



Indian Council of
Social Science Research

NASSDOC RESEARCH INFORMATION SERIES: 3

August, 2024



<https://twitter.com/icssr>



facebook.com/icssrnassdoc



**Indian Council of Social Science Research
National Social Science Documentation Centre
35, Ferozeshah Road New Delhi-110001
www.icssr.org**

E-mail: icssrnassdoc@gmail.com



Current Contents

A Monthly Issue

**Edited & Compiled
by
NASSDOC Team**

**National Social Science Documentation Centre
Research Information Series: 3
©ICSSR-NASSDOC, New Delhi**

August, 2024

FOREWORD

Current Contents is a Current Awareness Service under “**NASSDOC Research Information Series**”. It provides ready access to bibliographic details of articles with abstracts from the recently published leading scholarly journals in Social Sciences and is available in NASSDOC. In this publication, “**Table of Contents**” of selected print journals are arranged under the title of the journal and at its end **Author Index** and **Keyword Index** have been provided in alphabetical order.

While adequate care has been taken in reproducing the information from various scholarly journals received in NASSDOC, but NASSDOC does not take legal responsibility for its correctness. It is only for information and is based on information collected from journals received in NASSDOC.

Readers can consult or obtain a photocopy of interested article against a nominal payment.

Dr. S.N. Chari
Director, In-charge (Documentation)
NASSDOC, ICSSR

CONTENTS

S. No	Name of Journal	Vol./ Issue	Page No.
1	Energy & Environment	<i>Vol.35, No.1</i>	1-9p.
2	Energy & Environment	<i>Vol.35, No.2</i>	10-17p.
3	Energy & Environment	<i>Vol.35, No.3</i>	18-25p.
4	Energy & Environment	<i>Vol.35, No.4</i>	26-33p.
5	Journal of Social and Economic Development	<i>Vol.26, No.1</i>	34-38p.
6	Journal of Adult and Continuing Education	<i>Vol.30, No.1</i>	39-43p.
7	International Security	<i>Vol.48, No.4</i>	44-48p.
8	Indian Journal of Industrial Relations	<i>Vol.60, No.1</i>	49-50p.
9	Indian Journal of Industrial Relations	<i>Vol.60, No.2</i>	51-52p.
10	Journal of Peace Research	<i>Vol.61, No.1</i>	53-55p.
11	Journal of Peace Research	<i>Vol.61, No.2</i>	56-58p.
12	European Journal of Cultural Studies	<i>Vol.27, No.1</i>	59-60p.
13	European Journal of Cultural Studies	<i>Vol.27, No.2</i>	61-63p.
14	European Journal of Cultural Studies	<i>Vol.27, No.3</i>	64-67p.
15	Culture and Psychology	<i>Vol.30, No.1</i>	68-70p.
16	Culture and Psychology	<i>Vol.30, No.2</i>	71-73p.
17	Capital and Class	<i>Vol.48, No.1</i>	74-76p.
18	Capital and Class	<i>Vol.48, No.2</i>	77-78p.
19	Race and Class	<i>Vol.65, No.3</i>	79p.
20	Race and Class	<i>Vol.65, No.4</i>	80-81p.
21	Author Index		82-90p.
22	Keyword Index		91-103p.

- 1 Optimization path of green credit to energy consumption structure: A symbiotic development perspective of resource-based and non-resource-based industries / Qiu, Wei; Bian, Yaojun; Irfan, Muhammad ; Li, Yanan, pp. 3–22

In the context of ecological environment construction, how to create a new development pattern in which environment and economy are coordinated has become an important goal of the Chinese government. From the perspective of the symbiotic development of resource-based industries and non-resource industries, this study discusses the path of green credit optimization of energy consumption structure by using the space Durbin model, based on the panel data from 30 Chinese provinces from 2006 to 2019. The study results are as follows: Both green credit and energy consumption structure have a significant positive spatial correlation. Furthermore, the energy consumption structure of local and adjacent areas is significantly optimized by green credit. Additionally, for non-resource-based regions, although green credit has no spatial spillover, it can significantly improve the local energy consumption structure, while green credit in resource-based regions significantly inhibits the optimization of the energy consumption structure in local and adjacent regions. Finally, from the perspective of the symbiotic development of resource-based industries and non-resource industries, although green credit can significantly improve the local energy consumption structure, it will inhibit the optimization of the energy consumption structure in adjacent areas. Therefore, government departments not only need to implement green credit policies according to local conditions but also actively guide exchanges and cooperation between resource-based industries and non-resource industries. This move promotes the symbiotic development of resource-based industries and non-resource industries and simultaneously improves the utilization efficiency of green credit, and optimizes the energy consumption structure.

- 2 The impact of digitalization on green economic efficiency: Empirical evidence from city-level panel data in China / Lee, Chien-Chiang; He, Zhi-Wen; Wen, Huwei, pp. 23–46

The digital transformation of global economic and social activities brought about by advanced information and communication technology (ICT) may have a profound impact on sustainable economic development. This research measures the digitalization of the economy and society in cities of China based on Internet-related indicators and digital financial development and investigates the economic and environmental effects of their digitalization. The empirical results show that digitalization has significantly improved green economic efficiency (GEE), and this finding remains valid after a series of robust analyses. However, there is regional heterogeneity in the improvement effect of GEE. The green effect of digitalization is significant only in the cities with a high degree of economic servitization, capital-abundant cities, and eastern cities. Although digitalization has promoted the green development of the urban economy, it also has a negative spatial spillover effect on the GEE of neighboring cities. One explanation is that cities are shifting polluting industries to other areas during the process of digital transformation.

- 3 The spatial impacts of the circular economy on carbon intensity - new evidence from the super-efficient SBM-DEA model / Chen, Pengyu, pp. 47–63

With the signing of the Paris Agreement in 2016, countries began to explore new economic models to get rid of the high emissions and high pollution caused by the traditional extensive economic model. Circular economy (CE) is regarded as an important way to achieve carbon neutrality, yet there is little literature has explored the relationship between the two. This paper aims to provide evidence and suggestions for developing circular economy strategies in emerging developing countries such as China by exploring the relationship between circular economy and carbon emissions. In this study, urban carbon emissions were measured by using high-resolution carbon emission data and the circular economy of 285 cities in China from 2009 to 2018 was estimated using a data envelopment analysis (SBM-DEA) model based on a super effective slackness measure. Then, the spatial impact of the circular economy was analyzed based on the spatial Durbin model. The empirical results are as follows: first, carbon intensity shows a positive spatial correlation, with most cities clustered in high-high (H-H) and low-low (L-L) types. Second, it was found that CE has a significant negative impact on the carbon intensity of local cities and neighboring cities. Third, based on regional heterogeneity, CE has significant negative direct and indirect effects in central and western cities. In contrast, CE has only significant direct effects (negative values) in eastern cities.

- 4 Economic, social, and political determinants of environmental sustainability: Panel data evidence from NEXT eleven economies / Mughal, Nafeesa, pp. 64–87

This paper aims to investigate the impact of social, economic, and political variables on per capita ecological footprint consumption in the NEXT Eleven economies over the period 1984–2018. The study utilized the dynamic heterogeneous panel estimators of Cross-Sectionally Augmented Autoregressive Distributive Lag (CS-ARDL) along with the estimator with a multifactor error structure. The study also estimated the cross-Sectionally augmented distributed lag (CS-DL) model while for robustness check the augmented mean group (AMG) and cross-Sectionally augmented error correction method (CS-ECM) is also considered. The study finding maintains that the impact of GDP per capita, multifaceted phenomena of financial development, and military expenditure is positive and significant suggesting that a unit increase in these variables deteriorates the environment in the NEXT Eleven economies. In contrast, higher life expectancy and government stability improve the environment in the long run. The findings of the study suggest that eco-friendly technologies to be used in the production process, as well as projects using outdated technologies, should be discouraged along with the assurance of government stability and reduction of military expenditure in the NEXT Eleven economies.

- 5 Tracking environmental sustainability pathways in Africa: Do natural resource dependence, renewable energy, and technological innovations amplify or reduce the pollution noises? / Shen, Jiahao; Ibrahim, Ridwan Lanre; Al-Faryan, Mamdouh Abdulaziz Saleh, pp. 88–112

The global economy is experiencing the most challenging era of climate change beyond what is evident in the pre-industrial age. Although Africa's share of global greenhouse gas (GHG) is minimal, the ensuing effects hit hard on the continent. Hence, the present study provides the first comprehensive empirical assessment of environmental sustainability in Africa within the novel STIRPAT framework. This study critically examines the impacts of natural resource dependence, renewable energy, urbanization, technological innovations, and structural transition on environmental pollution proxied by carbon emissions, ecological footprint, and PM_{2.5} air pollution from 1990 to 2019 in five top carbon-emitting African countries. The empirical evidence is based on advanced panel estimators comprising CS-ARDL, CCEMG, and AMG robust to cross-sectional dependence (CSD). The quantile regression efficient for exploring the conditional distribution effects is equally employed alongside Dumitrescu-Hurlin panel granger causality test. The preliminary tests reveal the presence of CSD and heterogeneity of the series, which led to the conduct of second-generation unit root and cointegration tests. The main empirical results show that renewable energy, technological innovations, and structural transition reduce environmental pollutants from surging based on the observable negative signs. By implication, these indicators support Africa's path to environmental sustainability. On the flip side, resource dependence and urbanization amplify the surge. The feedbacks from quantile regression provide sturdy support for the main estimators. The granger causality feedbacks support the existence of bidirectional and unidirectional causality among the variables. Based on the findings, policies that promote sustainable environment are formulated.

- 6 Analysis of barriers affecting the adoption of community solar from consumer's perspective: A hybrid ISM-DEMATEL approach / Thakur, Pragya; Wilson, Vincent Herald, pp. 113–141

Community solar has the capability to broaden solar accessibility and convalesce financial feasibility in comparison to conventional and commercial solar options and holds the potential to be part of the energy mix. Community solar avails ingress and affordability to solar power for those who may not be able to exploit it either due to financial or location constraints. Parallely, it solves the issues related to electrification, fossil fuel crisis and greenhouse gas emission, contributes to sustainable development goals (SDG 7 and SDG 11), and realization of net-zero goals, however, the presence of barriers makes the adoption or scaling of community solar difficult. This research work intends to identify twelve crucial barriers for the adoption of community solar on the basis of the literature review and the perception of experts in the energy system. In this paper, we adopted hybrid Interpretive Structural Modeling (ISM) - Decision Making Trial and Evaluation Laboratory (DEMATEL) approach for comprehension of the causal and hierarchical relationships among barriers for community solar adoption. The result suggested that lack of consumer awareness, lack of regulations and policies addressing community solar and lack of business model are the most influential barriers as depicted in ISM-DEMATEL based methodology. With the presented novel method, policy-makers, utilities and communities can liaise, coordinate and practice the system-wide advantages of community energy projects. It can also aid the public sector in comprehending the barriers and requirements of people.

- 7 Evaluation of low energy consumption control for seawater desalination on Penghu Island / Fang, Shyang-Chyuan, pp. 142–162

In fact, current water supplies due to natural constraints or lack of infrastructure (or both) cannot be provided in a sustainable manner for all increasing and competing uses (e.g. residential, industrial, agricultural). While promoting Penghu's low-carbon islands, in a water-scarce environment, it is the motivation of this research to take into account the development of water resources and lower energy consumption costs. The seawater desalination plant water production technology is improved, the cost of water production is reduced. This research uses a genetic algorithm (GA) to optimize the recovery rate to solve the minimum Specific energy consumption (SEC) value, and then, according to the required water production, the optimal flow rate of raw seawater of the high-pressure pump is obtained, so as to minimize the energy consumption of the reverse osmosis (RO) system. The energy recovery device has a great effect on reducing the energy consumption of the RO system, and it can be seen from the results that the higher efficiency does greatly reduce the energy consumption of the SEC and water production under the different energy recovery device efficiency. Calculated using genetic algorithms, and the SEC is 3.275 and the recovery rate is 45.1%, and the water production energy consumption is 2.35 kWh/ m³. Scheme B changed the efficiency of the energy recovery unit to 97.22%, resulting in a SEC of 1.819 and a recovery rate of 25.3%, and a water production energy consumption of 1.31 kWh/ m³. Finally, challenges and research gaps are also proposed.

- 8 The interplay of the carbon market, the tradable green certificate market, and electricity market in South Korea: Dynamic transmission and spillover effects / Wu, Changsong; Zhou, Dequn; Donglan, Zha, pp. 163–184

The carbon emission trading scheme (ETS) and tradable green certificate (TGC) system have been widely used to encourage renewable technology and mitigate greenhouse gas emissions. Previous studies have discussed the interaction between these market-based instruments and the electricity market from a theoretical perspective. This research contributes to the literature by empirically examining the interplay of carbon market, the TGC market, and electricity market using a vector autoregressive (VAR) model to investigate the price transmission between different markets. A VAR-BEKK-GARCH model, based on discrete wavelet decomposition, was used to reveal the spill over effect between the three markets over multiple time scales. Based on evidence from the partially deregulated electricity market in South Korea, we do not find a significant short-term interaction between carbon market and the TGC market through the price transmission. However, the analysis over multiple time scales demonstrates that the return spill over between the carbon market and the TGC market is positive and bidirectional in the medium-term and long-term. In addition, the policy integration may create higher price risks to the carbon market and the TGC market, resulting from long-term risk spill overs. We explain these contrasting findings and discuss implications for the future deployment of these policies.

- 9 Investigating the asymmetric effects of renewable energy-carbon neutrality nexus: Can technological innovation, trade openness, and transport services deliver the target for Germany?/ Ibrahim, Ridwan Lanre; Adebayo, Tomiwa Sunday; Bolarinwa, Fatimah Ololade, pp. 185–206

The present millennium records the most devastating effects of global warming than what was evident in the pre-industrial era. The pervasive effects of global warming have raised concerns about the sustainability of the present and future generations. Hence, researchers are working assiduously towards proffering the most effective method of halting the surging emissions from global, regional, and national angles. This study contributes to the extant literature by providing the first empirical verification of how renewable energy, technological innovations, trade openness, and transport services impact carbon emissions in Germany. The empirical evidence is anchored on annual time series data from 1990 to 2020 estimated using the novel nonlinear ARDL to explore the positive and negative shocks associated with the short and long-run nexus. The wavelet coherence estimator is equally for ascertaining the multiple time scales in the time series and extends the knowledge frontier to the literature. The following findings are eminent from the overall analyses. First, long-run cointegration is supported among the variables of interest Second, only the adverse effects of renewable energy and technology are substantial enough to mitigate carbon emissions. The trade-induced emissions are established with the positive impacts of trade openness on carbon emissions. Transport services contribute significantly to carbon emissions in the long-run and short-run periods. However, mitigating effects of small magnitude are apparent in the long-run due to the perceived transition to green transportation. Policy implications supporting the transition to 100% renewable energy and green transportation are significant steps towards achieving Germany's carbon neutrality target.

