withdrawal, offering limited scope for individual agency or contextual variation (Tadic, 2017).

Activity Theory, while more progressive, remains implicitly exclusionary. Its emphasis on active participation overlooks the lived realities of older adults experiencing chronic illness, disability, or mobility limitations. Moreover, it insufficiently accounts for environmental and economic barriers that restrict opportunities for engagement, thereby reinforcing an idealised standard of ageing that many cannot attain (Saha & Zaman, 2020).

Continuity Theory improves inclusivity by recognising individual preferences and adaptive strategies. However, it underestimates the disruptive impact of severe health decline, environmental displacement, or socioeconomic instability, conditions that can render continuity untenable and necessitate fundamental life reorganisation (Asper, 2018).

Rowe and Kahn's model has been widely criticised for its lack of inclusivity. By equating successful ageing with the absence of disease and high functional capacity, it pathologises normal age-related decline and implicitly labels many older adults as unsuccessful (Depp et al., 2012). These framing risks reinforce stigma and obscure the possibility of well-being in the presence of illness or disability.

Among the models reviewed, the SOC framework offers the most inclusive and ethically defensible approach. It explicitly acknowledges variability in health, ability, and environment, framing successful ageing as a process of flexible adaptation rather than a fixed outcome. By allowing individuals to redefine goals and success in response to changing circumstances, the SOC model accommodates diverse ageing trajectories and aligns with contemporary person–environment fit perspectives (Zajac-Lamparska, 2021).

3.4 Synthesis and Implications

Collectively, this comparative analysis demonstrates that early ageing theories were often grounded in normative, linear assumptions that inadequately capture the diversity of later-life experiences. While models such as Activity Theory and Rowe and Kahn's framework have advanced more positive narratives, they remain constrained by implicit ideals of productivity and optimal functioning. In contrast, adaptive and process-oriented frameworks, particularly the SOC model, offer more inclusive, culturally sensitive, and realistic accounts of ageing.

These insights underscore the need for integrative theoretical approaches that move beyond dichotomies of success and failure, activity and disengagement, or health and illness. Contemporary ageing research must prioritise frameworks that recognise

heterogeneity, structural inequality, and adaptive capacity as central to understanding successful ageing in diverse populations.

models across assumptions, cultural relevance, inclusivity, and conceptual limitations, thereby illustrating the progressive shift from normative and decline-oriented perspectives toward adaptive and process-based frameworks of ageing.

Table 1 synthesises the comparative analysis by systematically contrasting the theoretical

Table 1: Comparative Analysis of Major Theoretical Models of Successful Ageing

Theory / Model	Core Assumptions about Ageing	View of Older Adults	Role of Health & Functioning	Cultural & Socioeconomic Relevance	Inclusivity & Limitations	Key Critiques
Disengagement Theory (Cumming & Henry, 1961)	Ageing is a natural, inevitable process of social withdrawal that benefits both individuals and society	Passive recipients of role exit	Declining health reinforces disengagement	Low – reflects Western, individualistic and functionalist assumptions	Low inclusivity; assumes a universal ageing trajectory	Reinforces ageism; legitimises social exclusion; ignores agency, diversity, and intergenerational contributions
Activity Theory (Havighurst, 1961)	Successful ageing is achieved through sustained social, physical, and psychological activity	Active, socially engaged contributors	Good health enables continued participation	Moderate – adaptable but assumes access to resources and opportunities	Limited inclusivity for those with illness, disability, or poverty	Overemphasises productivity; risks marginalising frail or disadvantaged older adults
Continuity Theory (Atchley, 1989)	Ageing involves maintaining internal and external continuity across the life course	Adaptive individuals seeking stability	Health decline disrupts but does not redefine identity	Moderate – culturally flexible but less applicable in unstable contexts	Partially inclusive; underplays disruptive life events	Overly static; insufficient attention to transformation, loss, and structural change
Rowe & Kahn's Successful Ageing Model (1987, 1997)	Successful ageing is characterised by the absence of disease, high functioning, and active engagement	High-performing, "successful" agers	Central determinant of success	Low-moderate – biomedical and resource-dependent	Low inclusivity; excludes those with chronic illness or disability	Normative and exclusionary; pathologies normal ageing; promotes unrealistic ideals
Selective Optimization with Compensation (SOC) Model	Ageing is a dynamic process of adaptation through goal	Active agents managing	Health decline is anticipated	High – flexible across cultures and	High inclusivity; accommodate	Less explicit on structural inequalities; complex to

Theory / Model	Core Assumptions about Ageing	View of Older Adults	Role of Health & Functioning	Cultural & Socioeconomic Relevance	Inclusivity & Limitations	Key Critiques
(Baltes & Baltes, 1990)	selection, optimisation, and compensation	gains and losses	and managed adaptively	socioeconomic conditions	s diverse trajectories	operationalise empirically

DISCUSSION

This paper set out to critically examine major theoretical frameworks of successful ageing and to evaluate their relevance in light of contemporary understandings of mental health, well-being, and diversity in later life. The comparative analysis demonstrates that traditional ageing theories vary considerably in their conceptualisation of ageing trajectories, assumptions about health and functioning, and capacity to accommodate sociocultural and structural variability. Collectively, these findings reinforce the argument that no single classical model sufficiently captures the complexity of ageing in contemporary societies.

Among the frameworks reviewed, the Selective Optimisation with Compensation (SOC) model emerges as the most theoretically robust and context-sensitive. Its emphasis on adaptive goal selection, optimisation of available resources, and compensation for age-related losses aligns closely with current psychological and gerontological perspectives that conceptualise ageing as an ongoing process of adjustment rather than a fixed outcome. Importantly, the SOC model reframes decline not as failure but as a condition that can be actively managed through adaptive strategies, thereby offering a more inclusive and humane account of successful ageing

across diverse health statuses and life circumstances.

The Activity Theory also retains considerable relevance within modern discourses on mental health and well-being, particularly through its emphasis on continued engagement, purpose, and social connectedness. Empirical research consistently demonstrates that meaningful participation in social, cognitive, and physical activities contributes positively to psychological resilience and life satisfaction in later life. However, as highlighted in the comparative analysis, Activity Theory risks advancing a normative ideal of productivity that may marginalise older adults experiencing functional limitations or socioeconomic disadvantage. Thus, while engagement remains a critical component of well-being, it must be understood within a broader framework that recognises structural constraints and individual variability.

In contrast, Rowe and Kahn's model of successful ageing, despite its enduring influence, appears increasingly misaligned with contemporary ageing realities. Its strong emphasis on the absence of disease and high physical and cognitive functioning establishes rigid criteria that exclude large segments of ageing populations, particularly those living with chronic illness or disability. Such an idealised

conceptualisation risks pathologising normal ageing processes and reinforcing stigma, thereby undermining its applicability in diverse and ageing societies. This critique underscores the limitations of outcome-based definitions of successful ageing and highlights the need to shift toward process-oriented and adaptive frameworks.

The observed theoretical fragmentation across ageing models points to the necessity of an integrative or hybrid conceptual approach. Rather than positioning theories in opposition, this study argues for a synthesis that draws selectively on their strengths. Specifically, an integrative framework could combine the emphasis on meaningful engagement from Activity Theory, the adaptive mechanisms central to the SOC model, and the preservation of identity articulated in Continuity Theory. Such a hybrid approach would move beyond binary distinctions of success and failure, recognising ageing as a non-linear, context-dependent journey shaped by shifting goals, capacities, and meanings over time.

Crucially, the analysis also reveals significant gaps in existing theoretical frameworks. One notable omission is the concept of digital ageing. As digital technologies increasingly mediate social interaction, healthcare access, and lifelong learning, older adults' digital inclusion, or exclusion, has become a critical determinant of well-being. Yet, traditional ageing theories remain largely silent on digital literacy, technological access, and online social capital. Integrating digital ageing into theoretical models is therefore essential for maintaining relevance in rapidly digitising societies.

Similarly, the impacts of climate change and environmental stressors represent another under-theorised dimension of ageing. Extreme weather events, environmental degradation, and forced displacement disproportionately affect older adults by exacerbating health risks, limiting mobility, and disrupting social networks. The absence of environmental vulnerability and resilience within classical ageing frameworks reflects a significant conceptual blind spot that must be addressed to understand ageing in an era of global environmental uncertainty.

Furthermore, structural inequalities, such as disparities in income, education, gender, ethnicity, and geographic location, profoundly shape opportunities for engagement, health maintenance, and adaptation in later life. Most traditional models, particularly biomedical and individualistic frameworks, inadequately account for how systemic barriers constrain ageing trajectories. This limitation reinforces the need for intersectional perspectives that situate individual ageing experiences within broader social, economic, and political contexts.

Taken together, these findings suggest that successful ageing should no longer be conceptualised as a fixed endpoint defined by optimal functioning. Instead, it should be understood as a flexible, evolving process shaped by adaptability, resilience, and the capacity to redefine purpose across the life course. Theoretical models that prioritise inclusivity, contextual sensitivity, and adaptive capacity are better positioned to reflect the lived realities of ageing populations in diverse settings.

As illustrated in Figure 1, the synthesis of traditional frameworks—from disengagement to optimisation- indicates that successful ageing is most coherently understood as a dynamic process rather than a static state. This process is underpinned by core elements such as adaptability, engagement, continuity, and resilience, while being increasingly influenced by contemporary forces including digital transformation, environmental change, and social inequality. Advancing ageing theory, therefore, requires not the abandonment of classical models, but their critical integration and extension to address the complex challenges of ageing in the twenty-first century.

To maintain relevance, theoretical models of ageing must address these overlooked

dimensions and transition to inclusive, intersectional, and adaptable paradigms. Successful ageing ought to be conceptualised not as a fixed destination but as a flexible journey shaped by context, resilience, and the ability to redefine purpose throughout the lifespan.

Cases such as Stephen Hawking and Franklin D. Roosevelt further underscore the limitations of rigid frameworks that equate successful ageing solely with the absence of disease. Both individuals exemplify the principles of adaptation, engagement, and continuity, demonstrating that meaningful contributions, psychological, social, and intellectual, are integral to ageing well. These examples reinforce the need for integrative models that capture the full spectrum of human potential across the lifespan.

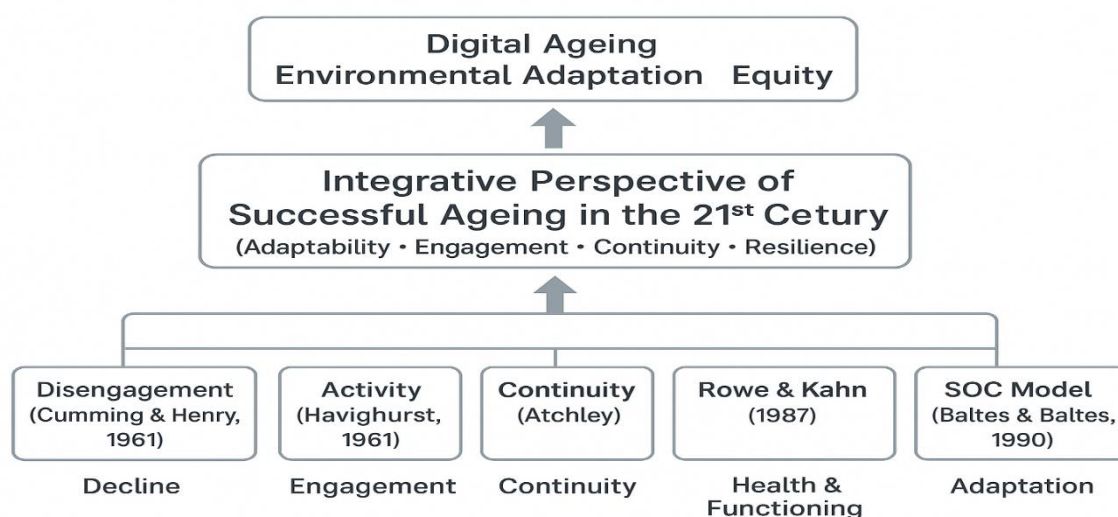


Figure 1: Integrative Framework of Successful Ageing: Traditional Theories and Contemporary Considerations

4.1 Contribution of the Study

This article makes several important contributions to the literature on successful ageing by advancing theoretical clarity, critical integration, and contextual relevance within contemporary gerontological discourse.

First, this study contributes theoretically by offering a systematic and critical synthesis of five major models of successful ageing: Disengagement Theory, Activity Theory, Continuity Theory, Rowe and Kahn's model, and the Selective Optimisation with Compensation (SOC) framework. Rather than treating these models in isolation, the paper comparatively evaluates their underlying assumptions, normative orientations, and conceptual limitations using a structured matrix analysis. This approach moves beyond descriptive theorisation and clarifies how dominant models differ in their treatment of engagement, health, adaptability, and inclusivity, thereby strengthening conceptual precision within successful ageing scholarship.

Second, the study contributes conceptually by highlighting the limitations of outcome-based and individualistic definitions of successful ageing that continue to dominate gerontological theory and policy discourse. By critically examining how classical models marginalise older adults living with chronic illness, disability, or socioeconomic disadvantage, this paper challenges narrow interpretations of success and reframes successful ageing as a dynamic, adaptive process rather than a fixed endpoint. In doing so, the analysis reinforces adaptability, resilience, and goal adjustment as core mechanisms of ageing well across diverse life circumstances.

Third, this article advances the literature by identifying under-theorised contemporary dimensions of ageing, particularly digital exclusion, environmental vulnerability, and structural inequality. While these factors increasingly shape older adults' well-being, they remain largely absent from classical theoretical frameworks. By explicitly foregrounding these emerging realities, the paper extends existing models and underscores the need for ageing theories that are responsive to twenty-first-century social, technological, and environmental contexts.

Finally, the study offers a contextually grounded contribution by situating theoretical debates within the Malaysian and broader ASEAN ageing landscape. By aligning the comparative analysis with regional policy frameworks on active and productive ageing, the paper enhances the relevance of successful ageing theory for middle-income and rapidly ageing societies. This contextual integration supports the development of more inclusive and culturally sensitive frameworks that can inform both policy design and future empirical research.

Collectively, these contributions position the study as a theoretically integrative and critically reflective examination of successful ageing, offering a foundation for future research aimed at developing inclusive, adaptive, and context-aware models of ageing across diverse populations.

5. Conclusion

This review highlights that existing theoretical models of successful ageing provide valuable, yet partial, insights into

the ageing experience. Classical frameworks such as the Disengagement Theory and Rowe and Kahn's model have significantly shaped scholarly discourse; however, their applicability is constrained by rigid assumptions, limited inclusivity, and narrow operational definitions. In contrast, models such as the Activity Theory, Continuity Theory, and the Selection, Optimisation, and Compensation (SOC) framework offer greater flexibility, emphasising engagement, resilience, and adaptive personal agency as central mechanisms for navigating later life.

Importantly, successful ageing cannot be reduced to fixed criteria or uniform outcomes. The heterogeneity of ageing trajectories necessitates models that recognise the interplay of individual capacities, social and environmental contexts, and intersectional identities. Contemporary realities, including digital engagement, environmental stressors, and structural inequalities, further underscore the need for frameworks that integrate evolving societal and technological influences.

Ultimately, the essence of successful ageing lies not in the pursuit of idealised benchmarks but in fostering adaptability, cultivating meaning, and promoting inclusivity. Future theoretical and practical approaches must reflect the dynamic, multidimensional, and context-dependent nature of ageing, supporting older adults in shaping fulfilling, resilient, and self-

directed pathways through the later stages of life. By reconceptualising ageing as a continuous process rather than a fixed state, scholarship and policy can better facilitate holistic well-being across diverse populations and settings.

ACKNOWLEDGMENTS

I would like to extend my deepest gratitude to Jabatan Perkhidmatan Awam (JPA) & Bahagian Pembangunan Modal Insan (BMI, JPA) for the scholarship to pursue my PhD as a full-time student. I thank JPA for their unwavering financial support and belief in the value of this study. I am also deeply grateful to my supervisory team, led by my supervisor, Gs. Ts. Dr. Mohammad Mujaheed Hassan, and my co-supervisors, Dr. Asmidawati Ashari and Dr. Azlina Mohd Khir. Their unwavering support has been crucial in bringing this journal to fruition, and without their contributions, this research would not have been completed. Finally, I sincerely thank MyAgeing and Dr. Puvaneswaran Kunasekaran for their invaluable backing and encouragement to start writing. Their support has allowed me to dedicate myself entirely to my research, knowing that the necessary resources were available to pursue this endeavour. Thank you for your dedication and partnership. I hope this journal reflects the trust you have placed in me and contributes positively to the field of social gerontology in Malaysia.

REFERENCES

- Abdullah, J., Ismail, A., & Yusoff, M. S. B. (2024). Healthy ageing in Malaysia by 2030: Needs, challenges and future directions. *Malaysian Journal of Medical Sciences*, 31(4), 1–13. <https://doi.org/10.21315/mjms2024.31.4.1>
- Abolfathi Momtaz, Y., & Ibrahim, R. (2012). Predictors and prevalence of successful aging among older Malaysians. *Gerontology*, 58(4), 366–370. <https://doi.org/10.1159/000334671>
- Andrews, M. (2009). The narrative complexity of successful ageing. *International Journal of Sociology and Social Policy*, 29(1–2), 73–83. <https://doi.org/10.1108/01443330910934736>
- Asper, A. (2018). Continuity theory. In the *Encyclopedia of gerontology and population aging*. Springer.
- Atchley, R. C. (1989). A continuity theory of normal aging. *The Gerontologist*, 29(2), 183–190. <https://doi.org/10.1093/geront/29.2.183>
- Badache, A. C., Hachem, H., & Mäki-Torkko, E. (2023). Perspectives of successful ageing among adults aged 75+: A systematic review with narrative synthesis. *Ageing & Society*, 43(5), 1203–1239. <https://doi.org/10.1017/S0144686X21001070>
- Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful aging: Perspectives from the behavioral sciences* (pp. 1–34). Cambridge University Press. <https://doi.org/10.1017/CBO9780511665684.003>
- Barman, P., Rahut, D. B., & Mishra, R. (2024). Mediating role of social disengagement and loneliness in the relationship between functional health and mental well-being among older adults. *Scientific Reports*, 14(1), Article 66919. <https://doi.org/10.1038/s41598-024-66919-9>
- Cheng, B. H., & McCarthy, J. M. (2013). Managing work, family, and school roles: Disengagement strategies can help and hinder. *Journal of Occupational Health Psychology*, 18(4), 448–460. <https://doi.org/10.1037/a0034240>
- Cumming, E., & Henry, W. E. (1961). *Growing old: The process of disengagement*. Basic Books.
- Depp, C. A., Vahia, I. V., & Jeste, D. V. (2012). Successful aging. In S. K. Whitbourne & M. J. Sliwinski (Eds.), *The Wiley-Blackwell handbook of adulthood and aging* (pp. 459–476). Wiley-Blackwell. <https://doi.org/10.1002/9781118392966.ch23>
- Doyle, Y. G., McKee, M., & Sherriff, M. (2012). A model of successful ageing in British populations. *European Journal of Public Health*, 22(1), 71–76. <https://doi.org/10.1093/eurpub/ckq132>
- Freund, A. M., & Baltes, P. B. (2002). Life-management strategies of selection, optimization, and compensation: Measurement by self-report and construct validity. *Journal of Personality and Social Psychology*, 82(4), 642–662. <https://doi.org/10.1037/0022-3514.82.4.642>

- Havighurst, R. J. (1961). Successful aging. *The Gerontologist*, 1(1), 8–13. <https://doi.org/10.1093/geront/1.1.8>
- Hocking, C., & Meltzer, P. (2016). Theoretical models relevant to gerontological occupational therapy practice. In K. F. Barney, C. Emerita, & M. A. Perkinson (Eds.), *Occupational therapy with aging adults* (pp. 41–51). Mosby. <https://doi.org/10.1016/B978-0-323-06776-8.00013-X>
- Ibáñez-Pérez, R., & Martínez-Moreno, A. (2020). Influence of physical activity, anxiety, resilience, and engagement on optimism among older adults. *International Journal of Environmental Research and Public Health*, 17(21), Article 8284. <https://doi.org/10.3390/ijerph17218284>
- Kusumastuti, S., Derks, M. G. M., Tellier, S., Di Nucci, E., Lund, R., Mortensen, E. L., & Westendorp, R. G. J. (2016). Successful ageing: A literature review using citation network analysis. *Maturitas*, 93, 4–12. <https://doi.org/10.1016/j.maturitas.2016.04.010>
- Lowry, K. A., Vallejo, A. N., & Studenski, S. A. (2012). Successful aging as a continuum of functional independence: Lessons from physical disability models of aging. *Aging and Disease*, 3(1), 5–15.
- McCarthy, V. (2011). A new look at successful aging: Exploring a mid-range nursing theory. *Journal of Theory Construction & Testing*, 15(1), 17–21.
- Rowe, J. W., & Kahn, R. L. (1987). Human aging: Usual and successful. *Science*, 237(4811), 143–149. <https://doi.org/10.1126/science.3299702>
- Saha, S., & Zaman, A. (2020). Satisfaction in old age: Activity or disengagement? *Journal of Sociological Research*, 12(1), 7–20. <https://doi.org/10.5296/jsr.v12i1.17399>
- Tadić, D. (2017). Review of *Beyond successful and active ageing: A theory of model ageing* by V. Timonen. *International Journal of Ageing and Later Life*, 11(2), 1–4. https://doi.org/10.3384/ijal.1652-8670.11_2A
- Zajac-Lamparska, L. (2021). Selection, optimization and compensation strategies and their relationship with well-being and impulsivity across adulthood. *BMC Psychology*, 9(1), Article 144. <https://doi.org/10.1186/s40359-021-00650-2>

MALAYSIAN JOURNAL OF HUMAN ECOLOGY

Journal Homepage: https://ecol.upm.edu.my/malaysian_journal_of_human_ecology_mjhe-3740

SHIFT WORK AND ADULT WELL-BEING IN AN AGEING WORKFORCE: EVIDENCE FROM SECURITY GUARDS IN MALAYSIA

Shridev Nair Thamotheran^{1,*}, Shamsul Bahri Md Tamrin²

^{1,2} Faculty of Medicine and Health Sciences, Universiti Putra Malaysia (UPM), 3400, Seri Kembangan, Selangor, Malaysia.

Abstract

Malaysia's transition into an ageing society has intensified reliance on older adults in low-wage, shift-intensive sectors such as private security. This study examines how shift work, ageing, and socioeconomic pressures influence well-being among Malaysian security guards. An analytical cross-sectional study was conducted among 189 guards across eight industrial and commercial sites in Johor Bahru. Data on sociodemographic background, education, household dependents, lifestyle behaviors, and metabolic health indicators including body mass index, waist circumference, blood pressure, and random blood glucose were collected through structured questionnaires and field-based health assessments.

Night shift workers were significantly older and predominantly male and were more likely to occupy lower-education categories. They reported higher consumption of sugar-sweetened beverages and markedly lower physical activity levels. Night work was significantly associated with central obesity, elevated BMI, impaired glucose levels, and higher composite diabetes risk scores. Logistic regression showed that night shift work independently predicted high diabetes risk after adjusting for age, gender, and family history.

These findings highlight how work organization, ageing, and socioeconomic constraints intersect to shape chronic disease vulnerability within the security sector. The clustering of older and lower-educated workers in night shifts reflects structural labour-market stratification that amplifies metabolic health risks. Addressing these risks requires age-sensitive scheduling, routine health screening, improved access to healthy food options, and organizational policies that support the well-being of shift workers in Malaysia's ageing workforce.

Keywords: ageing workforce; adult well-being; shift work; community health; socioeconomic vulnerability

INTRODUCTION

Malaysia became an “ageing society” in 2020 with over 7% of its population aged 65 and above, a proportion expected to double by 2043 (DOSM, 2020). This shift carries significant implications for labour participation, chronic illness patterns and the organisations of work particularly as older adults remain in the workforce out of economic necessity. Many of these workers are concentrated in low wage sectors characterised by demanding schedules and limited protections. The private security industry exemplifies this pattern. Although essential for safeguarding workplaces and communities, the sector relies heavily on middle-aged and older adults from lower socioeconomic backgrounds.

Security guards commonly perform long 12-hour night shifts, experience irregular sleep, engage in prolonged sedentary duties, face limited job mobility, minimal health benefits, and financial pressure from large household responsibilities. Despite these conditions, scholarly attention to how work demands, occupational culture, and shift schedules shape adult well-being in Malaysia remains limited.

Johor Bahru, an urban centre with one of the highest national burdens of metabolic and chronic conditions offers a relevant context to examine how work organisation interacts with socioeconomic constraints. Although Malaysian occupational health research has examined shift-intensive sectors

such as healthcare and manufacturing, the security profession has received far less scholarly attention. As a result, the specific risks and lived realities of security guards remain largely undocumented.

This study examines the association between shift work, ageing, education, and health risk indicators among security guards in Johor Bahru. By reframing clinical indicators as proxies for adult well-being, it situates occupational health within a human ecology framework, providing insight into an underexplored occupational group and advances understanding of how work organisation influences adult well-being in Malaysia’s ageing society.

LITERATURE REVIEW

Shift work disrupts circadian rhythms and impairs metabolic regulation, glucose tolerance, and inflammatory pathways (Harrington, 2001; Kivimäki et al., 2011; Leproult et al., 2014). Rotating or prolonged night schedules intensify these disruptions by continuously forcing the body to re-entrain to misaligned sleep-wake cycles (Pan et al., 2011; Gan et al., 2015). Although these physiological mechanisms are well established internationally, the social and occupational forces that shape exposure to night work remain underexamined in Malaysia.

Ageing amplifies circadian vulnerability, as older adults exhibit

reduced physiological resilience and poorer sleep quality (Marcovecchio et al., 2011). In the Malaysian context, where the prevalence of type 2 diabetes and metabolic disorders is increasing (NHMS, 2019), many older adults continue to work in low-barrier sectors such as private security. However, research on how age, work schedules, and job demands interact within this group is limited.

Lifestyle adaptations common among shift workers such as night-time eating, reliance on sugar-sweetened beverages, and limited physical activity have been linked to obesity and metabolic dysfunction (Crispim et al., 2011; Shan et al., 2018). These behaviours often reflect structural constraints rather than personal choice: long, sedentary shifts, restricted access to healthy food, and fatigue reduce workers' capacity to maintain healthy routines (Manodpitipong et al., 2017; Strohmaier et al., 2018).

Lower education levels limit occupational mobility, often placing less-qualified workers into night shifts with fewer protections and reduced health literacy (Nutbeam, 2000; Canuto et al., 2014). Financial strain and high dependency ratios push many breadwinners into overtime or undesirable shifts as a coping strategy. Ethnic and gender dimensions reinforce inequality.

Malays and Indians are overrepresented in the sector and also have higher national prevalence of diabetes and

metabolic syndrome (MOH, 2020; Ye, 2023).

International studies document psychosocial strain, family disruption, and sleep deprivation among security personnel (Jovanović et al., 2021; Begani et al., 2013; Lee, 2024). Despite this, Malaysian research has paid little attention to security work as a distinct occupational environment.

Overall, the literature shows that shift work is not merely a biological stressor but a social and occupational phenomenon shaped by ageing, socioeconomic pressures, and work culture. However, the intersection of these factors particularly among Malaysia's growing cohort of older, low-income security guards remains understudied.

METHODOLOGY

An analytical cross-sectional study was conducted among 189 Malaysian security guards across eight industrial and commercial sites in Johor Bahru selected for their 24-hour operational requirements. All participants were Malaysian citizens employed under Gunma Guardforce DS. No exclusion criteria were applied. Convenience sampling was used due to restricted access to private security firms and COVID-19 operational limitations. While this may introduce selection bias and limit generalizability, it enabled full participation of all guards present on-site and yielded meaningful workforce insights. A formal power

calculation could not be performed due to pandemic constraints; however, the sample of 189 guards reflects the maximum attainable population across accessible sites, provides adequate variability for comparative analysis, and satisfies event-per-variable (EPV) considerations for logistic regression. All respondents completed both the structured questionnaire and health assessments, resulting in no missing data. Sociodemographic and work variables included age, gender, ethnicity, marital status, education, years of service, shift type (day/night), and number of dependents (0–2, 3–5, >5). Lifestyle factors included sugar-sweetened beverage intake and physical activity, defined as ≥ 30 minutes of moderate daily exercise per WHO guidelines.

Anthropometric and clinical indicators included body mass index (BMI), waist circumference, blood pressure, and random capillary blood glucose (RBG).

Waist circumference was measured at the midpoint between the lower rib margin and iliac crest, and RBG ≥ 11.1 mmol/L was classified as impaired per WHO criteria. These provided practical proxies for cardiometabolic risk in field-based occupational settings.

Measurements were conducted by trained personnel using standardised procedures. Data were analysed with IBM SPSS Statistics Version 26. Descriptive statistics summarised participant characteristics, chi-square

tests examined associations, t-tests compared continuous variables, and logistic regression identified predictors of impaired health outcomes after adjusting for age, gender, and family history. Statistical significance was set at $p < 0.05$.

Ethical approval was obtained from the Universiti Putra Malaysia Ethics Committee for Research Involving Human Subjects (JKEUPM-2021-486), and informed consent was secured from all participants.

RESULTS AND DISCUSSION

The study analysed 189 Malaysian security guards across eight industrial sites in Johor Bahru, a workforce largely male (87.8%) and middle-aged, with 75.7% aged ≥ 40 years. This reflects labour patterns in low-income sectors where men often enter security work later in life. Night shift workers were significantly older than day workers ($t = -1.99$, $p = 0.0488$), indicating age-stratified allocation of riskier schedules. Gender was strongly associated with shift assignment ($\chi^2 = 11.81$, $p = 0.0006$), and women were markedly less likely to work night shifts ($B = -1.941$, $p = 0.001$), reflecting cultural norms, safety concerns, and caregiving roles in Malaysia (Karimi, 2025). Although marital status was not associated with shift type ($p = 0.371$), married guards showed significantly higher RBG levels, suggesting financial strain and caregiving demands may offset

marriage's usual protective effects (Soriano,2021).

Ethnic clustering was evident: Malays (56%) and Indians (35.5%) were overrepresented, consistent with patterns in lower-income occupations. Indians were significantly more likely to be assigned night shifts ($B = 0.734$, $p = 0.043$), compounding disparities in metabolic disease risk (MOH, 2020; Ye, 2023). This supports a human ecology interpretation where work organization intersects with ethnicity and socioeconomic constraints. Guards with tertiary education were less likely to work night shifts ($B = -1.866$, $p = 0.032$), aligning with evidence that education enhances job mobility and health literacy (Nutbeam, 2000; Canuto et al., 2014). While number of dependents was not statistically associated with shift allocation ($p = 0.617$), descriptive trends indicate that workers supporting ≥ 3 dependents more often accepted night shifts (~60%), reflecting economic pressure.