- 10 Environmental regulation, technological innovation, and industrial structure upgrading / Yin, Kedong; Miao, Yuqing; Chong, Huang, pp. 207–227

The conflict between rapid economic development, resource mismatch, and ecological damage is growing more severe. Industrial structure upgrading, as a bridge between economic activity and the ecological environment, is a crucial strategy for solving ecological and environmental problems. Based on the mediating effect and threshold models, this study selected 30 provincial panel data points in China from 2000 to 2020 to study the impact of environmental regulation and technological innovation on industrial structure upgrading. According to the findings, environmental regulation has a “U” shaped impact on industrial upgrading and passes the three threshold tests, with technological innovation playing a partially positive mediating role. There is regional heterogeneity in the impact of environmental regulation on industrial upgrading, with a “U” shaped impact on the eastern regions; there is inhibited industrial upscaling in the central and western areas. Foreign trade hinders industrial development in the eastern region but promotes rapid development and achieves structural adjustment in the central and western areas. The expansion of fixed asset investment hinders industrial restructuring. Government regulation can encourage industrial structure upgrading in all regions. We propose policy recommendations based on China’s current situation. The development of technological innovation should be promoted, and environmental rules should be differentiated according to local conditions. This study has a certain guiding significance and reference value for balancing environmental governance and economic development, effectively implementing an innovation-driven development strategy, and formulating China’s regional development strategy.

- 11 Impact of United States energy and climate policies on China’s energy industry: Comparison of Biden and Trump period / Zebang, Xia; Yi, Zhang, pp. 228–243

As an important field, energy trade significantly impacts China and the United States. Energy and climate policies in the U.S. impact China’s energy industry differently. Climate and energy policies have also changed in tandem with changes in the U.S. regime. By comparing the energy policies of the Biden and Trump administrations, the impact of different U.S. energy and climate policies on China’s energy industry was discussed, and the industry’s development status was analysed. In addition, corresponding strategies for China’s energy industry’s rapid and stable development are proposed. The current research results show that: (i) China has become an importer of traditional fossil energy in the United States since the Trump period, and U.S. energy and climate policies have had different impacts on China’s energy industry; (ii) China’s natural gas imports from United States in China rose from 2.19 million tons (Trump period) to 8.98 million tons (Biden period); however, China’s oil imports from United States continued to decline, from a maximum of 8.427 million tons (Trump period) to 1.147 million tons (Biden period); (iii) China’s photovoltaic solar cell exports under Biden period increased by 43.7% compared to the Trump period (2020). In addition, United States energy and climate policies will lead to increased demand for photovoltaic solar cells in the global market, which has a positive impact on China’s new energy industry represented by solar photovoltaics.

- 12 A hybrid technique for optimal power quality enhancement in grid-connected photovoltaic interleaved inverter / Vidhya, K; Krishnamoorthi, K, pp. 244–274

A grid-connected photovoltaic (PV) system with interleaved inverter using a hybrid approach is presented in the paper. Generally, high deviation of DC voltage causes severe damage to the grid-linked system generate power quality issues. Therefore, a hybrid technique called LA-HBO, which is a combination of Lichtenberg optimization algorithm (LA) and heap-based optimizer, is proposed. The proposed method works with the interleaved inverter to realize a multifunctional operation and improve the power quality efficiency of the system. Here, LA techniques improve the power generated from PV and self-charging of the DC-link voltage control loop. The reference current signal is generated through the self-charging DC-link voltage control loop to eliminate the power quality issues. The double band hysteresis current controller generated a minimum switching frequency to provide low switching losses. A MATLAB platform is utilized to implement the proposed system, and the performance of the system is compared with other existing techniques. The test result validated that the proposed system can able to perform multilevel functions and produce power with high quality compared to other techniques. The value for the THD that achieves the proposed hybrid technique is 21.22%. The elapsed time of the proposed hybrid technique is 2.09 seconds.

- 13 Modelling and simulation of eco-friendly solar cells sensitized by natural dyes/ Tajvar, Zarreen; Faraz, Sadia Muniza; Sayyad, Muhammad Hassan, pp. 275–288

One of the biggest environmental challenges for scientists and researchers is to minimize energy crisis by utilizing renewable energy without impacting the climate. Natural dyes based organic solar cells are third generation dye sensitized solar cells (DSSC) which are bio safe, low cost, and relatively easy to fabricate with flexibility than Silicon based solar cells. In this study dye sensitized solar cells are modelled and simulated using diffusion model. The simulations are carried out in MATLAB software to investigate the electrical characteristics. The simulations are performed for three different DSSCs made of pomegranate, beetroot and N-719 dyes. Physical parameters are extracted and their impact on the performance of solar cells is studied. Additionally, the effects of variations in electrode thickness and irradiance are also investigated. The results indicated that short-circuit current, open-circuit voltage and output power increased by decreasing the electrode thickness. Simulated results are in good agreement with the experimental results of preassembled DSSCs. A set of parameters based on electrical considerations is delivered which will not only help to study the impact of physical parameter of DSSC but will also help to control and improve the performance and efficiency of Dye sensitized solar cells.

- 14 The effect of renewable energy and economic conditions on the environmental degradation in China/ Chien, Fengsheng, pp. 289–311

Environmental degradation has been recognized as a global issue due to high energy consumption and economic growth. This situation needs researchers to focus on, thereby, the current article examined the impact of renewable energy production (REP), energy import, renewable energy consumption (REC), gross domestic product (GDP), inflation, and foreign direct investment (FDI) on the carbon dioxide (CO₂) emission in China. The study considered secondary data and extracted it from the World Bank database covering the period 1981 to 2018. The current article has examined the stationarity of the constructs using Augmented Dickey-Fuller tests and investigated the association among constructs using the quantile autoregressive distributed lag (QARDL) model. The data revealed that REP, energy import, and REC, had a significant and negative linkage with CO₂ emission in China. In contrast, GDP, inflation, and FDI are linked with CO₂ emission in a positive manner. The article also guided the policymakers regarding the policy development related to reducing carbon emissions using renewable energy production and consumption.

- 15 Which clean energy contributes better for growth? – dynamic panel analysis of heterogeneous impacts of individual renewable sources on economic growth/ Kim, Sehwan; Jeon, Wooyoung, pp. 312–330
- The impact of renewable energy on economic growth has been controversial and the possible reason for this is that renewable energy is aggregation of sources with heterogeneous characteristics and different countries have different portfolio of renewable sources depending on their climate condition and technology maturity. This study examines the relationship between renewable energy sources such as solar, wind and bio energy and economic growth in 89 countries. For methodology, this paper adopted Islam's growth equation and performed Dynamic Panel Analysis based on Arellano-Bond GMM methodology. In addition to whole sample analysis, a sub-group analysis is performed between OECD and non-OECD countries, and between energy-importing and energy-exporting countries to examine how the relationship is affected by country's capital accumulation, technology maturity, energy cost, and energy security. The result shows that individual sources have the U-shaped relationships with growth, but the turning points where negative relationship changes to positive vary for different sources. For sub-group analysis, the U-shaped relationship was significant only in OECD countries and energy-importing countries. This shows that high technology development and capital accumulation of OECD countries and high energy cost and vulnerability to international energy market of energy-importing countries makes renewable sources more beneficial to economic growth.

- 16 Experimental investigation on combustion and emission characteristics of diesel methanol dual fuel (DMDF) engine at various altitudes/ Wang, Jian; Chen, Luteng; Chen, Jinke, pp. 331–352

In order to reveal the effects of diesel and diesel methanol dual fuel (DMDF) on engine performance at different altitudes, especially on combustion stability. In this study, a comparison of experimental research on characteristics of combustion, economy, and emissions for a turbocharged DMDF at various simulated altitudes (10m, 700m, 1670m, and 2400m) and three working conditions (1200rpm-72 Nm, 1800rpm-158 Nm, and 2200rpm-153 Nm) were conducted and analyzed combustion characteristics, economy and emissions. At 1800rpm and 2200rpm, with the increment of altitude, the peak value of the cylinder pressure, the pressure rise rate, and the brake thermal efficiency (BTE) for DMDF mode were higher than diesel mode, while combustion center (CA₅₀) and combustion duration of diesel mode higher than DMDF mode. At 1200rpm and 1800 rpm, the maximum heat release rate (HRR) of DMDF mode was higher than diesel mode. When the altitude rose from 10m to 2400m, the coefficient of variation of peak pressure (COVPP) of DMDF mode increased while the coefficient of variation of indicated mean effective pressure (COVIMEP) of DMDF mode decreased, which means the combustion of dual-fuel is relatively stable. The exhaust temperature of DMDF mode was lower than that of diesel mode at various altitudes. Compared with diesel mode, NOX and Soot emissions in DMDF model significantly decreased at different altitudes and working conditions.

- 17 Social acceptability of climate-change adaptation policies in South Korea: A contingent valuation method/ Park, JaeHyung; Woo, JongRoul, pp. 353–371

In this study, the willingness to pay (WTP) of the Korean people for a flood control policy to prepare for climate change and a policy to reinforce the protection of populations vulnerable to climate change was estimated using the contingent valuation method (CVM). In addition, the appropriateness of the budgets allotted by the Korean government for these two policies in 2021 was examined by comparing them with the benefits to the people at the national level. The average annual WTP per household was estimated to be approximately KRW 27,457 and 25,854 for these two policies. The WTP was found to increase with adverse effects caused by extreme weather conditions; as people developed an interest in climate change, their income level increased and hence they showed preferences for policies by the ruling party. In addition, the benefits of the two policies at the national level were estimated to be worth KRW 573.6 and 540.1 billion, respectively. When the benefits were compared with the amount allotted in the budgets for them, the ratio of the budget to the benefit was found to be 77.55% for flood control in preparation for climate change and 4.46% for the reinforced protection of populations vulnerable to climate change. This confirms that the acceptability of the policy by the populations vulnerable to climate change is high, but the budget is not allocated as per the need.

- 18 The effect of extreme temperature on electricity consumption, air pollution, and gross domestic product/ Huang, Kuei-Ying; Chiu, Yung-ho; Lin, Tai-Yu, pp. 372–394

The Report: Intergovernmental Panel on Climate Change (IPCC) set a goal global warming of 1.5°C on global temperature change. Extreme climate changes have increased the demand for electricity consumption by people and enterprises. In fact, China's total power generation in 2019 exceeded 25% of the world's amount, and its thermal power generation accounted for more than 70%. Although past research on electricity efficiency seldom discusses the issue of climate change, the topic still remains important. This research thus considers extreme temperature days (climate change variable) as exogenous variable and uses the Two-Stage Meta Under exogenous undesirable EBM model to examine power efficiency in China. The results are as follows. (1) In the west only Qinghai's GDP, CO₂, PM_{2.5}, and electricity consumption have technology gap ratio (TGR) efficiency values of 1 in the 5 years. (2) China's electricity consumption has the same trend with the TGR efficiency of CO₂ and is higher than PM_{2.5}. (3) The national overall efficiency, meta overall efficiency, and TGR overall efficiency are the worst in China's west region.

- 19 Unleashing the Influence of Information Sharing, Technological Openness, and Corporate Innovation on Green Corporate Social Responsibility: A Way Toward Environmental Sustainability/ Yi, Xin; Tanveer, Arifa; Xue, Yan, pp. 395–417

The current study investigates three important characteristics of corporate culture, i.e., information sharing, technological openness, and corporate innovation to address the research gap about how they affect corporate culture to enhance green corporate social responsibility in the automobile sector of China. The data were tested and examined using PLS-SEM. The findings indicate that information sharing, technological openness, and corporate innovation contribute to enhancing green corporate social responsibility. More precisely, the corporate culture encourages information sharing and innovation among employees and connects them to increased corporation operations that may facilitate the acquisition of advanced manufacturing skills. The study demonstrated that corporate culture is critical to effective corporate integration and that information sharing and corporate innovation tend to be powerful determinants of green corporate social responsibility. Additionally, the study emphasized that these characteristics are the source of corporate social responsibility and adopting these characteristics will assist corporations in enhancing the green corporate social responsibility.

- 20 Effects of venture capital on green technology innovation in new energy vehicle industry in China/Jiang, Cailou; Liu, Dehai, pp. 418–437

Taking new energy vehicle (NEV) listed enterprises from 2010 to 2018 as a research sample, this paper empirically analyzes the innovative impact of VC on NEV enterprises by applying the difference-in-difference (DID) model. The results indicate that the intervention of VC has a positive and significant impact on the green technological innovation in NEV enterprises, an impact which is reflected in a significant increase in the number of green invention and green utility model patent applications. Compared with state-owned NEV enterprises, VC plays a more significant role in promoting the green technological innovation of private and foreign NEV enterprises. In the NEV industry chain, VC has significantly promoted green technological innovation of upstream and midstream NEV enterprises. From the perspective of VC, it also finds that, compared with independent and local VC, it is the syndicated and non-local VC that have a more positive and significant impact on green technological innovation in the NEV enterprises. Besides, the high-reputation of VC has not had an “incubating” effect on green technological innovation in NEV enterprises.

- 21 A critical review on the effective utilization of geothermal energy/Jamil, Farrukh; Shafiq, Iqrash; Hussain, Murid, pp. 438–457

Rapid growth in the global population and associated elevated reliance on modern technology has resulted in increased demand for energy consumption. This has resulted in an increased focus on the development and generation of advanced sustainable energy systems. The swift implementation of sustainable renewable energy resource utilization and improvement in their efficiency by the modification of current technologies are the possible solutions that gave rise to the emergence of geothermal technology as a potential alternative. Geothermal technology is a non-carbon renewable energy resource that could be utilized efficiently to fulfil the energy demands while mitigating the climate change threat. According to the surveyed literature, the global geothermal energy power plant installation capacity has reached 14.3 GWe to successfully implement this sustainable alternative. In order to have a successful and uninterrupted way forward, it is essential to evaluate the constraints both in terms of technicality and economic feasibility to establish an approved framework. Moreover, the governance and monitoring regarding the social and environmental impact alongside the legal challenges should also be addressed. The significant barriers include increased capital cost, site selection, superiority of resources at diverse levels of rock bottoms, and obstruction from nearby residents that need to be addressed appropriately. As a result, policymakers will continue to seek measure that have least negative impact on environment.

- 22 Recent advancements in CaFe_2O_4 -based composite: Properties, synthesis, and multiple applications/Yadav, Nidhi; Ahmaruzzaman, Md, pp. 458–490

Metal ferrites like nickel ferrite, copper ferrite, zinc ferrite, cobalt ferrite, and other ferrites are highly abundant and used as catalysts in various transformations. However, CaFe_2O_4 is the most abundant alkali metal ferrite, which is eco-friendly and non-toxic. CaFe_2O_4 is a superparamagnetic material that can be easily recovered from the reaction media due to its magnetic properties. Therefore, it has been widely used in numerous applications, such as dye degradation, removal of heavy metal ions, transesterification reaction, gas sensing, photocatalytic water splitting, drug delivery, etc. In this review, (1) magnetic properties and crystal structure of spinal CaFe_2O_4 are discussed, (2) potential applications of CaFe_2O_4 are discussed, and (3) various synthesis techniques of CaFe_2O_4 are demonstrated. CaFe_2O_4 shows photocatalytic properties due to its narrow band gap (1.9 eV), abundant functional group, and high surface area. It is found that CaFe_2O_4 possesses a remarkable potential for energy and environmental remediation. In this review, we have added the photocatalytic mechanism of various pollutants. At last, future perspectives are given for developing novel, sustainable CaFe_2O_4 or CaFe_2O_4 -based nanocomposite.

- 23 China's renewable energy and energy efficiency policies toward carbon neutrality: A systematic cross-sectoral review/ Yang, Yiqun; Lo, Kevin, pp. 491–509

The ambitious targets of peaking CO_2 emissions before 2030 and reaching carbon neutrality before 2060 (Goal 3060) have emerged as the driving force in the development of China's low-carbon energy policy. Adopting a systematic review approach, this article provides a timely analysis of key Chinese renewable energy and energy efficiency policies under Goal 3060 across five sectors: electricity, industry, transportation, buildings, and local governments. In addition, the review identifies challenges to be addressed and offers policy recommendations. There are five main conclusions: (1) expedite the development of market-based and network-based governance systems; (2) pursue the harmonization of policies by avoiding contradiction and fragmentation; (3) develop new policies, especially in the building and transportation sectors; (4) embrace surveillance technologies to improve implementation and compliance; and (5) ensure just transition by implementing policy to reduce the negative socioeconomic impacts on fossil fuels-based communities and workers. This review serves as a useful guide for scholars interested in China's clean and low-carbon energy transition.

- 24 Upcycling of plastic and tire waste toward use as modifier for asphalt binder/ Lee, Seonho; Park, Young-Kwon; Lee, Jechan, pp. 510–524

A tremendous amount of plastic and tire waste is generated every day. Pyrolysis gives a sustainable plastic and tire waste management solution by transforming them into high-value carbonaceous materials (i.e., char). Char made from plastic or tire waste can be used as a modifier for asphalt binder (i.e., bitumen), in order to improve the properties and performance of base bitumen. In most cases, the char is produced from waste feedstock at $\leq 300^\circ\text{C}$, most likely due to the high volatile matter content in feedstock. These chars have been proven experimentally to enhance the deformation resistance, rutting resistance, stiffness, and elasticity of bitumen. The optimal dosage of char in the modification process is highly associated with the kind of waste feedstock and pyrolysis conditions under which the char is made. The present review highlights the promise of the char materials derived from plastic and tire waste for use in materials applied to civil and construction industries, which is aimed specifically at expanding the application of chars made from plastic and tire waste beyond their typical applications, such as in environmental remediation and catalysts.

- 25 Investigation on the relationship between the number of coronavirus disease 2019 cases at the beginning of the epidemic and the decrease of $\text{PM}_{2.5}$ in Hubei, China: The role of temperature changes/ Wang, Qiang; Wang, Lili; Li, Rongrong, pp. 525–535

In response to the coronavirus disease 2019 pandemic, the Chinese government implemented blockade measures in Hubei, which largely affected the emission of pollutants. This work is aimed to explore the effects of epidemics on pollutants at different temperatures in Hubei, China. We applied for a panel nonlinear model with autonomous search thresholds to explore this, using daily average temperature as a threshold variable, and PM_{2.5} set as the explained variable, and the cumulative number of confirmed coronavirus disease 2019 cases set as the explanatory variable. An empirical analysis was conducted by running the proposed model and using nine cities in China most impacted by the pandemic. The results show that there was a non-linear negative relationship between the cumulative number of confirmed coronavirus disease 2019 cases and PM_{2.5}. A more detailed non-linear relationship between the two was uncovered by the proposed panel threshold regression model. When the temperature crosses the threshold value (12.5 °C and 20.5 °C) in sequence, the estimated value was -0.0688, -0.0934, and -0.1520 in that order. This means that this negative non-linear relationship increased with increasing temperature. This work helps to explore the effect of coronavirus disease 2019 on pollutions at different temperatures and provides a methodological reference to study their nonlinear relationship.



Indian Council of Social Science Research
National Social Science Documentation Centre
NASSDOC: Research Information Series 3



• **Current Contents - Annotated Index to Indian Social Science Journals**

Current Contents is a Current Awareness Service under “NASSDOC Research Information Series”. It provides ready access to bibliographic details of articles from the recently published leading scholarly journals in Social Sciences and is available in NASSDOC. In this publication, the “Table of Contents” of selected journals is arranged under the title of the journal and at its end Author Index and Keyword Indexes have been provided in alphabetical order.

- 26 Unveiling the asymmetric energy-growth nexus in top oil-importing and exporting countries: The common correlated effects approach/ Sim, Khang Yi; Sek, Siok Kun, pp. 539–568

Conventional panel models that overlook nonlinearity, nonstationary, heterogeneity and cross-sectional dependency when analysing the energy-growth nexus might produce misleading conclusions. In addressing these issues, this study extends the examination of the nexus by applying nonstationary panel models with common correlated effects (CCE). They involve two estimators, namely CCE mean group (CCEMG) and augmented mean group (AMG) estimators. The main objective is to examine the effects of total and renewable energy consumption on the gross domestic product (GDP) by comparing the top oil-importing and top oil-exporting countries. The datasets are in annual frequency, ranging from 1992 to 2015. The results are compared to ordinary least squares (OLS)-type models that serve as benchmarks. This study innovates the models by incorporating the asymmetric effects of energy consumption into the estimations. The findings reveal a positive correlation between total energy consumption and GDP for both panel groups, and capital input is one of the determinants in all cases. The results disclose evidence of the asymmetric effects of total and renewable energy consumption. The positive impact of total/ renewable energy consumption decreases for the top oil-exporting group is more apparent than its increases, signifying the importance of energy conservation. For top oil-importing nations, increased renewable energy consumption impedes the GDP, but the increase in total energy consumption accelerates it. Energy efficiency policies should be implemented in oil-importing countries since the positive impact of total energy consumption is smaller than in the other group.

- 27 Does the low-carbon city pilot policy achieve the synergistic effect of pollution and carbon reduction?/ Wang, Hui; Gu, Kuiying; Sun, Hui, pp. 569–596

A scientific assessment of the synergistic effect of the low-carbon city pilot policy in reducing air pollution and carbon emissions is needed to promote carbon peak and carbon neutrality. This study applied the Spatial Durbin Model-Difference in Difference technique to investigate the synergistic effect of air pollution and carbon emission reduction through the implementation of the low-carbon city pilot policy. The main results are as follows. (1) A spatial phenomenon was observed, in which there was a coexistence of urban carbon emissions and air pollution agglomerations. The spatial characteristics of the “symbiotic” carbon emissions and air pollution agglomerations were revealed. (2) The low-carbon city policy significantly reduced CO₂, SO₂, and PM_{2.5} concentrations, and the effect of the “co-governance” of air pollution and carbon emission reduction was obvious. (3) There was a clear regional heterogeneity in the synergistic effect of air pollution and carbon emission reduction in low-carbon cities. A stronger incentive effect was apparent in central and western cities, resource-based cities, and key environmental protection cities. (4) To achieve a synergistic governance “sharing” situation, the transmission mechanism of the low-carbon city pilot policy was the reduction of total energy consumption, the promotion of industrial restructuring, the optimization of the factor endowment structure, and the continuous improvement of the urban transport structure and green innovation. Our results not only help advance the research on synergistic reduction of air pollution and carbon emissions, but also can be of interest to low-carbon city policy makers in China.

- 28 Hydrocarbon regulation and lower temperature pyrolysis of balikun oil shale kerogen/ Liu, Fei; Shi, Weiguang; Yan, Xiuling, pp. 597–609

Oil shale kerogen is a kind of composite nature of fossil energy polymer. Kerogen pyrolysis is a feasible and alternative strategy to produce fossil fuels from shales. However, the disadvantages including the high energy consumption, the high cost, and the low hydrocarbon conversion, significantly hinder the development and utilization of unconventional hydrocarbon resources. Herein, the hexagonal crystal structural layered double hydroxides (LDHs) with the Ni/ Fe ratio of 5.64:2.36 is proposed as pyrolysis catalyst to improve the catalytic efficiency, the selectivity of target hydrocarbons, and lower the temperature for the process of kerogen pyrolysis. As a result, needle-like nanoscale NiFe-LDHs are prepared successfully to perform the fast thermal upgrading of Balikun oil shale kerogen. The catalytic pyrolysis performance has been observed that the temperature for maximum conversion (T_{max}) is 401.18 °C, presenting a T_{max} reduction of 37.84 °C, the yield of shale oil is increased by 7.83 wt%. And during 350°C– 400°C, a progressive increment of 147.67%, 230.86%, and 310.61% is obtained corresponding to the content of C₁-C₅, C₆-C₁₄, and C₁₄ + hydrocarbons, respectively. This finding enriches the catalyst candidates for kerogen pyrolysis and provides new insights into industrial applications of in-situ pyrolysis technology for oil shale recovery processes.

- 29 Insurance market development, renewable energy, and environmental quality in the UAE: Novel findings from a bootstrap ARDL test/ Samour, Ahmed; Onwe, Joshua Chukwuma; Muhammad, Imran, pp. 610–627

The present work aims to contribute to the existing literature by assessing the influence of insurance market development on the UAE's environmental quality. This study stands to be the first to evaluate the influence of the insurance market on environmental quality in the UAE. The study used an advanced approach to confirm the cointegrating relationship among selected variables: bootstrap Autoregressive Distributed Lag (ARDL) testing and the Bayer and Hanck test for co-integration. The empirical outcomes reveal that renewable energy consumption stimulates environmental quality in the short and long run. Furthermore, empirical outcomes show that insurance market development has a positive effect on the level of environmental quality in the country. Therefore, policymakers in the UAE are advised to make policies and strategies to reinforce the sustainability of insurance markets that would minimize environmental pollution by giving incentives to whoever contributes minimal carbon and uses eco-friendly materials. This can be achieved through an active role in green investments and product development to promote environmental quality and increase insurers' profitability and credit rating.

- 30 Low-carbon development mechanism of energy industry from the perspective of carbon neutralization/ Wu, Bishan, pp. 628–643

Energy supply and environmental capacity are important material foundations for social and economic development and constraints for scientific and sustainable development, and with achieving the strategic goals of carbon peak and carbon neutral at an early date, too. Therefore, the international community generally regards energy-economic-environment (3E) as a necessary research direction. This paper studies the relationship among effective energy utilization, economic growth protection and ecological environment protection by establishing the contribution rate model of energy consumption factors to economic GDP growth. At the same time, this paper puts forward the government needs to use carbon trading market, carbon tax, such as low carbon management mechanism based on the Pareto Optimality of carbon trading market, prompts the excess money of the country or the region back to actively invest in low-carbon production, lets more energy companies to clean energy and low carbon production transformation, and helps to achieve the goal of regional energy industry carbon neutral.

- 31 Renewable energy consumption and its impact on environmental quality: A pathway for achieving sustainable development goals in ASEAN countries/ Amin, Nabila; Shabbir, Muhammad Salman; Abbass, Kashif, pp. 644–662

Developing an inclusive policy agenda for ensuring sustainable development is a challenge for both developed and developing countries. The developing countries face challenges in designing policy that achieves sustainable development goals based on environmental awareness, and that is one of the main contributions of this research. By taking into account the SDG 13 (climate action) and 7 (clean and affordable energy) this study examines the influence of education, natural resource availability, financial development, urbanization, and economic growth for ASEAN nations from 1991 to 2018. For an empirical estimate, second-generation approaches are used. The findings demonstrate the energizing influence of renewable energy usage in altering the environmental quality. According to the empirical findings, renewable energy and education lower CO₂ emissions by 0.46% and 0.22%, respectively. Financial development, urbanization, and natural resource depletion all have a 0.14%, 0.03%, and 0.08% impact on the environment, respectively. The heterogeneous causality analysis reveals the feedback effect, i.e., bidirectional causal links between education, carbon emissions, and the use of renewable energy. This empirical data implies that nations should enhance investment in renewable energy and education sectors, as well as prepare for renewable energy research and development, to ensure environmental sustainability. This research has policy implications for ASEAN countries in terms of renewable energy and education investments. Through this agenda, the objectives of SDG 13 and SDG 7 will be achieved, while SDG 4 will be targeted.

- 32 Effect of α -aluminium oxide nano additives with Sal biodiesel blend as a potential alternative fuel for existing DI diesel engine/ Sharma, Abhishek; Pali, Harveer Singh; Gupta, Naveen Kumar, pp. 663–691

The increasing demand, rapid consumption, price increase, limited reserves, and environmental concern due to pollution produced by conventional fossil fuel (diesel & gasoline) are a few reasons why biofuels need to be explored. The present paper employs a systematic methodology to examine the performance of a 20% volumetric blend of Sal biodiesel (S20) blended with diesel using α -aluminium oxide (α -Al₂O₃) nanoparticles (NP) as additives and is compared with a diesel under like circumstances. The central composite design, Box-Behnken design (BBD) based response surface methodology, and desirability tests are used in the organized experiments on a diesel engine configuration to facilitate calibration. The created multivariate regression model yields all of the best engine inputs. Interaction effects are used to determine the most influential element by observing the interaction of two distinct input factors on a single response. According to the desirability tests, the highest estimated desirability was 0.579; the optimal input parameters found are 21°bTDC injection timing (IT), 238 bar injection pressure (IOP), 17 compression ratio (CR), and 74 ppm concentration of α -Al₂O₃NP, estimated the optimized response of brake thermal efficiency (BHTE) 31.18%, brake specific fuel consumption (BSFC) 0.2975 kg/ kWh, carbon monoxide (CO) 0.0887%, hydrocarbon (HC) 31 ppm, oxide of nitrogen (NO_x) 677 ppm, and smoke level 54.92%. These predicted values were validated with experimental results, and errors were within the range. The nanoparticle combination sample offers improved brake thermal efficiency (BTHE) and lower BSFC rate than the S20 while testing for the optimal parametric condition.