Lifestyle behaviors and metabolic indicators differed notably by shift type. Night shift workers consumed more sugar-sweetened beverages ($\chi^2 = 9.87$, $p = 0.002$) and were significantly less physically active ($p = 0.0008$). Long sedentary hours and circadian disruption may contribute to high prevalence of overweight/obesity (59.8%) and high-risk waist circumference (30.7%). Both BMI and waist circumference were significantly associated with shift type ($p < 0.05$), consistent with international

findings linking night work to central obesity (Manodpitipong et al., 2017; Hansen et al., 2016).

Diabetes Risk Assessment results showed that 84.1% of guards were in moderate-to-high risk categories. Night shift workers had significantly higher composite diabetes risk scores ($p < 0.01$), and night work independently predicted high diabetes risk (OR = 2.13, 95% CI 1.18–3.83) after adjusting for age, gender, and family history. This aligns with evidence that circadian misalignment impairs glucose metabolism (Harrington, 2001; Wang et al., 2014). Nearly half the workers had impaired glucose (43.9%), and 8.5% met diabetic thresholds. Shift type was highly associated with RBG category ($\chi^2 = 46.75$, $p < 0.0001$), with night workers overrepresented in impaired/diabetic ranges. Diabetes Risk Score and RBG were moderately correlated ($r = 0.58$, $p < 0.001$), supporting the validity of the screening method.

Using combined risk assessment and RBG criteria, 58.2% of guards fell into the high-risk category, with night workers disproportionately affected (69.9% vs 42.8%). Logistic regression identified night shift work ($p < 0.001$), BMI ($p < 0.001$), waist circumference ($p < 0.001$), and blood pressure ($p = 0.003$) as key predictors of high diabetes risk.

Overall, the findings show how shift work intersects with gender norms, ageing, socioeconomic strain, and

lifestyle constraints to shape metabolic risk in this occupational group. From a human ecology perspective, health outcomes reflect structural conditions—work schedules, economic responsibilities, limited occupational mobility, and fatigue-related coping behaviours—rather than individual choices alone. These patterns align with global evidence linking structural work conditions to chronic disease accumulation among ageing, low-income workers (Jovanović et al., 2023; Lee, 2024).

CONCLUSION

This study demonstrates that night shift work is strongly associated with increased diabetes risk among Malaysian security guards, independent of age, gender, and family history. The high prevalence of impaired glucose, central obesity, hypertension, and unhealthy coping behaviors reflects the cumulative impact of circadian disruption, socioeconomic pressure, and structural inequalities within the security workforce. Night shift workers consistently showed poorer metabolic profiles and significantly elevated diabetes risk, reinforcing international findings and offering new evidence for an occupational group rarely studied in Malaysia. These findings highlight the urgent need for coordinated workplace interventions. Employers should implement structured shift rotations, regular health screenings, access to nutritious meals, adequate rest breaks,

and health-promoting environments. Organizational policies should reduce stigma around chronic illness, support workers managing diabetes or hypertension, and provide adequate medical benefits. At the policy level, shift work should be explicitly recognized as a chronic disease risk factor within national occupational health guidelines. Stronger integration between occupational exposure, chronic disease prognosis, and national reporting systems is also needed to better capture risks among the working population.

Given Malaysia's ageing workforce, strengthening metabolic health among security personnel is both a public health and economic priority. Chronic disease reduces productivity, increases healthcare expenditure, and has long-term implications for household stability and national development. Future research should explore longitudinal health trajectories, sleep quality, psychosocial stress, and gendered labor patterns to deepen understanding of how work organization shapes chronic disease risks within ageing, low-income workers. A multi-level response spanning workplaces, communities, and national health systems is essential to reduce chronic disease burden and support well-being among shift workers who provide critical security services to the nation.

ACKNOWLEDGEMENT

The author extends gratitude to Prof. Dr. Shamsul Bahri Hj Md Tamrin and Dr. Masriana Hassan for their guidance and

support, to the management of Gunma Guardforce DS for facilitating access to research sites, and to all participating security guards for their cooperation.

CONFLICT OF INTEREST

The author declares no conflict of interest.

AUTHOR CONTRIBUTION STATEMENTS

Shridev Nair Thamotheran was responsible for conceptualisation, data collection, analysis, and manuscript preparation.

REFERENCES

Baker, P., Kay, A., & Walls, H. (2014). Trade and investment liberalization and Asia's noncommunicable disease epidemic: A synthesis of data and existing literature. *Globalization and Health*, 10,66. <https://doi.org/10.1186/s12992-014-0066-8>

Bazana, S., Campbell, K., & Kabungaidze, T. (2017). The impact of shift work on the health and wellbeing of campus security guards. *New Voices in Psychology*, 12, 70–93. <https://doi.org/10.25159/1812-6371/2783>

Begani, R. K., Begani, A. Z., So'on, V., & Pokasui, K. (2013). Impact of shift work amongst security guards in Madang.

<https://api.semanticscholar.org/CorpusID:74753825>

Canuto, R., Pattussi, M. P., Macagnan, J. B., et al. (2015). Metabolic syndrome in fixed-shift workers. *Revista de Saúde Pública*, 49, 30. <https://doi.org/10.1590/s0034-8910.2015049005524>

Crispim, C. A., Zimberg, I. Z., dos Reis, B. G., et al. (2011). Relationship between food intake and sleep pattern in healthy individuals. *Journal of Clinical Sleep Medicine*, 7(6), 659–664. <https://doi.org/10.5664/jcsm.1476>

Devalia, J., Mathur, A., Chhaya, J., et al. (2017). Visual evoked potential changes among security guards of Government Medical College and New Civil Hospital, Surat. *National Journal of Physiology, Pharmacy and Pharmacology*. <https://doi.org/10.5455/njppp.2018.8.0831221092017>

Department of Statistics Malaysia. (2020). Current population estimates, Malaysia, 2020. DOSM Malaysia. <https://www.dosm.gov.my/site/downloadrelease?id=current-population-estimates-malaysia-2020&lang=English>

Gan, Y., Yang, C., Tong, X., et al. (2015). Shift work and diabetes mellitus:

A meta-analysis of observational studies. *Occupational and Environmental Medicine*, 72(1), 72–78. <https://doi.org/10.1136/oemed-2014-102150>

Hansen, A. B., Stayner, L., Hansen, J., et al. (2016). Night shift work and incidence of diabetes in the Danish Nurse Cohort. *Occupational and Environmental Medicine*, 73(4), 262–268. <https://doi.org/10.1136/oemed-2015-103342>

Harrington, J. M. (2001). Health effects of shift work and extended hours of work. *Occupational and Environmental Medicine*, 58(1), 68–72. <https://doi.org/10.1136/oem.58.1.68>

Jovanović, J., Šarac, I., Jovanović, S., et al. (2021). The relationship between occupational stress, health status, and temporary and permanent work disability among security guards in Serbia. *International Journal of Occupational Safety and Ergonomics*, 27(2), 425–441. <https://doi.org/10.1080/10803548.2019.1579458>

Karimi, M. A., Binaei, S., Hashemi, S. H., et al. (2025). Marital status and risk of type 2 diabetes among middle-aged and elderly population: A systematic review and meta-analysis. *Frontiers in Medicine*, 11, 1485490. <https://doi.org/10.3389/fmed.2024.1485490>

Kivimäki, M., Batty, G. D., & Hublin, C. (2011). Shift work as a risk factor for type 2 diabetes: Evidence, mechanisms, implications, and future research directions. *PLOS Medicine*, 8(12), e1001138. <https://doi.org/10.1371/journal.pmed.1001138>

Leproult, R., Holmbäck, U., & Van Cauter, E. (2014). Circadian misalignment augments markers of insulin resistance and inflammation, independently of sleep loss. *Diabetes*, 63(6), 1860–1869. <https://doi.org/10.2337/db13-1546>

Lee, K. Y., Zakaria, N., & Zakaria, N. (2024). Examining the impact of burnout on hospital nurses engaged in shift work: Insights from a nationwide cross-sectional study in Malaysia. *SAGE Open Nursing*, 10, 23779608241245212. <https://doi.org/10.1177/23779608241245212>

Lim, Y. C., Hoe, V. C. W., Darus, A., et al. (2020). Association between night-shift work, sleep quality and health-related quality of life: A cross-sectional study among manufacturing workers in a middle-income setting. *BMJ Open*, 10(9), e034455. <https://doi.org/10.1136/bmjopen-2019-034455>

Manodpitipong, A., Saetung, S., Nimitphong, H., et al. (2017). Night-shift work is associated with poorer glycaemic control in patients with type

2 diabetes. *Journal of Sleep Research*, 26(6), 764–772.
<https://doi.org/10.1111/jsr.12554>

Marcovecchio, M. L. (2017). Complications of acute and chronic hyperglycemia. *US Endocrinology*.
<https://doi.org/10.17925/USE.2017.13.01.17>

Ministry of Health Malaysia. (2020). National Diabetes Registry Report 2020. Putrajaya: Ministry of Health Malaysia.
https://www.moh.gov.my/moh/resources/Penerbitan/Rujukan/NCD/Diabetes/National_Diabetes_Registry_Report_2020.pdf

Mohd Shahril, A. H., Mohamad Ezuan, A. J., & Norazura, I. (2020). Sleepiness and daily sleep of Malaysian shift workers in electronics manufacturing industry. *Malaysian Journal of Public Health Medicine*, 20(Special1), 208–215.
<https://doi.org/10.37268/mjphm/vol.20/no.Special1/art.702>

Morris, C. J., Purvis, T. E., Mistretta, J., et al. (2016). Effects of the internal circadian system and circadian misalignment on glucose tolerance in chronic shift workers. *Journal of Clinical Endocrinology & Metabolism*, 101(3), 1066–1074.
<https://doi.org/10.1210/jc.2015-3924>

Nutbeam, D. (2000). Health literacy as a public health goal: A challenge for contemporary health education

and communication strategies in the 21st century. *Health Promotion International*, 15(3), 259–267.
<https://doi.org/10.1093/heapro/15.3.259>

Pan, A., Schernhammer, E. S., Sun, Q., & Hu, F. B. (2011). Rotating night shift work and risk of type 2 diabetes: Two prospective cohort studies in women. *PLOS Medicine*, 8(12), e1001141.
<https://doi.org/10.1371/journal.pmed.1001141>

Seah, J. Y. H., Sim, X., Khoo, C. M., et al. (2023). Differences in type 2 diabetes risk between East, South, and Southeast Asians living in Singapore: The multi-ethnic cohort. *BMJ Open Diabetes Research & Care*, 11(4), e003385.
<https://doi.org/10.1136/bmjdr-2023-003385>

Shan, Z., Li, Y., Zong, G., et al. (2018). Rotating night shift work and adherence to unhealthy lifestyle in predicting risk of type 2 diabetes: Results from two large US cohorts of female nurses. *BMJ*, 363, k4641.
<https://doi.org/10.1136/bmj.k4641>

Strohmaier, S., Devore, E. E., Zhang, Y., & Schernhammer, E. S. (2018). A review of findings on night shift work

and the development of diabetes mellitus and cardiovascular disease events. *Current Diabetes Reports*, 18(12), 132. <https://doi.org/10.1007/s11892-018-1102-5>

4-year retrospective cohort study. *Healthcare*, 11(6), 802. <https://doi.org/10.3390/healthcare1106080>

Soriano, E. C., Lenhard, J. M., Gonzalez, J. S., et al. (2021). Spousal influence on diabetes self-care: Moderating effects of distress and relationship quality on glycemic control. *Annals of Behavioral Medicine*, 55(2), 123–132. <https://doi.org/10.1093/abm/kaa038>

Sun, T. (2024, September). Illegal foreign security guards pose national security risk. *The Sun Daily*. <https://thesun.my/malaysia-news/illegal-foreign-security-guards-pose-national-security-risk-EP12952503>

Wang, F., Zhang, L., Zhang, Y., et al. (2014). Meta-analysis on night shift work and risk of metabolic syndrome. *Obesity Reviews*, 15(9), 709–720. <https://doi.org/10.1111/obr.12194>

Wang, L., Ma, Q., Fang, B., et al. (2023). Shift work is associated with an increased risk of type 2 diabetes and elevated RBP4 level: Cross-sectional analysis from the OHSPIW cohort study. *BMC Public Health*, 23, 1139. <https://doi.org/10.1186/s12889-023-16091-y>

Ye, B. J. (2023). Association between shift work and metabolic syndrome: A

MALAYSIAN JOURNAL OF HUMAN ECOLOGY

Journal Homepage: https://eco1.upm.edu.my/malaysian_journal_of_human_ecology_mjhe-3740

SOCIO-ECONOMIC IMPLICATIONS OF BANDITRY AND KIDNAPPING IN NORTHERN NIGERIA: DIMENSIONS AND SOLUTIONS

Abdulkadir Mamman Saba

¹ *Ibrahim Badamasi Babangida University, Nigeria*

ABSTRACT

This paper explores factors responsible for the emergence and persistence of banditry and kidnapping that have enveloped Northern Nigeria and other parts of the country. Nigeria is experiencing a challenging period of security that hampers political stability, which is necessary for socio-economic development. It is therefore important to understand the dimensions of these problems and seek ways to resolve them and move beyond the issues and challenges.

INTRODUCTION

This paper seeks to examine factors responsible for the emergence and persistence of banditry and kidnapping in the Northern Region of Nigeria. The paper discusses the emergence of banditry and kidnapping and how this posed challenges to security and development for the country. It offers recommendations as potential solutions to reduce these problems.

BACKGROUND

The history of banditry in Nigeria can be traced specifically to the North-west region of the country, particularly in Borno, Yobe, and Zamfara states. It first arose from the farmers-herders' clashes which later turned into banditry. According to former Niger State Secretary, Ahmed Matane (2021), the following factors were primarily the cause of the emergence of banditry, namely climatic change, non-agricultural use of land, the porous nature of Nigeria's border, under-delineated state borders, poverty, illiteracy and unemployment. The proliferation of small arms and light weapons is noted as among the factors responsible for banditry as well.

It is generally seen that conflict over space, resources, and the good things of life are as old as

the history of human settlement. Its consequences vary from one locality to another, but all are threats to human existence. According to NSW Volunteering (2021), conflict can occur due to a number of reasons. Conflict occurs over resources when people have unequal access to resources or disagree about how their resources should be used or shared. The resources could be land, water, or other common assets. Conflicts can also take the form of competition for dominance over values and beliefs when people have different understandings of the concept of wrong or right. In some cases, what is considered extremely bad in some cultures could be deemed desirable by others. It can happen when people of a particular belief or value system perceive that they are being forced to accept a belief or value they do not agree with. When conflict occurs due to breakdown of trust, then people who have co-existed harmoniously for a long time could develop strong negative emotions towards one another, and this could lead to loss of trust and confidence that ended in conflict. Furthermore, unfair use of power by a section of the people leads to frustration, anger, and eventually, conflict and open confrontation. In the view of NSW Volunteering (2021), bullying, harassment, and discrimination are another cause of conflict when people are unfairly or unequally treated based on their race, religion,

color, sex, age, or disability. These exacerbate the situation for conflict.

Nigeria's safety is consistently threatened by ongoing security problems. Insecurity is a complex problem that takes on diverse forms in various geographical regions. Cybercrime, armed robbery, kidnapping, domestic violence, extrajudicial killings, herder-farmer disputes, ritual killings, and banditry are all on the rise in the country. Ritual killings, commercial crimes, secessionist agitation, kidnappings, gunman attacks, and banditry are all common in many parts of Nigeria. Militancy, kidnapping, and environmental agitation continue to pose threats to Nigerians wherever they live in any part of the country.

FOCUS THROUGH SOCIAL STRUCTURE AND ANOMIE FRAMEWORK

Theories can be seen as systems of ideas or concepts used to help explain social phenomena. They help explain and evaluate or clarify human social interactions and situations into easy-to-comprehend or understand.

The social theory adopted in this paper posits that the environment has a greater influence on shaping the character and behavior of every individual. By implication, those who

reside in a decent environment are decent in nature, and those who live in an environment characterized by social vices tend to be drawn into such vices. The theory was proposed by Merton (1957: 132), who focuses mainly on the "broad patterns of norm-violating behavior rather than in the behavior of individual deviants", using cultural goals, institutional norms, and social structures of society.

Merton examines how people who belong to particular social groups are more likely to be influenced by their surroundings and how this could lead to abnormal behavior. All social strata are supposed to fight for the cultural ideal of material success, which includes wealth and the magnificent possessions a society can afford within its institutions or structure. However, a society that sets a high value on the cultural environment for its citizens' social advancement should provide suitable facilities for their achievements. Unfortunately, society places less emphasis on how its members might achieve this aim, making them more likely to engage in criminal activity.

Thus, the substantial discrepancy between cultural objectives and structural certainties undermines not only societal support for the

existing norms but also serves to encourage the desecration of those norms (Merton, 1957). People who struggle in society's pursuit of economic success are compelled to adapt in bizarre ways to this aggravating environmental circumstance.

Over the years, Nigeria has seen great chaos, insurgencies, terrorism, and banditry. Notable security challenges have not been properly and effectively addressed by the government. The most notable insecurity challenges include Boko Haram and banditry in the country. These groups have made life unbearable for those who inhabit the Northern region of Nigeria (Chidi Anselm Odinkalu, 2018). Niger remains the country's largest state with a huge landscape. Minna is the capital with some major cities like Bida, Kontogora, and Suleja that boost natural resources and five hydroelectric power dams. The bandits have laid siege to many local government areas in the state. There have been eighteen such attacks, and these regions are constantly invaded, such as the local governments of Shiroro, Munyan, Rafi, Mashegu, Zungeru, and, more recently, Paiko and Gulu (Wole Mosadomi, 2021).

The activities of cattle rearing in 2015 were blown into a Cold War against defenseless

people living in the communities. The bandits attacked 40 communities between March and December in 2015. In the process, herdsmen lost their sources of business and their livelihoods are greatly affected. In 2016, about 36 attacks were carried out in 70 communities across Kaure, Kukoki, Ajata, and Kwaki in Shiroro local government, while in Rafi local government area, such as Pandogari, Allawa, and Madaka communities were not spared from these attacks.

According to Merton (1957), when persons are prevented in their pursuit of economic activities, they are forced to acclimatize to the prevailing condition. Due to this pursuit, young men use illegal ways to secure and run economic activities. Merton states that three typologies contribute to insecurity in Nigeria. These are innovation, retreatism, and rebellion. Merton's explanation of innovation supports the high rates of criminal activities in economic recession in contemporary Nigeria among unemployed and underemployed graduates who engage in violent conflicts for survival (Haruna and Jumba, 2011; Ibekwe and Ewoh, 2012; Igbafe and Offiong, 2007; Orcutt, 2006; Smith, 2001). This could lead to what he states as retreatism, which could be applied to the deviant role of smugglers and the rise of touts

in motor parks, alamajiris, drug peddlers, omoonile, and alcoholics in Nigeria (Shu-Acquaye, 2013).

They tend to remove themselves from society because they have no means, lack goals, and have no ambition to change their status (Ayodele et al., 2012). He states that rebellion signifies an attempt to greatly amend the existing structure of society, which could be dangerous to national development and the well-being of other persons, as reflected in youth militancy in the south-south, Boko Haram insurgency in the Northeast, and kidnapping in the southeast. The gang members seem to have made a new goal of gaining power in their gang and using violence and other illegal activities to achieve this (Ayodele et al., 2012).

Banditry in Northern Nigeria is influenced by the following factors: socioeconomic problems, multidimensional poverty, widespread unemployment, deprivation, inequality, marginalization, exclusion, and lack of access to basic amenities. Even though this is a national challenge, the North is particularly affected. Better if there is data to back these assertions

Secondly, the complex relationship between pastoralists and farmers: desertification,

drought, climate change, cattle rustling, insurgency, and population growth have led to the ongoing migration of pastoralists or herdsmen. Lastly, illegal mining activities in the Northwest region of the country are prominent in Niger, Kebbi, Katsina, and Zamfara states. These have triggered violent conflicts over the control of minefields, and have led to the deaths of thousands of people. Due to the displacement caused by the conflict, the people of the region engage in banditry as an alternate means of survival.

However, it is necessary to examine the effects and possible solutions to banditry in the region. The immediate appearance of banditry has deprived many of their lives and shelter, and in the end, more refugees were created. Many fled to neighboring states. These activities also led to the loss of assets, ways of life, well-being, and disruption to the system in rural areas due to the fear of being kidnapped or killed (Adedeji Ademola, 2021). This has also prevented teachers from carrying out their duties in school, such as in Government Science College, Kagara, Niger state, on 17th February 2021, when 27 students were killed, and 3 teachers abducted. This has affected infrastructures like schools, homes, hospitals, and bridges.

One of the major reasons why government intervention is unable to yield results is the topographic nature of those areas. The terrain makes the area inaccessible, and communication takes a long time before help would come. In some cases, there is little or no security for these communities (Emmanuel Akinwotu, 2020). The forestry and off-road conditions in these areas make communication almost impossible. Security and good roads for accessibility in case of emergency are clearly needed. Additionally, the security forces should be provided with a support system in order to be able to do their work in pursuing these armed bandits. The government should consider small villages as a coordinated unit so they can help offer more security (Alhaji Mohammad Ketso, 2021). To have effective security, the people themselves must organize and help because security forces cannot be everywhere every time.

SOCIO- ECONOMIC IMPLICATIONS OF BANDITRY AND KIDNAPPING

The poverty challenge has contributed to the spate of insurgency, terrorism, and banditry, with a debilitating consequence for food security as experienced nationwide. This, in turn, is forcing the people to provide support and become a ready source of recruitment into criminal groups. Since independence in 1960, the issue of marginalisation and

nepotism has been a recurring vocabulary in the nation's dictionary. These two issues contributed significantly to the eruption of the Civil War from 1967 to 1970, the scar of which is the IPOB of today. In any society, once a group feels marginalised, it moves to the periphery to be part of the opposition to challenge the system and create problems for the larger society (Sheshi T. Sidi, Abe Olajide Mayowa & Evuti Sulieman, 2025). The Niger Delta militants and IPOB separatists are examples of this assertion (Wahab, 2023). The struggle for dominance among the major groups in the area has generated heat and, most of the time, unhealthy politics. Drawing directly from the religious and ethnic intolerance is the problem of social injustice and inequality. This is fueled by the 'Zero Sum' politics practiced in central Nigeria at large, which gives the winner complete control of state resources, thereby propagating discrimination and marginalisation amongst the different groups and people (Wahab, 2023).

Understanding the socio-economic impacts of banditry and kidnapping is essential to understanding the huge challenges facing Northern Nigeria. They disrupt livelihoods, social structures, and economic progress. The socio-economic implications of banditry and

kidnapping in Northern Nigeria are multifaceted, and they affect individuals, communities, and the nation. The implications of kidnapping and banditry in Nigeria can be examined from different perspectives. Some of the effects of banditry and kidnapping include the following.

Psychological Stress and Trauma

The traumatic experience that victims of kidnapping and banditry undergo usually leaves an indelible mark on them that lasts a lifetime. This has a negative psychological effect, especially in children, and in most cases, it leads to depression, anxiety, and post-traumatic stress disorder (PTSD), which has a long-lasting effect.

Atmosphere of fear and general distrust

In a society where the incidence of kidnapping is high, there is usually an atmosphere of fear and general lack of trust. This tends to limit people's lives and actions, which translates to reduce economic activities.

Reduces foreign direct investment

The high rate of kidnapping and banditry in certain areas of the country has turned these regions into high-risk zones for foreigners.

This discourages foreign investors from investing in those areas. The insurgency overlaps with environmental challenges (desertification, flooding), economic shocks. Rebuilding must not simply aim to restore the status quo but enable communities to better withstand future crises. ISS recommendations include tailoring responses to economic sectors and adding output value in farming/fishing; also building infrastructure (roads, water, etc.) under MCRP areas. This can be seen in northern Nigeria, where Boko Haram and banditry operate unabated. It generated fear and unhealthy operation for the multinational companies, which is why investors were scared of opening companies in Nigeria at large (Wahab, 2023).

The Victims Support Fund (VSF) has planned rebuilding projects (e.g., N1.6 billion funded projects in three LGAs of Borno: Gwoza, Mobba, Ngala) by 2018, while state governments (e.g., Borno) are establishing ministries for Reconstruction, Rehabilitation, and Resettlement. Securing farms, trade routes, and transport infrastructure is essential. Many affected communities have lost farms, markets, and the means to earn a living. Without livelihoods, people become vulnerable to coercion or turn to negative

coping mechanisms. Reviving economic activity helps reduce the appeal of insurgent groups. Expert analysis by ISS emphasizes that securing farms, markets, and transport routes aids revival; the importance of credit and vocational training is also noted (Wahab, 2023). These efforts reveal both the extent of destruction and ongoing responses. However, many analyses highlight gaps and the need for better, more durable strategies.

DIMENSIONS OF THE ISSUES

Niger State, which is one of the most ravaged states in the North. These bandits severely attacked forty communities between March and December of 2015. Thirty-eight people lost their lives, and several others ran away from their homes. The bandits took 300 sheep and 2,000 animals from the people. 15 further persons were abducted, and their relatives paid a ransom of almost N11 million to free them. In order to assess the trend, Dr. Muazu Babangida Aliyu, the state's governor at the time, called a stakeholder meeting right away. Attendees included the leaders of all local governments, emirs, districts, and village heads, and the *Miyetti* Allah Cattle Breeders Association, Niger State. The government was then provided with security files that named the individuals alleged to be

responsible for the horrific murders, in which the well-known herders were not among. Nonetheless, the material was allegedly buried beneath the carpet (Sheshi, Abe, and Evuti, 2025).

In 2016, 36 violent attacks were conducted in roughly 70 localities throughout the three local government areas. The Rafi Local Government Area's Pangu, Kukoki, Zara, and Kushreki communities all turned into battlegrounds. The bandits did not spare Pandogeri, Allawa, or Madaka in the same Local Government Area. In addition to 2,600 cattle being rustled, over 50 people were slain, 12 more were kidnapped, and relatives had to pay N5 million in ransom to get the victims freed. Feeling unsettled by these ceaseless murders, former senator David Umaru, for the impacted zone, conveyed his grievances to the Abuja Security Forces and requested their help. The action paid off, as Ibrahim Idris, the then-Inspector General of Police from Niger State, directed the then Muazu Zubaru, the state's commissioner of Police, to track down those responsible. Following this instruction, the police and their sister security services launched Operation Puff Adder, a full-scale assault on the bandits that gave these villages some respite (Sheshi, Abe, and Evuti, 2025).

But on January 15, 2017, the bandits struck once more, leaving nine people dead and rendering 6,000 people homeless. A N3 million ransom was eventually paid to free the five kidnapped individuals. 11 individuals were killed between April and June of 2017, and the inhabitants paid a ransom of over N30 million to obtain the return of the victims, along with about 150 sheep and 1,000 cattle that had been rustled. Twenty villages in the Kushreki community in Rafi Local Government, home to roughly 250,000 people, served as these armed men's safe haven between September and December of 2017. Six months later, the bandits in the area carried out another attack, in which they killed six individuals and kidnapped nineteen more, among whom was Zara, an SS11 female student at Day Secondary School, who worked as a cook for the abducted for two weeks before her release after a ransom was paid on her behalf. After selling nearly all of their agricultural produce, the communities that came together paid N11 million to guarantee the release of the remaining persons in captivity (Sheshi, Abe, and Evuti, 2025).

On October 16, 2018, no fewer than 13 members of the vigilante corps lost their lives, and 30 more individuals were

kidnapped by bandits in Niger State. This tragic incident occurred in Kusherki village, within the Rafi local government area, and was part of a broader surge of bandit attacks targeting rural communities in the neighboring local government areas of Paikoro, Rafi, Shiroro, and Munya. Reports indicated that the vigilante corps was caught off guard during these nighttime assaults. Sources reveal that the bandits ambushed the vigilante members, arriving in large numbers on motorbikes, brandishing lethal weapons, and firing indiscriminately to instill fear in the residents. An escapee from the attack recounted that they confronted the bandits in a desperate struggle but ultimately succumbed to their superior firepower. Mr. Ishaya Ishaku recalled an earlier incident on December 16, 2018, when bandits raided their village, stealing everything they owned, including clothes, rice, beans, oil, and chickens. Although no one from their household was kidnapped, their neighbor's daughter was taken. (Sheshi, Abe, and Evuti, 2025). On April 4, 2019, bandits attacked Kukoki village and killed Danasabe, the vigilante chairman of the Rafi Local Government Area, specifically in Majanjan village witnessed a troubling series of events was witnessed. While the local staff and residents were rescued (refer to Appendix 2),

a witness named Mr. Haruna reported that he was stripped of his phone before being released. On the same day, twenty individuals were abducted from Tashan Kare. The kidnapped victims were held captive for approximately two months, during which the bandits demanded a ransom that included a Honda motorcycle, bags of rice, and three million dollars for each person.

In that same month, a nighttime raid on Zara village resulted in the deaths of three individuals and the abduction of eight others. Among those captured, a disabled person was released, while the remaining captives were subjected to a ransom demand of five million naira. The following day, two individuals from the same village—Tanko's wives, Ladi and Fatima—were kidnapped, though unfortunately, Fatima passed away during their captivity. After a week of captivity, Ladi was freed following the payment of 500,000 naira, a bag of rice, a 50,000 naira recharge card, and 25 liters of groundnut oil. On September 29, the bandits attacked Ugwan Buhari, stealing cattle and property while abducting four people and killing three others. An eyewitness reported that the village was engulfed in flames that day (Sheshi, Abe, and Evuti, 2025).

Economic Disruption:

- **Agricultural Impact:** Banditry disrupts farming activities. This leads to food shortage and therefore food insecurity becomes an issue. Farmers abandon their lands due to fear and threats. As a result, there is reduced agricultural output and increased prices for basic commodities.

Disruption of Trade: Insecurity hampers trade routes, affecting the movement of goods to local markets. The result is an increase in the cost of goods due to the limited amount that can be delivered to markets. This also leads to higher inflation rates in affected regions.

Displacement: Many families are forced to flee their homes, leading to internally displaced persons (IDPs) who face inadequate shelter, food, and healthcare.

- **Psychological Effects:** The constant threat of violence contributes to widespread trauma, affecting mental health and community cohesion.
- **Security and Governance Challenges:**

5.3.1 Weak Law Enforcement: The inability of security agencies to effectively

combat banditry undermines trust in government leadership and institutions.

5.3.2 Corruption: Corruption among security personnel further exacerbates the situation, leading to a lack of accountability and ineffective response.

- **Education Disruption:**

Schools in affected areas often close, leading to a significant drop in educational attainment. The fear of kidnapping targets children, particularly girls, who are disproportionately affected.

- **Healthcare Access:**

Insecurity limits access to healthcare facilities, exacerbating health crises, particularly in maternal and child health.

RECOMMENDATIONS

Addressing the root causes and manifestations of banditry and kidnapping

requires both strategic interventions and practical measures. This section outlines recommendations aimed at restoring security, fostering economic growth, and building resilient communities. Having examined the phenomenon of banditry and insecurity in Northern Nigeria, it is imperative to employ both kinetic and non-kinetic measures to curtail this ugly trend. Against this backdrop, the following recommendations are hereby put forward with a view to eliminating banditry, if not drastically reducing it.

6.1 A coordinated and sustained joint security operation with strict surveillance on the proliferation of weapons is required.

6.2 Fully scaled ICT drones should be deployed to banditry zones where trackers and communication gadgets can be effectively and efficiently used.

6.3 Establishing community policing initiatives to counter banditry is essential, providing a trusted local framework for security, as banditry cannot only be tackled by security agencies.

- 6.4 Strong legislation and formidable punishment for informants require urgent and prompt attention.
- 6.5 The activities of informants who share intelligence reports with bandits on the movement of their targets should be checked, and anyone found guilty should be made to carry the weight of the law on their head without any form of prejudice or sentiment.
- 6.6 The activities of bandits should be condemned in strong terms, and the idea of negotiating with bandits should be outrightly rejected, as bandits are criminal elements in society.
- 6.7 The government should promulgate a "Village Harmonization Policy" (VHP). The present village setting of distant isolation should be discouraged. With the high concentration of a large population in one area, it will be difficult for the bandits to overcome any village with ease.
- 6.8 Some of the measures that can assist in containing kidnapping and banditry are as follows:

6.8.1 Enhanced Security Measures:

A. Community Policing:

Engaging local communities in security initiatives can improve trust and cooperation with law enforcement.

B. Intelligence Gathering:

Developing robust intelligence networks to preemptively address threats is crucial.

6.8.2 Economic Resilience Programs:

A. Support for Farmers:

Providing resources, training, and financial support to farmers can help stabilize agricultural production.

B. Diversification of Livelihoods:

Encouraging alternative sources of income can reduce dependency on agriculture and build resilience against shocks.

6.8.3 Education and Awareness:

A. Promoting Education:

Establishing safe learning environments and campaigns to encourage enrollment, especially for girls, can help rebuild communities.

B. Community Engagement:

Raising awareness about the dangers of banditry and the importance of education can mobilize local action against violence.

6.8.4 Strengthening Governance:

A. Anti-Corruption

Measures: Addressing corruption within security forces can enhance their effectiveness and accountability.

B. Inclusive Governance:

Involving local leaders in decision-making can help ensure that solutions are contextually relevant and supported by the community.

6.8.5 International Support:

A. Collaboration with

NGOs: Partnering with international organizations can provide additional resources and expertise in addressing the socio-economic fallout of violence.

B. Development Aid: Targeted development aid can help rebuild affected communities and support long-term stability. The Victims Support Fund (VSF) has planned rebuilding projects (e.g., N1.6 billion funded projects in three LGAs of Borno: Gwoza, Mobba, Ngala) by 2018, while state governments (e.g., Borno) are establishing ministries for Reconstruction, Rehabilitation, and Resettlement. Securing farms, trade routes, and transport infrastructure is essential. Many affected communities have lost farms, markets, and the means to earn a living. Without livelihoods, people become vulnerable to coercion or turn to negative coping mechanisms. Revitalizing economic activity is vital in reducing the appeal of insurgent groups. Analysis from ISS clearly demonstrates that securing farms, markets, and transport routes plays a crucial role in this revival. Additionally, providing access to credit and vocational training is essential (Wahab, 2023). These initiatives not only highlight the significant destruction that has occurred but also reveal strong responses to the challenges at hand. However, many analyses point to existing gaps, underscoring the urgent need for more effective and sustainable strategies moving forward.

7.0 Vision for the Future

Our vision for the future is one of resilience, peace, and prosperity—a Northern Nigeria where communities thrive securely and equitably. To realize this vision, we must foster a society that is not only secure but also vibrant, inclusive, and empowered to overcome its challenges. Our approach is grounded in these transformative aspirations:

7.1 Empowered Communities with Shared Responsibility

We envision a future where communities are not only secure but actively engaged in maintaining that security. This includes cultivating local pride, unity, and ownership in safety and development efforts. By establishing a culture of shared responsibility, communities can collaborate to reduce conflict and crime, creating safer, more interconnected environments.

7.2 Educational Transformation as a Catalyst for Social Change

Education must evolve as the cornerstone of our future. Our vision is one where educational access is universal, unhampered

by security challenges. By embedding peace education, critical thinking, and innovation in our curriculum, we aim to shape a generation prepared to tackle social issues proactively. This education would not only empower individuals but also foster values that reinforce societal stability.

7.3 Sustainable Economic Growth Rooted in Opportunity

We envision an economy that is inclusive and diverse, offering fair opportunities to all, particularly in rural areas affected by banditry. Future initiatives must focus on building resilient economies through sustainable agriculture, micro-enterprises, and innovative technology. A diversified economy will help reduce poverty and dissuade vulnerable groups from falling into crime.

7.4 Innovative Security Approaches and Technological Integration

The future calls for a secure Northern Nigeria where

technology and local insights combine to create effective, responsive security networks. Using advanced surveillance and predictive tools alongside community intelligence can help preempt and address security threats. In this vision, each community becomes a hub of information and resilience, protected by a synergy of tradition and technology.

7.5 Collaborative Governance and Transparent Institutions

Our vision is to restore public trust by fostering transparent, accountable governance. Through open dialogues and partnerships with communities, the government can better address local needs and resolve conflicts. This approach emphasizes a future where the rule of law and fair justice systems uphold security and well-being, creating an environment where people and institutions thrive in mutual respect.

7.6 Healing, Recovery, and Unity for Lasting Peace

We recognize the psychological toll of conflict; our future vision includes a compassionate, supportive approach to healing and recovery. Mental health services, trauma centers, and community support networks will help individuals and communities overcome the scars of violence. This unity-focused approach to healing will lay the foundation for enduring peace and cohesive progress.

7.7 Global Partnerships for Local Strength

We aspire to build strong partnerships with international organizations, leveraging global support and expertise for sustainable local development. These partnerships would provide valuable resources and innovation, fostering development programs that enhance education, healthcare, infrastructure, and economic growth tailored to the unique needs of our region.

Together, these elements form a powerful vision for a secure,

prosperous, and united Northern Nigeria—one that prioritizes the dignity and potential of every individual. In striving towards this vision, we commit to addressing both the roots and the effects of insecurity, building a future that offers hope, opportunity, and harmony to all.

CONCLUSION:

While the journey to overcome these challenges is complex, a collaborative commitment to peace and development can pave the way for a brighter future. Together, we can shape a Northern Nigeria that is secure, prosperous, and hopeful. Much literature has been written on different fields of life, but little has been done to address the issue of insecurity in Nigeria. This article has used social theory to debunk the act of insecurity_ banditry. This will serve as a plus to the field of criminology and sociology and even a guide to paramount issues relating to insecurity in Niger State, Nigeria, and the world at large.

REFERENCES

Achumba, I. C., Ighomereho, O. S. and Akpan Robaro, M.O.M. (2013). Security challenges in Nigeria and the implications for business activities and sustainable development. *Journal of Economics and Sustainable Development*, 4 (2):79-99

Adedeji Ademola (2021) "The Growing Threat of Armed Banditry in North-West Nigeria"<https://www.strifeblog.org/2021/01/08/>

African Institute for Mathematical Sciences (ALMS), (2020), Curriculum, Retrieved from African Center of Excellence in Data Science. (2021). About Us. Retrieved from African Renewal (2024). Artificial intelligence and Africa. Retrieved from African Virtual University. (2020). About AVU. Retrieved from <https://www.avu.org/about-avu/>

Ajodo-Adebanjo, K. A. and Okorie, N. (2014). Corruption and the challenges of insecurity in Nigeria: Political economy implications. *Global Journal of Human-Social Science*, 14(5): 10-16.

Ajodo-Adebanjoko, A. and Walter, U. O. (2014). Poverty and the challenge of insecurity to development. *European Scientific Journal*, 10(14): 361-72.

Aluko, M. A. (2016). The History of Social Thought. Lecture note delivered in SOC 601, Department of Sociology and Anthropology, Obafemi Awolowo University, Ile-ife.

Andela. (2020). About Us. Retrieved from <https://www.andela.com/about/>

Animashaun, E. S., Familoni, B., T., and Onyebuchi N. C., (2024). Implementing

Arya, Dit 14 (2024), Advancing Personalized Learning through Educational Artificial

Ayodele, J. O., Atere, A. A. and Bayewu (2012). Agbero” and Maintenance of Social Order: A Study of Iyana Iba, Mile 2 and Oshodi Motor Parks. *British Journal of Arts and Social Sciences*, 4(1): 123-34.

Ayodele, J. O., Atere, A. A. and Bayewu (2012). Agbero” and Maintenance of Social Order: A Study of Iyana Iba, Mile 2 and Oshodi Motor Parks. *British Journal of Arts and Social Sciences*, 4(1): 123-34.

Beland, D. (2005). The political construction of collective insecurity: From moral panic to blame avoidance and organized irresponsibility. Center for European Studies, Working Paper Series 126.

Bell, A. G. (1907). The achievements of a young scientist. Houghton Mifflin.

Bertha Centre. (2020). About Us. Retrieved from <https://www.gsb.uct.ac.za/berthacentre>

Brenner, Clair (2021) ‘Combating Banditry in Northwest Nigeria’, Available at: <<https://www.americansecurityproject.org/combating-banditry-in-northwest-nigeria>> [Accessed 29 July 2021].

Buckingham, E. L. (1928). [Review of *The Art of Public Speaking*, by W. Doll]. *American*

Bukoye, R. O. Inaugural lecture series 17, A counsellor's perspective on the paradox of raising youth and healthy generation, Ibrahim Badamasi Babangida University, PP 25-28, 2022.

Carnegie Mellon University Africa. (2021). Industry Partnerships. Retrieved from case of Nairobi, Kenya. 10.18418/978-3-96043-038-4.

Chakawodza, J. M., Nakedi, E. M., & Kizito, R. N. (2024). The Effectiveness of Flipped Classroom Pedagogy in Promoting Learning Engagement in Organic Chemistry in Grade-

12 Students in the Context of South Africa and Covid-19. *International Journal of Science Education*, 1-27. <https://doi.org/10.1080/09500693.2024.2342574>

Chandra, P. G., & Vani, V. (2024). Blockchain and AI for Secure and Sustainable Healthcare Development. *Advances in Healthcare Information Systems and Administration Book Series*, doi: 10.4018/979-8-3693-7457-3.ch014

Chaushi, B. A., Kurtishi, T. V. & Chaushi, A. (2024). Unlocking Student Success: A Comparative Analysis of Business Intelligence and Analytics in Higher Education Institutions. *International Journal of Advanced Natural Sciences and Engineering Researches*, 8(4), 163-174.

Chidi Anselm Odin Kalu (December 27, 2018) "Banditry in Nigeria: A Brief History of a Long War". *The Punch*

Design curricula to Promote Inventiveness: A Student-Centered Approach to Inclusive Innovation. 10.18260/1-2--41609.

Dewey, J. (1938). *Experience and education*. Kappa Delta Pi.

Dzobenuku, R.K., Amoako, G.K., & Kumi, D.K. (2020). Social media and student performance: the moderating role of ICT knowledge. *Journal of Information, Communication and Ethics in Society*, 18 (2), 197-219. <https://doi.org/10.1108/JICES-08-2019-0092>

Edigin, L. U. (2010). Political conflicts and godfatherism in Nigeria: A Focus on the fourth republic. *African Research Review: An International Multi-Disciplinary Journal*, Ethiopia, 4(4): 174-86.

Educational Technology Solutions for Sustainable Development in Emerging Markets. *International Journal of Science and*

Research Archive, 12(01), 2428-2434. Doi: 10.30574/ijrsra.2024.12.1.1045

Einstein, A. (1954). Ideas and opinions. Crown Publishers.

Emmanuel Akinwotu (2020) "Waves of Bandit Massacres Rupture Rural Life in Northwest Nigeria" The Guardian Retrieved.

Esiri, M. O. (2016). Political thuggery and the crisis of confidence among youths in Nigeria. *Journal of Humanities and Social Science*, 21(1): 01-07.

FarmCrowdy. (2019). Our Story. Retrieved from <https://www.farmcrowdy.com/our-story> Flutterwave. (2021). About Us. Retrieved from <https://www.flutterwave.com/about-us>

Halliru, T. (2012). Ethnicity and political violence in Nigeria: Challenges of democratic governance. *Journal of Research in Peace, Gender and Development*, 2(4): 89-94.

Hardianti, H. (2024). Gamification in EFL: Exploring the Use of Gamification Strategies to Enhance Student Motivation and Engagement. *INTELEKTIVUM*. 5(1), 8-25. <https://doi.org/10.37010/int.v5i1531>

Harnessing Digital Technology for Economic Development in Africa. In E. Niyitunga (Ed.), *Contributions of Africa's Indigenous Knowledge to the Wave of Digital Technology. Decolonial Perspectives* (232-259). Global.

Haruna and Jumba (2011). Politics of thuggery and patronage in the north-eastern Nigeria. *Academic Research International*, 1(1): 111-20.

Heritage Christian University College (2024). About CEPE. Retrieved from Human Development Report (1994). New

dimensions of human security-human security: Seven categories. Available: <http://www.gdrc.org/sustdev/husec/z-categories.html>

Human Development Report (1994). New dimensions of human security-human security: Seven categories. Available: <http://www.gdrc.org/sustdev/husec/z-categories.html> Otaha, I. J. (2013). Food insecurity in Nigeria: Way forward. *African research review. An International Multidisciplinary Journal, Ethiopia*, 7(4): 26-35.

Ibekwe, C. and Ewoh, A. I. E. (2012). Resource control and the rise of militia in the Nigerian delta region. *African Social Science Review*, 5(1): 1-13.

Igbafe, A. A. and Offiong, O. J. (2007). Political assassination in Nigeria: An exploratory study 1986-2005. *African Journal of Political Science and International Relations*, 1(1): 9-19.

Ikeke, M. O. (2014). The national world and violent conflict in Nigeria: An appraisal. *Nnamdi Azikiwe University Journal of Arts and Humanities*: 91-109. Available: <http://dx.doi.org/10.4314/ujah.v15i1.5>

iLab Liberia (2024). About iLabLiberia. Retrieved from <https://www.ilabliberia.org/about> insights/2022/02/pulse-of-fintech-h2-2022.html

Intelligence: Challenges, Opportunities, and Future Directions. *Research Invention Journal of Engineering and Physical Sciences*, 3(1), 89-101.

International Crisis Group (2020) 'Violence in Nigeria's North West: Rolling Back the Mayhem', Available at: <https://reliefweb.int/sites/reliefweb.int/files>

/resources/288-violence-in-nigerias-north-west.pdf> [Accessed 24 July 2021].

International Journal for Multidisciplinary Research, 6(1) Doi: 10.36948/ijfr.2024.v0601.12477

Lawal, T. and Abe, O. (2011). National development in Nigeria: Issues, challenges and prospects. *Journal of Public Administration and Policy Research*, 3(9): 237-341.

Masrek, M. (2024). Enabling education everywhere: how artificial intelligence empowers ubiquitous and lifelong learning. *Environment-Behaviour Proceedings Journal*, 9(5118), 57-63. <https://doi.org/10.21834/e-bpj.v9isi18.5462>

Merton, R. K. (1957). *Social theory and social structure*. The Free Press: New York.

MEST Africa. (2021). About MEST. Retrieved from <https://www.meltwater.org/about/>

Meylani, R. (2024). Transforming education with the internet of things: A journey into smarter learning environments. *International Journal of Research in Education and Science (URES)*, 10(1), 161-178. <https://doi.org/10.46328/ijres.3362> replace Mohite & Raverka, (2023)

Mohammed, U. (2013). Corruption in Nigeria: A challenge to sustainable development in the fourth republic. *European Scientific Journal*, 9(4): 118-37.

Muriithi, S. M., (2017). African Small and Medium Enterprises (SMEs) Contributions, Challenges and Solutions. *European Journal of Research and Reflection in Management Sciences*. 5(1), 36-48

Mzyece, M., Soumonni, O, & Townsend, S. (2021). *African Leadership University: implementation strategies for innovative*

mass higher education. *Emerald Emerging Markets Case Studies*, doi: 10.1108/EEMCS-03-2020-0084 replace

Ogbeidi, M. M. (2012). Political leadership and corruption in Nigeria since 1960: A socio-economic analysis. *Journal of Nigeria Studies*, 1(2): 1-25

Ojo, J. S. (2016). Looting the looters: The paradox of anti-corruption crusades in Nigeria's fourth republic (1999-2014). *Canadian Social Science*, 12(9): 1-20.

Okafor, V.I. (2012). *Corruption and underdevelopment: (A Case Study of Halliburton)*. ABS Project Submitted to the Department of Political Science, Caritas University, Enugu.

Saliu, A. H., Luqman, S. and Abdullahi, A. A. (2007). Environmental degradation, rising poverty and conflict: Towards an explanation of the niger delta crisis. *Journal of Sustainable Development in Africa*, 9(4):

Sheshi T. Sidi, Abe, Olajide Mayowa and Suleiman Mohammed Evuti, (2024) "Banditry, Kidnapping, Terrorism and Insurgency in Niger State: Social and Cultural Reforms as non-Kinetics Alternative" *CERDEL Multidisciplinary Journal of African Development*, Glorious Vision University, Edo State, Nigeria, Vol. 2, No. 1,

Tambuwal, A. W. (2013). Leadership in developing democracies: A Nigerian perspective (2). Available: <http://www.vanguardngr.com/2013/09/leadership-in-developing-democracies-a-nigerian-perspective-2/> Tomololu, B. (2007). How the elite underdeveloped Nigeria culture. *The Constitution*, 7(3): 3-27.

Terhemba wuam, Muhammed Lawal Salahu (2014). *Aspects of Niger state History:*

Essays in Honour of Professor Ibrahim Adamu Kolo.

Uche, Jasper and Iwuamadi, Chijioke (2018) 'Nigeria: Rural Banditry and Community Resilience in the Nimbo Community', *Conflict Studies Quarterly*, 24, 71–82.

UNDP (2023). Mapping of Kenya's innovation ecosystem. Retrieved from

UN-Habitat. (2015). Participatory Slum Upgrading Programme (PSUP). Retrieved from

University of Education, Winneba. (2021-2022). Annual report on student performance

MALAYSIAN JOURNAL OF HUMAN ECOLOGY

Journal Homepage: https://eco1.upm.edu.my/malaysian_journal_of_human_ecology_mjhe-3740

PSYCHOSOCIAL EFFECTS OF INSTITUTIONALIZATION ON EDUCATION AND WELL-BEING OF VULNERABLE YOUTHS: INSIGHTS FROM NORTHEASTERN NIGERIA

Sule Idi,¹ Azlina Mohd Khir,² Arfah AB Majid³

^{1,2,3}*Faculty of Human Ecology, Universiti Putra Malaysia, 43400, Seri Kembangan, Selangor, Malaysia.
email: nfrhanakhayr@gmail.com*

ABSTRACT

This narrative review explores the psychosocial and educational impacts of institutionalization on vulnerable youths in conflict-affected Northeastern Nigeria, with a focus on Yobe State. Drawing on global and local evidence, it examines how conflict, displacement, and under-resourced institutions shape children's mental health, emotional well-being, and learning outcomes. The review identifies overlapping psychosocial and educational disadvantages, including heightened risks of post-traumatic stress, depression, and poor academic performance, compounded by limited caregiving capacity and inadequate mental health support. Applying ecological, trauma, attachment, and needs-based frameworks, the paper shows that children's emotional and cognitive challenges are interconnected across individual, institutional, and policy levels. Interventions such as trauma-informed care, remedial education, and life skills programs show promise but remain under-implemented. This review contributes one of the first contextual syntheses linking psychosocial and educational effects of institutionalization in Northeastern Nigeria, offering policy recommendations for integrated mental health, education, and community-based care strategies.

INTRODUCTION

The institutionalization of vulnerable youths is a significant concern, particularly in regions marked by conflict, poverty, and socio-political instability. In Northeastern Nigeria, the ongoing insurgency by Boko Haram has displaced many families, leaving numerous children without stable homes. These children often find refuge in institutional care, which provides physical safety but presents unique challenges related to their psychosocial well-being and educational development. Research from global organizations highlights that institutional settings, especially in conflict-affected regions, often struggle to meet the emotional and psychological needs of children, compounding the challenges they face due to trauma and displacement (UNICEF, 2022).

In Yobe State, a region heavily affected by Boko Haram's insurgency, thousands of children have been displaced, with many living in care institutions or temporary shelters. These environments, while offering essential services such as food and shelter, often fail to address the more complex emotional and psychological needs of children, many of whom have experienced trauma from violence, displacement, and loss. Research shows that institutionalized children in conflict zones are particularly vulnerable to mental health issues such as anxiety, depression, and post-traumatic stress disorder (PTSD) (Mebu, 2019). These

challenges are compounded in settings where institutions lack the resources and trained personnel to provide adequate psychosocial support (Umar, 2019).

The insurgency has also severely disrupted the educational trajectories of vulnerable youths. Boko Haram's direct attacks on schools and infrastructure have led to widespread closure of educational facilities, leaving many children without access to formal education. A study examining the educational effects of the Boko Haram conflict revealed significant declines in school enrollment and increases in dropout rates among children in conflict-affected areas of Northeastern Nigeria (Bertoni et al., 2019). Beyond the physical destruction of schools, the psychosocial effects of conflict, including trauma and stress, further impair cognitive functioning, hindering children's ability to focus and succeed in school (Mebu, 2019).

The impact of institutionalization goes beyond education. Institutionalized children often struggle with emotional regulation, social attachment, and behavioral issues due to inconsistent caregiving and lack of emotional support (Umar, 2019). In conflict-affected regions like Yobe State, the trauma experienced by displaced children worsens these challenges. Children who witness violence and lose family members are at a higher risk of long-term psychological issues, including PTSD and depression (Mebu,

2019).

Research highlights the role of parental figures in reducing the negative outcomes of institutionalization. A study in conflict-ridden regions of Nigeria found that maternal education plays a critical role in improving children's resilience and psychosocial adjustment, particularly by reducing rates of undernutrition and improving mental health outcomes (Kraamwinkel et al., 2019). The absence of family involvement in many institutions further contributes to the isolation and emotional difficulties faced by institutionalized youths.

Despite growing literature on institutionalization and child development, most existing studies focus on general populations or regions outside Northeastern Nigeria. Few reviews have examined how institutionalization in conflict-affected contexts, such as Yobe State, influences both psychosocial and educational outcomes. This lack of localized synthesis limits the development of evidence-based interventions for vulnerable youths.

This review therefore aims to explore how institutional environments affect the psychosocial well-being and educational outcomes of vulnerable youths in Yobe State, Northeastern Nigeria. Drawing on local and global evidence, the review examines the long-term impacts of institutionalization on

children's mental health, emotional well-being, and educational success, while identifying ways in which institutions can better address these needs.

METHOD OF THE REVIEW

This paper adopts a narrative review approach to synthesize existing knowledge on the psychosocial and educational effects of institutionalization among vulnerable youths in conflict-affected regions, with a particular focus on Northeastern Nigeria. The narrative review method was chosen because it allows for an integrative understanding of complex, multi-dimensional issues by drawing upon empirical studies, theoretical analyses, and policy reports rather than generating new primary data. This approach is particularly suitable for topics that cut across multiple domains such as psychology, education, and social welfare, where evidence is diverse and context dependent.

Relevant literature was identified through purposive and iterative searches conducted across academic databases such as Google Scholar, Scopus, PsycINFO, and PubMed, as well as from grey literature sources, including UNICEF, the World Health Organization (WHO), and the Nigerian Ministry of Education. Keywords and phrases such as *institutionalization*, *vulnerable youth*, *psychosocial effects*, *education*, *conflict-affected children*,

trauma-informed care, and *Yobe State* were used in various combinations. Additional sources were located through citation tracking and cross-referencing within relevant studies. Only materials written in English and published between 2010 and 2024 were considered to ensure both currency and contextual relevance.

The review prioritized works that examined psychosocial or educational outcomes among children in institutional or conflict-affected settings, as well as those that addressed interventions or policy frameworks for vulnerable youth. Studies unrelated to child development or those focusing exclusively on adult populations were excluded. Emphasis was placed on identifying recurring patterns, thematic consistencies, and contextual contrasts across local and international literature.

The selected materials were read closely and synthesized thematically rather than statistically aggregated. The analysis centered on four interrelated domains that structure this paper: (1) psychosocial effects of institutionalization, (2) educational outcomes, (3) contextual insights from Yobe State, and (4) institutional interventions with policy implications. This flexible, interpretive synthesis aligns with the purpose of a narrative review, i.e., to connect ideas, identify gaps, and propose integrative perspectives that can inform both research and practice.

To interpret the synthesized literature meaningfully, the review is guided by several theoretical perspectives that explain how conflict, trauma, and caregiving environments influence children's psychosocial and educational development. The following section outlines these frameworks and establishes the conceptual foundation that informs the thematic synthesis presented in the subsequent sections of this paper.

THEORETICAL FRAMEWORK

Understanding the psychosocial and educational impacts of institutionalization on vulnerable youths in conflict zones requires a multi-faceted theoretical approach. This section draws on several foundational theories that help explain how conflict, trauma, and institutional care environments interact to shape the well-being and development of children.

3.1 Bronfenbrenner's Ecological Systems Theory

Bronfenbrenner's Ecological Systems Theory offers a framework for understanding how children's development is influenced by interconnected environments. The theory is particularly relevant in institutional settings where the disruption of normal environmental systems due to conflict can significantly affect child development.

Bronfenbrenner's model divides the environment into layers, ranging from the immediate microsystem, such as caregivers and peers, to the broader macrosystem, encompassing societal values and policies.

In conflict zones like Yobe State, Northeastern Nigeria, children's microsystems are often unstable. Caregivers in institutions may be overburdened or poorly trained, leading to insufficient emotional support. This instability hampers children's ability to form secure attachments, which is essential for healthy emotional regulation and social behavior (Stanley & Kuo, 2022). At the ecosystem level, institutions are influenced by external factors like community infrastructure and policies, which are often disrupted by insurgency. This limits access to essential services, including mental health care and education (Ruppar et al., 2017).

At the macrosystem level, cultural norms and societal priorities in conflict zones tend to focus on survival, often at the expense of long-term emotional well-being. This societal shift can exacerbate mental health challenges among children in institutions. In Yobe State, the focus on immediate safety frequently overshadows the emotional needs of children, increasing the prevalence of PTSD, anxiety, and depression (Walker et al., 2018). Additionally, trauma from conflict may transcend individual experiences and

affect entire communities, complicating reintegration efforts and healing processes (Ike et al., 2022).

This framework supports the analysis of psychosocial outcomes (Section 4) by illustrating how disrupted caregiving and community systems affect children's emotional and behavioral development.

3.2 Trauma and Resilience Theories

Children in conflict zones are frequently exposed to severe trauma, including violence, displacement, and the loss of family members. Trauma and Resilience Theories help explain how these experiences shape psychological development. Trauma often results in long-term psychological effects such as PTSD, depression, and anxiety. In institutional settings, where trauma is compounded by separation from families, the lack of trauma-informed care can worsen these conditions (Mebu, 2019).

However, resilience, the ability to recover from adversity, can be fostered in children through protective factors such as supportive relationships and safe environments. Institutions that incorporate trauma-informed care models, which emphasize emotional safety and psychological healing, are better equipped to enhance resilience in children exposed to severe trauma (Fonkwo et al., 2023). Research in conflict-affected regions like Palestine

has shown that community support systems, cultural perceptions, and family involvement play crucial roles in helping children develop resilience, despite their exposure to violence and trauma (Harazneh et al., 2020).

In Nigeria, studies have shown that trauma is pervasive in conflict zones, where children frequently face displacement, sexual violence, and loss of family members. Addressing trauma at both individual and community levels is essential for promoting mental health and resilience. Integrating community-based approaches, such as those recommended for Nigerian conflict zones, can improve outcomes by addressing the root causes of trauma and enhancing resilience through localized care systems (Adesina et al., 2020). Institutions such as trauma recovery programs also offer structured approaches to emotional recovery through telehealth and other services designed to support children post-trauma (Ridings et al., 2019).

These concepts underpin discussions of coping mechanisms and intervention efficacy (Sections 4.3 and 7), highlighting how supportive environments can rebuild resilience after trauma.

3.3 Attachment Theory

Attachment Theory emphasizes the importance of early relationships with caregivers in shaping emotional and

social development. Children in institutional settings, especially those in conflict zones, often experience disrupted caregiving. This lack of stable relationships impedes their ability to form secure attachments, which are crucial for healthy emotional regulation and interpersonal relationships. Inconsistent caregiving in institutions, combined with the trauma of displacement, can result in emotional and behavioral difficulties, such as aggression, withdrawal, and difficulties in forming future relationships (Akbarak & Douglas, 2021).

Studies in conflict-affected regions like Amhara, Ethiopia, reveal that children who experience traumatic separation from caregivers often struggle with PTSD and other psychological disorders. Reinforcing secure attachments through consistent caregiving is critical for mitigating these effects and supporting children's psychosocial development (Biset et al., 2023). Without stable, nurturing relationships, institutionalized children face heightened risks of emotional and psychological distress.

Attachment theory is directly relevant to psychosocial themes in this review, particularly emotional regulation and social development (Sections 4.2 and 6).

3.4 Maslow's Hierarchy of Needs

Maslow's Hierarchy of Needs provides a framework for understanding how

institutions address the holistic needs of children. Maslow categorizes human needs into a hierarchy, beginning with basic physiological needs (food, shelter) and progressing to higher-order psychological needs (love, belonging, self-esteem). In conflict-affected areas, institutions often focus primarily on meeting children's basic survival needs, such as providing food and shelter. However, many fall short in addressing children's higher-order emotional and social needs.

Children in institutional settings, particularly those recovering from trauma, require environments that provide not only basic necessities but also emotional support and a sense of belonging. Institutions that fail to meet these higher-order needs leave children vulnerable to feelings of isolation and mistrust, hindering their emotional and cognitive development (Delany & Cheung, 2020). Comprehensive care models that integrate psychosocial support and community engagement are essential for ensuring that children's full range of needs are met (Peacock & Holliday, 2021).