- 33 Japan energy mix and economic growth nexus: Focus on natural gas consumption/ Eweade, Babatunde S; Uzuner, Gizem; Lasisi, Taiwo Temitope, pp. 692–724

Japan's recent enunciation of a “Free and Open Indo-Pacific” policy aims to promote principles such as free trade, freedom of navigation, and encouraging economic prosperity with building commitment to stability and peace connecting the economic hub of Asia to Africa (MFA, 2019). Natural gas use continues to dominate Japan's energy mix despite efforts to improve environmental protection and attain the Sustainable Development Goals (SDGs). Also, increasing production and investment typically leads to a better quality of life and more disposable income for the populace, which promotes economic growth. To this end, the study investigates the relationship between economic growth, trade openness, and natural gas consumption, as well as gross fixed capital formation and carbon dioxide emissions to overcome omitted variable problems to explore the natural gas-economic growth hypothesis in Japan over the period 1980–2020. Empirical results reveal a long-run relationship among the variables under consideration. By applying the Toda and Yamamoto approach to Granger causality testing, a two-sided causality running from CO₂ and economic growth was revealed, while a one-sided causality from economic growth to natural gas consumption. This outcome suggests that the natural gas-economic growth hypothesis is not valid for Japan. According to these outcomes, policymakers in the energy sector should consciously diversify their energy portfolio in line with the Sustainable Development Goals (SDGs) for Japan. Also, it is recommended that there should be a provision of access to skilled labor to increase productivity and export finished products to boost a nation's economy.

- 34 Design islanded hybrid micro-grid and analyzing its socio-economic technical and environmental aspects for off-grid electrification in developing countries/ Ullah, Saleem; Yousi, Muhammad; Kataria, Mubashar Aslam, pp. 725–753

Developing countries are facing many electricity crises such as low production, worst power outages, blackouts, and poor inadequate supplies. Most of their rural areas have no basic power infrastructure as it requires long transmission lines, which causes high installation, operation, maintenance costs and line losses issues. The people of these unconnected rural areas belong to low-income families and use kerosene oil, candles, small solar panels, and batteries to meet their basic electricity needs. As an alternative, renewable-based hybrid energy systems have enormous potential. It is also environmentally friendly and low-cost, sustainable, and promising solution to electrify rural off-grid areas. This research work focuses on the economic and optimal design of a renewable-based hybrid energy system for the rural off-grid area of Pakistan. HOMER (Hybrid Optimization of Multiple Energy Resources) software is used to perform techno-economic and environmental analysis. The optimization results show that the most economical and optimal configuration is PV/ diesel generator with batteries having lower harmful emissions. Furthermore, the sensitivity analysis is performed to refine the results which show that the most optimal system will remain sustainable if variations occur in the sensitivity variables in the future. Moreover, the results and findings of this study can help the government to make effective policies and planning to provide reliable and affordable electricity to the off-grid areas, to improve the electrification rate in the country.

- 35 Analyzing the mechanism between nuclear energy consumption and carbon emissions: Fresh insights from novel bootstrap rolling-window approach/ Irfan, Muhammad; Adebayo, Tomiwa Sunday; Shahzad, Farrukh, pp. 754–778

This research utilizes a bootstrap rolling-window (BRW) causality test to explore the causal interrelationship between nuclear energy consumption (NUC) and carbon dioxide emissions (CO₂) in 6 developed countries from 1980 to 2020. When there are structural shifts in the full-sample time series, empirical research exploring causality between two-time series generates erroneous conclusions. On the other hand, the BRW method allows researchers to find potential time-varying causality between time series using sub-sample data. The outcomes of the BRW causality test disclosed the following results: (i) a unidirectional negative causality from NUC to CO₂ without feedback was found for Japan; (ii) a negative causality at sup-sample periods from NUC to CO₂ surfaced at the sub-sample period while a positive causality surfaced from NUC to CO₂ in sub-sample period for the United States of America (USA) and France; (iii) a negative feedback causality between NUC and CO₂ was found For Canada; (iv) a positive unidirectional causality surfaced from NUC to CO₂ was found for Germany, which implies that consumption of NUC worsens the environment in the sub-sampled period. The results may have policy consequences for the selected developed countries regarding NUC and CO₂ nexus.

- 36 Modeling the influence of green innovation on environmental sustainability of small and medium-sized enterprises: A way towards sustainable development/ Xin, Yongrong; Laila, Umeand; Zhang, Shuo, pp. 779–794

Significantly tied to China's 14th five-year plan, green innovation is a vital component of high-value growth. This study explores the impact of green innovation on the environmental sustainability of small and medium-sized companies (SMEs). The findings are based on the primary data collected from 453 Chinese SME employees via an online questionnaire survey. Structural equation modeling is utilized for data analysis purposes. Study results reveal that green innovation has a significant influence on marketing innovation and product innovation. Similarly, marketing innovation positively affects product innovation and environmental sustainability. Moreover, product innovation has a significant effect on environmental sustainability. The outcomes of this study imply that organizations in developing economies should prioritize green innovation elements in order to improve the environmental sustainability of SMEs. Study limitations and directions for future research are also discussed at the end of the study.

- 37 Impact of trade liberalization and renewable energy on load capacity factor: Evidence from novel dual adjustment approach/ Huilan, Wu; Akadiri, Seyi Saint; Odu, Ada Tony, pp. 795–814

Several nations, including Mexico, are encountering problems with accomplishing the targets of sustainable development goals (SDGs). This study addresses how to develop SDG agenda for Mexico, which may also be applied to other emerging markets with comparable profiles. Therefore, this study utilizes a newly developed load capacity factor (LCF, a detailed environmental evaluation tool) that combines biocapacity (supply side) and ecological foot (demand side) to examine the effect of renewable energy consumption and trade openness on LCF while controlling for nonrenewable energy consumption and economic growth in the case of Mexico during 1970–2017. Using the dual adjustment approach, we find evidence of long-run cointegration nexus among the series. In addition, trade openness affects LCF positively, whereas renewable energy consumption, economic growth, and nonrenewable energy consumption impact LCF negatively. Furthermore, results of the frequency domain causality show that all the variables can predict LCF in the long-term. Based on these results, Mexico should focus on promoting public understanding of green energy and environmental preservation measures and participate in the production of nonenergy-consuming and ecologically friendly products while compelling polluting enterprises to migrate to countries with less stringent environmental restrictions.

- 38 Economic policy uncertainty and firm performance: Evidence from the energy-intensive industry in China/ Yu, Weihua; Jin, Xin, pp. 815–832

As a result of high energy consumption and pollution from energy-intensive industries, the Chinese government has implemented a series of policies. A comprehensive assessment of these policies is necessary to guide the green transformation and upgrading of the industry, however, little research has been conducted on this issue. This article takes China's economic policy uncertainty (EPU) Index as a comprehensive and continuous policy shock and investigates the impact of EPU on the financial performance of energy-intensive firms. Based on 289 listed energy-intensive companies from 2003 to 2018, we find that EPU negatively affects the financial performance of firms, and the negative effect is robust after replacing the dependent variable and endogenous discussion. Further, the negative impacts are more pronounced for midwestern, non-SOE firms, as well as ferrous metal and chemical product manufacturers. Moreover, our results indicate that the negative impact of EPU on performance is mitigated for firms with high cash holdings and low debt ratios.

- 39 Towards green growth: Industry structure and energy transition in OECD countries/ pp. 833–847

This paper is concerned with the impact on the global greenhouse effect issues and focus on comprehensive multi-indicator though analyze the relationship between CO₂ emissions and real GDP, energy intensity, fraction of the renewable energy supply out of the total energy supply, and energy consumption from different sectors, including the agricultural, service, industrial and transport sectors. The panel data encompass all 37 Organization for Economic Co-operation and Development (OECD) member countries covering 20 years from 2000 to 2019 and divide into two subsamples, the first and second ten years, for comparison. The empirical results of all parameters track the sound progress of green growth trend in OECD countries in the second ten years (2010–2019). According to the OECD, green growth strategy had been acknowledged in OECD Ministerial Council Meeting in June 2009. Thus, the study divided into the first and second ten years with 2010 as the boundary to compare and the empirical result also indicates the green growth strategy in OECD countries have gradually matured in the last ten years. The implementation of the policy framework and measures includes pricing, removing perverse subsidies, ensuring the regulatory standards of energy efficiency, innovation, and infrastructure investments might also provide a reference and important information for energy policy makers.

- 40 Assessment of renewable electricity adoption in sub-Saharan Africa/ Olanrele, Iyabo Adeola; Fuinhas, José Alberto, pp. 848–873

Most sub-Saharan African electricity generation is through renewable energy sources. However, the pace of renewable expansion is slow, mirrored by the region's low per capita electric power consumption and electricity access. The study examines the determinants of renewable electricity generation adoption in sub-Saharan Africa (SSA) countries using content description and a panel ARDL analysis. Findings from this study show that hydroelectric power is the long-standing renewable electricity source in the region. The deployment of non-hydro renewable electricity sources is slow despite its vast potential. In most evaluated countries, renewable electricity targets are below actual realization. Also, policies are ineffective in driving renewable electricity adoption, as indicated by the negative relationship between renewable electricity generation and policy enactments in SSA. Foreign direct investment and financial development significantly negatively impact renewable electricity adoption, suggesting that both factors do not expand renewable electricity generation. Feasible strategies for increasing non-hydro renewable electricity use include activating renewable energy support mechanisms and their uptake. In addition, governments in SSA should strengthen their legal and institutional frameworks and encourage lessening bottlenecks and bureaucracies associated with renewable electricity investment.

- 41 Analyzing the determinants of renewable energy: The moderating role of technology and macroeconomic uncertainty/ Chishti, Muhammad Zubair; Dogan, Eyup, pp. 874–903

In line with the importance of SDG-7, a number of studies have endeavored to divulge the changes in renewable energy consumption (REC); however, the literature fails to either understand the importance of technology i.e., information communication technologies (ICT) and macroeconomic uncertainty in this context or employ robust econometric techniques. This research paper extends the prior literature by focusing on technology and macroeconomic uncertainty as novel determinants in addition to natural resources, human development, globalization, and economic growth as control variables of renewable energy for the top 10 renewable energy-consuming countries by applying several second and third generation econometric tests on annual data from 1990 to 2017. The empirical estimations determine ICT as a crucial factor of renewable energy, suggesting that it significantly triggers REC in the top economies. Conversely, the detrimental effects of uncertainty tend to shrink REC. Furthermore, natural resources, human development, globalization, and economic growth significantly boost REC as consistent with the existing literature. Based on these findings, this study suggests several SGD-oriented policies.

- 42 Does the export-to-import ratio affect environmental sustainability? Evidence from BRICS countries/ Rahman, Md. Mominur; Halim, Md. Abdul, pp. 904–926

The study aims to examine the effects of trade balance, economic growth, green field investment, energy use, financial development, and urbanization on environmental sustainability in BRICS countries. This study proceeds to estimate the long-term association using the fully modified ordinary least square (FMOLS) and the dynamic ordinary least square (DOLS) panel estimation methods for the years 1991–2020. This empirical study finds that the ratio of exports to imports has a negative effect on environmental degradation. This indicates that increasing the trade balance eventually leads to environmental sustainability, which finally improves living standards and environmental conditions in the BRICS countries. The findings further show that green field investment and financial development substantially improve environmental sustainability, but energy use, urbanization, and economic growth desperately negatively affect environmental sustainability. Additionally, this research finds a unidirectional relationship of environmental sustainability with trade balance, green field investment, energy use, urbanization, and economic growth rate. This study states how BRICS countries can be protected through trade balance controlling environmental degradation. Thus, this research provides improved orientations to the policymakers of BRICS countries to design policy in favor of the environment.

- 43 Energy and environmental efficiency of China's regional electric power industry by considering renewable energy constraints/ Chen, Xifan; Zhu, Qingyuan; Song, Malin, pp. 927–949

The renewable electricity quota standard (RES) policy plays an important role in achieving sustainable and green development targets. Thus, it is essential to measure the sustainability of the electric power sectors in the context of RES. In terms of the energy and environmental efficiency (EEE) measurements, few studies divided energy inputs into renewable and non-renewable energy or explored the restricted problem of minimizing resource summation. To fill these gaps, we propose an improved fix-sum energy input data envelopment analysis (FSIDEA) model based on the adjustment strategy of weighted sum minimization of renewable energy inputs. The assurance region (AR) restriction and renewable energy input sum constraint (IC) are, respectively, imposed on the FSIDEA model to achieve the common equilibrium effective frontier (EEF). Finally, this study assesses the EEE of the electric power sectors in China's 30 main regions based on the common EEF. The result reveals that Beijing and Shanghai can be selected as benchmarks after efficiency comparison. In addition, our proposed model can compressively rank all decision-making units (DMUs) compared with traditional efficiency models.

- 44 The nexus of financialization and circularity: Evidence from European economies/ Ha, Le Thanh, pp. 950–985

This article is the first to study a nexus between financialization and circularity performance in the European region. To reflect the circularity performance, we use six different measures, including the amount of municipal waste, the number of circularity patents, the amount of circular material used, the rate of recycling waste, the rate of recycling biowaste, and the rate of recycling e-waste. By using various econometric techniques (namely a panel-corrected standard errors [PCSE] model, a feasible generalized least square estimates [FGLS] model, and the two-step General Method of Moment [the two-step GMM]), our study indicates that financialization is an enabler for circularity. However, these results are only statistically significant for the financial institution's development, while the financial market has a positive yet insignificant impact on circularity performance. The development of the financial institution is reported to increase municipal waste and the amount of recycling bio-waste and e-waste, thus promoting the path toward the circular economy. To shed light on the financialization-circularity nexus, we use the different dimensions of financialization dynamics and report heterogeneous influences on the different issues of circularity performance. Furthermore, the results from the dynamic fixed effects (DFE) in the autoregressive distributed lag (ARDL) method suggest that the impact of financial development only becomes apparent in the long term.

- 45 Towards sustainable environment: Unleashing the mechanism between green finance and corporate social responsibility/ Cai ,Xuesen; Song, Xiaowei., pp. 986–1003

Environmental and socio-economic activities are vital to achieving sustainable growth. Corporate social responsibility (CSR) originated to achieve social equilibrium via the sustainable performance of organizations. Nevertheless, corporations require ample resources to cope with the concepts of CSR and sustainability. Accordingly, the present research analyses the function of green financing, which encompasses the economic, social, and environmental practices for accomplishing and developing CSR goals in the automobile industry. Using questionnaire survey and structural equation modelling, this study's data supports the contribution of green finance and its associated practices (economic ($\beta = 0.248^{***}, 0.239^{**}, 0.312^{***}, 0.125^{**}, 0.549^{***}$), social ($\beta = 0.343^{***}, 0.147^{**}, 0.458^{***}, 0.593^{***}, 0.257^{***}$), and environmental practices ($\beta = 0.487^{***}, 0.164^{**}, 0.238^{**}, 0.043^{*}, 0.126^{**}$)) to the enhancement of CSR's implications. Research findings suggest that organizations should devote more monetary resources to enhancing CSR traits. Future research directions are also discussed at the end of study.