In some settings, applying Maslow's theory in trauma-informed care has proven effective in addressing the needs of children recovering from severe abuse or trauma, aiding them in progressing toward self-actualization (Laser-Maira et al., 2019). Programs that specifically aim to strengthen resilience by focusing on children's

foundational needs have shown promise in enhancing emotional recovery and promoting long-term psychosocial well-being (Lipscomb et al., 2019).

These theoretical frameworks; Bronfenbrenner's Ecological Systems Theory, Trauma and Resilience Theories, Attachment Theory, and Maslow's Hierarchy of Needs, offer comprehensive insights into the factors influencing the development of institutionalized children in conflict zones. Bronfenbrenner's ecological model highlights how multiple environments interact to shape children's development, while trauma and resilience theories focus on the psychological effects of conflict and the capacity for recovery. Attachment theory emphasizes the critical role of stable caregiving, and Maslow's hierarchy emphasizes the need for a holistic approach to care, addressing both basic and higher-order needs.

Maslow's model helps interpret the imbalance between meeting children's basic survival needs and neglecting higher psychosocial and educational needs (Sections 4 and 5).

PSYCHOSOCIAL EFFECTS OF INSTITUTIONALIZATION

Mental Health Issues

Children raised in institutional settings, especially those exposed to conflict, face heightened risks of developing severe

mental health disorders. Exposure to trauma; whether from displacement, witnessing violence, or losing family members, leads to conditions such as post-traumatic stress disorder (PTSD), anxiety, and depression. Institutional environments often exacerbate these challenges by providing inadequate emotional care, compounding the impact of past trauma. Research conducted in Southeast Turkey, for instance, revealed that children living in conflict zones showed moderate PTSD symptoms, particularly among those who had to flee their homes during conflict (Eyüboğlu et al., 2019). To better illustrate the mental health challenges faced by institutionalized children in different conflict zones, Table 1 summarizes the specific mental health issues, conflict-related causes, primary symptoms, interventions, and outcomes across various regions.

In Syria, 35% of school-aged children exhibited symptoms of PTSD due to ongoing conflict and displacement (Perkins et al., 2018). Similarly, a study in Thailand revealed that children and emotional regulation in children with developmental trauma (Rogel et al., 2020).

directly exposed to violent events had significantly higher rates of PTSD, demonstrating a strong link between trauma and mental health outcomes (Jayuphan et al., 2019). The long-term exposure to violence contributed significantly to PTSD and anxiety among these children. Moreover, Syrian children with prolonged exposure to violence also showed a high prevalence of anxiety, compounding their vulnerability to PTSD (Eyüboğlu et al., 2019).

The emotional consequences of institutionalization often persist into adulthood, with displaced adolescents showing higher levels of depression and anxiety due to cumulative trauma and unstable caregiving environments (Eray et al., 2020). Studies on institutionalized children have highlighted the neurodevelopmental impact of PTSD on the brain, showing structural differences in the amygdala and prefrontal cortex, which are vital for emotional regulation (Herringa, 2017). Neurofeedback training has shown promise in improving PTSD symptoms

Table 1. Multidimensional view of mental health issues and institutionalization

Country/Region	Mental Health Issue	Causes (Conflict-Related)	Primary Symptoms	Intervention	Outcome	References
Syria	PTSD, Anxiety	Exposure to violence, displacement	Nightmares, hypervigilance	Trauma-focused Cognitive Behavioral Therapy (CBT)	30% reduction in PTSD symptoms	Perkins et al., 2018

Turkey	PTSD, Depression	Family separation, displacement	Emotional numbness, aggression	Group counseling, trauma-informed care	Moderate reduction in depressive symptoms	Eyüboğlu et al., 2019
Thailand	PTSD, Emotional Dysregulation	Witnessing violent events	Anxiety, behavioral issues	Individual therapy and community support	40% reduction in anxiety, improvement in emotional regulation	Jayuphan et al., 2019
Nigeria (Yobe State)	PTSD, Depression	Boko Haram insurgency, insecurity	Flashbacks, social withdrawal	Psychoeducation and peer support	Significant improvement in emotional well-being	Dahiru, 2020

4.2 Emotional and Social Development

The emotional and social development of institutionalized children is frequently compromised due to inconsistent caregiving and emotional neglect in these settings. Children in conflict zones who end up in institutions often experience profound disruptions in their ability to form healthy attachments, which are essential for emotional regulation and interpersonal skills (Ribaudó et al., 2022). For instance, children living in conflict areas in Turkey showed significant psychosocial difficulties, exacerbated by the trauma of displacement (Eyüboğlu et al., 2019).

Children returning from formerly ISIS-controlled territories have exhibited

significant emotional and developmental challenges, often struggling with feelings of insecurity and fear. These emotional challenges, rooted in disrupted caregiving and ongoing trauma, can stunt social development and lead to lifelong emotional vulnerabilities (Ellis et al., 2020). Similarly, research in Thailand highlights that children exposed to conflict, even indirectly, are at a heightened risk for PTSD and emotional dysregulation, which adversely impacts their social skills and relationships (Jayuphan et al., 2019).

Institutionalized children also tend to exhibit deficits in emotional intelligence and social interaction skills. Emotional neglect in early childhood often leads to difficulties in empathy, self-awareness,

and the ability to maintain healthy social relationships (Hevia-Orozco & Sanz-Martin, 2018). Children who face persistent neglect and trauma are at risk of social isolation, aggressive behavior, and difficulties forming trust-based relationships. Additionally, findings have shown that deficits in these skills persist into adulthood, significantly impacting long-term social functioning (Freeman et al., 2020).

4.3 Coping Mechanisms

Coping mechanisms developed by institutionalized children vary widely depending on the availability of emotional support and the severity of trauma experienced. Some children in institutional care develop adaptive coping strategies, such as resilience, when they are provided with structured, supportive environments. Programs like the Trauma Resilience and Recovery Program (TRRP), implemented in paediatric trauma centers, have shown positive results in helping children recover emotionally from trauma by providing early mental health interventions (Ridings et al., 2019). However, when institutions fail to address the emotional needs of children, many resort to maladaptive behaviors, such as emotional withdrawal, self-harm, or substance use (Kazlauskas, 2017). Research on parental responses to trauma also highlights that negative appraisals or avoidant coping strategies offered by caregivers can worsen children's PTSD symptoms (Halligan,

2017). Effective trauma-informed care models, such as neurofeedback training, have been shown to help children improve emotional resilience and self-regulation by addressing the brain mechanisms involved in trauma response (Rogel et al., 2020).

4.4 Long-Term Implications for Mental Health

The long-term consequences of institutionalization are significant and often persist into adulthood. Institutionalized children frequently struggle with ongoing mental health issues, including chronic emotional dysregulation and difficulty forming stable relationships. For example, children separated from their caregivers at the U.S.–Mexico border exhibited long-lasting emotional consequences, underscoring the critical need for trauma-informed interventions (MacLean et al., 2020). Table 2 presents an overview of the long-term effects of institutionalization on children, highlighting emotional, social, and academic outcomes observed in conflict-affected regions.

Children affected by developmental trauma, who face persistent emotional and behavioral problems, benefit significantly from interventions such as neurofeedback, which helps regulate brain activity and reduce PTSD symptoms (Rogel et al., 2020). Furthermore, addressing the long-term neurobiological impacts of trauma, such

as structural brain differences, is critical for improving mental health outcomes in

children exposed to institutionalization and conflict (Herrington, 2017).

Table 2. Long-term effects of Institutionalization

Long-Term Effect	Description	Geographic Focus	Prevalence	Suggested Intervention	References
Emotional Dysregulation	Persistent difficulty in managing emotions	Conflict-affected regions (e.g., Syria, Nigeria)	45% of institutionalized children	Long-term therapeutic support, trauma-informed care models	Herrington et al., 2017
Academic Underperformance	Lower academic success, higher dropout rates	Northeastern Nigeria, Sub-Saharan Africa	50% experience significant learning gaps	Integration of continuous remedial education and tech-based learning	Jürges et al., 2022
Social Isolation	Difficulty forming and maintaining relationships	Children returning from conflict zones	40% exhibit issues with trust and social interaction	Peer support and community reintegration programs	Freeman et al., 2020
Coping Mechanism Deficiencies	Reliance on maladaptive coping mechanisms (e.g., substance abuse)	Institutionalized children globally	30% of former institutionalized children develop maladaptive behaviors	Early psychosocial interventions and follow-up care post-institution	Kazlauskas et al., 2017

5. EDUCATIONAL OUTCOMES IN INSTITUTIONAL CARE

Institutional care has far-reaching implications for children's educational outcomes, particularly in settings

affected by conflict and instability. The complex interplay of factors such as trauma, cognitive development, access to educational resources, and the quality of caregiving significantly impacts the academic trajectories of children in

institutional care. This section explores how institutionalization affects educational access, cognitive development, academic performance, and long-term educational attainment, emphasizing the need for targeted interventions.

5.1 Access to Education

One of the most pressing issues for institutionalized children is their inconsistent and often limited access to education. For children living in conflict zones, access to formal education is frequently interrupted due to damaged infrastructure, displacement, and resource shortages. Institutional settings in such regions often prioritize basic needs like food, shelter, and health over education, leaving children vulnerable to educational neglect. For example, children in war-torn areas are likely to miss years of schooling due to the destruction of educational facilities, teacher shortages, and security concerns (Kazemi & Hashemi, 2020). These disruptions can lead to long-term educational gaps, which are difficult to address later in life.

In many institutional settings, children lack consistent schooling due to the absence of formal educational systems, particularly in conflict-affected regions. Educational interventions, such as programs focused on physical activity and emotional regulation, have been shown to improve school performance and reduce behavioral problems, especially among children who face

psychosocial stressors (BunketorpKäll et al., 2015).

5.2 Cognitive Development and Learning Outcomes

Cognitive development is a crucial factor influencing the educational outcomes of institutionalized children. Many children raised in institutional settings suffer from cognitive delays due to a lack of early stimulation, responsive caregiving, and structured learning environments. Research has shown that the absence of consistent caregiving relationships, especially in the early years, can impair the development of brain structures critical to cognitive function, such as the prefrontal cortex and hippocampus (Nelson et al., 2014).

Children in institutional care environments often exhibit deficits in areas such as executive functioning, memory, and attention, skills that are essential for academic success.

Children in institutional care who receive early intervention services often demonstrate better cognitive outcomes and academic skills by the time they enter formal schooling (Litt et al., 2017). Studies have shown that children receiving early intervention are more likely to perform at average or above-average levels in academic assessments compared to those who receive delayed services. Moreover, comprehensive school-based programs that integrate social and emotional learning

components have been found to improve cognitive performance and emotional regulation, which are critical for academic success (Goldberg et al., 2018).

5.3 Long-Term Academic Achievement

The long-term academic achievements of children raised in institutional care are often significantly lower than those of their peers in family-based or foster care environments. Institutionalized children are more likely to repeat grades, experience learning difficulties, and drop out of school before completing their education. Several factors contribute to these outcomes, including cognitive delays, emotional trauma, and the absence of individualized attention in institutional settings. Research indicates that institutionalized children have lower rates of high school graduation and are less likely to pursue higher education or vocational training, particularly those raised in conflict-affected regions (Davidson & Adams, 2018).

Institutionalized children also show persistent educational challenges, even when receiving support. Children with chronic health conditions or mental health issues, such as those hospitalized with mental health or behavioral conditions, perform significantly worse on national assessments in literacy and numeracy than their peers (Hu et al., 2021). These findings suggest that

additional, tailored educational support is necessary to help institutionalized children catch up academically.

5.4 The Role of Educational Interventions

Educational interventions that are tailored to the unique needs of institutionalized children can play a critical role in mitigating the negative educational outcomes associated with institutional care. Early intervention programs that focus on building cognitive skills and emotional resilience have been shown to improve both academic performance and long-term educational outcomes. For instance, trauma-informed educational practices are designed to address the psychological and emotional needs of children who have experienced significant adversity, helping them to re-engage with learning and overcome barriers to academic success (Schneider et al., 2020).

Additionally, interventions focused on improving social-emotional learning (SEL) in schools have been shown to enhance both academic and developmental outcomes for institutionalized children (Taylor et al., 2017). Studies have found that students participating in SEL programs fare significantly better in areas such as emotional well-being, social competence, and school engagement, which directly correlate with academic achievement. Furthermore, programs

like classroom-based physical activity interventions have demonstrated positive effects on academic performance, particularly in subjects like mathematics (Watson et al., 2017). These interventions help children develop better attention and focus in class, which can lead to improved academic outcomes without compromising their physical health.

Table 3 presents a comprehensive overview of educational interventions implemented in institutional care settings, highlighting the components, challenges, and outcomes of each approach, further illustrating their potential to mitigate the academic difficulties faced by institutionalized children.

Table 3. Educational interventions and outcomes in institutional settings

Intervention	Region	Components	Challenges Faced	Outcomes	References
Trauma-Informed Teaching	Syria	Incorporates trauma-sensitive curriculum, teacher training on PTSD	Lack of trained professionals, intermittent school closures due to conflict	Improved emotional regulation, 15% increase in focus	McGraw et al., 2022
Remedial Education Programs	Yobe State	Small group instruction, tailored learning plans	Resource constraints, teacher shortages	20% increase in academic performance, better integration into formal education	Garba et al., 2020
Technology-Based Learning	Sub-Saharan Africa	Use of mobile platforms for remote learning, digital assessments	Limited access to technology, unstable internet connection	Increased school retention rates, 25% rise in exam scores	Kizilcec et al., 2021
Psychoeducational Programs	Kenya	Emotional and behavioral skill-building, psychoeducation	High student-to-teacher ratio, lack of consistent funding	30% reduction in emotional issues, enhanced coping mechanisms	Mutiso et al., 2018

6. CASE STUDY: YOBE STATE,

NORTHEASTERN NIGERIA

Yobe State, located in Northeastern Nigeria, is one of the regions hardest hit by the Boko Haram insurgency, which has had devastating effects on the population, especially children. The state has faced a prolonged humanitarian crisis marked by widespread displacement, destruction of infrastructure, and a breakdown of social and educational services. This section examines how the ongoing conflict has affected institutional care for children in Yobe State, with a focus on educational, psychosocial, and health outcomes.

6.1 Impact of Conflict on Institutional Care

The prolonged insurgency in Yobe State has severely disrupted the care systems for children, particularly those who are orphaned, displaced, or otherwise vulnerable. The region has seen a sharp rise in the number of children separated from their families due to conflict-related violence and displacement. Many children have been placed in institutional care, but these institutions

often lack the resources and capacity to provide adequate support. Facilities have been overwhelmed by the sheer number of displaced children, with overcrowding and underfunding being major challenges.

UNICEF reports indicate that more than 800,000 children have been displaced in Northeastern Nigeria since the start of the Boko Haram insurgency. Institutions in Yobe State, like many others, struggle to meet even basic needs such as food, shelter, and education, leading to significant gaps in care. These institutions are further strained by a lack of training and resources for caregivers to adequately address the trauma and psychological issues that result from the conflict (Emenike, 2022). Table 4 provides a comprehensive overview of the major challenges faced by institutional care in Yobe State, highlighting the impact of overcrowding, inadequate educational resources, limited mental health services, and the shortage of qualified teachers, along with suggested interventions to address these issues.

Table 4. Institutional care challenges in Northeastern Nigeria

Challenge	Impact on Children	Institutional Response (Current)	Suggested Intervention	References
Overcrowding	Increased emotional neglect, limited individual care	Construction of new dormitories	Adoption of family-based care models to reduce crowding	Amodu et al., 2020
Inadequate Educational Resources	Reduced academic performance, disengagement	Distribution of basic learning materials	Integration of technology-based learning platforms	Garba et al., 2020
Limited Mental Health Services	High rates of PTSD, anxiety, depression	Sporadic counseling services	Increased recruitment of mental health professionals, partnerships with NGOs	Ibrahim et al., 2023
Lack of Qualified Teachers	Lower literacy and numeracy rates	Use of volunteer teachers	Teacher training programs focused on trauma-informed approaches	Brown et al., 2020

6.2 Educational Challenges

The education system in Yobe State has been particularly hard hit by the insurgency, with schools destroyed and many children unable to access formal education. Institutions housing displaced children often lack the resources to provide quality education, which has resulted in significant educational deficits among children in care. The destruction of over 1,200 schools across Northeastern Nigeria has left many children without access to education, further exacerbating the difficulties faced by institutionalized children.

In Yobe State, where the literacy rate is

already one of the lowest in Nigeria, the insurgency has worsened educational outcomes. Many children in institutional care face barriers in accessing education due to destroyed schools and the displacement of teachers (Amodu et al., 2020). Additionally, the trauma caused by witnessing violence and the loss of family members further hinders their ability to engage in learning (Mebu, 2019). Efforts to provide alternative forms of education, such as mobile classrooms and community-based learning programs, have had limited reach due to security concerns and logistical difficulties. However, outreach programs targeting internally displaced children, such as those that focus on educational resilience, have

shown promise in improving access to schooling despite ongoing conflict (Abdullahi et al., 2020).

6.3 Psychosocial and Behavioral Impacts

The psychological toll of the conflict on children in Yobe State has been profound. Many of the children in institutional care suffer from trauma due to their direct exposure to violence, loss of family members, and displacement. The resulting emotional and behavioral issues are compounded by the lack of mental health services in care institutions, which are often ill-equipped to provide psychosocial support.

Children in institutional care frequently exhibit symptoms of post-traumatic stress disorder (PTSD), depression, and anxiety. These conditions are exacerbated by unstable living conditions, overcrowding, and the lack of emotional support from caregivers (Raslan et al., 2021). Programs aimed at providing trauma-informed care have been introduced in some areas, but these programs remain underfunded and have limited reach in rural regions of Yobe State.

Several non-governmental organizations (NGOs), such as UNICEF and the International Organization for Migration (IOM), have established child-friendly spaces within camps where children can receive psychosocial support, engage in recreational

activities, and develop coping skills. These interventions, although effective, are often limited by the scale of the crisis and the available funding (Onoja et al., 2020).

6.4 Health Outcomes

Health outcomes for children in institutional care in Yobe State have also been adversely affected by the conflict. Many institutions lack adequate healthcare services, resulting in poor health conditions among children. Malnutrition, infectious diseases, and poor sanitation are common issues in care facilities, exacerbated by overcrowding and a lack of resources. The Nigerian government, in collaboration with international aid organizations, has made efforts to provide health services to displaced children, but the ongoing conflict has limited the effectiveness of these interventions.

One of the key health challenges facing institutionalized children in Yobe State is malnutrition. The World Health Organization (WHO) and other agencies have reported that acute malnutrition rates in Yobe State exceed the emergency threshold, with many institutionalized children facing long-term health complications as a result (Iacoella & Tirivayi, 2020). Additionally, limited access to healthcare services has contributed to outbreaks of preventable diseases such as measles and cholera among displaced

populations (Surajudeen et al., 2019). Vaccination coverage remains low in conflict-affected areas, leading to health risks for institutionalized children. Programs providing outreach services, such as vaccination and routine healthcare for displaced populations, have shown some success in mitigating these health risks (Ekezie et al., 2020).

6.5 Interventions and Policy Measures

Despite the immense challenges facing institutional care in Yobe State, various interventions and policy measures have been implemented to address the needs of displaced and orphaned children. International organizations such as UNICEF, the World Food Programme (WFP), and local NGOs have been instrumental in providing food aid, healthcare services, and educational support to children in institutional care.

Key interventions include the establishment of safe spaces within camps and institutions, providing not only physical safety but also emotional and psychological support for children. These safe spaces offer trauma-informed counselling, recreational activities, and educational programs designed to promote resilience among conflict-affected children (Emenike, 2022). Additionally, the Nigerian government, through its Safe Schools Initiative, has worked to rebuild schools and provide alternative forms of education for displaced children. Efforts

to integrate children from institutional care back into family or community-based care settings have also been prioritized as a more sustainable solution. Family reunification programs, supported by the Nigerian government and international agencies, aim to reconnect children with extended family members or foster families, offering them a more stable and nurturing environment. However, these programs face challenges due to the displacement of entire communities and difficulties in tracing families in conflict zones (Onoja et al., 2020).

The case of Yobe State illustrates the profound challenges faced by children in institutional care within a conflict-affected region. The destruction of educational infrastructure, coupled with the psychological and health impacts of the conflict, has left institutionalized children vulnerable to poor educational and psychosocial outcomes. While interventions by the Nigerian government and international organizations have provided some relief, much more needs to be done to ensure that children in Yobe State receive the care, education, and emotional support they need to overcome the trauma of conflict and displacement.

7. INSTITUTIONAL INTERVENTIONS AND PROGRAM EFFICACY

Effective institutional interventions are crucial for addressing the psychosocial,

educational, and developmental needs of vulnerable children, particularly in conflict-affected regions like Yobe State. These interventions aim to mitigate the negative impacts of institutionalization, offering mental health support, education, and life skills training. However, the efficacy of these programs often varies due to resource constraints and contextual challenges. This section reviews key interventions, assesses their efficacy, and provides insights into areas for improvement.

7.1 Trauma-Informed Care (TIC) Interventions

Trauma-informed care (TIC) is a critical framework for supporting children in institutional settings, particularly those affected by conflict. TIC interventions focus on creating safe environments that address the emotional and psychological needs of traumatized children. These interventions aim to foster emotional regulation, resilience, and positive relationships between children and caregivers. For instance, the Fostering Connections Program has shown significant improvements in emotional regulation and resilience in children placed in foster care, highlighting the potential of TIC programs to address the unique needs of vulnerable youth (Lotty et al., 2020).

In conflict zones like Yobe State, where children are often exposed to violence and displacement, the need for sustained and comprehensive TIC interventions is paramount. However, many programs

remain underdeveloped or inconsistently implemented due to resource limitations (Jankowski et al., 2018). In regions like Yobe State, TIC programs often involve periodic visits from mental health professionals, with group counselling sessions offered sporadically. While beneficial, these interventions lack the consistency and depth required to foster long-term emotional healing (Ramirez et al., 2021).

7.2 Psychosocial Support Programs

Psychosocial support programs are designed to address the mental health challenges faced by children in institutional care, particularly those who have experienced trauma. These programs provide counselling, therapeutic activities, and community-based support to help children manage the psychological impacts of displacement and violence. Studies have demonstrated that focused psychosocial interventions, particularly in low-resource humanitarian settings, can significantly reduce PTSD, anxiety, and depression in children (Purgato et al., 2018).

However, in Yobe State, the efficacy of psychosocial support programs is often hampered by inconsistent implementation and limited resources. Programs that partner with non-governmental organizations (NGOs) provide essential services, but they often lack the comprehensiveness needed to address the deep-seated trauma experienced by many institutionalized

children (McNamara et al., 2020). Long-term, individualized care is crucial for fostering emotional recovery and reintegration into society. Table 5 outlines various psychological support

programs provided to institutionalized children in conflict zones, detailing their methodologies, effectiveness, and challenges faced

Table 5. Psychological support programs for institutionalized children in conflict zones

Program Type	Target Population	Methodology	Effectiveness (Quantified Impact)	Challenges	References
Trauma-Informed Care (TIC)	Children exposed to violence	Trauma-sensitive care, training for caregivers	30% reduction in PTSD and emotional outbursts	Lack of long-term sustainability due to funding gaps	Lotty et al., 2020
Peer Support Programs	Adolescents in institutions	Peer mentoring, group counseling, leadership training	20% improvement in social engagement and self-esteem	High peer dropout rates, difficulties in peer supervision	Sanusi and Ibrahim, 2023
Neurofeedback and CBT Combination	Conflict-affected children	Brainwave regulation, cognitive restructuring	25% reduction in PTSD symptoms, 15% improvement in emotional regulation	Expensive, limited access to technology	Rogel et al., 2020
Parent-Based Interventions	Children recovering from trauma	Parental education on trauma-informed approaches	35% decrease in persistent PTSD, improved family relationships	Reluctance from some parents to participate	Ramirez et al., 2021

7.3 Educational and Cognitive Development Programs

Education is a cornerstone of institutional interventions, yet children in institutional care often face significant educational gaps due to displacement and interrupted schooling. In Yobe State, educational programs typically focus on remedial classes and tutoring to help children catch up. However, these interventions are frequently undermined by a lack of qualified teachers, outdated learning materials, and logistical challenges due to insecurity.

Programs that integrate trauma-informed teaching methods, such as those designed to implement trauma-informed care in school settings, have shown success in improving both cognitive and academic outcomes for children with adverse childhood experiences (McGraw et al., 2022). Furthermore, web-based educational interventions offer a potential solution to the educational disruptions caused by conflict. Studies have found that such technology-based platforms can help maintain continuity in education, even when physical schools are inaccessible (Simons et al., 2020).

7.4 Life Skills Training Programs

Life skills training programs aim to equip children with practical skills to prepare them for adulthood and

independent living. These programs often include vocational training in areas such as tailoring, carpentry, and agriculture. In Yobe State, the implementation of life skills programs varies across institutions, with some offering comprehensive training while others provide limited opportunities due to resource constraints (Mutiso et al., 2018).

Studies indicate that expanding life skills training to include emotional intelligence, communication, and problem-solving skills can significantly enhance the efficacy of these programs. Moreover, follow-up support, such as mentorship and post-institutional care, is essential for helping children transition smoothly into adulthood (Bryson et al., 2017). The absence of such support systems leaves many youths feeling unprepared to navigate the challenges of independent living.

7.5 Challenges in Program Implementation

Despite the demonstrated efficacy of many interventions, numerous challenges persist in their implementation, particularly in resource-limited and conflict-affected regions. One of the primary barriers is the lack of standardized metrics for evaluating program success. While trauma-informed care programs report improvements in emotional and behavioral outcomes, there is often limited data on how these changes

translate into long-term success, such as improved academic performance or mental health stability (Fernández et al., 2023).

In addition, logistical challenges, including shortages of trained staff, funding limitations, and ongoing security concerns, impede the scalability of effective programs. For example, while psychosocial interventions are critical for supporting children in post-conflict settings, the delivery of consistent, high-quality services is often hampered by these structural challenges (Ramirez et al., 2020).

7.6 Opportunities for Improvement

Improving the efficacy of institutional interventions requires a multi-faceted approach. First, institutions should adopt trauma-informed care models that integrate mental health professionals into regular care, providing sustained, individualized support for children. This approach has been shown to improve emotional and psychological outcomes for children in care (Duffee et al., 2021).

Furthermore, educational programs should be more resilient to disruptions caused by insecurity, with technology-based solutions offering potential alternatives in conflict zones (Sun et al., 2023). Expanding life skills training programs to include emotional and social development, combined with post-institutional support networks, can significantly improve outcomes for

youths transitioning out of institutional care (Galvin et al., 2019). Institutional interventions for children in care have shown varying levels of efficacy, particularly in trauma-informed care, psychosocial support, and education. While many programs demonstrate positive outcomes, significant barriers to effective implementation remain, especially in resource-limited and conflict-affected areas. By adopting more comprehensive, sustained, and context-specific interventions, institutions can better support the developmental and emotional needs of vulnerable children.

8. RECOMMENDATIONS FOR POLICY AND PRACTICE

Across psychosocial, educational, and institutional domains, the reviewed evidence consistently shows that institutionalized children in conflict zones experience overlapping emotional, cognitive, and developmental challenges. Drawing on the theoretical frameworks outlined earlier, these outcomes reflect disruptions in caregiving environments, unaddressed trauma, and limited educational opportunities. Integrating trauma-informed care, resilient education models, and community-based support emerges as the most effective strategy for improving both psychosocial and academic outcomes. These insights form the basis of the policy and practice recommendations that follow.

8.1 Improving Psychosocial Support

One of the most urgent areas for policy intervention is the improvement of psychosocial support for vulnerable children in institutional care. Children in conflict zones, such as Yobe State, experience high levels of post-traumatic stress disorder (PTSD), anxiety, and depression, which require comprehensive and sustained mental health services. Current practices, which often rely on sporadic visits from mental health professionals, are insufficient to address the depth of trauma experienced.

• Policy Recommendation: Counseling services should become a permanent fixture within institutional settings, with regular access to trauma-informed mental health professionals. Research shows that consistent counseling helps children process their experiences and develop healthier coping mechanisms (Han et al., 2021).

• Practice Recommendation: Institutions should collaborate with governmental and non-governmental organizations to ensure that mental health professionals are available on-site to provide regular individual and group counseling sessions. Caregiver training in trauma-informed care should be prioritized to equip caregivers with the skills necessary to manage behavioral issues, support emotional regulation, and foster a secure environment (Bryson

et al., 2017). Additionally, structured peer support programs that encourage positive peer relationships can help reduce feelings of isolation (Duffee et al., 2021).

8.2 Enhancing Educational Support Strategies

Improving educational outcomes for institutionalized children requires addressing both the academic gaps caused by disrupted schooling and the cognitive challenges linked to trauma. In regions like Yobe State, institutions face challenges such as teacher shortages, inadequate resources, and inconsistent funding.

• Policy Recommendation: Educational interventions must include personalized learning plans tailored to each child's needs. Children often have varying levels of academic proficiency due to missed schooling, and individualized learning plans can help address these gaps (Sun et al., 2023).

• Practice Recommendation: Remedial education programs should focus on core subjects such as literacy and numeracy, using small-group instruction to allow children to progress at their own pace (McGraw et al., 2022). Teachers should be trained in trauma-sensitive teaching strategies to better support children emotionally and academically (Chung et al., 2021). Technology-based learning solutions, such as mobile learning programs, should be explored to ensure continuity

in education, even when schools are inaccessible (Kizilcec et al., 2021).

8.3 Expanding Life Skills Programs

Preparing children in institutional care for adulthood requires comprehensive life skills programs that go beyond vocational training to include emotional intelligence, communication, and problem-solving skills. These programs should aim to build resilience and self-sufficiency.

• **Policy Recommendation:** Governments should standardize life skills training in institutional care, ensuring that children receive training in both practical and emotional skills. This should include structured post-institutional support, such as mentorship programs, to assist children in their transition to independent living (Bailey et al., 2018).

• **Practice Recommendation:** Institutions should tailor life skills training to individual children's needs and abilities, offering opportunities for vocational and social-emotional learning. Long-term follow-up support, such as community-based mentorship, can significantly improve children's outcomes as they transition out of institutional care (Mutiso et al., 2018).

8.4 Promoting Community-Based Care Models

Globally, there is a growing recognition

that institutional care should be a last resort. Family- and community-based care models offer better psychosocial and developmental outcomes for children. Reintegration into family settings provides a more stable and nurturing environment than institutional care.

• **Policy Recommendation:** Governments should prioritize policies that support community-based care, such as foster care and family reunification programs. Comparative studies show that family-based care models promote better long-term outcomes for children in conflict-affected regions (Bartlett et al., 2018).

• **Practice Recommendation:** Institutions should work towards reintegrating children into familial settings where possible. In cases where family reunification is not feasible, strengthening community ties and fostering kinship care can provide more supportive alternatives to institutionalization.

8.5 Strengthening Monitoring and Evaluation

To improve the efficacy and scalability of interventions, reliable monitoring and evaluation frameworks must be established. These systems are essential for assessing the short-term and long-term impacts of institutional care on children's well-being.

• **Policy Recommendation:** Governments should develop standardized monitoring and evaluation frameworks for all institutions caring for children. These frameworks should incorporate both quantitative and qualitative measures to ensure that programs are meeting their objectives and improving children's outcomes (Fernández et al., 2023).

• **Practice Recommendation:** Institutions should adopt evidence-based practices for evaluating the success of their programs. Regular feedback from children, caregivers, and community stakeholders can provide insights into areas for improvement.

8.6 Further Research Needs

While substantial progress has been made in understanding the effects of institutionalization on vulnerable youths, significant gaps remain. Further research is needed to inform future policy and practice:

- Longitudinal studies are necessary to track the long-term effects of institutionalization on children's mental health, social functioning, and life outcomes. This research can help identify how children fare after leaving institutional care, providing insights into the lasting impact of institutionalization (Chung et al., 2021).
- More studies are needed on the efficacy of alternative care models, such

as family reunification programs and community-based care. These studies should compare the long-term success of institutional versus family-based care, particularly in conflict-affected regions (Bartlett et al., 2018).

- Culturally specific interventions should be developed to address the unique social and economic contexts of regions like Yobe State. Many current interventions are developed in Western contexts and may not fully address the needs of children in African settings. Research on culturally appropriate interventions is necessary to ensure that programs are effective in diverse cultural environments (Bailey et al., 2018).

9. CONCLUSION

This review examined how institutionalization affects the psychosocial well-being and educational outcomes of vulnerable youths in Yobe State, Northeastern Nigeria. Drawing from global and local literature, it showed how conflict, displacement, and institutional environments interact to shape children's mental health, emotional adjustment, and learning. Using a narrative review approach, the paper integrated evidence from psychology, education, and social welfare to present a holistic view of the challenges faced by institutionalized children in conflict-affected contexts.

The reviewed literature consistently shows that institutionalized youths in such settings experience overlapping psychosocial and educational disadvantages. Psychosocially, they are at heightened risk of post-traumatic stress, anxiety, depression, and social withdrawal, often stemming from disrupted caregiving, exposure to violence, and prolonged insecurity. Educationally, the same conditions hinder access, concentration, and performance, resulting in learning gaps and poor long-term achievement. These outcomes are compounded by weak institutional capacity and limited psychosocial support within care facilities.

The theoretical frameworks applied, i.e., Bronfenbrenner's ecological systems theory, trauma and resilience theory, attachment theory, and Maslow's hierarchy of needs, clarify how emotional well-being and their learning potential. Effective institutional care must address children's needs across the immediate caregiving environment, the institutional and policy structures, and the broader sociopolitical context of conflict recovery.

A major contribution of this review is the localized synthesis of evidence from

REFERENCE

Abdullahi, S. A., Adebayo, A., Akinwande, A., & Adebayo, K. (2020). Providing TB and HIV outreach

Northeastern Nigeria, where limited research has examined institutionalization from both psychosocial and educational perspectives. This paper provides one of the first comprehensive analyses linking trauma-informed care, education access, and institutional practice within this region. While gender was not the central analytical lens, the findings acknowledge that gendered vulnerabilities often shape how children experience and respond to institutionalization.

The findings from this review emphasize the need for multi-dimensional interventions that integrate trauma-informed psychosocial care, adaptive educational programs, and community-based reintegration initiatives. Policymakers, caregivers, and humanitarian agencies must collaborate to ensure that institutions evolve from being mere shelters to becoming nurturing environments that promote resilience, learning, and emotional healing. Future research should further examine context-specific gender and policy dynamics to strengthen institutional care frameworks and improve long-term outcomes for vulnerable youths.

services to internally displaced populations in Northeast Nigeria: Results of a controlled intervention study. *PLOS Medicine*, 17.

- Adesina, M., Adesanya, T., & Olufadewa, I. (2020). Mental Health and Conflict in Nigeria: An Overview. *European Journal of Environment and Public Health, 4*(1), em0038.
- Akbayrak, K., & Douglas, G. (2021). Examining specialist teachers' conceptualisations of their roles in supporting learners with vision impairment: A comparative analysis of Turkey and England using Bronfenbrenner's ecological systems theory. *European Journal of Special Needs Education, 36*(2), 229-243.
- Amodu, O., Richter, M., & Salami, B. (2020). A scoping review of the health of conflict-induced internally displaced women in Africa. *International Journal of Environmental Research and Public Health, 17*.
- Bailey, C., Klas, A., Cox, R., Bergmeier, H., Avery, J., & Skouteris, H. (2018). Systematic review of organisation-wide, trauma-informed care models in out-of-home care (OoHC) settings. *Health & Social Care in the Community, 27*, e10-e22.
- Bartlett, J., Griffin, J. L., Spinazzola, J., Fraser, J. G., Noroña, C., Bodian, R., Todd, M., & Montagna, C. (2018). The impact of a statewide trauma-informed care initiative in child welfare on the well-being of children and youth with complex trauma. *Children and Youth Services Review, 84*, 110-117.
- Bertoni, E., Maio, M., Molini, V., & Nisticò, R. (2019). Education is forbidden: The effect of the Boko Haram conflict on education in North-East Nigeria. *Journal of Development Economics.*
- Biset, G., Goshiye, D., Melesse, N., & Tsehay, M. (2023). Post-traumatic stress disorders among children and adolescents in conflict-affected zones of Amhara region. *Frontiers in Psychology, 14*, 834021.
- Brendtro, L. (2019). Pathways from pain to resilience. *International Journal of Child, Youth and Family Studies, 10*(1), 4-22.
- Brown, T., Ashworth, H., Bass, M., Rittenberg, E., Levy-Carrick, N. C., Grossman, S., Lewis-O'Connor, A., & Stoklosa, H. (2022). Trauma-informed care interventions in emergency medicine: A systematic review. *Western Journal of Emergency Medicine, 23*, 334-344.
- Bryson, S. A., Gauvin, E., Jamieson, A., & Rathgeber, M. (2017). Effective strategies for implementing trauma-informed care in youth inpatient psychiatric and residential treatment settings: A realist systematic review. *International Journal of Mental Health Systems, 11*.
- BunketorpKäll, L., Malmgren, H., Olsson, E., Lindén, T., & Nilsson, M.

- (2015). Effects of a curricular physical activity intervention on children's school performance, wellness, and brain development. *The Journal of School Health*, 85(10), 704-713.
- Chung, G., Ansong, D., Brevard, K. C., & Chen, D. (2021). Identifying treatment moderators of a trauma-informed parenting intervention with children in foster care: Using model-based recursive partitioning. *Child Abuse & Neglect*, 117, 105065.
- Delany, D., & Cheung, C. (2020). Culture and Adolescent Development. *The Encyclopedia of Child and Adolescent Development*.
- Duffee, J., Szilagyi, M., Forkey, H. C., & Kelly, E. (2021). Trauma-informed care in child health systems. *Pediatrics*, 148.
- Eiraldi, R., Mautone, J. A., Khanna, M., Power, T., Orapallo, A., Cacia, J., et al. (2018). Group CBT for externalizing disorders in urban schools: Effect of training strategy on treatment fidelity and child outcomes. *Behavior Therapy*, 49(4), 538-550.
- Ekezie, W., Myles, P., & Timmons, S. (2020). Self-reported diseases and their associated risk factors among camp-dwelling conflict-affected internally displaced populations in Nigeria. *Journal of Public Health*.
- Ellis, B. H., Cardeli, E., Bloom, M., Brahmabhatt, Z., & Weine, S. (2020). Understanding the needs of children returning from formerly ISIS-controlled territories through an emotional security theory lens. *Child Abuse & Neglect*, 109, 104754.
- Emenike, J. U. (2022). Interventions for persons affected by conflicts & insurgency: An assessment of psychosocial support in IDP camps in Nigeria. *Psychology and Mental Health Care*.
- Eray, Ş., Murat, D., Uçar, H., & Gönüllü, E. (2020). Psychological well-being among internally displaced adolescents and the effect of psychopathology on PTSD scores depends on gender. *Community Mental Health Journal*, 56(8), 1489-1495.
- Eyüboğlu, M., Eyüboğlu, D., Şahin, B., & Fidan, E. (2019). Posttraumatic stress disorder and psychosocial difficulties among children living in a conflict area of the Southeastern Anatolia region of Turkey. *Indian Journal of Psychiatry*, 61(6), 496-502.
- Fernández, V., Gausereide-Corral, M., & Valiente, C. (2023). Effectiveness of trauma-informed care interventions at the organizational level: A systematic review. *Psychological Services*, 20(4):849-862
- Fonkwo, J., Besong, M., Ngong, J., et al. (2023). The effect of the anglophone crisis on youth sexual and reproductive

health in Cameroon. *Journal of Global Health Reports*, 7, e2023001.

Freeman, M., Young, J., Erickson, K., Damon, J. D., & Crockett, K. (2020). Evaluating the need for trauma-informed care in a behavioral health system of care. *Journal of Child and Youth Care Work*, 25, 53-65.

Galvin, E., O'Donnell, R., & Skouteris, H. (2019). Interventions and practice models for improving health and psychosocial outcomes of children in out-of-home care: Protocol for a systematic review. *BMJ Open*, 9.

García-Hermoso, A., Ramírez-Vélez, R., Lubans, D., & Izquierdo, M. (2021). Effects of physical education interventions on cognition and academic performance outcomes in children and adolescents: A systematic review and meta-analysis. *British Journal of Sports Medicine*, 55, 1224-1232.

Goldberg, J. M., Sklad, M., Elfrink, T., Schreurs, K., Bohlmeijer, E., & Clarke, A. (2018). Effectiveness of interventions adopting a whole school approach to enhancing social and emotional development: A meta-analysis. *European Journal of Psychology of Education*.

Halligan, S. (2017). How can informal support impact child PTSD symptoms following a psychological trauma? *Emergency Medicine Journal*, 34, A894.

Han, H. R., Miller, H. N., Nkimbeng, M., Budhathoki, C., Mikhael, T., Rivers, E., Gray, J., Trimble, K., Chow, S., & Wilson, P. (2021). Trauma-informed interventions: A systematic review. *PLoS ONE*, 16.

Harazneh, L., Hamdan-Mansour, A., & Ayed, A. (2020). Resiliency process and socialization among Palestinian children exposed to traumatic experience: Grounded theory approach. *Journal of Child and Adolescent Psychiatric Nursing*, 33(1), 26-33.

Herringa, R. (2017). Trauma, PTSD, and the developing brain. *Current Psychiatry Reports*, 19(1), 1-9.

Hevia-Orozco, J. C., & Sanz-Martin, A. (2018). EEG characteristics of adolescents raised in institutional environments and their relation to psychopathological symptoms. *Journal of Behavioral and Brain Science*, 8(10), 519-537.

Hu, N., Fardell, J., Wakefield, C., Marshall, G., Bell, J., Nassar, N., & Lingam, R. (2021). School academic performance of children hospitalized with a chronic condition. *Archives of Disease in Childhood*, 107, 289-296.

Iacoella, F., & Tirivayi, N. (2020). Child nutrition during conflict and displacement: Evidence from areas affected by the Boko Haram insurgency in Nigeria. *Public Health*, 183.

- Ike, T., Jidong, D., Ike, M. L., Francis, C., & Ayobi, E. E. (2022). Reintegration of former Boko Haram members and combatants in Nigeria: An interpretative phenomenological analysis of community members' experiences of trauma. *Third World Quarterly*, 43(1), 47-67.
- Jankowski, M. K., Schifferdecker, K., & Butcher, R. L. (2018). Effectiveness of a trauma-informed care initiative in a state child welfare system: A randomized study. *Child Maltreatment*, 24(1), 86-97.
- Jay, M., & Mc Grath-Lone, L. (2019). Educational outcomes of children in contact with social care in England: A systematic review. *Systematic Reviews*, 8.
- Jayuphan, J., Sangthong, R., Hayeevani, N., Assanangkornchai, S., & McNeil, E. (2019). Mental health problems from direct vs indirect exposure to violent events among children born and growing up in a conflict zone of southern Thailand. *Social Psychiatry and Psychiatric Epidemiology*, 55(1), 57-62.
- Johnson, S. L., Elam, K. K., Rogers, A. A., & Hilley, C. D. (2018). A meta-analysis of parenting practices and child psychosocial outcomes in trauma-informed parenting interventions after violence exposure. *Prevention Science*, 19, 927-938.
- Kazlauskas, E. (2017). Challenges for providing health care in traumatized populations: Barriers for PTSD treatments and the need for new developments. *Global Health Action*, 10(1), 1322396.
- Kizilcec, R., Chen, M., Jasińska, K., Madaio, M., & Ogan, A. (2021). Mobile Learning During School Disruptions in Sub-Saharan Africa. *AERA Open*, 7.
- Kolaitis, G. (2017). Trauma and post-traumatic stress disorder in children and adolescents. *European Journal of Psychotraumatology*, 8.
- Kraamwinkel, N., Ekbrand, H., Davia, S., & Daoud, A. (2019). The influence of maternal agency on severe child undernutrition in conflict-ridden Nigeria: Modeling heterogeneous treatment effects with machine learning. *PLoS ONE*, 14(12), e0208937.
- Laser-Maira, J. A., Peach, D., & Hounmenou, C. (2019). Moving towards self-actualization: A trauma-informed and needs-focused approach to the mental health needs of survivors of commercial child sexual exploitation. *International Journal of Social Work*, 6(1), 1-15.
- Lipscomb, S. T., Hatfield, B. E., Lewis, H., & Goka-Dubose, E. (2019). Strengthening children's roots of resilience: Trauma-responsive early learning. *Children and Youth Services Review*, 107, 104514.

- Litt, J., Glymour, M., Hauser-Cram, P., Hehir, T., & McCormick, M. (2017). Early intervention services improve school-age functional outcome among neonatal intensive care unit graduates. *Academic Pediatrics, 18*(4), 468-474.
- Lotty, M., Dunn-Galvin, A., & Bantry-White, E. (2020). Effectiveness of a trauma-informed care psychoeducational program for foster carers: Evaluation of the Fostering Connections Program. *Child Abuse & Neglect, 102*, 104390.
- MacLean, S. A., Agyeman, P. O., Walther, J., Singer, E., Baranowski, K., & Katz, C. (2020). Characterization of the mental health of immigrant children separated from their mothers at the U.S.–Mexico border. *Psychiatry Research, 286*, 112555.
- McGraw, S., Palokas, M., & Christian, R. (2022). Effectiveness of trauma-informed, school-based interventions for children with a history of trauma or adverse experiences: An umbrella review protocol. *JBIE Evidence Synthesis, 20*(8), 2087-2093.
- McGuire, R., Halligan, S., Meiser-Stedman, R., Durbin, L., & Hiller, R. (2022). Differences in the diagnosis and treatment decisions for children in care compared to their peers: An experimental study on post-traumatic stress disorder. *The British Journal of Clinical Psychology, 61*(4), 1075-1088.
- McNamara, M., Cane, R., & Hoffman, Y. (2020). Training hospital personnel in trauma-informed care: Assessing an inter-professional workshop with patients as teachers. *Academic Pediatrics.*
- Mebu, V. A. (2019). Effects of psycho-educational intervention on post-traumatic stress disorder symptoms among secondary school students exposed to conflict in Kano Metropolis, Nigeria. *European Journal of Psychology of Education.*
- Mutiso, V., Tele, A., Musyimi, C., Gitonga, I., Musau, A., & Ndeti, D. (2018). Effectiveness of life skills education and psychoeducation on emotional and behavioral problems among adolescents in institutional care in Kenya: a longitudinal study. *Child and Adolescent Mental Health, 23*, 351–358.
- Okpan Samuel, & Ezeah, P. (2020). Socio-economic status and health shocks; Analysis of coping strategies among internally displaced persons (IDPs) households in Abuja Nigeria.
- Onoja, A., Ogedengbe, C., & Sanni, F. (2020). Alleviating the material and health challenges of young internally displaced people in North-East Nigeria. *Humanities and Social Sciences Research, 3*(2), 10-20.
- Peacock, F., & Holliday, C. (2021).

Relational and developmental trauma and schools. *Education*, 141(1), 13-22.

Perkins, J., Ajeeb, M., Fadel, L., & Saleh, G. A. (2018). Mental health in Syrian children with a focus on post-traumatic stress: A cross-sectional study from Syrian schools. *Social Psychiatry and Psychiatric Epidemiology*, 53(11), 1231-1239.

Purgato, M., Gross, A., Betancourt, T., & Bolton, P. (2018). Focused psychosocial interventions for children in low-resource humanitarian settings: A systematic review and individual participant data meta-analysis. *The Lancet Global Health*, 6(4), e390-e400.

Ramirez, M., Flores, J., Woods-Jaeger, B., Cavanaugh, J., Peek-Asa, C., Branch, C., Bolenbaugh, M., Chande, V., Pitcher, G., Ortega, H., Randell, K., Wetjen, K., Roth, L., & Kenardy, J. (2021). Comparative Effectiveness of Parent-Based Interventions to Support Injured Children. *Pediatrics*, 148.

Ramirez, M., Flores, J., Woods-Jaeger, B., Cavanaugh, J., Peek-Asa, C., Branch, C., Bolenbaugh, M., Chande, V., Pitcher, G., Ortega, H., Randell, K., Wetjen, K., Roth, L., & Kenardy, J. (2020). Link for Injured Kids and Trauma Education: A Comparative Effectiveness Study of Two Parent-Based Interventions to Support Children After Traumatic Injury. *Social Science Research Network*.

Raslan, N., Hamlet, A., & Kumari, V. (2021). Mental health and psychosocial support in conflict: children's protection concerns and intervention outcomes in Syria. *Conflict and Health*, 15.

Ribaudo, J., Lawler, J. M., Jester, J., Riggs, J. L., Erickson, N., Stacks, A., Brophy-Herb, H., Muzik, M., & Rosenblum, K. (2022). Maternal history of adverse experiences and posttraumatic stress disorder symptoms impact toddlers' early socioemotional wellbeing. *Frontiers in Psychology*, 12.

Ridings, L. E., Anton, M. T., Winkelmann, J., Davidson, T. M., Wray, L., Streck, C., & Ruggiero, K. (2019). Trauma resilience and recovery program: Addressing mental health in pediatric trauma centers. *Journal of Pediatric Psychology*, 44(9): 1046–1056.

Rogel, A., Loomis, A., Hamlin, E., Hodgdon, H., Spinazzola, J., & van der Kolk, B. A. (2020). The impact of neurofeedback training on children with developmental trauma: A randomized controlled study. *Psychological Trauma: Theory, Research, Practice, and Policy*.

Simons, M., De Young, A. D., & McPhail, S. (2020). A web-based educational intervention to implement trauma-informed care in a paediatric healthcare setting: Protocol for a feasibility study. *Pilot and Feasibility Studies*, 6.

Stanley, K., & Kuo, N. (2022). "It Takes a Village": Approaching the development of school-family-community partnerships through Bronfenbrenner's socio-ecological perspectives. *Journal of Human Sciences and Extension*, 10(2), 104-120.

Stokes, Y., Lewis, K. B., Tricco, A. C., Hambrick, E., Jacob, J. D., Varin, M. D., Gould, J., & Aggarwal, D. (2023). Trauma-informed care interventions used in pediatric inpatient or residential treatment mental health settings and strategies to implement them: A scoping review. *Trauma, Violence & Abuse*.

Sun, Y., Blewitt, C., & Minson, V. (2023). Trauma-informed interventions in early childhood education and care settings: A scoping review. *Trauma, Violence & Abuse*, 25, 648-662.

Surajudeen, O. M., Adesina, A., & Adewole, S. (2019). Conflicts and insurgency: Barriers to global quality health service for internally displaced persons in the North Eastern part of Nigeria. *African Journal of Political Science and International Relations*.

Takehara, K., Togoobaatar, G., Kikuchi, A., Lkhagvasuren, G., Lkhagvasuren, A., Aoki, A., et al. (2021). Exercise intervention for academic achievement among children: A randomized controlled trial. *Pediatrics*, 148.

Taylor, R. D., Oberle, E., Durlak, J., & Weissberg, R. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Development*, 88(4), 1156-1171.

Umar, U. (2019). Impact of insurgency on the psycho-social adjustment of senior secondary school students in North-Eastern Nigeria. *The International Journal of Humanities & Social Studies*, 7(7), 123-131.

UNICEF. (2022). Reports on Child Poverty in Nigeria. Retrieved from <https://www.unicef.org/nigeria/reports/reports-child-poverty-nigeria>

Walker, M., Nixon, S., Haines, J., & McPherson, A. (2018). Examining risk factors for overweight and obesity in children with disabilities: A commentary on Bronfenbrenner's ecological systems framework. *Developmental Neurorehabilitation*, 21(8), 449-457.

Watson, A., Timperio, A., Brown, H., Best, K., & Hesketh, K. (2017). Effect of classroom-based physical activity interventions on academic and physical activity outcomes: A systematic review and meta-analysis. *The International Journal of Behavioral Nutrition and Physical Activity*, 14.

Jürges, H., Stella, L., Hallaq, S., & Schwarz, A. (2022). Cohort at risk:

Long-term consequences of conflict for child school achievement. *Journal of Population Economics*, 35(1), 1-43.

Garba, A., Dawha, M., & Sini, K. (2020). Technical Vocational Education and Training Institutions and Industry Collaboration: Analysis of Benefits, Strategies and Challenges. *ATBU Journal of Science, Technology and Education*, 7, 324-330.

Ibrahim, A., Kiiza, J., & Atekyereza, P. (2023). Youth Perceptions on State Institutional Capacity for Their Empowerment in Yobe State, Northern Nigeria. *Mediterranean Journal of Social Sciences*.

Brown, E., Freedle, A., Hurless, N., Miller, R., Martin, C., & Paul, Z. (2020). Preparing Teacher Candidates for Trauma-Informed Practices. *Urban Education*, 57, 662 - 685.

Dahiru, M. (2020). Challenges of Teaching Literature-in-English in Secondary Schools in Borno and Yobe, Nigeria. *International Journal of Linguistics, Literature and Translation*.

Sanusi, S., & Ibrahim, U. (2023). Rural Women Participation in Nutrition and Agri-Entrepreneurial Development: Empirical Evidence from Yobe State, Nigeria. *Egyptian Journal of Agricultural Research*.

MALAYSIAN JOURNAL OF HUMAN ECOLOGY

Journal Homepage: https://eco1.upm.edu.my/malaysian_journal_of_human_ecology_mjhe-3740

IMPACT OF CORRUPTION AND INTEGRITY ON CONTEMPORARY HUMAN CIVILIZATION IN SOUTH ASIA

Hussain Mazin^{1,2*}, Adlina Ab Halim²

^{1,2} Faculty of Human Ecology, Universiti Putra Malaysia, 43400, Seri Kembangan, Selangor, Malaysia

This paper examines contemporary challenges of human civilization in South Asia, a region confronting severe socio-economic, political, technological, climate-related issues, and assesses the impact of entrenched corruption and fragile integrity systems on governance and developmental outcomes. Drawing on recent global estimates that corruption diverts substantial shares of the Gross Domestic Product, public procurement and development aid, and on persistently low Corruption Perceptions Index scores across most South Asian states, the study frames corruption as a structural impediment to equitable and sustainable development, while integrity is conceptualized as a strategic asset for resilient governance. The analysis is grounded in institutional theory, pioneered by North (1990) and further developed by Acemoglu and Robinson (2012), and develops a conceptual framework linking corruption, integrity and human civilization. The purpose is to analyse the multidimensional impact of corruption on economic performance, political stability and social welfare, and to elucidate the countervailing role of integrity in safeguarding contemporary civilization in the region. Methodologically, the study employs a qualitative document-centric approach that triangulates secondary data from international indices, policy reports and academic literature, complemented by probative case evidence. The principal findings show that corruption constrains long-term growth, deters foreign investment and exacerbates income inequality, while also fuelling clientelism, state capture and governance failures that provoke mass mobilization and regime crises. In the social sphere, corruption distorts resource allocation in education and health, undermining human capital formation and further entrenching vulnerability. At the same time, existing integrity frameworks, including commitments from specialized anti-corruption agencies and access-to-information regimes, remain largely symbolic due to politicization, weak enforcement, and inadequate protection for whistle-blowers. The paper concludes that achieving the aspirations of contemporary human civilization in South Asia requires a regionally coordinated integrity agenda grounded in genuine political will, institutional autonomy, digital transparency tools, empowered citizens, and robust regional oversight through platforms such as SAARC. It further argues that international development partners should link support to demonstrable enforcement outcomes and inclusive, multi-stakeholder participation in anti-corruption reforms.

Keywords: Corruption; Integrity; South Asia; Contemporary human civilization

²**Corresponding author:**

Hussain Mazin

Email: mazin75.5@gmail.com

INTRODUCTION

Civilization is a term derived from the Latin word “civitas,” denoting a district or urban culture (Rossignol, 2011). In the most universal terms, human civilization is defined as the full spectrum of development and progress of human society, culture, and identities shaped by the historical, political, and intellectual context, reflecting the evolution of enlightenment and development of society through reasoning (Cole & Symes, 2014; Yoffee, 2004). Paradoxically, humanity’s quest for virtue has also normalized vices such as corruption, the misuse of public authority for private benefit (Ilyos, 2024a, 2024b; Kuru, 2023). A vice that ranges from bribery and nepotism to embezzlement and state capture, which is regarded as one of the vilest institutional vulnerabilities (Obijekwu, 2022). While petty corruption involves minor infractions such as bribery in service delivery, grand corruption involves embezzlement and large-scale misuse of power by political elites, often resulting in systemic breakdowns (Kuru, 2023; Obijekwu, 2022; Transparency Maldives, 2019). Beyond normative ideals, corruption is considered a pervasive and deeply rooted plague that has permeated across time and is a significant indicator that determines the trajectory of state development (Ilyos, 2024b).

Stark estimates from the UN and World Economic Forum report that corruption slurps roughly 5% of global GDP, which is approximately US\$2.6 trillion annually, while countries of the Global South account for US\$1.26 trillion annually (OECD, 2025; United Nations, 2023). Each year, corruption

siphons off between 10 - 25% of annual government procurement spending, a colossal 10 - 30% of public infrastructure project costs, and 30% of development aid (Hartmann & Ferreyra, 2022; OECD, 2025). According to Transparency International, over 66% of nations’ Corruption Perceptions Index (CPI) 2024 have a score below 50, indicating a high level of institutional vulnerability to corruption (Transparency International, 2025). Furthermore, the World Bank highlights its broad detrimental effects on equitable and sustainable development, while the Organization for Economic Co-operation and Development (OECD) identified corruption as a serious obstacle to development (Hartmann & Ferreyra, 2022; OECD, 2025).

Integrity, on the other hand, is the antidote and catalyst that sustains ethical leadership, societal trust, and institutional accountability (Barreto & Viera, 2021; OECD, 2021). Indisputably, the building block of sustainably accountable governance and to preserve ethical foundations that harmonize stability of modern society largely depends on invigorating a culture of integrity (Li, 2024; Maali & Morshed, 2025). Furthermore, beyond ethical obligation, integrity serves as a strategic asset that strengthens an institution’s ability to withstand value-based discords (Barreto & Viera, 2021). Thus, the interaction between these antithetical constructs forms a dialectical relationship that influences the course of state development in modern societies. Building on previous work, empirical evidence, and documented incidents, the aim of this paper is to analyse the impact of corruption and to underscore the

enduring role of integrity to nurture resilient societies of contemporary human civilization within the context of South Asia.

Despite a growing body of scholarship on corruption, governance, and development in South Asia, a large strand of literature remains empirically descriptive, predominantly focusing on measurements and utilised as a policy instrument, falling short of providing a coherent explanatory framework that systematically connects corruption, integrity, and human civilization.

LITERATURE REVIEW

South Asia, recognized as the cradle and home of the ancient Indus Valley Civilization, accounts for 2 billion (Worldometer, 2025) of the world's total population and stands at a perilous juncture in achieving contemporary civilization, where efforts towards progress are encumbered by deeply ingrained challenges (Sharma, 2020). According to the World Bank (2024), 75% of South Asian countries, including India, Pakistan, Bangladesh, Nepal, Bhutan, and Sri Lanka, are classified in the Lower-middle income category with Gross National Income (GNI) between US\$1,136 and 4,466, while the Maldives is classified as an Upper-middle income and Afghanistan a Low-income country. Although globalization offers pathways for development through grants, aid, and loans from various bilateral and multilateral financial mechanisms, achieving sustainable growth remains a complex and multifaceted challenge in the face of contemporary human civilization (Metreau et al., 2024).

- **Challenges of Contemporary Human Civilization in South Asia**

Socio-economic challenges include poverty and inequality, inadequate health and education systems, and significant energy shortages (United Nations, 2024). The latest UN Sustainable Development Goals (SDG) report highlights that 21% or 357 million people out of the 2 billion population in South Asia lives below the extreme poverty rate of US\$2.15/day, a situation worsened from the impacts of Covid19 pandemic (Islam, 2023; United Nations, 2024), while rapid urbanization increased economic disparity, leading to the growth of urban slums (Sharma, 2020). Bhandari (2023) and Sharma (2020) reveal that this economic disparity, which is greatly linked to cultural and historical elements, causes structural inequalities and entrenched social hierarchies that further marginalize vulnerable groups to poverty and exclusion.

Institutionalizing democracy is considered one of the biggest challenges in many South Asian countries (Pyakurel & Khangchian, 2024). The politicization of key independent institutions such as the judiciary, election commissions, anti-corruption commissions, and media through executive dominance restricts the proper functioning of the opposition, declining social and political trust in the system, and undermining democratic reforms (Pyakurel & Khangchian, 2024).

Amid sustained domestic political instability, geopolitical maneuvering between the competing interests of India and the Belt and Road Initiative of China, to pursue their strategic goals has emerged as a significant challenge to sustainable development in South Asia (Saklani & Ram, 2023). The growing debt burden and limited fiscal space,

combined with structural issues in the Maldives, Sri Lanka, Nepal, Pakistan, and Bangladesh, are weakening regional harmony and cooperative governance ideals of social and economic order (Dar & Ahmad, 2025; Pokharel, 2024; Saklani & Ram, 2023; Shivamurthy, 2024). For instance, the Maldives, with a total debt of US\$8.2 billion, a staggering 110% debt-to-GDP ratio, with external loans amounting to US\$3.4 billion, owing 70% to China and 18% to India, has considerably strained the country's financial stability (Shivamurthy, 2024). The debt-to-GDP ratio in Sri Lanka was 115.5% in 2022, and it defaulted on its sovereign debt. Pakistan's debt stood at Rs. 77.7 billion in 2023, while Nepal recorded a precipitous rise in public debt from 25.7% in 2015 to 41.4% of GDP in 2022 due to hastily ambitious development objectives (Farooqui et al., 2024).