- 46 Modified coal fly ash for textile dye removal from industrial wastewater/ Eteba, Ahmed; Bassyouni, Saleh; M, Mamdouh, pp. 1004–1030

Complex dyes have an adverse impact on the environment since they have a high aqueous solubility and are very challenging to be removed using conventional approaches. A series of batch tests were performed to determine the optimum parameters for the direct blue 78 dye adsorption process as a function of chemically treated coal fly ash (TCFA) Effect of fly ash dose, contact time and dye initial concentration were studied using an industrial wastewater. A pilot plant, consisting of three stages; mixing, sedimentation and filtration was designed and implemented to investigate the ability of TCFA to remove COD, BOD₅, TDS and TSS from textile wastewater under optimal conditions. A series of fly ash physico-chemical analysis including particles size analysis, zeta potential, XRD, EDX, BET, SEM and FTIR were investigated. The results showed that the particles size and zeta potential for raw coal fly ash were 1.2 μm and -20.70 mv. Chemical treatment process using hydrochloric acid resulted reducing the particles size of fly ash from 1.2 μm to 0.95 μm . Zeta potential value increased to $+7.20$ mv. Batch adsorption process showed that the removal efficiency decreased as the primary dye concentration increased. It increased when fly ash loading and contact time increased. Dyes removal was achieved up to 99.7% using TCFA loading 3g/L for initial dye concentration 10 mg/L. Studies on equilibrium revealed that the equilibrium data was closely fitted to the Freundlich and Langmuir isotherm models. Kinetic study of adsorption process was studied in detail. Based on high correlation coefficient ($R^2 = 0.999$), the results were followed pseudo second-order model.

- 47 Interactions among technological innovation, foreign direct investment, and agriculture: A symmetric and asymmetric study of inclusive sustainable development/ Emir, Firat; Udemba, Edmund Ntom; Hussain, Sadam, pp. 1031–1049

This study examines the Indian inclusive sustainable development. India ranked third in global carbon emissions amidst its economic performance. This tells more about one-sided sustainable development policy of the country. With this trend of development anchored only on Indian economic activities, we consider it important to research the economy with instruments (such as technological innovation, foreign direct investment (FDI), and agriculture) that are unique to the country. India's data from 1980 to 2019 are applied to this study with two models for testing both economic and environmental developments. We utilized two scientific methods (non-linear autoregressive distributive lag (NARDL) and dynamic ordinary least squares (DOLS)) to demonstrate both symmetric and asymmetric technical analyses. Findings from NARDL show that technological innovation and FDI are mitigating carbon emissions, while economic growth and agriculture are increasing carbon emissions thereby impacting negatively the environment. Also, the result from the economic model confirms that all variables are impacting favorably on economic development except carbon emission. The findings from DOLS support the findings from NARDL. The result confirmed that India is yet to attain inclusive sustainable development, however, it is evident that with the right policy framed on tech innovation and FDI, the country could attain balanced sustainable development. Having seen, the dual capacity of both technological innovation and FDI toward strengthening both the economy and environment, it is worthy to consider these instruments as among the sustainable policies

- 48 Towards sustainable environment: Unleashing the mechanism between green finance and corporate social responsibility/ Cai ,Xuesen; Song, Xiaowei, pp. 1050–1088

Towards sustainable environment: Unleashing the mechanism between green finance and corporate social responsibility

- 49 Review of electric vehicle (EV) charging using renewable solar photovoltaic (PV) nano grid/ Kumar, S Satheesh; Kumar, B Ashok; Senthilrani, S, pp. 1089–1117

This review article gives a comprehensive review of existing research on renewable solar photovoltaic (PV) nanogrid, which is described from small-scale power system with a single domain for reliability, control, and power quality (PQ) for electric vehicle (EV) charging. A primary feeder on the Microgrid is connected to a nanogrid test bed that includes PV as power source, a battery energy storage system (BESS), smart-inverter multiple and EV charging stations (EVCS). The control algorithms are graded on four metrics: (1) voltage profiles, (2) renewable penetration, (3) PV curtailed and (4) net power flows. To investigate the local power quality, a steady-state power flow model of the nano-grid is created. The control algorithms successfully employ the battery to shift the nano-grid peak load while limiting the nano-grid demand to set level. Furthermore, an increasing emphasis is being placed on commonly used strategies for addressing the characteristics of each renewable system. This review paper characterizes the dynamic operation of 4 distinct BESS control algorithms for solar EV charging nanogrid: (1) peak load shifting, (2) reduce peak period impact, (3) cap demand, and (4) photovoltaic capture. These control modes are executed and analyzed on real-world nano-grid site, and optimal BESS control modes are assessed in terms of (1) solar electric vehicle charging, (2) power quality, (3) grid net demand, (4) photovoltaic curtailment, and (5) solar penetration. Finally, the problems highlight research gaps, and discussions on future trends are critical for enhancing the general technology of the renewable solar photovoltaic nano-grid for EV charging.

- 50 Energy, exergy, environment and techno-economic analysis of parabolic trough collector: A comprehensive review/ Chakraborty, Oveepsa; Roy, Sujit; Das, Biplab, pp. 1118–1181

Inexhaustible energy sources are the focus of the energy industry for meeting the increased need for energy and reducing carbon emissions. Among various alternatives, harnessing solar energy has become a promising choice around the world. Parabolic trough collectors (PTCs) are an effective way to transform radiant energy into thermal energy, as well as electricity. However, these collectors can be improved by refining their design and tweaking the parameters related to thermal behavior. This may be done either by enhancing the surface area or improving the heat transfer coefficient of the heat carrying medium. These kinds of improvements could be achieved by making the use of nanofluids and by using inserts or fins within the collector tube. The current study provides an extensive review of PTCs from the points of view of their design, along with their thermal characteristics. Different types of nanofluids as the working liquid are investigated and discussed to achieve better PTC performance. Inserts within the collector tube and various design approaches, including fins, twisted tubes, U-shaped tubes, coiled wire inserts, and porous twisted tape inserts, are reviewed and discussed in detail. Finally, based on this review, challenges of PTC applications are described and future research recommendations are proposed.

- 51 Reducing energy and environmental challenges by modelling clean electricity generation in oil-rich regions/ Pourarshad, Meysam; Noorollahi, Younes; Panahi, Mostafa, pp. 1185–1215
Reducing greenhouse gas (GHG) emissions induced environmental hazards is one of the most important goals of future research the energy economy and the environment. This challenge is becoming more important in developing countries, including Iran, with high energy intensity and is one of the leading countries in GHG emissions. This study aims to visualize emissions from electricity generation in Khuzestan province, southern Iran. Khuzestan is the largest producer of electricity and the country's energy capital. Khuzestan's electricity supply and demand system was simulated and examined under green scenarios till 2050 by assessing the existing situation and choosing a suitable low-carbon energy system for the future. One of the results of this research is to reduce emissions in terms of energy management strategies in the short term and the ineffectiveness of development strategies regardless of consumption management strategies. Electricity supply optimization scenarios are attractive in the long term, which indicates the costly implementation of development strategies. Combining solutions to balance the energy economy and environment is more effective. The OKEP scenario as a combination of consumption management and development strategies showed that it would maintain its positive impact in the short and long term and successfully reduce emissions. In this scenario, the net present value (NPV) attractiveness is over \$ 6706 million and saves the emission of 179 MtCO_{2e}. Compared to the business as usual (BAU) scenario, more than 90 Bm³NGe savings and a 3.62% increase in renewables share are other benefits of this scenario.
- 52 Analyzing the risk spillovers of international crude oil on China's corn and biofuel ethanol markets: A transition toward green economy and environmental sustainability/ Zhang, Jin; Lin, Zhenqing; Li, Jinkai, pp. 1216–1234
This study aims to analyze the risk spillover effects between the global crude oil market and the biofuel ethanol and corn markets in China, employing a DCC-GARCH-Copula-CoVaR model and basing the weekly price data from 2012 to 2021. The empirical results revealed that there were dynamic conditional correlations among international crude oil, China's biofuel ethanol, and corn markets. Following the COVID-19 outbreak, the CoVaR and ΔCoVaR changed, which caused a sharp increase in the mean values and volatility. Additionally, China's biofuel ethanol market is more vulnerable to the risk spillovers from the international crude oil market than China's corn market. However, China's markets do not appear to have obvious risk spillover effects on the global market. The implications of the results are discussed in financial market supervision, including the risk management and portfolio adjustment.
- 53 Risk management of e-waste disposal in China: A life cycle perspective/ Yang, Haichao; Zhang, Sheng, pp. 1235–1250
In the wave of global e-waste migration, the problem of e-waste management in developing countries and underdeveloped areas has become the focus of academic attention. In the developing countries represented by China, there are still a large number of electronic waste flowing into the extensive manual dismantling workshops. These informal recycling and disposal have a huge adverse impact on the environment of the surrounding areas, and there are huge health and ecological risks. How to effectively deal with the risks generated in the process of e-waste disposal is of great significance to global e-waste management. At present, risk assessment and management have not been included in China's existing e-waste management system. This article analyzes the health, ecological, and regional risks of e-waste in the four links of recycling, dismantling, resource utilization, and final disposal. At the same time, a list of e-waste risk assessment processes is formulated, and a risk management framework for e-waste in China is proposed. It enriches the theoretical and empirical research on e-waste management and provides Chinese practices for the future construction of an industrial 4.0 sustainable ecosystem.
- 54 Revisiting Hofstede's dimensions of national culture and environmental sustainability/ Huang, Chi-Jui; Liu, Heng-Yih; Lai, Jia-Yu, pp. 1251–1269

This study investigates the impact of Hofstede's dimensions of national culture on environmental sustainability across 57 countries. Hofstede's national culture construct reflects and gauges the extent of the inclination of a particular national person toward either economic development or environmental preservation. Climate change and pollution have continuously devastated the environment in recent decades. The United Nations Sustainable Development Goals aim to achieve a more sustainable future and prevent further environmental destruction. This study aims to explore whether national culture significantly influences national environmental sustainability. We use national environmental performance as the proxy for national environmental sustainability and adopt the ordinary least squares regression model to explore the possible relationship with two datasets of international indices; one is proposed by Hofstede, and the other is proposed by Germanwatch. Our results show that the power distance index has a strong negative impact on the climate change performance index (CCPI), greenhouse gas (GHG) emissions, renewable energy, and energy use. Further, the masculinity index is negatively related to CCPI and GHG emissions. The individual index is also negatively related to renewable energy. Furthermore, indulgence is positively associated with climate policy. These findings support the notion that nations should consider their cultural characteristics to improve environmental sustainability. Thus, conducting a national environmental policy that aligns with national culture is suggested to achieve environmental sustainability.

- 55 What determines household cooking fuel preferences? Empirical evidence from South Korea/ Lee, Chan Hee; Hong, Jong Ho; Kang, Sung Hoon, pp. 1270–1287

This study examines the determinants of modern cooking fuel choices in Korea. The ordered probit model is estimated using an extensive online survey of Korean household energy consumers. Our empirical results showed that age, gender, and education are significant determinants of modern cooking fuel choices among the socioeconomic demographic variables: females, older people, and highly educated people are more likely to prefer electricity. Also, electricity is more likely to be preferred over natural gas by people who have a higher preference for district heating. Two psychological factors significantly influence cooking fuel choices. People whose behaviours are environment-friendly and people who are more health-conscious are more likely to prefer electricity over natural gas or propane. There are three important insights into the cooking fuel transition toward electricity. First, as interest in health and climate change has significantly increased in recent years in Korea, it may stimulate the transition from natural gas or propane to electricity. Second, electrification of cooking methods will be beneficial for the environment if electricity generation becomes less carbon-intensive. Since electricity in Korea is mainly generated by fossil fuels, it is crucial to implement more aggressive policies toward renewable sources in the energy mix for electricity generation. Third, the public should better understand why this problem cannot be overlooked because the energy mix is important in mitigating climate change. The better the people understand the exact relationship between energy consumption and pollutant emissions, the more effective and environmentally sound will the energy mix policy become.

- 56 Can urbanization move ahead with energy conservation and emission reduction? New evidence from China/ Wu, Haitao; Sun, Mengzhe; Hao, Yu, pp. 1288–1314

In China, urbanization is mainly stimulated by resource flows, and industrialization is normally accompanied by an increase in the proportion of the urban population and urban land area. During the process, urbanization at a rapid pace often induces a huge consumption of energy and environmental emissions. Nevertheless, it is also worth considering whether urbanization positively affects urban environment promotion. With a more solid economic foundation, urban subjects will carry out energy conservation and emission reduction (ECER) from various aspects, primarily focusing on technological innovation, advancement of production mechanisms and structural optimization. Along these lines, this study aims to examine urbanization's direct and indirect impact on energy conservation and emission reduction using panel data consisting of 196 Chinese cities for the period of 2011–2018 with a Slacks-based model and transmission mechanism. Study results indicate that urbanization's development can give a direct impetus to ECER, which is quite robust after employing a series of robust tests, including instrumental variable estimation. Besides, urbanization indirectly influences ECER by promoting economic growth, better allocation of resources, internet advancement, and adjusting the employment structure. Further investigation suggests that the relationship between urbanization and ECER is nonlinear, depending on the levels of the above-mentioned mediating variables. Finally, essential policy suggestions are proposed, i.e. promoting high-quality development of urban clusters, accelerating the policies for ECER, and paying more attention to economic growth, resource allocation, internet technology, and employment structure.

- 57 Comparison approach for wind resource assessment to determine the most precise approach/ Khan, Tasir; Ahmad, Ishfaq; Batool, Masooma, pp. 1315–1338

The distribution models of wind speed data are essential to assess the potential wind speed energy because they decrease the uncertainty in estimating wind energy output. Therefore, before performing a detailed potential energy analysis, the precise distribution model for data relating to wind speed must be found. This research contains material from numerous goodness-of-fit tests, such as Kolmogorov–Simonov, Anderson–Darling, chi-square, root mean square error, Akaike information criterion, and Bayesian information criterion, which were combined finally to determine the wind speed of the best-fitted distribution. The suggested method collectively makes each criterion. This method was useful in statistically fitting 14 distribution models to wind speed data collected at four sites in Pakistan. The consequences show that this method provides the best source for selecting the most suitable wind speed statistical distribution. Also, the graphical representation is consistent with the analytical consequences. This research presents three estimation methods that can be used to calculate the different distributions used to estimate the wind. In the suggested maximum likelihood method, method of moments, and maximum likelihood estimation, the third-order moment used in the wind energy formula is a crucial function because it contributes to the precise estimate of wind energy. In order to prove the presence of the suggested method of moments, it was compared with well-known estimation methods, such as the method of linear moments and maximum likelihood estimation. In the relative analysis, given several goodness-of-fit tests, the presentation of the considered techniques is estimated based on the actual wind speed evaluated in different periods. The results show that the method of moments provides a more precise estimation than other commonly used methods for estimating wind energy based on the 14 distributions. Therefore, the method of moments can be a better technique for assessing wind energy.