Among the key technological issues that thwart equitable progress in South Asia are weak digital infrastructure in rural areas, energy insecurity, and inadequate investment in R&D. The digital divide remains vast, with only 15% of households in rural areas having access to the internet in the region, with sheer disparities between gender, urban, and rural areas (Ho, 2023). While there are improvements in the development of Artificial Intelligence and big data management, there are significant concerns regarding adoption and underinvestment in skill development and ethical dilemmas. Linguistic diversity also constrains access to digital devices in some countries (Arfanuzzaman, 2021).

In addition to these multifaceted challenges, the current civilizational context is faced with a worsening planetary crisis of climatic

conditions, posing serious threats to sustainable development (United Nations, 2024). The UNSDG 2024 report has highlighted that the achievement of Agenda 2030 in South Asia has been jeopardized, and the impact of climate shock is leading to multiple crises, including extreme poverty, clean water, health, education, life below water, and on land, with food security being an alarming threat (United Nations, 2024). Some studies have shown that a mere 1% change in climate will reduce food security in South Asia by 0.043% in the short run and 0.165% in the long run (Rehman et al., 2024). While numerous efforts have been undertaken to mitigate the adverse effects of climate change through climate adaptation resources and funds, the intensifying corruption through misuse and embezzlement poses additional threats to resolving the problem (Transparency International, 2025; United Nations, 2023, 2024).

- **South Asia's Standing on the Global Corruption Index**

The Corruption Perception Index (CPI) by Transparency International is considered one of the most reliable and comprehensive global corruption information providers widely cited by the UN agencies, World Bank, and OECD (Wathne & Stephenson, 2021). The statistics suggest that there is a recurring phenomenon and pattern in the context of corruption in South Asian countries, often linked to political patronage, bribery, and misallocation or embezzlement of climate funds, weak governance and rule of law, ineffective and selective implementation of anti-corruption laws, lack of transparency, and erosion of public confidence.

According to the latest data published, South Asian countries' scores in the global index look sober and troubling, indicating constant flaws in governance, accountability, and a lack of transparency in institutions. Except for Bhutan, which has a CPI score of 72 and a global rank of 18, all other South Asian countries scored below the global midpoint of

50 in an index that ranks 180 countries (Transparency International, 2025). The following table summarizes the CPI scores for South Asian countries over the past three years from 2022 to 2024, with CPI scores ranging from 0, as highly corrupt, to 100, as very clean (Transparency International, 2025).

Table 1 CPI scores for South Asian countries (2022 – 2024)

Country	2022	2023	2024	Global Rank (2024)
Bhutan	68	68	72	18
India	40	39	38	96
Maldives	40	39	38	96
Nepal	34	35	34	107
Sri Lanka	36	34	32	121
Pakistan	27	29	27	135
Bangladesh	25	24	23	151
Afghanistan	24	20	17	165

According to the CPI scores, Bhutan has demonstrated significantly clean records, positioning itself as the top performer throughout the past three years, with an increase of +4 points from 68 to 72 in 2024. India and the Maldives share the same scores and global ranks at 96, with a gradual decline, with each dropping one point annually from 40 to 38. Nepal shows little fluctuation in the score, but corruption seems to be persistent, maintaining the score below 35. Although Pakistan showed little improvement in 2023

with a score of 29, it regressed to 27 in 2024, again sliding backwards to the score it had in 2022. Bangladesh has also consistently declined by one point annually from 25 in 2022 to 23 in 2024, while Afghanistan's score has significantly dropped from 24 to 17 during the past three years and ranks 165 out of 180.

- **Causes of South Asia's Low Ranking in the Global Corruption Index**

The CPI of South Asia from 2022 to 2024 depicts widespread public sector corruption. According to Transparency Maldives (2025), the declining score experienced by the Maldives and India highlights the importance of accountability and the necessity to empower independent oversight bodies and increase transparency while bolstering investigations, prosecutions, and implementing anti-corruption mechanisms effectively to hold corrupt political and public officials accountable according to the law (Transparency International, 2025). The report highlighted that 40% of Indians who used public services paid bribes (The Telegraph Online, 2025; Transparency International, 2025) while successive administrations in Bangladesh have neglected to address corruption and protected corrupt individuals, allowing embezzlement and selective law enforcement (Abdullah, 2025; The Daily Star, 2025).

Similarly, in Pakistan, one in four citizens resorts to paying bribes or 'petty corruption' to obtain public services, while enforcement agencies, including judicial institutions, are sought to be the most corruption-prone institutions (Mehdi, 2025). Sri Lanka, on the other hand, is already on the International Monetary Fund's (IMF) External Fund Facility after the sovereign default in 2022 due to economic mismanagement, governance weaknesses, and widespread corruption. The IMF Governance Diagnostic Report 2024 suggests that the country faces severe economic inefficiencies and irregularities in tax collection, public investment, and credit allocation (Zhang et al., 2024). Nepal has also seen fluctuating low

scores due to the increase in policy-level corruption in executive and legislative branches stemming from bribery in foreign investment (Business Age, 2025).

CONCEPTUAL FRAMEWORK

The preceding literature review underlines the multifaceted challenges that undermine contemporary human civilization in South Asia. Institutional weaknesses and structural constraints significantly contribute to the region's continuing low standing on global corruption indices. Drawing on Douglass North's theory of institutions (1990) and Acemoglu and Robinson's political economy of institutions (2012), this study proposes an institutional theory-based conceptual framework to analytically integrate these empirical observations. These perspectives collectively provide a coherent analytical lens for understanding how corruption and integrity are embedded in institutional arrangements and how they shape governance outcomes, and determine whether nations prosper or fail.

North (1990) conceptualizes institutions as a set of rules, ethical behavioral norms, compliance procedures, or enforcement mechanisms that are designed to constrain the behaviour of individuals. His institutional analysis argues that well-designed institutional arrangements serve as a cornerstone of development and stability. The broad definition of institutions by North (1990) encompasses both formal and informal institutions. From this perspective, corruption extends beyond individual misconduct and appears as a structurally generated outcome rooted in weak formal constraints, misaligned informal norms, and

ineffective enforcement. By contrast, integrity is indicative of institutional environments where credible rules are supported by accountability-oriented norms and impartial enforcement mechanisms.

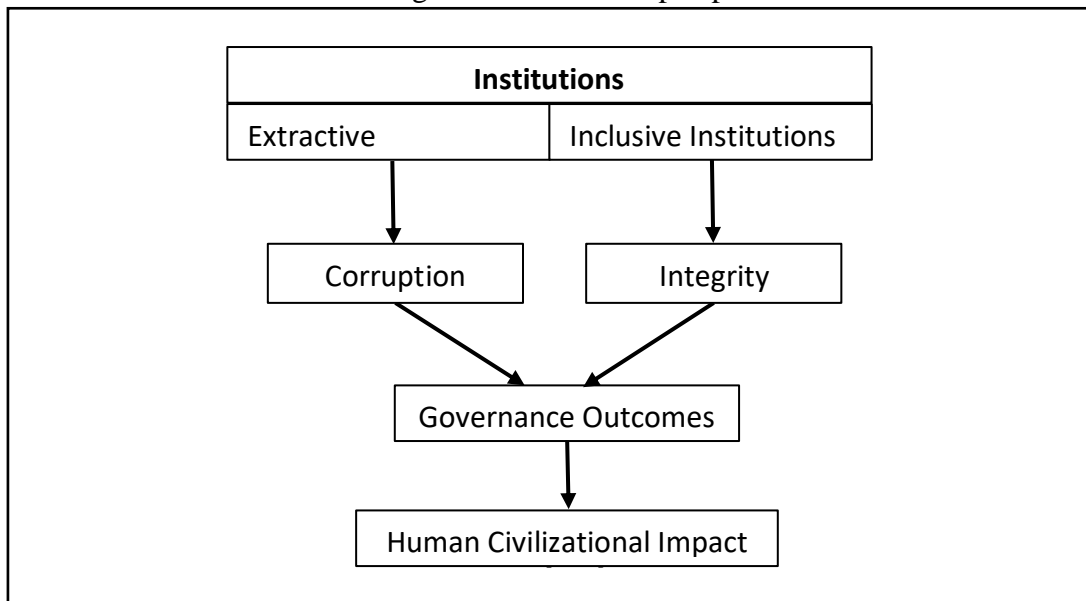
Building on the foundation of North (1990), Acemoglu and Robinson (2012) extended the institutional rationality by differentiating between inclusive and extractive institutions. They defined inclusive institutions as broad participation and distribution of political power, effective enforcement of the rule of law, and the provision of incentives that foster equitable resource distribution, which promote long-term prosperity. Conversely, extractive institutions concentrate power in entrenched elites, undermine accountability, and institutionalize rent-seeking and political patronage, leading to corruption and instability.

Grounded in North (1990) and Acemoglu and Robinson (2012) institutional theories, this framework conceptualizes corruption as extractive institutions and integrity as inclusive institutions, which are positioned as

opposing institutional orders with implications for governance that impact human civilization. In this regard, with extractive institutions, a weak rule of law, lack of accountability, rent-seeking, and political patronage, corruption becomes institutionalized. This, in turn, erodes public trust, distorts resource allocation, and exacerbates social inequality, leading to weak governance. On the other hand, institutionalized integrity strengthens accountability, augments public trust, promotes social cohesion, and supports inclusive and effective governance. The framework ultimately demonstrates how the institutional dynamics of corruption and integrity shape governance outcomes and determine whether civilizations prosper through development and resilience or fail through stagnation and conflict.

Figure 1 illustrates the conceptual framework derived from North's (1990) theory of institutions and Acemoglu and Robinson's (2012) distinction between inclusive and extractive institutions.

Figure 1: Conceptual framework linking corruption, integrity and human civilization through the institutional perspective



METHODOLOGY

This study employed a qualitative, document-based approach rooted in library research, drawing extensively on books, academic journals, international indices, and policy reports to synthesize relevant secondary data. The analysis incorporates illustrative case evidence, including the Maldives Marketing and Public Relations Corporation's "grand corruption" scandal, Sri Lanka's Aragalaya protest movement, and recent anti-corruption uprisings in Bangladesh, to contextualize the discussion within real-world dynamics. In addition, a comparative review of Transparency International's Corruption Perception Index trends from 2022 to 2024 is undertaken to situate national trajectories within broader regional patterns, thereby strengthening the conceptual grounding of the paper.

FINDINGS AND INTERPRETATIONS

Throughout human history, corruption has been a plague deeply ingrained in society (Ilyos, 2024a). Corruption is not a new phenomenon. During and after Aurangzeb's reign, the decentralized kleptocracy of the Mughal Empire debilitated state authority and undermined sovereignty by opening doors for foreign powers like the British East India Company to intervene in Indian politics (Raj, 2025). However, with the advent of globalization, corruption took a great leap forward with new dimensions, and its detrimental impact on the economic, political and social domains of states is evident in the current developmental landscape.

Impact of Corruption on Contemporary Human Civilization in South Asia

• **Economic Impact**

The correlation between corruption and economic growth has been extensively investigated, but research on many South Asian countries has been limited (J. Khan et al., 2020). Most studies on the impact of corruption on economic growth have used the notions of 'sand the wheels' and 'grease the wheels' concepts. Sand the wheels concept views corruption as an impediment to economic development, while grease the wheels suggests that corruption may enhance efficiency under certain institutional constraints (Djouadi et al., 2024).

Over the past decade, the largest corruption scandal in South Asia was witnessed by the Maldives in 2014 and 2015, as Transparency International (2019) describe it as "the grand corruption" in a controversial island sales initiative, orchestrated by high ranking government officials including a former President, ministers and judges, that siphoned US\$ 80 million through the Maldives Marketing and Public Relations Corporation (MMPRC). This scheme, which involved the leasing out of 50 islands and submerged coral lagoons to private developments, was uncovered by Al Jazeera Investigative Unit and documented as the "Stealing Paradise" (Al Jazeera, 2016; Transparency Maldives, 2019). According to Transparency International (2019), the Maldives lost 66% of its environmental protection budget for the next year, obstructing SDG achievement while public debt was increased and tarnishing the brand image of the Maldives and deterring foreign investment, which truly exhibits a textbook case study.

The bulk of academic research and findings shows that corruption remains a barrier,

supporting the sand in the wheels concept with a negative impact on economic growth and development in South Asia. In this regard, Appuhamilage and Sriyalatha (2019) studied the impact of corruption on economic growth using international, macro-level panel data from India, Pakistan, Bangladesh, and Sri Lanka, and the findings suggested that corruption influences economic growth directly and indirectly, claiming that a one-unit increase in corruption leads to a 0.0282% decline in economic growth. (Hasan et al., 2018) investigated the relationship between corruption and Foreign Direct Investment (FDI) inflows to India and China. Their findings supported the sand the wheels hypothesis on India, suggesting that corruption deters FDI inflow to India significantly, with a moderate positive correlation. Findings from a similar study by Khan et al. (2023) on the BRICS (Brazil, Russia, India, China, and South Africa) also supported the sand in the wheel hypothesis, implying the level of corruption harmed the inflow of FDI to India, while the effect on other countries was less significant.

These results suggest that the governments of South Asian countries need to enhance meaningful policies to control corruption to attract more foreign investments. This negative influence is synonymous with various studies indicating that corruption slows down or harms the economic growth in the region (Rashid et al., 2024). In addition to the above discussion, studies also suggest that corruption intensifies income inequality in South Asia (Appuhamilage & Sriyalatha, 2019; Rashid et al., 2024). Furthermore, even with measures to control corruption, the persistence of shadow economies, which open doors for the circulation of black money

that evades taxes and government levies, decreases economic growth by 0.72% for every 1% increase in corruption (Djouadi et al., 2024; Rashid et al., 2024).

While corruption is considered ‘immoral’ at the two ends of human civilization, the grease the wheels hypothesis contends that bribery and other forms of financial gain help to cross bureaucratic hurdles and expedite project execution (Djouadi et al., 2024). Khan et al. (2020) used panel data analysis from Nepal, Sri Lanka, Pakistan, India, and Bangladesh between 2002 and 2017, which reveals that corruption is beneficial for economic growth, indicating that a 1% increase in corruption leads to an increase in economic growth of 0.85%. The findings suggest that the grease the wheel hypothesis in these countries was achieved through the use of bribes to avoid institutional barriers, incentivize the private sector, and increase short-term efficiency (J. Khan et al., 2020).

The findings suggest the impacts of corruption and integrity vary significantly across time horizons in South Asia, with cumulative economic, political, and social consequences. In the short-term, corruption may generate limited administrative efficiency by bypassing bureaucratic delays. Political stability may be achieved through regime consolidation and elite entrenchment, while social groups may be marginalized through unequal access to services and public spending. Over the medium-term, persistent corruption dampens FDI inflow, deters fiscal capacity, and expands shadow economies that gradually weaken economic performance. While politically it erodes political trust and democratic accountability and transparency, weakens checks and balances and normalizes

clientelism, social impacts include deepening of inequality and normalization of unethical norms, eroding social cohesion and trust. Finally, in the long-term, corruption ingrains institutional decay and locks economies into low-growth and debt traps, while political instability, state capture, and social fragmentation threaten the foundations of contemporary human civilization. By contrast, instructional integrity delivers modest immediate effects but generates durable sustainability, democratic consolidation, and social cohesion over time.

Interpreted through the institutional theory, these findings indicate that the short-term gains associated with the “*grease the wheels*” hypothesis reflect underlying institutional failures rather than sustainable development pathways. As North (1990) argues, corruption emerges where formal rules are weakly enforced and informal practices substitute for institutional efficiency. In such contexts, bribery may temporarily bypass administrative bottlenecks but simultaneously entrenches institutional dysfunction. From the perspective of Acemoglu and Robinson (2012), the prevalence of the “*sand the wheels*” effect in South Asia suggests the continuation of extractive institutions that enable elite rent-seeking at the expense of broad-based economic growth. The Maldives’ MMPRC scandal illustrates how corruption reallocates public resources toward narrow political interests, undermining fiscal stability, environmental sustainability, and investor confidence, which are key pillars of contemporary civilization.

- **Political Impact**

Corruption in South Asia has a significant political impact, influencing governance and

policy implementation, declining trust in institutions, and the overall democratic process. Over the past five years, in the broader context of South Asia, Sri Lanka has faced a series of acute national crises including Covid19, just after the Easter Sunday Bombings in 2019, a profound economic and financial collapse that triggered a mass civil protest ‘*The Aragalaya Movement*’ or the ‘Struggle’, that led to the ultimate change in regime in 2022 (Silva & Ramasamy, 2022). In an effort to investigate the underlying causes of the mass movement, it was revealed that 82.17% indicated that the corruption of rulers was the fundamental issue, followed by 59.58% poor government policies (Silva & Ramasamy, 2022). In 2024, the student movement that led to the resignation of Prime Minister Sheikh Hasina in Bangladesh also highlighted corruption over a controversial employment quota system (Pyakurel & Khangchian, 2024; Rodacki, 2025). These two incidents in the recent history of South Asia reflect widespread public dissatisfaction with systematic corruption, unaccountable governance, and erosion of institutional trust and support the argument claiming the destabilizing effect of corruption on political systems that leads to mistrust, anti-incumbency movements, protests, and violent clashes.

Clientelism or transactional politics, where political support is obtained by providing material goods and services, is also a major predicament that weakens democratic values, misrepresents political expression, and erodes democratic accountability (Lewis & Hossain, 2022; Wilkinson, 2021). This patronage-based exchange association persists in almost all South Asian countries

and is a determining factor that leads to higher corruption and weakening rule of law by fostering patron-client dependencies, which can deter efforts to hold political actors accountable (Wilkinson, 2021).

In Bangladesh, strong party alignment and political intolerance foster a climate of clientelism, which in turn leads to state-patronized corruption and the misappropriation of public funds, which is further institutionalized by formal and informal legal immunity (Lewis & Hossain, 2022). Similarly, in India, the most specific guarantees patrons demand from politicians are security from the police, facilitation of favoritism from the government and mediation in court cases (Wilkinson, 2021).

Since the adoption of a multi-party political system in the Maldives, the nexus between money and politics has emerged as a central concern and a culture normalizing clientelism and vote-buying as a key strategy (Shaafiu et al., 2025). Available data suggests that a striking 75% to 90% of electoral campaign finance is sourced for vote buying (Shaafiu et al., 2025). This trend is further aggravated by political apathy, which creates a conducive environment for unethical practices such as the purchase of national identity cards to suppress or manipulate voter participation until the end of elections. A significant portion of these funds is reportedly sourced through the misappropriation of resources from State-Owned Enterprises (Shaafiu et al., 2025). Moreover, government contracts, especially procurement deals, are frequently awarded to companies affiliated with ruling party Members of Parliament or businesses loyal to the executive domain at inflated market prices, serving as a discreet

mechanism in partisan interest for campaign fundraising and political consolidation by incumbents (Shaafiu et al., 2025).

These findings, through the lens of institutional theory, indicate that corruption in South Asia undermines democratic governance by distorting both formal political institutions and informal norms of political participation. North (1990) emphasizes that when formal rules are weakly enforced, informal practices such as clientelism and patronage become dominant, reshaping political behavior and eroding institutional credibility. Similarly, from the perspective of Acemoglu and Robinson (2012), the prevalence of clientelism and executive dominance reflects the persistence of extractive political institutions that concentrate power and resources among ruling elites. The Sri Lankan and Bangladeshi protest movements illustrate how sustained corruption and unaccountable governance can trigger legitimacy crises, transforming public discontent into mass mobilization and regime instability.

While clientelist systems may temporarily stabilize political coalitions through material exchange, they ultimately weaken democratic representation, suppress genuine political competition, and discourage citizen trust in electoral processes. In the Maldivian context, the normalization of vote-buying and politicized procurement reflects a broader institutional failure where political survival depends on rent distribution rather than policy performance or public accountability.

Collectively, these dynamics suggest that corruption does not merely degrade governance efficiency but fundamentally reshapes political institutions in ways that are

incompatible with the advancement of contemporary human civilization. Integrity, therefore, emerges as a critical institutional mechanism for restoring democratic legitimacy, strengthening political accountability, and fostering inclusive political systems capable of sustaining long-term civilizational progress.

- **Social Impact**

The social implications of corruption are immense in South Asia and have both direct and indirect relationships to basic human rights such as education and health (Hassan, 2022). Corruption increases the cost of essential services while at the same time lowering the quality of services (Hassan, 2022). The blight of corruption in the education sector is materialized through exam score tampering, diploma mill activities, academic fraud, favoritism for elites, and misuse of educational development funds (Han, 2023). This conundrum is most acutely felt by the vulnerable groups, especially in countries such as India and Pakistan, further intensifying social and economic inequalities (Hassan, 2022; Transparency International, 2025). These immoral and unethical practices result in the decline of educational standards and an increase in underqualified graduates, while widening the inequality gap and diminishing the prospects for social progress (Han, 2023).

Basic healthcare is another vital sector exploited by corruption in South Asia. Empirical evidence suggests that corrupt bureaucrats recurrently divert budgetary allocations for public healthcare, which leads to subpar results of healthcare institutions, thereby limiting access to basic services and

deteriorating health systems (Cheng & Urpelainen, 2019). In India and Sri Lanka, for instance, some politicians tend to prefer infrastructure projects such as bridges and road development over hospitals and schools, as personal financial gains through kickbacks are exponentially high (Cheng & Urpelainen, 2019; Herath et al., 2019). This is a phenomenon that has lasting repercussions and implications for the growth and development of a nation.

A civilization prospect with a set of societal values, norms, and ethics. However, the amoral and exploitative act of corruption has also damaged the social fabric of society. According to Han (2023), when morality decreases, and the material aspect increases in a society, corruption becomes normalized, and at the individual level, they start to justify or accept corrupt behaviour for their survival and increase material wealth. Throughout history, civilizations flourished with the eschatological and teleological religious worldview by providing meanings and purpose to life, while shaping morality and ethical frameworks becomes the glue that binds the society (Petri, 2018).

- **Role of Integrity in Contemporary Human Civilization**

Throughout the history of mankind, integrity serves as one of the bedrocks of societal development, progress, and harmony. Integrity, originating from the Latin roots *integras*, meaning intact or whole, was earlier used to stress a person's commitment to allegiance and adherence to honesty (Huberts, 2018). However, owing to the magnitude of governance challenges facing modern societies, integrity emerges not as a mere moral value or aspirational ideal, but as

a structural necessity for the survival and progress of human civilization (Li, 2024; Maali & Morshed, 2025). In this regard, promulgating a culture of integrity through strict legal systems, social education, strong institutions, and broad participation of all sectors of society is paramount, especially in regions such as South Asia, where systematic corruption is an obstacle to economic growth and social cohesion, undermining social values and equity (Li, 2024).

- **Mechanisms to Strengthen Integrity in South Asia**

Although South Asia has implemented several measures to stimulate integrity and counter corruption, their practical application lacks impact (Teramura et al., 2024). Every South Asian nation has ratified the United Nations Convention Against Corruption (UNCAC) (2003), which binds them to international norms for prevention, enforcement, cooperation, and asset recovery. However, there are significant regional differences in how these commitments are domesticated into legally binding actions (Teramura et al., 2024).

Governance reforms, such as digital procurement systems, fiscal transparency tools, and capacity-building initiatives for oversight agencies, have been implemented and highly supported by multilateral organizations like the Asian Development Bank (ADB) and World Bank (Teramura et al., 2024). A2I laws, Freedom of Information (FOI) laws, and Right to Information (RTI) initiatives have also established legal avenues for citizens to hold governments accountable, but their implementation is obstructed by institutional weakness and political interference (Zafarullah & Siddiquee, 2021).

The majority of South Asian nations also have integrity agencies like Bangladesh's Anti-Corruption Commission (ACC) and Maldives's ACC and National Integrity Commission, India's Lokpal, and Sri Lanka's Commission to Investigate Allegations of Bribery and Corruption (CIABOC), as well as specific anti-corruption legislation. However, the credibility and efficacy of these bodies are limited because they lack the autonomy to prosecute due to executive influence (Zafarullah & Siddiquee, 2021).

- **Challenges in Implementing Integrity Measures**

Although several measures have been designed and implemented to combat corruption and foster a culture of integrity in South Asia, structural and political barriers make these measures largely ineffective. Firstly, a lack of political commitment to curb corruption undermines coherent enforcement of integrity frameworks (Huberts, 2018). The credibility of anti-corruption efforts is being fundamentally weakened by institutional vulnerabilities and politicized governance that pave the way for selective justice and lopsided scrutiny (Lewis & Hossain, 2022; Wilkinson, 2021).

For instance, the grand corruption case of the Maldives revealed how executive aggrandizement can undermine integrity and accountability mechanisms when the Auditor General was terminated from his position by a parliament controlled by the government for flagging the scandal and recommending a thorough investigation (Transparency Maldives, 2019). Further, when a bank manager exposed the embezzlement documents, he was prosecuted and charged

with unauthorized disclosure of private information (Transparency Maldives, 2019). This pattern reveals that the whistleblower protection mechanisms in South Asia remain weak and politically compromised. Consistent with North's (1990) distinction between formal rules and informal norms, the existence of legal instruments has failed to alter corrupt behaviour where informal practices of patronage and political loyalty continue to dominate institutional conduct. Furthermore, as argued by Acemoglu and Robinson (2012), the persistence of extractive political institutions systematically weakens oversight bodies, especially when accountability mechanisms threaten entrenched elite interests.

While Bangladesh has formulated a comprehensive National Integrity Strategy (NIS), political patronage, bureaucratic disinclination, and resistance have baffled meaningful reforms (Transparency Bangladesh, 2025). Similarly, India's '*Lokpal*' or the anti-corruption ombudsmen has been widely criticized for its dysfunctionality and symbolic authority to prosecute malfeasance (Chandra & Sunoj, 2025). Despite the presence of federal and provincial anti-corruption and accountability agencies in Pakistan, they have failed to achieve their objectives owing to undue political interference, victimization of honest officers, and a lack of capacity (Khan et al., 2023).

CONCLUSION

This conceptual paper argues that corruption remains a far-reaching and systematically embedded problem across South Asia, deteriorating socio-economic development,

democratic governance, and public trust. South Asia's consistently low rankings on Transparency International's CPI reflect not only the prevalence of corrupt practices but also the ineptness and weaknesses of existing integrity frameworks. Similar assessments by the OECD, World Bank, and other multilateral agencies bolstered these findings, recognizing institutional vulnerabilities, regulatory gaps, and wanton political interference as impediments to reform and development. The empirical case insights discussed in the paper further demonstrate how selective prosecutions and state capture erode institutional checks and balances, reinforcing cycles of impunity and public disillusionment in South Asia.

Theoretically, this study contributes to the scholarship linking corruption, integrity, and human civilization by proposing a conceptual framework rooted in institutional theory, which positions corruption and integrity as competing institutional configurations with implications for societal and civilizational transformations. The framework conceptualizes corruption as a manifestation of compromised regulatory frameworks, distorted norms, and systematic enforcement deficiencies, rather than treating it as an isolated institutional malfunction. By linking institutional integrity to civilizational resilience, this study extends institutional theory beyond its traditional economic and political focus to incorporate broader dimensions of human and societal sustainability, thereby addressing an existing gap in the literature that remains largely descriptive.

From a policy perspective, the findings underscore the necessity of moving beyond

symbolic anti-corruption commitments toward structural and institutional reform. These institutional gridlocks, governance challenges, and political impunity that are analogous in South Asia require an overhaul of the existing political culture that would support honest commitment to combat corruption and nurture a culture of integrity for the advancement of modern societies.

Reflecting on the discussion, this paper recommends the promulgation of a regionally coordinated strategy for enhancing integrity that is fortified by institutional autonomy, political commitment or zero tolerance for corruption, and citizen empowerment. This should involve strengthening anti-corruption agencies by granting full authority to prosecute perpetrators, enacting laws that insulate whistle-blowers, and implementing digital transparency tools to track public procurement and service delivery in real time. Furthermore, SAARC, as the regional platform, needs to galvanize and promote shared standards and peer accountability. Support should be prioritized by international development partners, such as the UN, World Bank, ADB, and the OECD, based on quantifiable enforcement results rather than just the presence of legal instruments. Addressing these issues requires inclusive policies, stronger R&D support, and investment in digital literacy and infrastructure. Lastly, maintaining independent oversight is essential and requires protecting the freedom of media and civil society actors. The essence of contemporary human civilization in South Asian countries can only be achieved through pursuing a comprehensive, multi-stakeholder approach from rhetorical commitment to a purposeful worldview that prioritizes strong

political will that would enable anti-corruption reforms and institutional integrity.

This study is subject to several limitations. As a qualitative, document-based conceptual analysis, the study exclusively relies on secondary data and perception-based indices, which may not account for lived experiences or sector-specific variations of corruption and integrity across South Asian countries. The study's broad regional scope may understate important country-level and regional dynamics. Future research could address these limitations through other research designs by incorporating primary data, in-depth institutional analysis, and comparative case studies. Empirical testing of the proposed conceptual framework and temporal impact pathways would further strengthen understanding of how integrity mechanisms shape long-term human civilizational outcomes.

ACKNOWLEDGEMENT

This manuscript draws on insights from the postgraduate course, History of Human Civilization, delivered by Assoc. Prof. Dr. Adlina Ab Halim (UPM). I am grateful for her valuable guidance on contextualisation, content outlining, and review.

CONFLICT OF INTEREST

The authors whose names are listed immediately below certify that they have NO affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies,

stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

AUTHOR CONTRIBUTION STATEMENTS

Mazin: Conceptualization, data collection, analysis, and writing.

Adlina: Contextualization, content outlining and review

REFERENCES

Abdullah, M. (2025). *TIB: Bangladesh's Corruption Index Score Worst in 13 Years*. Retrieved from <https://www.dhakatribune.com/bangladesh/corruption/373381/bangladesh-ranks-14th-among-most-corrupt>. Accessed June 14, 2025.

Acemoglu, D., & Robinson, J. A. (2012). *Why nations fail: The origins of power, prosperity and poverty*. Crown Publishers. Retrieved from <https://shorturl.at/9k1QC>. Accessed December 13, 2025.

Al Jazeera. (2016). *Stealing Paradise Investigation*. AL Jazeera Investigative Unit. Retrieved from <https://www.aljazeera.com/program/investigations/2016/6/9/stealing-paradise>. Accessed June 16, 2025.

Appuhamilage, M., & Sriyalatha, K. (2019). The Impact of Corruption on Economic Growth: A Case Study of South Asian

Countries. *Journal of Business Management and Economic Research (JOBMER)*, 2019(10), 35–47. <https://doi.org/10.29226/TR1001.2019.161>

Arfanuzzaman, M. (2021). Harnessing artificial intelligence and big data for SDGs and prosperous urban future in South Asia. *Environmental and Sustainability Indicators*, 11, 100127. <https://doi.org/10.1016/J.INDIC.2021.100127>

Arif, I., Khan, L., & Waqar, S. (2023). Does Corruption Sand or Grease the Wheels? A Case of BRICS Countries. *Global Business Review*, 24(6), 1468–1481. <https://doi.org/10.1177/0972150920927370>

Barreto, R. T. de S., & Viera, J. B. (2021). Public integrity programs in Brazil: Indicators and challenges. *Cadernos EBAP.EBR*, 19(3), 442–463. <https://doi.org/10.1590/1679-395120200069>

Bhandari, M. P. (2023). Past and Present of Social Inequality - Analyzing Structure and Future Trends. *Futurity of Social Science*, 1(3), 47–60. <https://doi.org/https://doi.org/10.57125/FS.2023.09.20.04>

Business Age. (2025). *Corruption in Politics and Business Up In Nepal: Report*. Retrieved from <https://newbusinessage.com/article/corruption-in-politics-and-business-up-in-nepal-report>, Accessed June 18, 2025

Chandra, A., & Sunoj, G. K. (2025). *A promise undone by dysfunctionality and unrealised potential*. Retrieved from

<https://www.theweek.in/news/india/2025/02/24/opinion-lokpal-a-promise-undone-by-dysfunctionality-and-unrealised-potential.html>. Accessed June 20, 2025.

Cheng, C. Y., & Urpelainen, J. (2019). Criminal Politicians and Socioeconomic Development: Evidence from Rural India. *Studies in Comparative International Development*, 54(4), 501–527. <https://doi.org/10.1007/s12116-019-09290-5>

Cole, J., & Symes, C. (2014). *Western Civilizations: Their History and Their Culture* (J. Durbin, Ed.; 18th ed.). W. W. Norton & Company.

Dar, Z. A., & Ahmad, Y. (2025). The Dynamics of South Asian Politics and Power: Unraveling the Complexities and Shaping the Future. *Inclusive*, 2(26), 469–482. Retrieved from <https://www.researchgate.net/publication/387894170>. Accessed June 20, 2025.

Djouadi, I., Zakane, A., & Abdellaoui, O. (2024). Corruption and Economic Growth Nexus: Empirical Evidence From Dynamic Threshold Panel Data. *Business Ethics and Leadership*, 8(2), 49–62. [https://doi.org/10.61093/bel.8\(2\).49-62.2024](https://doi.org/10.61093/bel.8(2).49-62.2024)

Farooqui, A. Z., Bari, F., Mehmood, W., & Sabir, A. A. (2024). *The Political Economy of Debt*. Retrieved from https://asiafoundation.org/wp-content/uploads/2024/10/International-Cooperation_The-Political-Economy-of-Debt.pdf. Accessed June 16, 2025.

Han, J. (2023). Examining Determinants of Corruption at the Individual Level in South

Asia. *Economies*, 11(7). <https://doi.org/10.3390/economies11070179>

Hartmann, J. T., & Ferreyra, C. (2022). *What are the costs of corruption?* Retrieved from <https://blogs.worldbank.org/en/governance/what-are-costs-corruption?> Accessed June 20, 2025.

Hasan, M., Rahman, M. N., & Iqbal, B. A. (2018). Corruption and FDI Inflows: Evidence from India and China. *Mediterranean Journal of Social Sciences*, 8(4–1), 173–182. <https://doi.org/10.2478/mjss-2018-0088>

Hassan, H. (2022). Social Implications of corruption - India and Pakistan. *Central European Journal of Public Policy*, 16(1), 1–13. <https://doi.org/10.2478/cejpp-2022-0003>

Herath, D., Lindberg, J., & Orjuela, C. (2019). Swimming upstream: fighting systemic corruption in Sri Lanka. *Contemporary South Asia*, 27(2), 259–272. <https://doi.org/10.1080/09584935.2019.1579171>

Ho, R. (2023). *An outsider's view to closing the digital divide in South Asia*. https://www.sanog.org/resources/sanog39/SANOG39_Conference-S1-raf-keynote.pdf

Huberts, L. W. J. C. (2018). Integrity: What it is and Why it is Important. *Public Integrity*, 20, S18–S32. <https://doi.org/10.1080/10999922.2018.1477404>

Ilyos, S. (2024a). Corruption and Its Historical Roots. *Journal of Social Sciences and Humanities Research Fundamentals*,

4(3), 59–63. <https://doi.org/10.55640/jsshrf-04-03-13>

Ilyos, S. (2024b). Unravelling Corruption: A Historical Exploration of its Emergence and Impact on Society. *American Journal of Social Sciences and Humanity Research*, 4(6), 13–18. <https://doi.org/10.37547/ajsshr/Volume04Issue06-03>

Islam, M. R. (2023). Navigating the Health and Wellbeing Landscape in South Asia: Assessing Progress, Addressing Challenges, and Charting a Path Forward. *Eastern Journal of Healthcare*. <https://doi.org/10.31557/EJHC.2023.1.8-19>

Khan, J., Muhammad Adeel-Farooq, R., Akram, K., & Sharif Abbasi, M. (2020). Is Corruption Detrimental for Economic Growth? A Panel Data Analysis of Selected South Asian Economies. *A Research Journal of South Asian Studies* 37 *South Asian Studies A Research Journal of South Asian Studies*, 35(1), 37–46. Retrieved from <http://111.68.103.26/journals/index.php/IJAS/article/viewFile/4103/2007>. Accessed June 2, 2025

Khan, S. N., Alim, W., Ghaffar, A., & Sohail, M. (2023). Why do anti-corruption agencies fail in Pakistan? A Phenomenological Study. *Journal of Business and Social Review in Emerging Economies*, 9(3), 181–190. Retrieved from <https://nja.pastic.gov.pk/JBSEE/index.php/JBSEE/article/view/162/102>. Accessed May 31, 2025.

Kuru, D. (2023). Perspective Chapter: From Ancient Times to Modern World-Corruptus.

In J. Fahed-Sreih (Ed.), *Corruption: New Insights*. IntechOpen. <https://doi.org/10.5772/intechopen.102118>

Lewis, D., & Hossain, A. (2022). Local Political Consolidation in Bangladesh: Power, Informality and Patronage. *Development and Change*, 53(2), 356–375. <https://doi.org/10.1111/dech.12534>

Li, Y. (2024). Integrity Culture and Socio-economic Development Interactions and Synergies. *Transactions on Economics, Business and Management Research*, 7, 457–464. <https://doi.org/https://doi.org/10.62051/8dbpnj13>

Maali, B. M., & Morshed, A. (2025). Impact of IPSAS Adoption on Governance and Corruption: A Comparative Study of Southern Europe. *Journal of Risk and Financial Management*, 18(2). <https://doi.org/10.3390/jrfm18020067>

Mehdi, S. S. (2025). *Pakistan struggles with governance and rampant corruption*. Retrieved from <https://globalvoices.org/2025/03/05/pakistan-struggles-with-governance-and-rampant-corruption/>. Accessed June 14, 2025.

Metreau, E., Young, K., & Eapen, S. G. (2024). *World Bank country classifications by income level for 2024-2025*. Retrieved from <https://blogs.worldbank.org/en/opendata/world-bank-country-classifications-by-income-level-for-2024-2025>. Accessed June 12, 2025

North, D. C. (1990). *Institutions, institutional change and economic performance*.

Cambridge University Press. Retrieved from <https://shorturl.at/aqE3b>. Accessed December 13, 2025.

Objekwu, M. I. (2022). Discourse on Corruption and Collapse of Reason in Human Affairs: A Philosophical Solution. *Evaia: International Journal of Ethics and Values*, 3, 1–30. Retrieved from <https://www.nigerianjournalsonline.com/index.php/EVAIA/article/view/2845>. Accessed June 06, 2025.

OECD. (2021). *Strengthening Public Integrity in Brazil: Mainstreaming Integrity Policies in the Federal Executive Branch* (OECD Public Governance Reviews). OECD. <https://doi.org/10.1787/a8cbb8fa-en>

OECD. (2025). *Corruption as a Development Obstacle: Policy Brief on Managing the Risk of Corruption Series*. Retrieved from [https://one.oecd.org/document/DCD/DAC/GOVNET\(2024\)2/en/pdf](https://one.oecd.org/document/DCD/DAC/GOVNET(2024)2/en/pdf). Accessed May 31, 2025.

Petri, R. (2018). *A Short History of Western Ideology: A Critical Account* (1st ed.). Bloomsbury. Retrieved from <https://www.perlego.com/book/804849/a-short-history-of-western-ideology-a-critical-account>. Accessed June 04, 2025.

Pokharel, A. P. (2024). Geopolitical Dynamics in South Asia: A Comparative Study of Chinese and Indian Interests in the Sovereignty and Politics of Nepal. *Academia Research Journal*, 4(1), 1–16. <https://doi.org/10.3126/academia.v4i1.73344>

Pyakurel, U., & Khangchian, V. (2024). Democratic Backsliding in South Asia: Recent Anecdotes. *Bodhi: An Interdisciplinary Journal*, 10(3). <https://doi.org/10.4324/9780367816827-9>

Raj, L. (2025). A study on the rise and Fall of the Mughal Empire. *International Research Journal of Human Resource and Social Sciences*, 12(1), 1–22. https://www.aarf.asia/current/2025/Jan/Iyfn_gaSmGMsBYM9.pdf

Rashid, M., Falki, N., Saleem, U., & Shakoor, U. (2024). Unmasking the Economic Traps: How Corruption, Political Instability, and Public Debt Stall Growth in South Asia - A Panel Study. *Remittances View*, 9(4), 20–31. <https://doi.org/https://doi.org/10.33282/rr.vx9i2.03>

Rehman, A., Batool, Z., Ma, H., Alvarado, R., & Oláh, J. (2024). Climate change and food security in South Asia: the importance of renewable energy and agricultural credit. *Humanities and Social Sciences Communications*, 11(1). <https://doi.org/10.1057/s41599-024-02847-3>

Rodacki, I. B. (2025). *Resistance, Neoliberalism, and Democracy: Lessons from Bangladesh's 2024 Student Uprisings* Isabela Bortolotto Rodacki *International Policy Review-Policy of the Month*. https://www.constituteproject.org/constitution/Bangladesh_2014

Rossignol, S. (2011). Civitas in early medieval central Europe- Stronghold or district? *Medieval History Journal*, 14(1), 71–99.

<https://doi.org/10.1177/097194581001400104>

Saklani, J. S., & Ram, N. (2023). China's Geopolitical Advancement in South Asia and the Indian Response. *Journal of Polity & Society*, 15(1), 3–13.

<https://journalspoliticalscience.com/index.php/i/article/view/61>

Shaafiu, Al. Z., Riffath, I., Shabeen, K., & Rasheed, A. A. (2025). *The Cost of Politics in the Maldives*. Retrieved from https://www.wfd.org/sites/default/files/2025-02/wfd_2025_cost_of_politics_in_the_maldives.pdf. Accessed June 06, 2025.

Sharma, G. (2020). *Contemporary issues in South Asia*. Nova Science. Retrieved from <https://lccn.loc.gov/2020010763>. Accessed June 17, 2025

Shivamurthy, A. G. (2024). *Shivamurthy - Understanding the Maldives' economic crisis_ Causes and implications*. Observer Research Foundation. Retrieved from <https://www.orfonline.org/expert-speak/understanding-the-maldives-economic-crisis-causes-and-implications>. Accessed May 29, 2025.

Silva, K. T., & Ramasamy, R. (2022). *Popular Protest (Aragalaya), Repression and Future of Democracy in Sri Lanka*. Retrieved from <https://www.isdkandy.org/wp-content/uploads/2024/06/Aragalaya.pdf>. Accessed June 01, 2025.

Teramura, N., Nottage, L., & Jetin, B. (Eds.). (2024). *Corruption and Illegality in Asian Investment Arbitration* (Vol. 22). Springer

Nature Singapore.
<https://doi.org/10.1007/978-981-99-9303-1>

The Daily Star. (2025). *Bangladesh is still stuck in the vicious cycle of corruption: The Daily Star*. Retrieved from <https://asianews.network/bangladesh-is-still-stuck-in-the-vicious-cycle-of-corruption-the-daily-star/>. Accessed May 31, 2025.

The Telegraph Online. (2025, February 20). *Deep smear: Editorial on India's decline in the Corruption Perceptions Index*. The Telegraph Online. Retrieved from <https://www.telegraphindia.com/opinion/deep-smear-editorial-on-indias-decline-in-the-corruption-perceptions-index-prnt/cid/2084575>. Accessed May 31, 2025.

Transparency Bangladesh. (2025). *A Stark Reflection of Deep-rooted Corruption Leading to Governance Failures in Bangladesh*. Retrieved from <https://www.ti-bangladesh.org/articles/story/7202>. Accessed May 31, 2025.

Transparency International. (2025). *Corruption Perceptions Index 2024*. Retrieved from <https://www.transparency.org/en/cpi/2024>. Accessed May 13, 2025.

Transparency Maldives. (2019). *Grand corruption and the SDGs: The Maldives Grand corruption in the Maldives Background*. Retrieved from https://images.transparencycdn.org/images/Grand-Corruption-and-the-SDGs_Maldives_FINAL.pdf. Accessed June 04, 2025.

Transparency Maldives. (2025). *CPI-2024-Corruption and Climate Change Maldives' Decline in the Corruption Perception Index 2024*. Retrieved from <https://transparency.mv/downloads/press-statement-corruption-and-climate-change-maldives-decline-in-the-corruption-perception-index-2024/>. Accessed May 31, 2025.

United Nations. (2023). *Corruption and the Sustainable Development Goals*. United Nations Information Service. <https://unis.unvienna.org/unis/pressrels/2023/uniscpl1172.html>

United Nations. (2024). *The Sustainable Development Goals Report*. Retrieved from <https://unstats.un.org/sdgs/report/2024/The-Sustainable-Development-Goals-Report-2024.pdf>. Accessed May 15, 2025.

United Nations. (2003). United Nations Convention Against Corruption, XVIII 14. Retrieved from <https://www.unodc.org/corruption/en/uncac/ratification-status.html>. Accessed June 22, 2025.

Wathne, C., & Stephenson, M. C. (2021). *The Credibility of Corruption Statistics: A Critical Review of Ten Global Estimates*. Retrieved from <https://www.u4.no/publications/the-credibility-of-corruption-statistics.pdf>. Accessed May 31, 2025.

Wilkinson, S. I. (2021). *Technology and clientelist politics in India* (WIDER Working Paper, Vol. 2021). UNU-WIDER. <https://doi.org/10.35188/UNU-WIDER/2021/093-1>

Worldometer. (2025). *Population of Southern Asia (2025)*. Worldometer. Retrieved from <https://www.worldometers.info/world-population/southern-asia-population/>. Accessed May 28, 2025.

Yoffee, N. (2004). *Myths of the Archaic State: Evolution of the Earliest Cities, States, and Civilizations*. Cambridge University Press. <https://kalamkopi.wordpress.com/wp-content/uploads/2017/04/norman-yoffee-mitos-negara-kuno.pdf>

Zafarullah, H., & Siddiquee, N. A. (2021). Open government and the right to information: Implications for transparency and accountability in Asia. *Public Administration and Development*, 41(4), 157–168. <https://doi.org/10.1002/pad.1944>

Zhang, Y. S., Rozhkov, D., Turkewitz, J., Zarazinski, P., & Sultanov, A. (2024). *Sri Lanka Selected Issues: IMF Country Report*. Retrieved from <https://www.imf.org/en/publications/cr/issuess/2024/06/13/sri-lanka-selected-issues-550264> Accessed May 28, 2025.

MALAYSIAN JOURNAL OF HUMAN ECOLOGY

Journal Homepage: https://eco1.upm.edu.my/malaysian_journal_of_human_ecology_mjhe-3740

INTERACTIVE PROBLEM-SOLVING, EMOTION REGULATIONS AND CONFLICT MANAGEMENT: PERSPECTIVES FROM ARMED BANDITRY IN NORTH-WEST, NIGERIA

Tukur Ibrahim Talasse¹, Azlina Mohd Khir², Wan Munira Wan Jaafar³, Mohammad Mujaheed Hassan⁴

^{1,2,3,4}Faculty of Human Ecology, Universiti Putra Malaysia, 43400, Seri Kembangan, Selangor, Malaysia

ABSTRACT

The development of interactive problem-solving as an instrument of conflict resolution is part of the evolutionary process in the field of conflict resolution. This new instrument focus on addressing deep-root cause and structural issues in a conflict by seeking to identify the root-causes of conflict relying on studies of human nature, human behaviour and social structures. As a result of persistent different inter-state and intra-ethnic conflicts being generated in the country leading to banditry, it has therefore become more essential to adopt some other comprehensive conflict resolution techniques which should be designed in a way to ensure the international community, Community Based Organizations (CBOs) and other International Non-Governmental Organizations (NGOs) to intervene and thoroughly dealt with the root causes of the existing bandits attack, intra-state and other ethnic based conflicts by putting all relevant stakeholders involved at the centre of the resolution process in Northwest, Nigeria. The ontology of this study is to examine the effect of interactive problem solving and emotion regulations on national security with specific reference to addressing Armed banditry in Northwest Geo-political zone of Nigeria. The objective of this paper is to examine the effects of interactive problem-solving and emotion regulations on conflict resolution in addressing armed banditry in North-Western, Nigeria. The work is undergirded by the interactive problem-solving theory as a framework. Using secondary data, the study found out among other things that interactive problem solving had significant effect on armed banditry conflicts in Northwest geo-political zone, Nigeria. This means that, there was a significant reduction in the participants' tendency towards involvement in armed banditry conflicts after exposure to interactive problem solving.

Keywords: *Interactive problem-solving, Conflict resolution, Armed banditry, Northwest Nigeria, Emotion regulation.*

Corresponding author:

Tukur Ibrahim Talasse
gs67101@student.upm.edu.my

INTRODUCTION

Generally, many communities and villages in the Northwestern part of Nigeria are repeatedly terrorized and attacked by armed bandits and these criminal acts include and not limited to cattle rustling, murder and raping, kidnapping, killing and looting. Also, it was reported by National Bureau of Statistics (2016) that the armed banditry attacks into various communities/villages in some of the local government areas of the affected states in Northwest and the rates of their deadly attacks had caused displacement of more than 200,000 residents and over 8,000 people had lost their lives in these attacks since year 2011. Also, on Sunday, 1st January 2023, a case of kidnap was reported in Zamfara State, along Gusau-Tsafe road where a retired Colonel Rabi'u Garba, along his two children were kidnapped, the incident occurred in that Sunday night (Daily Trust, 2023).

Similarly, in the same area, City & Crime in Daily Trust (2023) reported that bandits invaded Kagarko village and Kachia LGA of Kaduna State on December 11, 2022, where more than 37 people were abducted. In maintaining a peaceful and secured environment in Nigeria and in particular, the Northwest zone, scores of joint military and para-military personnel have been involved in the exercises but the mission has not been fully accomplished to eliminate the continuous armed banditry attacks which has been putting the country on a serious security threat or alert. In this process, many lives were reportedly to have been lost during counter attacks on the armed bandits both from military and the civilians. Therefore, the widespread of banditry in Nigeria and the

accompanying security dangers it has created have become a matter of public concern as regards the threat to national security (Abdullahi, 2019). As a result of several failed efforts to reduce or curb the widespread of armed banditry in Nigeria, some experts are of the opinion of introducing other peaceful method of conflict resolution to ensure restoration of peace in the area. It was also part of the initiative to re-install normalcy in the area that forced the newly elected executive Governor of Kaduna State to summon the meeting of all security chiefs in the state over insecurity on the 2nd of June 2023 (Daily Trust, 2023).

Moreover, as a result of persistent different inter-state and intra-ethnic conflicts being generated in the country leading to banditry, it has therefore become more essential to adopt some other comprehensive conflict resolution techniques which should be designed in a way to ensure the international community, Community Based Organizations (CBOs) and other International Non-Governmental Organizations (NGOs) to intervene and thoroughly deal with the root causes of the existing bandits attack, intra-state and other ethnic based conflicts by putting all relevant stakeholders involved at the centre of the resolution process. Negotiation process was part of resolution put in place by individuals in those communities and after the negotiation process failed, the Governor of the states in Northwestern zone in July 2019 collectively handle and enter the re-negotiation table with number of armed bandit kinsmen to control the threat and enhance internal security. However, apart from the conditions been stipulated for the re-

negotiation that was tagged as “Sulhu” which failed immediately, after one of the imposed conditions was breached by the bandits (West Africa Early Warning and Early Response Network WARN, 2019).

This, however, calls for the introduction of more robust method of resolving the long pending armed banditry crisis in the area and the need for the adoption of interactive problem solving in Northwest zone to improve the security situation of the country. Therefore, interactive problem solving is an alternative way of resolving an internal crisis within a place, village, town, state and a nation to reduce the threat or tension of security challenge. Also, the interactive problem-solving as a conflict resolution intervention method emphasizes on the close interaction of the conflicting parties through a bottom-up approach. This approach was further affirmed to be a very effective tool in addressing the root causes of a conflict through facilitating a forum of open and honest dialogue among the members of the different conflicting parties, while others contend that the real impact of such effort is limited to the doors of the conference venue as it involves only a limited number of participants who cannot guarantee the dissemination of the outcomes to the rest of the society (Taylor, 2022).

Consequently, upon this, an interactive problem solving is best in a situation where a particular crisis has been generated for so long without any positive result. Therefore, this process will involve the introduction of dialogue with the concerned parties to ensure normalcy is restored back to the affected

areas or the communities with the involvement of all relevant security agencies, the traditional leaders, religious leader and all the concerned members of the community. However, the interactive problem solving is therefore, not the only means of addressing armed banditry in Northwest. Emotion regulation of the parties involved will therefore complement the effort of interactive problem-solving intervention to permanently create a lasting solution to continuous armed banditry in Northwest leading to national security threats. Generally, emotions in this context, are clearly defined as brief and transient reactions to an event by individual or group of individuals, which influence thoughts and motivate the enactment of immediate response. Intergroup emotions are, however, include those that express emotions towards "out-group" because of their belonging or identification to a specific group or in response to events that affect the group itself. Therefore, emotion regulation is a wide-ranging term that describes explicit and implicit processes that involve monitoring, evaluating, altering and modulating emotions (Spinrad & Eisenberg 2019).

Finally, in view of several efforts being made by individuals and the state governments towards all failed negotiation processes to reduce the threat to national security by persistent armed banditry attacks in North West and most of Northern part of Nigeria motivate the researcher to embark on this study to examine the effect of interactive problem solving and emotion regulations on national security with specific reference to addressing Armed banditry in North West Geo-political zone of Nigeria.

Justification of the Study

In Nigeria today, armed banditry is a serious crime that has been consuming many lives of innocent Nigerians and become a threat to the national security of the country, thereby, having a magnanimous effect on the peaceful and co-existence of the inhabitants of the Northwestern zone. Majority of the communities and villages in the states of Zamfara, Kaduna, Sokoto and Kastina are frequently attack by these so-called armed bandits. Okoli (2019) affirmed that the bad effect of incidence and continuous armed banditry in the area raises a fundamental question as to the state government's ability to effectively govern the state. Hence, the state security machine in Northwest zone has so far failed to tackle the scourge of banditry which emanated from lack of political will and operational challenge. This crime initially emanated from rural farmers and herders which later translate to cattle rustling, kidnapping, raping, killings, looting and ransom demand from the communities, villages and the passerby victims. In recent time, the rate at which the armed banditry and related crimes threaten the security situation of many states in the Northwest, Nigeria has called for both national and international concern, which has affected both the social-economic and educational development of the areas. The concurrent violence attacks have affected over 35 out of 92 local government areas in the four (4) states among the Northwest zone, thereby increasing the number of internally displaced persons without or little humanitarian response from the government. It is, therefore, a known fact that this crime started as a conflict within this area without serious attention given to it that

led to the long outstanding insecurity challenge created by the bandits. Katsina and Zamfara states have become major point of banditry attack through kidnapping, armed robbery and cattle rustling and however, some parts of Kaduna state are not left out. On this note, Igbini (2022) re-affirmed that the growing threat of banditry is claiming many lives in hundreds, while several women become widows and many children of teenage category also become orphaned, this situation in Northwest is now becoming unbearable and in secured to people. Additionally, it was estimated that about 4,983 women were widowed, 25,050 children orphaned, and almost 190,340 others were internally displaced between June 2011 to May 2019 in Zamfara State alone (Ani, Eme & Oji, 2021).

Also, between January to June 2023, there were different reports of armed banditry attacks in Zamfara, Katsina, Sokoto and Kaduna States, particularly, Birnin-Gwari area of the state where many lives were been lost on daily basis because of bandit's attack (Daily Trust, 2023). Moreover, several efforts were made by the government towards negotiation with the bandits to stop the menace, but all were aborted and instead, the armed banditry re-launched their attacks in Northwest, Nigeria. An empirical finding therefore, show that the government of Katsina state and Zamfara lacks adequate information about the structure and organization of armed bandits' operation, strategies and leadership, thereby leading to one of the factors contributing to the failure of most negotiation in 2019 (Igbini, 2022). It is on this note, that revelation was made

showing about 30,000 organized bandits in 100 gangs are currently very active in Northwestern states of Zamfara, Sokoto, Katsina, Kaduna, Kebbi and Niger state, one of North Central states (Locchi, 2023).

However, there are other problems identified during the negotiation that led to the failure of the process. Among it, was a factor of inconclusiveness of the negotiation meetings between the identified armed bandit groups in the area. Also, it was affirmed by Premium Time (2015) that the Federal Government of Nigeria has committed over 4.62 trillion naira on maintaining national security for the past five (5) years, despite this huge amount spent to tackle the insecurity, the phenomenon persists and now in another deadly dimension, which consumed many lives and properties in the zone. This was however, because of lack of accountability, diversion of funds and corruption which has characterized the government activities and all its sub-systems in Nigeria.

Further to this, the demand for ransom and payment has also been identified as a factor for the formation and increase in numbers of new band of kidnapers and however, jeopardized the security situation of the zone. Shortland and Tom (2017) revealed in their study that if criminals or the kidnapers realized that the government would pay the ransom, there is every likelihood that they would demand more exorbitant amount because of their believe that government has enough in the treasury, therefore, increase the rate of kidnapping in the zone. In addition to this, despite several security arrangements and interventions made by the Federal Government to succumb the armed banditry in the zone, the resilience of the bandits'

operation spreading across almost every region of the country calls for a multi-dimensional approach in resolving the long persistent bandit to cushion the security threat it has created in the area.

Therefore, in view of the problems of inconclusiveness of negotiation meetings with the bandits, lack of adequate information about the number of armed bandits, ransom demand and payment by the government and the large corruption in the system on diversion of security fund, then the move for the approach of psychological interactive problem-solving that could provide an effective and sustainable peace and guaranteed the security of the area in the hands of armed banditry. Thus, the needs for the researchers to embark on this study to holistically examine the effect of interactive problem-solving and emotion regulations on the national security of Nigeria and particularly, paying specific attention to armed banditry in Northwestern Geo-Political Zone, Nigeria. The study will further intensify its effort to provide psychological interventions for conflict resolution that can effectively neutralize and eradicate the act of banditry in the North-Western, Nigeria.

The main objective of this study was to examine the effects of interactive problem-solving and emotion regulations on national security with specific reference to addressing armed banditry in North-West zone, Nigeria. Other specific objectives were to:

- Examine the effects of interactive problem-solving on conflict resolution in addressing armed banditry in North-Western, Nigeria.

- Examine the effects of emotion regulations on conflict resolution in addressing armed banditry in Northwestern, Nigeria.
- Examine the differential effects of interactive problem solving on armed robbery, kidnapping and cattle rustling in North-Western, Nigeria.
- Examine the differential effects of emotion regulations on armed robbery, kidnapping and cattle rustling in North-Western, Nigeria.

In conflict resolution process, there is need for involvement of all concerned parties or actors, this process is therefore referred to as a problem-solving mechanism. Problem solving is defined as an activity oriented toward changing an undesirable situation. However, according to Kelman (2023), interactive problem solving is referred to as a process that change parties to conflict perceptions about each other in a way that reconciles them and transform their relationship, it therefore, view conflict resolution in a much broader term than just achieving an agreement. In another concept, interactive problem-solving intervention in conflict resolution emphasizes on the close interaction between the conflicting parties through a bottom-up approach with other intervening parties to the intervention (Taylor, 2022). Also, interactive problem solving in conflict resolution allow an open window of opportunity for empowering citizens to participate in decision making processes. Moreover, it also provides an opportunity to explore opportunities for confidence-building measures and de-escalation of conflict.

Interactive problem-solving (IPS) in conflict resolution process condemn the use of threats in influencing the conflict development and

Concept of Interactive Problem Solving

therefore, positive incentives to be a better way of moving the conflict towards resolution. Similarly, IPS examines the history of conflict escalation and suggest ways of interaction that can reverse this dynamic during conflict resolution process (Kelman, 2023). Another concept, defined IPS as an unofficial, informal interaction between members of adversary groups or nations which aims to develop strategies, influence public opinion and organize human and material resources in a way that might help resolve their conflict (Joseph, 1987). Moreover, the parties to the conflict are brought together in an environment that is free from political pressure, usually in an academic setting where they can directly speak to each other with the assistance of social scientists who are more versatile and experienced in group facilitation and conflict management (Kelman, 2023). In addition to this, IPS employ an inter subjective approach of conflict which includes politics, especially in relation to representation and identity and, seeks to identify the root-causes of conflict relying on studies of human nature, human behaviour, and social structures (Tamra, 2009).