- 58 The effects of *Trichoderma atroviride* pretreatment on the biogas production from anaerobic digestion of water hyacinth/ Ilo, Obianuju Patience; Nkomo, S'phumelele Lucky; Mkhize, Ntandoyenkosi Malusi, pp. 1339–1358

Water hyacinth is an invasive alien plant with several impacts on the environment, economy and society. The plant's high degree of proliferation makes its mitigation difficult and sometimes complex. However, existing evidence suggests that water hyacinth is a sustainable substrate for biogas production. Using the pretreatment processes for the optimisation conditions for biogas production from water hyacinth, this study analysed the effects of moisture content (60%, 70% and 75%) on *Trichoderma atroviride* pretreatment of water hyacinth and the impact of the pretreatment on biogas production. Anaerobic digestion of the water hyacinth process was performed at 35°C for 35 days. The modified Gompertz model was used to analyse and predict the appropriate kinetic variables of the digestion process. Biogas yields from untreated, pretreated-60%, pretreated-70% and pretreated-75% were optimal at 135, 210, 217 and 223.4 mL/ g of volatile solids (VS). These results suggest the pretreatment of water hyacinth enhanced the degradability of water hyacinth by breaking down the cell wall structure and facilitating its use by microorganisms. Furthermore, the results also confirmed that the higher the moisture content, the easier the biodegradation rate and, consequently, the higher the biogas yield. The model predicted maximum methane production potential ranging from 91.84 to 201 mL/ g VS, and the maximum methane yield rate was within 10.12–15.12 mL/ day. The lag phase varied between 2.46 and 6.94 days. The percentage error between experimental and model outcomes for untreated, pretreated-60%, pretreated-70% and pretreated-75% are 17.96%, 16.67%, 14.20% and 4.68%, respectively, while the coefficients of determination of the model varied between 0.905 and 0.975, demonstrating significant reliability on attained factors.

- 59 Asymmetric impacts of natural gas consumption on renewable energy and economic growth in Kingdom of Saudi Arabia and the United Arab Emirates/ Alam, Md Shabbir; Adebayo, Tomiwa Sunday ; Khan, Uzma, pp. 1359–1373

The globe is now in ecological turmoil as a result of the unrelenting increase in global warming. As a result, governments worldwide are committing to decarbonizing the environment, with the United Arab Emirates (UAE) and the Kingdom of Saudi Arabia (KSA) playing an important role in this effort. Hence, this paper evaluates the nonlinear (asymmetric) impact of natural gas consumption on renewable energy consumption and economic growth in the KSA and the UAE utilizing data stretching from 1990 to 2020. The study also considers other drivers of renewable energy consumption and economic growth, such as trade openness and CO₂ emissions. The study utilizes nonlinear autoregressive distributed lag (ARDL) to evaluate these associations. The outcomes of bounds nonlinear ARDL (NARDL), affirm the long-run association between the variables in both countries. The nonlinear results show that positive and negative shocks in natural gas consumption have a negative impact on renewable energy in both UAE and KSA. In contrast, positive and negative shocks in natural gas consumption impact economic growth positively. The study proposed vital policy recommendations based on these results.

- 60 How to promote China's green economic development? The combination effects of consumption tax and carbon tax policies/ Liu, Wei Jiang; Liu, Min; Liu, Tingting, pp. 1374–1395

With massive greenhouse gas emissions causing global warming, emissions reduction and economic growth are essential objectives that must be balanced in sustainable development worldwide. The tax policy is an effective tool for environmental protection and economic regulation. Over the years, China has continuously adjusted tax policies, and the tax structure has tended to be optimized, but there is still no carbon tax. In this regard, based on the purpose of promoting the harmonious development of the environment and economy, this article builds a dynamic computable general equilibrium (CGE) model with five scenarios to assess the economic, energy, and environmental effects of the consumption tax, the carbon tax as well as their combination in China during 2022 to 2035. The results show that lowering the consumption tax on non-energy-intensive commodities boosts long-term economic growth but is not conducive to emissions reduction. Additionally, a separate carbon tax promotes a cleaner energy transition, reducing emissions while harming the economy. In contrast to the stand-alone policy treatment, the combination of lower consumption taxes on non-energy-intensive commodities with the medium carbon tax rate could have a “double dividend” effect, with long-term economic growth and consistently reduced pollution emissions. In the future, it will be essential to implement the appropriate policy combination to reduce fossil energy consumption and increase clean energy share. Thus, it would help to achieve China's 2030 peak carbon target and promote green economic development effectively.

- 61 Wind farms in contested landscapes: Procedural and scale gaps of wind power facility constructions in Japan/ Kohyama, Satomi; Kohsaka, Ryo, pp. 1396–1415

The legal system for renewable energy in Japan, Feed-in Tariff system, was deregulated in 2021 by the central government to reflect the international calls to reduce greenhouse gas emissions. However, this sudden change has raised concerns about social, environmental, and long-term economic sustainability. Thus, we conducted a state-of-the-art review of legal and policy frameworks of wind power projects in Japan and discussed the multi-layered structure at national- and municipal-level ordinances. By doing so, several gaps are highlighted. First, there are procedural gaps that business operators can de facto bypass by checking the environmental procedures. Second, there are issues at the scale (national or local), where the decisions are met. For example, while the overall framework is decided at the national level, the most contentious issues of the location of wind power facilities are left at the local level, where residents, municipalities, and developers are burdened to solve these issues. Third, in the current legal system, environmental impacts on popular natural landscapes are not taken into consideration. In the face of deregulation and concerns about multiple factors, there has been an increase in the number of municipalities opposing the construction of wind farms. Finally, existing legal cases related to wind power projects are provided to illustrate changes and disputes at different sites across Japan. These cases demonstrated how landscape elements (e.g. biodiversity) can be vital for wind power project development in Japan.

- 62 Reduce carbon emissions efficiently: The influencing factors and decoupling relationships of carbon emission from high-energy consumption and high-emission industries in China/ Guo, Xiaopeng; Shi, Ren Rong; Dongfang, pp. 1416–1433

High-energy consumption and high-emission industries contribute a lot to economic development, but their carbon emissions are also huge. In order to achieve the dual-carbon target as early as possible, it is necessary to reduce the carbon emissions of high-energy consumption and high-emission industries. This paper selected five representative factors (population, per capita gross domestic product (GDP), energy intensity, energy structure and carbon emission coefficient) and adopted the logarithmic mean divisia index (LMDI) method to decompose the driving factors of carbon emissions. Therefore, this paper uses Tapio decoupling model to analyze the decoupling relationship between the two factors with the greatest impact on carbon emissions and carbon emissions. The results show that: (i) There is a good decoupling between high-energy consumption and high-emission industries and per capita GDP, and the impact of per capita GDP on carbon emissions will gradually decrease in the future; (ii) The decoupling relationship between carbon emissions and energy intensity is poor. For some industries, the reduction of energy intensity can help reduce carbon emissions. Finally, this paper puts forward some suggestions to promote carbon emission reduction. This paper provides theoretical support for studying how to reduce carbon emissions and formulate relevant emission reduction policies in the high-energy consumption and high-emission industries.

- 63 Navigating the paths to sustainable environments via energy security, renewable energy and economic complexity: Evidence from array of pollution metrics/ Uche, Emmanuel; Das, Narasingha; Bera, Pinki, pp. 1434–1455

Empirical narratives pertaining to the implications of energy security (ENS) on environmental quality (EQ), particularly in the context of Emerging Seven (E7) countries, are currently understudied. Likewise, the influence of renewable energy (RWN), economic complexity (ECI) and environmental control technology (EVT) on EQ is still unsettled. Thus, based on arrays of pollution metrics (ecological footprint (ECF), carbon emission damage (CO₂D) and consumption-based carbon emissions (CCO₂) and annual panel series spanning 1990–2018, this study provides fresh insights into the implications of the listed variables on EQs in E7 countries. Accordingly, the following empirical narratives were established: (i) The effects of the enlisted panel series on EQ are sensitive to the peculiarities of each pollution metric. (ii) Estimates of the pool mean group autoregressive distributed lag (PMG-ARDL) model and those of cross-sectional augmented autoregressive distributed lag (CS-ARDL) underscore the important roles of ENS and RWN on EQ, particularly on ECF; and ECI on CO₂D. While EVT provides insignificant carbon emission reducing effects across all variants of EQ indicators, population and economic growth are all time-significant pollution enablers. (iii) The outcomes of the panel quantile regression demonstrate that ENS enhances EQ only at the 25th and 50th quantiles and accelerates pollution at the 75th and 95th quantiles. RWN enhances EQ across all quantiles while ECI deaccelerates ECF and CO₂D and accelerates CCO₂ across all quantiles. Furthermore, EVT accelerates ECF and CO₂D while it deaccelerates CCO₂ across all quantiles. Meanwhile, the unpleasant effects of growth and population are reemphasized. Policy strategies to ensure a sustainable environment in E7 have been highlighted.

- 64 The impact of heterogeneous environmental regulations on carbon neutrality in China: New evidence based on the spatial measurement model/ Yang, Yuanhua; Peng, Zhongwen; Tang, Dengli, pp. 1456–1478

Identifying the differentiated effects of different environmental regulations is the basis for promoting China's zero carbon emissions and carbon neutrality. We used Chinese provincial panel data from 2003 to 2017 to empirically test the impact of different environmental regulations on carbon neutrality through spatial measurement models. The highlights of the study are as follows: (1) Environmental regulations exert significant impact on carbon emissions, but different types of environmental regulations exert significantly different effect on carbon emissions. Public participation environmental regulation has a control effect on regional carbon emissions, while command-based and market-based environmental regulations had no significant effect on regional carbon neutrality. (2) The heterogeneity of the impact of different types of environmental regulations on carbon emissions can also be identified from the regional impacts heterogeneity and lags impact heterogeneity. (3) The combined mandatory and market-based environmental regulations and the combined mandatory and public-participatory environmental regulations significantly inhibited regional carbon neutrality.

- 65 Motivating people to adopt electricity management system based on push–pull–mooring model/ Ho, Chien-Wei, pp. 1479–1492

With growing concerns about power and environment issues, smart grid technology, such as meter data management systems, can be viewed as a great solution to handle issues of the environment and energy efficiency. Based on the push–pull–mooring (PPM) model, this research views dissatisfaction, personal innovativeness, information quality, locatability, economic benefits, and perceived value as predictors to examine their impact on switch intention to an electricity management system. The analysis results display that dissatisfaction has no significant effect on switch intention. As a mooring variable, personal innovativeness not only influences switch intention positively, but also moderates the relationship between perceived value and switch intention. Moreover, through perceived value, locatability and economic benefits influence switch intention positively. This research fills the gap in government policies as well as energy companies and provides ponderable suggestions if a government and energy companies would like to change citizens' behavior from paper-based bill to electricity management system. The government and energy companies should not overlook the effect of personal innovativeness and perceived value and put more effort to publicize the advantages of locatability and economic benefits.

- 66 Forecasting United Kingdom's energy consumption using machine learning and hybrid approaches/ Bala, Dahiru A; Shuaibu, Mohammed, pp. 1493–1531

Investigating the current and future dynamics of energy consumption in modern economies such as the UK is crucial. This paper predicts the UK's energy consumption using data spanning January 1995 to March 2022 by comparing and evaluating the forecast performance of machine learning, dynamic regression, time series and combination modelling techniques. The analysis reveals that the seasonal ARIMA and TBATS hybrid models yield the lowest forecast errors in predicting the UK's electricity and gas consumption. Although the combination forecasts performed poorly relative to other models, machine learning techniques such as neural network and support vector regression produced better results compared to the dynamic regression models, whereas the seasonal hybrid model performed better than the machine learning and time series models. The results indicate that the UK's electricity consumption would either stabilise or decline over the forecast horizon, suggesting that it will take some years for electricity consumption to attain pre-2019 levels. For gas consumption, the results indicate that consumption would either maintain current levels or increase over the forecast period. We also show that combination forecasts do not often generate the best predictions, and therefore, choice of methodology matters in energy consumption forecasting. Overall, changing seasonal patterns, energy efficiency improvements, shift to renewable sources and uncertainties due to the COVID-19 pandemic, Brexit, and the Russia–Ukraine crisis appear to be significant drivers of energy consumption in the UK in recent times. These findings are expected to help in designing more effective energy policies as well as guide investor decisions in the energy sector.

- 67 The effects of oxygen index on soot formation of ethylene, propane and their mixtures in coflow diffusion flames/ Zheng, Dongsheng; Hui, Xin; Liu, Weitao, pp. 1532–1549

Oxygen index (OI) effects on soot formation and oxidation of ethylene, propane and their mixtures were investigated in coflow diffusion flames. Experimental results show that the peak soot volume fraction (SVF) firstly increases and then reaches the plateau region as OI increases from 0.21 to 0.42 in ethylene and 90%ethylene/ 10%propane mixture flames. However, the peak SVF firstly increases and then decreases with the increase of OI in propane flame. All these three cases present a consistent trend in terms of maximum soot yield which increases first and then decreases as OI increases. Synergistic effect was captured in ethylene/ propane mixtures while it was firstly enhanced and then mitigated when OI increases in the investigated OI range. Numerical simulations were also conducted. A significant relationship was found among flame temperature, O₂ mole fraction and SVF in terms of their spatial gradients. The non-linear trends of SVF and soot yield with OI can be attributed to the competition between soot formation and oxidation. Such competition was also indicated from polycyclic aromatic hydrocarbons (PAHs) growth. Numerical analyses revealed that small radicals including O, CH₂ and C₆H₅ contribute to the non-linear changes of PAHs in the synergistic effect.