Concept of Emotion Regulations

Emotion regulation in conflict resolution entails the process of observing or evaluating individual emotion towards the existing conflict to guide the decision to be taken. Therefore, emotion in conflict resolution involves the components of body changes, facial expressions and other psychological reaction of individual or parties to the conflict. Also, Kvarnstrom (2017) defined emotion regulation as being able to think constructively about how to cope with feelings in resolving issues and conflict. Further to this, emotion regulation according to Gross (2014) recognizes that concerned individuals need to manage, adapt and express emotions in an appropriate and acceptable way, by shaping which emotions one has, when one has them, and how one experiences or expresses these emotions. He further described emotion regulation as how emotion is experienced in mind and body, and it is communicated to the mediators or negotiators. In another concept, emotion regulations describe the team, and emerge from and at the same time shape the local dynamics of the team, with other emergent states like conflict, trust, team cognition, cohesion (Mulu, 2023)

Similarly, emotion regulation in conflict resolution is defined by Yang and Mossholder (2004) as the process of detecting and solving discrepancies between current and desired emotional states. Emotion regulation may, therefore, be automatic or controlled, conscious or unconscious and may have its effects at one or more points in the emotion generative process. However, effective emotion regulation is expected to take time to emerge and thus emotion regulation processes are less likely to be

effective in ad-hoc groups as compared to permanent groups. But, sometimes with ad-hoc groups experiencing high levels of task conflict task and with a rather low level of emotion regulation are likely to experience increased levels of relationship conflict (Malu, 2023).

Concept of Armed Banditry

Armed banditry is a criminal act that has engulfed the people in North-Western zone of Nigeria and has been a challenge to national security. The concept of armed banditry is said to be the act and practice of rubbing or stealing cattle and animals from herders or raiding of cattle from their ranches (Egwu, 2016). Also, the term 'armed banditry' is defined as the act of allied violent crimes, that involved kidnapping, cattle rustling, village and highway raids involving the use of force to intimidate a person or a group of persons to kidnap, rape, rob or kill the victims (Rosenji & Adeniyi, 2022). Also, the concept of armed banditry is said to be the practice of raiding and attacking victims by members of an armed group in a particular place, whether planned or not planned, using weapons for the purpose of overpowering the victim and obtaining loot items/materials or achieving some political goals (Shalangwa, 2013). And to Egwu (2016), armed banditry has been described as a situation where some citizens of an area or place or state are attacked, killed, kidnapped, ransomed and raped and their properties destroyed, and cattle rustled.

Concept of Conflict Resolution

Conflict is evitable in our society but the ability to manage it before escalating is referred to conflict resolution. Conflict

involves both the realistic issue of incompatible interest and psychological issue of distrust and stereotyping. Therefore, according to Chaplain College (2023) conflict resolution is a skill that is best built through many years of experience and practice to ensure or persuade all parties involved in a conflict to prevent its escalation to a larger issue where life and properties would be destroyed. Also, according to Best (2005), conflict resolution is referred to as a sense of finality, where the parties to a conflict are mutually satisfied with the outcome of a settlement and the conflict is resolved in a true sense of it. Another concept defined conflict resolution as the process in which two or more parties work toward a solution to a problem or dispute and all parties involved work together in a productive way to achieve a result that satisfies all parties or associations involved in the process (Swetha, 2023).

Generally, conflict resolution involves the process of ensuring the negative aspects of conflict are reduced while the positive aspects of it are increased to finally come with a positive solution to end the conflict (Mishra 2023). In another view, conflict resolution is affirmed to be in a principle and process, it therefore involves the systematic intelligence and strategies on “dos” and “don’ts” to enhance their capability building in favour of mediation, negotiation, bargaining, conciliation and arbitration (Casmir, 2022). Moreover, conflict resolution, according to Mac Ginty (2021) is the process of putting a particular conflict under control by interacting with the concern parties to develop common generalization or principles and practices that will return cordial

relationship against violence. In another context, conflict resolution according to National Open University of Nigeria (NOUN, 2006) is based on human needs that would lead to variable sum or win-win outcomes since there is no individual’s basic needs to be compromised in the conflict.

Theoretical Framework - Interactive Problem-Solving Theory

The theory of interactive problem solving is a social psychology theory that was propounded by different scholars and experts in the field, the likes of Kahney (1986), Kelman (1990) and Tallman and Colleagues (1993) which was basically on group facilitation and conflict management approach. Consequently, Tallman and colleagues (1993) their theory was developed on problem-solving behaviour with much emphasis on special relevance to individuals and small groups’ involvement in dispute management. The theory was based on decision-making model which takes the problem-solving process on conflict management as significant in the latter stages. Additionally, Kelman (1990) in his own theory suggested that the detained armed bandits and the concerned community leaders/stakeholders of the affected areas in the region of study were brought together with the help of psychologists for group facilitation and conflict management. All parties in the process were free from the pressure of sustaining their political positions and were able to get involved in the process of mutual sharing and learning. The parties were subjected to a forum for negotiations to ensure a mission of resolution is accomplished. Kahney (1986) claimed in his theory that give detail explanation must be

given on the interactions between problem situations and the people who are confronted by said the problem. The theory provides a basis for understanding when and why actors in the conflict may resist any retaliation of any such. In accordance with the theory, there is need for certain requirements to be met to ensure the parties have the chance of overcoming the general disinterest that prevents them from solving the problems (Farazmand 2023).

Therefore, problem solving is defined as an activity oriented toward changing an undesirable situation in a particular area or region. In view of this, in reducing the menace of armed banditry in Northwest and however, improving the security situation of the country, Nigeria, interactive problem solving will therefore be a best approach with the detained armed bandits in the zone for a show of peaceful reconciliation and motivate a good orientation for change of behaviour towards tending the security of the country (Gidado & Muhammad 2022).

METHODOLOGY

This paper adopts a qualitative approach method. A qualitative research method is an approach of collecting and analysing non-numerical data like text, video and audio to understand the concepts, opinions and experiences (Bhandari, 2023). The Study used secondary data.

Features of Interactive Problem Solving

Interactive Problem Solving (IPS) according to OECD (2014) is defined as the ability to explore and identify the structure of (mostly technical) devices in dynamic environments

by means of interacting and to reach specific goals. Therefore, IPS is one of the common instruments used on conflict resolution process. According to Bercovitch and Jackson in Taylor (2022), it is said that the development of interactive problem-solving as an instrument of conflict resolution is part of the evolutionary process in the field and it was affirmed that this new instrument focus on addressing deep-root cause and structural issues in a conflict. In addition to this, the new approach of interactive problem solving seeks to identify the root-causes of conflict relying on studies of human nature, human behaviour and social structures. Other features of interactive problem solving as an intervention to conflict resolution in accordance with Taylor (2022) are:

- Interactive Problem Solving (IPS) as a conflict resolution instrument provides an opportunity to explore opportunities for confidence-building measures and de-escalation of conflict within community, state and nations.
- Also, IPS opens a window of opportunity for empowering citizens or concerned parties to a conflict to participate in decision making processes.
- IPS intervention process is an unofficial, informal interaction between members of the adversary groups or state or nations which aims to develop strategies, influence public opinion and organize human and material resources in a way that might help to resolve their conflict or dispute to avoid its de-escalation; and
- Another feature of interactive problem solving on conflict resolution process is that it utilizes an inter-subjective approach of conflict which includes politics,

especially in relation to representation and identity.

Interactive Problem-Solving Objectives and Approach

Interactive problem-solving workshop is one of the approach or instruments of interactive problem solving in a conflict resolution process. The interactive problem-solving workshop focuses majorly on conflict management methods of official diplomacy that includes negotiation and mediation which relates to the following:

- (a) Emphasis by the former on addressing poor relationships between the conflicting parties.
- (b) And final affirmation that the existing conflict can only be resolved through mutually accepted solutions; and
- (c) The unofficial small group discussion nature in problem-solving workshops (Freeman & Fisher, 2012).

Consequently, upon these, the typical IPS workshop is attested to bring together unofficial representatives of conflicting groups in a private setting for them to engage in face-to-face interaction and communication. However, according to Alemu (2016), the objectives of the IPS workshop shall therefore include:

- Attitude change.
- The generation of innovative solutions; and
- Improvement of intergroup relationships.

Similarly, Kelman in Alemu (2016) identified three basic rules for the IPS workshop, the basic rules shall be:

- IPS workshop must be primarily intended to facilitate the free participation,

privacy and confidentiality of the proceedings without the expectation that agreement will be reached.

- In IPS workshop, a balanced and equitable interaction among the parties involved must be guaranteed.
- And finally, all participants of the workshop must come as private individuals rather than official representatives

Interactive problem-solving workshop is a conflict resolution approach that is being facilitated by fast experienced, skilled and knowledgeable third-party, who might be from the academicians, who is also familiar with the region or area in question. However, in this process the third party is only interested primarily on analysis of conflict in the area and provision of a possible solution for problem solving. Therefore, Alemu (2016) in his theory, revealed the following steps to be followed in the interactive problem-solving workshop:

- The first step is to ensure an open exchange of views and experiences of the conflict among the conflicting parties or participants. This step is concerned mainly with the formulation of the different point of views of the various concerned parties as clearly as possible and, the identification of the essence of the conflict (Puryanto & Purwantiningsih, 2024).
- The second step is referred to responsiveness to the needs of others. This step involves the process by which each party look for an assurance that the other party does not

only understand its needs but also recognizes its legitimacy and takes it into account while developing solutions to the crisis on ground (Vilsmaier, 2024).

- The third step is about the identification of shared interests and similar needs. And further to this, the participants build a new group identity and mode of interaction that is built on the potential to develop ideas that led to a positive resolution (Vilsmaier, 2024).

- The fourth and the last step in problem-solving workshop is referred to the stage of working together. In this final stage, the group is expected to lay emphasis on discussions of ways of implementing the ideas and to also think about overcoming the obstacles to possible solutions while along the line, identifying the constraints on each side.

Skills for Emotion Regulation

Emotion is a general phenomenon of feeling which is experienced by individual be it negative or positive. Emotion is therefore a normal part of our everyday lives, which implies that each one experiences emotion. It is common for one or more strong emotions to occur before an individual engages in self-injury and these emotions often include: guilt, sadness, overwhelmed feelings, anger, self-blame and low self-worth. Therefore, according to Abigail and Elizabeth (2023), emotion regulation is a term used to describe an individual's ability to effectively manage and respond to certain emotional experience. However, Kvanstrom (2017) identified the following as skills necessary for emotional regulation in conflict resolution process:

i. Identifying the Emotions:

In the process of conflict resolution, one needs to first identify one's emotion, though, this might seem to be an easy thing, but many people don't know exactly which emotion they are experiencing at a particular time especially when they grew up in certain environments where certain emotions were not tolerated. Therefore, identifying your emotions is the first skill to develop toward understanding what you are feeling and how to take control of that feeling to avoid creating an escalated violence or dispute.

ii. Identifying Others' Emotion:

Another skill in emotion regulation is the ability to identify others' emotions in the conflict resolution process. Ability to learning how to read others' emotion is essential to emotional regulation and therefore helps in facilitating an effective conflict resolution. Also, without proper understanding of how an individual or groups are feeling, one cannot properly formulate a reality-based response, and this may lead to an inappropriate way of reaction towards the people. If one is not sure of what someone is feeling, there is room for one to ask to foster a better reaction.

iii. Tolerating Distress

In conflict resolution process, the act of tolerating distress is an essential skill in ensuring a peaceful resolution. Emotional regulation doesn't imply feeling happy or better at all the time, but it is a normal thing to feel anger, disappointment, embarrassment and sadness at times. However, allowing oneself to feel these things without having a high emotion is vital to learning how to have a healthy relationship with oneself and others and, very significant in the process of conflict resolution.

iv. Communicating Your Feelings

Communication is very essential in every human life and however, most important skill needed in conflict resolution process. In expressing one's emotions, though difficult sometime, is an important part of forming and maintaining meaningful relationships and fostering emotional growth and thereby creating a peaceful process in conflict resolution. For people who grew up in families or have had relationships in which emotional communication was discouraged, this can be difficult and even frightening but honestly talking about what you are experiencing is necessary to connect with others and have your emotional needs understood and met to avoid misplaced reactions on the opposing side.

v. Soothing Yourself:

One of the skills expected in emotion regulation is the act of soothing oneself. The act of developing strategies to calm or comfort one during the distress emotions or situations is an invaluable skill that can foster self-reliance and confidence. It also decreases the likelihood that one will turn to a healthy environment or unhealthy one during conflict resolution process.

vi. Nourishing Positive Emotions

Emotional regulation isn't just about managing negative emotions, but about creating opportunities for positive ones, therefore, in the process of conflict resolution, anticipation of a positive emotion should be a skill to be developed in the process. Planning of activities that will ensure a positive solution to a conflict or dispute

bring you joy and appreciate the experiences that make you feel alive (Kvanstrom, 2017).

1.12 Emotion Regulation Process

Emotion regulation process may be an automatic or control and this may have their effects at one or more point in the emotion generative process. Emotion regulation may, therefore, change the degree to which emotion response components cohere as the emotion unfold, such as when large changes in emotion experience and physiological responding occur in the absence of facial behaviour (Bjureberg & Gross, 2024). Therefore, emotion regulation process includes the following:

i. Situation Selection

Situation selection is the first process in emotion regulation in conflict resolution. It is, therefore, a process that involves taking actions that will make it more likely that will end up in a situation that we expect to give rise to a desirable emotion during conflict resolution process. For instance, in relation to this study and particularly in conflict resolution process, a mediator(s) is expected to choose a meeting place or venue where he (or they) thinks is likely to maximize the chance that all parties to a conflict will tolerate to give a way for a positive solution.

ii. Situation Modification

Another step in emotion regulation process is the situation modification process. The situation modification is a process where verbal prompt intervention is expected to assist in problem solving or to also immediately confirm the legitimacy of an emotion response. In this process, it is important to recognize that situation modification is created by the presence of a

mediator or partner for specific intervention to control the emotion response. In this regard, it is sometime difficult to differentiate between situation selection and situation modification because to modify a situation in conflict resolution sometimes may lead to the rise of a new situation. Therefore, situation modification in this case has to do with the modification of external physical environments.

iii. Attention Deployment

In attention deployment process, situation selection (SS) and situation modification (SM) help in shaping the individual's attention in conflict resolution process. Attention deployment is, therefore, refers to the process or a situation on how individuals or person direct their attention within a given situation to influence their emotions. However, two major attention deployments are significant in an internal situation selection; they are 'Distraction and Concentration'. Distraction involves focusing attention on different aspect of the situation and thereby moving attention away from the present situation altogether. While concentration involves the process of drawing the attention to emotion features of a situation to have a controlled situation (Bjureberg & Gross, 2024).

iv. Cognitive Change

Cognitive change is an emotion regulation process that refers to changing how we appraise the situation we are, to alter its emotional significance, either by changing how we think about the situation we are in or about our capacity to manage the demands it poses. It is on this note that Bjureberg & Gross, (2024) affirmed that after a situation has been selected, modified and attention

concentrated to, an emotional response is however, a necessity in the emotion regulation process in having a positive conflict resolution.

v. Response Modulation

RM is the last stage in emotion generative process. Response modulation, therefore, refers to influencing physiological, experiential or behavioural responding as directly as possible. Also, response modulation involves regulating emotion expressive behaviour.

Methods of Conflict Resolution

According to Mizser (2017), third-party mediators can adopt various methods to facilitate positive conflict resolution. These methods encompass a range of strategies that focus on both the process and the outcomes of mediation. The following sections outline key approaches that third parties can utilize.

i. Communication

In conflict resolution, effective communication plays very vital roles in ensuring a resolved conflict or dispute. Therefore, communication, is the process of sharing and exchanging information between individual, groups and potential parties in a conflict situation to ensure all relevant matters and issues are aired from all the contenders to a conflict. It is also the process whereby enable room and environment are provided for interacting and relating with others, that is, parties to a conflict situation are allowed to say out their mind.

ii. Collaboration

To ensure an effective conflict resolution process, all efforts should be made for collaboration process among the parties involved. Therefore, the collaboration process in conflict resolution is a process in which all parties work together on their own to resolve problems through constructive dialogue or other activities like joint projects, sharing of community schools and health centres, markets, bridges and culverts, as well as other utilities (Sabiati & Sudarmo, 2023). With this, dispute or conflict resolution process will be enhanced.

iii. Negotiation

Another method of conflict resolution is negotiation process. Negotiation is the process whereby the parties to a conflict or dispute seek or advice to settle or resolve their conflicts through the process of dialogue and discussion between the two parties or group of people involved. It is a direct process of dialogue and discussions among the parties in a conflict situation or a dispute. The goal of negotiation is to reach agreement through joint decisions between parties. Negotiation is a key approach to peaceful resolution of dispute and conflicts that may arise among parties.

iv. Conciliation

Another method of conflict resolution is a conciliation process, and the process is a bit closer to the mediation process. The conciliation process involves the third-party activity and intelligence that covers intermediary efforts aimed at persuading the contending parties to a conflict to work towards a peaceful solution. Conciliation process generally involves facilitation by the third parties or intermediary.

v. Mediation

Mediation is also one of the conflict resolution methods adopted generally by the third or external party to a conflict. Mediation is the process of intervening into a conflict to ensure parties agrees to a peaceful solution to end the crisis or dispute. Mediation is therefore an informal, voluntary, non-binding process undertaken by an external party that fosters the settlement of differences.

vi. Arbitration

This is another type of third-party intervention that is a step higher than mediation

in the conflict management or resolution process. The parties to a conflict select to use arbitration, even though they choose a non-violent method of settling their disputes, lose more control over their situation than those who select mediation and other lower levels of intervention.

vii. Adjudication:

Adjudication is another method of conflict resolution and is also a non-violent method to conflict management. Adjudication involves the use of the courts and litigation processes, where all parties seek redress in the court of law of a particular land. They may decide to take their case to a court of law, before a judge of competent jurisdiction (High court, court of appeal etc) and the need to engage the service of a legal counsel to represent them in the court for proper defence.

CONCLUSION

The study underscores the vital role that interactive problem-solving and emotion regulation play in mitigating armed banditry and other forms of conflict in the North-

Western region of Nigeria. By addressing the root causes of conflict rather than merely focusing on its manifestations, interactive problem-solving emerges as a powerful tool for fostering long-term peace and stability. The findings suggest that the traditional reactive measures often employed in the region such as military interventions and punitive approaches are insufficient to address the underlying issues driving armed banditry. Instead, the adoption of interactive problem-solving techniques, which involve collaboration, communication, and a deep understanding of human behaviour and social structures, presents a more holistic and sustainable approach to conflict resolution. The study also emphasizes the importance of emotion regulation as an essential component of the resolution process. Emotional responses such as anger, fear, and frustration are often drivers of violence, and the ability to regulate these emotions can play a significant role in preventing escalation and promoting peaceful dialogue. The reduction in participants' tendency to engage in armed banditry after exposure to these techniques demonstrates their potential to foster more constructive interactions and reduce the psychological triggers that fuel conflict. Furthermore, the involvement of multiple stakeholders' local communities, government agencies, international organizations, and NGOs was highlighted as a key factor for success. The study suggests that a collective approach, where each stakeholder contributes their knowledge and resources, ensures that conflict resolution strategies are context-specific, culturally sensitive, and, most importantly, inclusive. By placing local communities at the centre of the resolution

process, solutions become more relevant and effective, as they are designed by those most affected by the conflict. The significant reduction in violent behaviour observed in the study suggests that interactive problem-solving and emotion regulation can serve as effective tools not just in reducing armed banditry in the North-West, but also in other conflict-prone areas of Nigeria and beyond. This approach represents a paradigm shift in conflict resolution, moving from a focus on reactive measures to proactive, collaborative solutions that address the psychological, social, and structural dimensions of conflict. Overall, the study's findings provide compelling evidence for the adoption of these techniques as integral elements of national and regional security strategies. The broader application of interactive problem-solving and emotion regulation, coupled with strong community engagement and international collaboration, offers a promising pathway for reducing violence and promoting lasting peace in the region. By addressing the deep-seated issues driving armed banditry through collaborative, psychologically informed strategies, there is potential for significant improvements in the socio-political stability of Nigeria's North-Western region and similar areas globally.

RECOMMENDATIONS

1. Wider Implementation of Interactive Problem-Solving Programs. The success of interactive problem-solving in reducing armed banditry suggests the need for broader adoption of such programs across other regions affected by similar conflicts. These programs should involve key stakeholders,

including local communities, government agencies, and international organizations, to ensure the inclusion of all perspectives in the conflict resolution process.

2. Integration with Emotion Regulation

Training. Since emotion regulation plays a crucial role in reducing violent tendencies, it is recommended to integrate emotion regulation techniques into conflict resolution initiatives. This can equip individuals with the tools to manage intense emotions such as anger, fear, and frustration, which often contribute to violent conflict.

3. Community-Based Interventions.

Community-based organizations (CBOs) should be at the forefront of conflict resolution efforts, as they are most familiar with local dynamics. Empowering CBOs with resources and training in interactive problem-solving and emotion regulation will enhance their ability to effectively mediate conflicts at the grassroots level.

4. Collaboration with International Bodies.

Given the transnational nature of conflicts in the region, it is essential for international non-governmental organizations (NGOs) and the global community to collaborate with local stakeholders. This partnership can help address the structural issues fuelling banditry and ensure the sustainability of peace-building efforts.

5. Continued Research and Monitoring.

Continuous research and monitoring of the effectiveness of interactive problem-solving techniques are necessary to refine and adapt the approach to evolving conflicts. This should include feedback mechanisms from participants to improve the applicability of

the techniques in different socio-cultural contexts.

REFERENCES

Abdullahi, A. (2019). Rural banditry, regional security and integration in West Africa. *Journal of Social and Political Sciences*, 2(3), 644-654.

Abdulkabir, O. S. (2017). Causes and incisive solutions to the widespread of kidnapping in Nigeria current administration: under scholastic scrutiny. *Journal of Political Sciences and Public Affairs*, 5(2), 233-261. <http://www.omicsonline.org/open-access/causes-and-incisive-solutions>.

Abigail, R. & Elizabeth, L. (14th July 2023). What is emotion regulation and how do we do it? Cornell Research program on Self Injury and Recovery: <https://selfinjury.bctr.cornell.edu/perch/resources/what-is-emotion-regulationsinfo-brief.pdf>.

Adewuyi, O. O., Salami, A. A., Dogara, W. F. (2021). Conflict management mechanism in contemporary Nigeria; problems and prospects. *International Journal of Multidisciplinary Studies*, 8(III), 88-100.

Alemu, F.D. (2016). Interactive Problem-solving interventions as instrument of conflict transformation: prospects and challenges. *Mizan Law Review*, 10(2), 430-447.

Ani, J., Eme, O. I. & Oji, R. O. (2021). The relevance of indigenous conflict resolution mechanism in farmers-herders conflict in

Nigeria. *International Journal of Innovative Legal & Political Studies*, 9(1), 16-26.

Best, S. G. (2005). *Introduction to peace and conflict studies in West Africa. A reader* (Ed.). Ibadan: Spectrum Books Ltd.

Bjureberg, J., & Gross, J. J. (2024). *Changing the emotion process: The role of emotion regulation* (pp. 49–70). Elsevier BV. <https://doi.org/10.1016/b978-0-323-95604-8.00015-0>

Casmir, F. (2022). Conflict Resolution. *Communicare: Journal for Communication Studies in Africa*, 6(1), 5–13. <https://doi.org/10.36615/jcsa.v6i1.2108>

Champlain College (8th July 2023). The top 5 conflict resolution strategies for the workplace. <https://online.champlain.edu/blog/top-conflict-resolution-strategies>.

Daily Trust (3rd January 2023): Bandits kidnap ex-ZAROTA boss, Col. Garba, 2 children, 57(28), 3. www.dailytrust.com.

Daily Trust (31st March 2023). Banditry: 80% of my subjects have fled their homes – Kaduna village chief, 57(91), 17. www.dailytrust.com.

Daily Trust (1st June 2023). 2 women leaders of APC were abducted by bandits along the Kaduna- Birnin Gwari area of Kaduna State, 3. www.dailytrust.com.

Danbaki J. B., Abdulrazak A., Bilyaminu, M., Victoria G. G. (2023). Assessment of the educational implications of armed banditry in the North-Western Nigeria, *International Journal of Research Publication and Reviews*, 4(1), 480-486.

Egwu, S. (2016). The political economy of rural banditry in contemporary Nigeria, *Rural Banditry and Conflicts in Northern Nigeria*, Abuja: Center for Democracy and Development 219 (2016).

Farazmand, A. (Ed.). (2023). *Global encyclopedia of public administration, public policy, and governance*. Springer Nature.

Gidado, L. L. & Muhammad, R. H. (2022). Addressing Armed Banditry Conflict Through Interactive Problem Solving and Emotion Regulation in Northwest Geopolitical Zone Nigeria, *ATBU Journal of Science, Technology and Education*, 10(4)

Goddy, U. O. & Basil, O. D. (2022). Armed banditry and mass school abductions in Northern Nigeria: Implications for National Security, *Canadian Social Science*, 18(4), 26-35.

Gross, J. J. (2014). Emotion regulation: conceptual and empirical foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3–20). The Guilford Press.

Huddleston, K. (2020). Relationships among emotional regulation, conflict management style, and language ability. A thesis presented to the Honors College of Middle Tennessee State University in partial fulfilment of the requirements for graduation from the University Honors College.

Igbini, D. M. (2022). Banditry and security threats: an analysis of insecurity in Nigeria. *Journal of Public Administration, Finance and Law*, 23(4), 53-62.

Joseph, M. (1987). *The Arrow and the Olive Branch: A Case for Track Two Diplomacy in Conflict Resolution: Track Two Diplomacy*,

(Washington, DC: U.S. Government Printing Office.

Kelman, H. (2023). Interactive problem-solving: a social-psychological approach to conflict resolution. <https://www.beyondinteractibility.org/artsum/kelman-interactive>.

Kelman, H. (1990). Interactive problem-solving: a social-psychological approach to conflict resolution. In *Conflict: reading in management and resolution*. Ed. John Burton and Frank Duke. New York: St. Martin's Press, 1990, 199-215. <https://www.beyondinteractibility.org/artsum/kelman-interactive>.

Kvarnstrom, E. (2017). Fostering emotional regulation and growth through residential mental health treatment: <https://www.brightquest.com>.

Locchi, D. (2023). Nigeria's 'wild west': insecurity, pastoralism and banditry in the muslim North. Italian Institute for International political studies, <https://>

Mac Ginty, R. (2021). *Everyday peace: How so-called ordinary people can disrupt violent conflict*. Oxford University Press.

Mishra, A. K. (2023). Conflict, its management and resolution. *ShodhKosh Journal of Visual and Performing Arts*, 4(2). <https://doi.org/10.29121/shodhkosh.v4.i2.2023.2343>

Mizser, C. (2017). Methods of alternative dispute resolution - from conflict to connection. 175-187. <https://ideas.repec.org/h/pkk/sfyr17/175-187.html>

Mulu, F. (2023). Emotions in Negotiation and Mediation: Strategies for Managing Emotional Dynamics. *International Journal of Research and Innovation in Social Science*, VII(V), 1732-1741. <https://doi.org/10.47772/ijriss.2023.70634>

National Bureau of Statistics (NBS, 2016). *Social statistics in Nigeria Part III: Health, employment, public safety, population and vital registration*, 71.

National Open University of Nigeria (NOUN, 2017). *Fundamentals of peace studies and conflict resolution. A course guide -GNS 202*, Abuja, 1-192.

OECD (2014). *PISA 2012 Results: Creative Problem Solving (Volume V): Students' Skills in Tackling Real-Life Problems*. OECD Publishing, Paris: <http://dx.doi.org/10.1787/9789264208070-en>.

Okoli, A. C. & Okpaleke, F. N. (2014). Banditry and crisis of public safety in Nigeria: issues in national security strategies. *European Scientific Journal*, 10(4), 350-62.

Premium Time (2015). Nigeria spends #4.62 trillion on national security in 5 years, yet widespread of insecurity remains. www.premiumtimesng.com/new/headlines/185285.

Puryanto, S., & Purwantiningsih, A. (2024). Pendekatan Fenomenologi dalam Resolusi Konflik: Memahami Akar Konflik dengan Mendalam dan Komprehensif. *Journal of Education, Humaniora and Social Sciences*, 6(3), 1017-1024. <https://doi.org/10.34007/jehss.v6i3.1917>

Rosenje, M. O. & Adeniyi, O. P. (2022). The impact of banditry on Nigeria's security in the fourth

republic: an evaluation of Nigeria's Northwest. ResearchGate: <https://www.researchgate.net/publication/363762509>.

Sabiati, S., & Sudarmo, S. (2022). Komunikasi Dialogis dalam Rangka Penyelesaian Konflik antara Pelaku Industri Dengan Masyarakat. *Procedia of Social Sciences and Humanities*, 3, 51–55. <https://doi.org/10.21070/pssh.v3i.191>

Shalangwa, M. W. (2013). The nature and consequences of armed banditry in border communities of Adamawa State, Nigeria. M.Sc. thesis submitted to the School of Post-Graduate Studies, Ahmadu Bello University, and Zaria, Nigeria.

Shortland, A. & Tom, K. (2017). Closing the gap: assessing responses to terrorist-related kidnapped for ransom. *RUSI Occasional Paper*, 1-32.

Spinrad, T. L., & Eisenberg, N. (2019). Socialization of moral emotions and behaviour. *The Oxford handbook of parenting and moral development*, 57-72.

Swetha, A. (2023). 27 conflict resolution skills to use with your team and your customers. <https://blog.hubspot.com/service/conflict-resolution-skills>.

Tallman, I. (1993). Theoretical issues in researching problem solving in families. *Marriage & Family Review*, 18(3-4), 155-186.

Tamra, P. (2009). Problem-Solving Approaches, (in *The SAGE Handbook of Conflict Resolution*, ed. Jacob Bercovitch et al, Thousand Oaks, CA: Sage) p.13.

Taylor, A. (2022). Interactive conflict resolution: Addressing the essence of ethno-political conflict and peacebuilding 1 (pp. 118–130). Routledge eBooks. <https://doi.org/10.4324/9781003000686-13>

Umo, U. A. (2014). Forms and sources of conflict in Nigerian educational system: the search for Nigerian psyche. *Global Journal of Educational Research*, 13, 101-108

Vilsmair, U. (2024). Responsivity (pp. 438–441). Edward Elgar Publishing. <https://doi.org/10.4337/9781035317967.ch97>

Wani, H. A. (2011). Understanding conflict resolution. *International Journal of Humanities and Social Science*, 1(2), 104-111.

West Africa Early Warning and Early Response Network (WARN, 2019). Addressing armed banditry in North-West Nigeria: exploring the potentials of multidimensional conflict management approach. WANEPA.

Yang, J. & Mossholder, K. W. (2004). Decoupling task conflict and relationship conflict: the role of intra-group emotional processing. *Journal of Organizational Behavior*, 25, 589-605.

Office of Deputy Dean (Research & Innovation)
Faculty of Human Ecology
Universiti Putra Malaysia
43400 UPM Serdang
Selangor Darul Ehsan
Malaysia
<https://www.eco1.edu.upm.my>
Tel : +6039769 7053