- 68 The role of information and communication technologies in achieving hydropower sustainability: Evidence from European Union economies/ Wang, Xiaohui; Alsaleh, Mohd, pp. 1550–1572

This study aims to investigate the impacts of information, communication, and technology (ICT) factors and economic growth on the hydropower output in the European Union (EU) states from 1990 to 2021. Adopting the autoregressive distributed lag, findings from this study revealed that there could be a significant increase in the hydropower industry growth in EU14 emerging economies using ICT factors than in EU13 emerging economies. It was also discovered that economic growth makes more of a significant contribution to hydropower growth in EU13 emerging economies than in EU14 emerging economies. Findings from this study further revealed that there could be a significant decrease in the carbon dioxide emissions among the EU14 emerged economies using hydropower output than in EU13 emerging economies. This points to the fact that hydropower growth in EU region countries could significantly be enhanced by increasing the level of ICT determinants to achieve Energy Union aims by 2030. This will as well be effective in minimizing or reducing the risk effect of climate change and environmental pollution. Using the pooled mean group, mean group, and dynamic fixed effect methods, the projected calculations are observed to be valid and this study recommended that EU nations should intensify the use of ICT in achieving sustainable environmental and societal goals. The sustainability and security of hydropower production could also be enhanced through legislation. Lawmakers should become active in the green ICT aspects.

- 69 The future of the shale industry in light of the fluctuations in global oil prices/ Zuhaira, Zaid; Li, Jizu., pp. 1573–1596

During the twentieth and twenty-first centuries, the oil industry has been pivotal in influencing all countries' geopolitical, economic, and human development strategies. Until recently, the debate was about peak oil and what would happen after oil finished. However, due to technological advances and hydraulic fracturing, shale oil formations have become economically viable due to the United States' desire to achieve energy security to make a qualitative shift in the oil industry and the geopolitics of oil. Therefore, this paper deals with an economic model that illustrates the impact of oil price fluctuations to the shale oil and gas companies by analyzing the main determinants of continuity of shale oil and gas companies in production if global oil prices decline or rise. In addition, the study will investigate the effects of OPEC+ policy and Covid-19 on the future of shale oil industry. The study will discuss some future scenarios for global energy trends and predict what the shale industry will look like in the future. The study concluded the shale industry faces an internal destructive process (within the industry itself) and external (Renewable energy, OPEC and Covid-19). The stability of oil prices is a critical factor that promotes the shale industry's recovery. However, shale industry is expected to continue with low productivity growth rates and continuing government support for it.

- 70 The moderating role of natural resources between governance and CO₂ emissions: Evidence from MENA countries/ Sadaoui, Naima; Zabat, Lotfi; Abid, Mehdi, pp. 1597–1615

Despite the diversity of theoretical studies, natural resources' moderating role between governance indicators and environmental quality remains a controversial issue. The purpose of this paper is therefore to clarify the nature of this role in the Middle East and North Africa (MENA) countries from 1996 to 2017 relying on the generalized method of moment's system estimators. The empirical results reveal that corruption control, political stability, rule of law, voice and accountability, and government effectiveness increase CO₂ emissions, while regulation quality does not affect CO₂ emissions. Our findings also show that FDI and GDP increase CO₂ emissions. However, natural resources moderate the governance indicators to reduce CO₂ emissions. Therefore, policy-makers should increase public awareness of the best use of natural resources. Thus, improving governments' institutional framework will generally contribute to reducing the greenhouse gas emission levels in the MENA countries.

- 71 Transmission mechanism of public concern in waste-sorting policy: Evidence from text mining/Shi, Binfeng, pp. 1616–1636

An escalating amount of urban waste poses a significant threat to the sustainable growth of cities. Therefore, a waste-sorting policy is crucial for the advancement of humankind. The implementation of a waste-sorting policy relies heavily on public participation to ensure effective governance. This study examines public participation in urban waste-sorting by mining more than 580,000 microblog texts related to waste-sorting from 2012 to 2022, using data from Sina Weibo, China's leading social media platform. My findings indicate that (1) residents' attention to and support for mandatory waste-sorting policies varies by region; (2) widespread public interest stimulates publicity, education, and commercial entertainment related to waste-sorting policies and investment in thematically related sectors; (3) residents in regions with high education and income levels are more likely to generate waste and pay greater attention to waste-sorting policies; and (4) the promotion of waste-sorting policies affects knowledge dissemination. This study combines textual analysis and econometric techniques to offer a fresh perspective on the significance of public participation in promoting waste-sorting policies. It serves as an invaluable resource for governments to implement waste-sorting policies.

- 72 Soiling impact and cleaning techniques for optimizing photovoltaic and concentrated solar power production: A state-of-the-art review/ Benyadry, Sara; Halim, Mohammed; Khouya, Ahmed, pp. 1637–1669

Nowadays, renewable energies are capturing the world's attention, particularly in light of the phenomenon of climate change and carbon dioxide emissions, which have caused major environmental damage. As a result, many investors have recently focused on developing investments in renewable energy projects worldwide, specifically photovoltaic and concentrated solar power plant projects. These solar technologies are considered among the most profitable solutions for generating power from a natural, free, and unlimited energy source. This review paper discusses one of the most significant issues affecting the performance of these solar systems, which is known as soiling. It has been supported by several studies in various nations with different climatic conditions, which offered accurate empirical data on the degradation rate of photovoltaic and concentrated solar power systems' production due to the soiling effect. Furthermore, it provides various mitigating soiling ways, including manual and autonomous cleaning methods for both solar technologies. Ultimately, it summarizes each cleaning technique's main advantages and drawbacks, specifying its applicability according to the location characteristics and climatic conditions. Additionally, the review results reported in this work are intriguing enough to warrant further development of concentrated solar power and photovoltaic technologies.



Indian Council of Social Science Research
National Social Science Documentation Centre



Indian Social Science Periodical Literature (INSSPEL)

Indian Social Science Periodical Literature (INSSPEL) is an important indexing database. Earlier INSSPEL database covered only Economics and Political Science periodicals, but the current one will be exhaustive. It includes the Indian journals which are under UGC-CARE List, journals subscribed by NASSDOC, and ICSSR-suggested journals. The service will largely benefit the researchers who are pursuing social science research in India or in India and anyone can access this database upon his/her registration.

- 73 A hybrid WFS-CGO based approach for optimal allocation of EV charging spots along with capacitors in smart distribution network for congestion management/ Vijayalakshmi, VJ; Amudha, A; Prakash, A, pp. 1673–1702

In this document, a new methodology for the optimal allocation of capacitor electric vehicle (EV) charging points on smart grid systems is introduced. To realize a better balance between exploring and exploiting Wing suit Flying Search (WFS), the Chaos Game Optimization (CGO) algorithm is used on WFS performance. Thus, it is named the WFS-CGO approach. Here, along with reactive compensation, allocation of parking and capacitors is presented for congestion management. The proposed approach is used to limit the amount of parking space. The performance of the proposed system is tested on a IEEE 34 bus distribution network. The outcome obtained by the QGDA system is compared to existing procedures like PSO, ALO, ACSO, WFSa, and WFS2ACSO techniques. Under cases 1, 2, and 3, after EV loss, the proposed technique achieves 216.3397, 232.9558, and 265.0174. Additionally, the proposed outcomes portray that an uneven EV charging scenario may cause an important voltage imbalance that goes beyond their allowable limit of 2%.

- 74 How does the digital economy affect energy efficiency? Empirical research on Chinese cities/ Xin, Yongrong; Chang, Xiyin; Zhu, Jianing, pp. 1703–1728

Promoting high-quality economic development, boosting high-level ecological environment protection, and integrating deeply digital economy and energy efficiency has become a general trend. This paper, based on 284 prefecture-level Chinese cities from 2008 to 2018, uses the entropy weight method and super-efficient SBM-DEA model to measure the digital economy and energy efficiency (decompose into energy pure technical efficiency and energy scale efficiency), respectively. After the spatial and temporal evolution characteristics, a fixed-effect model is constructed to study the impact of the digital economy on energy efficiency. The research results show that: (1) the development of the digital economy effectively promotes energy efficiency, mainly reflected in the improvement of pure technical efficiency of energy; (2) the development of both the digital economy and the energy efficiency in China has complex spatial and temporal evolutionary characteristics, and there is heterogeneity in the impact of the digital economy on energy efficiency at the temporal and spatial levels; and (3) digital economy effectively improves energy efficiency by reducing unnecessary energy consumption through the R&D innovation effect. The development of the digital economy has far-reaching significance on the optimization and upgrading of the economic system, accelerating the improvement of energy efficiency and achieving green transformation.

- 75 What drives carbon emissions reduction in Beijing? An empirical study based on SDA and SPD/ Shi, Changfeng; Yu, Yue; Chen, Qiyong, pp. 1729–1752

A large number of studies have been conducted to examine China's CO₂ emissions problem disaggregated to the city level. However, few studies have delved further into the black box of economic production to examine the characteristics of CO₂ emissions at the city supply chain level. In the context of the reality that Beijing takes the lead in achieving CO₂ emissions reduction, this study decomposes CO₂ emissions change in Beijing at three levels: overall, supply stage, and supply chain, using structural decomposition analysis (SDA) and structural path decomposition (SPD), filling the gap in urban CO₂ emissions studies. The results show that: (i) energy consumption intensity is the most significant driver of emissions reduction, while per capita final demand is the largest factor in increasing emissions; (ii) Beijing's emissions reduction contribution is mainly reflected in the first supply stage (76.50%) and the second supply stage (18.85%); (iii) the expansion of domestic exports and thus greater demand for transportation is significant in emissions increase supply chains; (iv) the improvement of the demand structure for electricity from domestic exports contributes a large part in emissions reduction supply chains; (v) the existence of many offsetting effects, such as the ebb and flow of domestic exports on the demand for different products, has led to the loss of emissions reduction. Finally, corresponding policy recommendations are presented from the energy, industry, and demand perspectives. Our study will provide assistance in developing more microscopic policies to reduce emissions and replicating the Beijing experience.

- 76 Estimating the carbon dioxide emission levels of G7 countries: A count data approach/ Tuo, Siele Jean; Li, Chang; Gnangoin, Yobouet Thierry, pp. 1753–1772

The G7 countries account for about 40% of the global gross domestic product and emit 25% of energy-related emissions due to their energy use, releasing so much carbon dioxide (CO₂) into the atmosphere. This study uses competing count data models to model carbon emissions between 2002 and 2021. All the hypotheses are significant and with varied effects on the energy use of the G7 economies, backing the increasing levels of emissions. The findings show that emissions from manufacturing and construction have mixed effects on the energy use of the G7 countries, increasing by 2.37% and reducing by 6.65% and 8.39% in some countries. The study proves that the transport sector is the hard-to-abate sector as the effects of the transport covariate impact minimally between 6.49% and 4.13% of the G7. This means that the transport sector is the high-hanging fruit for deep decarbonization due to the low level of technology readiness. Also, emissions from solid fuels increase between 6.49% and 4.13% in the G7 countries, implying that coal consumption has peaked due to the current energy crisis. The cross-sectional dependence (CD) analysis proves a strong significant dependence among the study countries depicting the global nature of pollution. The fitness of the model was performed using the Akaike and Bayesian information criteria to determine the appropriate method to present robust and consistent results. The panel's negative Poisson regression model obtains the lowest Akaike information criteria and Bayesian information criteria values and is therefore the most appropriate model for the analysis. This will serve as a rallying point for achieving net zero emission (NZE) targets by mid-century and for scaling technologies to achieve that goal.

- 77 Machine learning-based thermo-electrical performance improvement of nanofluid-cooled photovoltaic–thermal system/ Diwania, Sourav; Kumar, Maneesh; Khetrpal, Pavan, pp. 1793–1817

Hybrid photovoltaic–thermal (hPVT) collectors are devices that allow the conversion of sun energy into useful thermal and electrical energy simultaneously. The power obtained from the photovoltaic (PV) module introduces random fluctuations into the system. While obtaining the data for PV power output in advance and for reducing the impact of random fluctuations, exact day-ahead PV power prediction is crucial. Machine learning algorithms have been proven an effective tool in PV technology for day-ahead prediction of PV-power output. This research employs the Gaussian process regression method using the Matlab environment for forecasting the hPVT collector's performance operating with pure water and Fe/ water nanofluid. A one-year historical data pertaining to solar irradiance as well as ambient temperature for Roorkee (29.8543 °N, 77.8880 °E), India location has been used to validate the proposed model. This data is utilized for day-ahead forecasting of solar irradiance and ambient temperature. The outcome elucidates that as the mass-flow rate increases, the thermo-electric performance of the hPVT collector enhances. Raising the mass-flow rate of Fe/ water nanofluid from 0.01 to 0.1 kg/ s, the cell temperature decreases by 9.35 °C and 9.47 °C, respectively, for the actual and predicted data. The thermal, electrical, as well as overall efficiency of the hPVT collector, improves by 2.73%, 7.11%, and 9.84%, respectively, using Fe/ water nanofluid ($\phi = 2\%$) in contrast to the water-cooled PVT system. Finally, results demonstrate that the outcomes obtained using the forecasted data closely follow the results obtained using the actual data. In conclusion, this analysis provides a comprehensive solution for utilizing nanofluids as a coolant in the most cost-effective ways.

- 78 Exploring the heterogeneous impact of technological innovation on income inequality: Formulating the SDG policies for the BRICS-T economies/ Adebayo, Tomiwa Sunday, pp. 1773–1792

The present research evaluates the effect of technological innovation distribution on the distribution of income using data from between 1992Q1 and 2019Q4 for the BRICS-T (Brazil, Russia, India, China, South Africa, and Turkey) nations. The BRICS-T nations present a good case for this research since this problem could be more widespread in developing countries with high prospects for economic growth. The quantile causality and quantile-on-quantile regression techniques have been used to evaluate this association. The research findings provide a range of outcomes from different countries, which can be grouped into three categories; (i) Technological innovation impacts income inequality positively. (ii) Technological innovation distribution impacts income inequality distribution negatively. (iii) The effects of technology innovation on income distribution are not evenly distributed. Significant policy ramifications are deduced that might inspire sustainable development plans in the BRICS-T nations. This research is one of the first studies to demonstrate a direct connection between income inequality and technological innovation across various quantiles within a country. The study also effectively shows how these techniques are utilized to deduce the policy ramifications of the Sustainable Development Goals (SDGs).

- 79 Exploring the heterogeneous effects of technological innovations on environmental sustainability: Do structural change, environmental policy, and biofuel energy matter for G7 economies?/ Junsong, Liu; Ibrahim, Ridwan Lanre ; Al-Faryan, Saleh; Mamdouh, Abdulaziz, pp. 1818–1849

The global economy has realized that global warming issues should not be treated with levity. Instead, conscientious and meticulous measures must be taken to address the unwavering ravaging impacts of ecological complications of which technological innovations stand out. Despite the emphasis on technology as a viable pathway to zero emissions by the recent 26th Conference of the Parties (COP26), the feasibility of achieving the global target remains vogue from the empirical perspective. Hence, this study presents the first empirically based evidence on the heterogeneous effects of technological innovations on environmental sustainability in Group of Seven (G7) countries from 1995 to 2019. For robust policy insights, the study controls for the functional roles of structural change, environmental policy, biofuel energy, and trade openness in verifying the empirical model. The empirical evidence relies on second-generation estimators comprising cross-sectional autoregressive distributed lag (CS-ARDL), augmented mean group (AMG), common correlated effects mean group (CCEMG), and panel method of moment quantile regression (PMMQR) that are robust for the issues of slope heterogeneity and cross-sectional dependence. The main findings show that the various components of technological innovations, structural change, environmental policy, and biofuel energy support environmental sustainability by exerting statistically adverse effects on CO₂ emissions. In contrast, trade openness appears as a deterrent to sustainable environment by statistically and positively impacting CO₂ emissions. Besides, the findings reveal bidirectional and unidirectional causality pathways in the nexuses investigated for G7. Based on the empirical fallouts, viable policy insights that lead to achieving the net zero emissions target are formulated.

- 80 Machine learning-based thermo-electrical performance improvement of nanofluid-cooled photovoltaic–thermal system/ Diwania, Sourav; Kumar, Maneesh; Khetrpal, Pavan, pp. 1793–1817

Hybrid photovoltaic–thermal (hPVT) collectors are devices that allow the conversion of sun energy into useful thermal and electrical energy simultaneously. The power obtained from the photovoltaic (PV) module introduces random fluctuations into the system. While obtaining the data for PV power output in advance and for reducing the impact of random fluctuations, exact day-ahead PV power prediction is crucial. Machine learning algorithms have been proven an effective tool in PV technology for day-ahead prediction of PV-power output. This research employs the Gaussian process regression method using the Matlab environment for forecasting the hPVT collector's performance operating with pure water and Fe/ water nanofluid. A one-year historical data pertaining to solar irradiance as well as ambient temperature for Roorkee (29.8543 °N, 77.8880 °E), India location has been used to validate the proposed model. This data is utilized for day-ahead forecasting of solar irradiance and ambient temperature. The outcome elucidates that as the mass-flow rate increases, the thermo-electric performance of the hPVT collector enhances. Raising the mass-flow rate of Fe/ water nanofluid from 0.01 to 0.1 kg/ s, the cell temperature decreases by 9.35 °C and 9.47 °C, respectively, for the actual and predicted data. The thermal, electrical, as well as overall efficiency of the hPVT collector, improves by 2.73%, 7.11%, and 9.84%, respectively, using Fe/ water nanofluid ($\phi = 2\%$) in contrast to the water-cooled PVT system. Finally, results demonstrate that the outcomes obtained using the forecasted data closely follow the results obtained using the actual data. In conclusion, this analysis provides a comprehensive solution for utilizing nanofluids as a coolant in the most cost-effective ways.

- 81 Analyzing the mechanism among rural financing constraint mitigation, agricultural development, and carbon emissions in China: A sustainable development paradigm/ Sun, Bohan; Sun, Ruiqi; Bai, Puxian, pp. 1850–1870

Agricultural development in developing countries generally faces increasingly severe financing constraints, and China's practice provides a model for other countries. This article investigates the impact of the policy to alleviate rural financing constraints on agricultural carbon emissions in developing countries by using a quasi-natural experiment, the “Incremental Incentives for Agricultural Loans from County Financial Institutions,” implemented in China, with data from 2005 to 2018, and with a DID approach. It is found that under the influence of this policy, the alleviation of agricultural financing constraints will significantly generate an increase in the intensity of agricultural carbon emissions, which is triggered by the fact that the alleviation of financing constraints increases the production factors invested per unit area in the agricultural production process, while the increase in the mechanization and scale of agriculture will assist to reduce the contribution of the alleviation of financing constraints to carbon emissions. The impact of financing constraint alleviation on agricultural carbon emissions may differ among places with different economic and social development and agricultural bases. Additionally, the alleviation of rural financing constraints can promote agricultural development and increase farmers' income, enabling other developing countries to adjust their policy orientation when adopting such policies, thus promoting agricultural development while controlling agricultural carbon emissions and contributing to the global emission reduction cause.

- 82 A generic algorithm-based application for pinch-exergy prediction in process industries: A case study/ Ibaaz, Khalid; Oudani, Mustapha; Kamble, Sachin, pp. 1871–1906

In the industrial sector, efficient production and optimal use of thermal energy are primary concerns for managers and engineers. Considerable research has been devoted to improving and promoting thermal energy efficiency, especially energy recovery in the context of sustainability. Pinch analysis is one of the most powerful methods in this regard. To maximise the energy recovery (MER), the pinch method is well-established in designing an optimal heat exchange network (HEN). Exergy analysis is combined with the pinch method to minimise the work potential loss (exergy loss) while ensuring maximum heat recovery. This study presents a generic algorithm built using Python language to predict and quantify energy and exergy targets in industrial processes. It provides a framework to guide experts and planners in efficiently using the combined analysis tools. The generic algorithm is based on advanced numerical and graphical tools. It provides exergy problem table algorithm (Ex-PTA) and grand composite curve (EHR and HRP) tools. For $\Delta T_{\min} = 10^{\circ}\text{C}$, the generic algorithm is implemented in a building complex case study. The energy targets for heating and cooling requirements are 316.2625 kW and 0 kW, respectively. The obtained exergy targets are less attractive given an improvement from advanced utility integration; this is due to the treated system (medium-temperature system) and not to the reliability and efficiency of the generic algorithm. To evaluate the generic algorithm calculations, they are executed in a low-temperature process in which pinch exergy analysis (PExA) has already been performed. The simulated and generated results are identical, demonstrating the reliability and effectiveness of the developed generic algorithm.

- 83 Quantifying the excess carbon footprint and its main determinants of Spanish households/ Mahía, Ramón; Arce, Rafael de, pp. 1907–1935

New evidence is provided on the determinants of the carbon footprint (CF) at the household level, using the Spanish case as an example and data from the Household Budget Survey (HBS) and the E-MRIO database. The research presents two new contributions. On the one hand, the basis of analysis on what we call ‘Excess per capita CF’, that is, the part of CF that exceeds a threshold associated with a minimum per capita consumption of each product in a household, below which level it is difficult to expect reductions in consumption. Second, the use of a quantile regression (QR) approach for the estimation of the drivers of CF. Both issues imply important changes in the consideration of the influence of some drivers considered so far in the literature, related to which CF quantile the household is in. These differences between an ordinary least squares (OLS) and the QR are especially significant for variables such as income, household size, occupation, age, household composition, housing area and area of residence.

- 84 Techno-economic feasibility analysis of grid-connected residential PV systems in Algeria/ Kaci, Ghania Mohand; Mahrane, Achour; Chikh, Madjid, pp. 1936–1966

Small-scale photovoltaic (PV) power systems have been proven to be successful in generating electricity, conserving fossil fuels, and reducing greenhouse gas emissions in the residential sector, which is one of the largest consumers of energy. In Algeria, to reduce energy consumption in this sector, the authorities are considering implementing a policy that would encourage grid-connected residential PV systems. This paper presents a techno-economic assessment of grid-connected residential PV systems in four climate zones in Algeria. This work was performed using HOMER software for two different PV system configurations, grid/ PV and grid/ PV/ battery. The technical performances of the considered systems were evaluated through the assessment of the self-consumption and self-sufficiency, while the net present value (NPV), internal rate of return (IRR), profitability index (PI), and discounted payback period (DPBP) were used to determine their feasibility. A sensitivity analysis was carried out to evaluate the effects of feed-in tariff (FiT), battery costs, and PV array capacity on the profitability of the systems. The results revealed that the grid/ PV systems are technically and economically feasible in all of the four climate zones. For the grid/ PV/ battery systems, the grant of battery costs and the development of a regional FiT system are recommended. This article provides a tool for policymakers to assess the technical and financial performance of residential solar PV systems to develop adequate policy supports and tariff structures for Algeria.

- 85 Green coordinated development from the transformation perspective: Systemic coupling and dynamic correlation/ Wu, Chengsong; Ang, Hao, pp. 1967–1986

To explore the core mechanisms of green synergistic development in China in the context of transition, this study takes 30 Chinese provinces and cities as a sample. Additionally, it is the first study to include digital finance, green finance, and ecological governance in the same research framework, and it innovatively explores the internal linkages between them from the perspective of systemic coupling and dynamic correlation. The study finds that the levels of digital finance, green finance, and ecological governance at the provincial level in China are all increasing to a certain extent. The coupling coordination degree between the three shows a development trend first rising and then falling in a transitional stage between barely coordinated and high-quality coordination, with developed regions having a higher coupling coordination degree, and less developed regions having a lower coupling coordination degree. From the dynamic correlation perspective, digital finance, green finance, and ecological governance all have a positive self-reinforcing effect, with the interaction effects being positively significant, except for the non-significant contribution of green finance to the level of digital finance and ecological governance. This study makes a series of theoretical suggestions that can optimize the transition path based on the reality of China's green development.

- 86 Magnetic particle-filled polyaniline-doped graphene oxide nanocomposite-based electrode in application of supercapacitor/ Mupit, Muazzin; Islam, Muhammad Remanul; Kooi, Ong Siew, b pp. 1987–2007

In this study, the electrochemical characteristics of magnetic particle-filled conductive polyaniline-doped graphene oxide nanocomposites (MDiPG) were investigated. The graphene oxide was chemically exfoliated from natural graphite flakes by the modified Hummer's method. The nanocomposite was characterised through thermogravimetric analysis, scanning electron microscopy, transmission electron microscopy and X-ray diffraction. Its electrochemical characteristics were evaluated by cyclic voltammetry and galvanostatic charge/ discharge tests. The nanocomposite electrode material was obtained through in situ polymerisation of polyaniline-doped graphene oxide combined with the mixing of a magnetic substance. The supercapacitor cell was composed of symmetric magnetic-derived electrodes, polypropylene separator, and 6M KOH as an electrolyte. The cyclic voltammetry curve study showed a good relation of both materials, where a high specific gravimetric capacitance was achieved at 303 F/ g.

- 87 The role of different paths of technological progress in improving China's energy efficiency/ Shao, Jun; Wang, Lianghu, b pp. 2008–2030

Improving energy efficiency is one of the most effective ways to address environmental constraints and achieve high-quality economic development. The existing literature suggests that technological progress has an important impact on energy efficiency, but ignores the role of different paths of technological progress. Herein, the impact of different technological progress paths on energy efficiency was analyzed using the dynamic panel data model and the threshold model based on the energy efficiency measurement using the Meta-frontier and Nonradial Directional Distance Function model. The findings of this study were as follows: (1) During the study sample period, a fluctuating upward trend was observed in China's energy efficiency, and there were significant differences in energy efficiency in different regions of China. (2) The energy efficiency in China could be significantly improved by domestic innovation and regional technology diffusion. Even though the imported technologies do not play a significant role in promoting energy efficiency and have no positive effect on the improvement of energy efficiency from the perspective of domestic technology absorption or foreign technology absorption. (3) The eastern and central regions of China improve their energy efficiency through domestic innovation. However, none of the technological progress paths in the western and low-energy-efficiency regions have played a positive role in promoting energy efficiency. (4) The effect of promoting domestic innovation and regional technology diffusion on energy efficiency is gradually increasing with human capital improvement, and the restriction of foreign technology import on energy efficiency has obviously decreased. In a nutshell, different paths of technological progress have differential effects on energy efficiency improvements. Based on the above results, this paper makes some targeted policy recommendations on the choice of technological progress paths to improve energy efficiency in different regions of China.

- 88 Investigating institutional quality and carbon mitigation drive in Sub-Saharan Africa: Are growth levels, energy use, population, and industrialization consequential factors?/ Appiah, Michael; Li, Mingxing; Gyamfi, Bright Akwasi, pp. 2031–2057

In view of the United Nations' Sustainable Development Goals on clean and responsible energy consumption, climate change mitigation, and sustainable economic growth (UN-SDGs-7, 11–13), this study examines institutional quality (IQ)–carbon emissions nexus in the framework of the Environmental Kuznets Curve (EKC) hypothesis. Six dimensions of IQ from the World Governance Indicators (WGIs) were used while focusing on Sub-Saharan African (SSA) countries between 1996 and 2019. After controlling for growth, energy use, and industrialization levels, the empirical results validated the EKC hypothesis for the SSA as a unit increase in economic growth initially worsens the environment while further economic expansion eventually improves the environment. However, mixed results were obtained on the effects of IQ indicators. CO₂ emissions are only substantially reduced by corruption control, regulatory quality, and the rule of law among other IQ measures. Furthermore, the causality analysis showed a unidirectional causality between growth and environmentally detrimental energy consumption levels coupled with a two-way emission-population growth causality flow as well as a two-way emissions—IQ causality channel. While economic growth, energy use, and industrialization levels undermine environmental sustainability in the SSA region via increased carbon emissions, the overall findings signal the moderating roles of IQ. Hence, the strengthening of institutions is recommended for environmental sustainability enhancement in the SSA region.

- 89 Prioritizing factors for the sustainable growth of Vietnam's solar photovoltaic power market/ Moon, Hong Eun; Choi, Si Won; Ha, Yoon Hee, pp. 2151–2177

This study investigates the factors that affect the investment environment of the renewable energy industry in emerging countries, and quantifies them to derive relative priorities, drawing on the Vietnamese solar market as a critical case. Vietnam's solar photovoltaic (PV) market was exposed to various adverse policy situations during 2017–2019. The priorities of the determinant factors were derived using analytic hierarchy process analysis, based on a survey of 20 energy experts. The priority of the factors in Level 1 include, in descending order, policies, legal framework, profitability, ease of access to finance, infrastructure, and external factors. The top five of the 29 important factors in Level 2 are level of policy implementation, policy consistency (predictability), feed-in-tariff price, incentives and subsidies for foreign (direct) investment in solar PV, fruitage remittance, and transmission/distribution lines. We demonstrate that the active establishment and implementation of policies is crucial for the development of the renewable energy market. The improvement of the grid infrastructure and measures for system integration should be supported in accordance with solar power deployment. Therefore, actively engaging the interests of various stakeholders comprehensively and in a balanced manner during policymaking can be decisive in supporting stable market growth, facilitated by partnerships between local developers and international investors.

- 90 A wavelet-based model of trade openness with ecological footprint in the MINT economies/ Adebayo, Tomiwa Sunday; Sevinç, Haktan; Kirikkaleli, Dervis, pp. 2178–2197

The acceleration of ecological footprint and trade openness are two major hot subjects that have received much attention in recent years. Thus, the current study evaluates the interrelationship between ecological footprint and trade openness in Mexico, Indonesia, Nigeria, and Turkey (MINT) nations. The study utilized time series and panel analysis between 1961 and 2018. The research provides thorough information regarding this relationship for various time and frequency sub-periods by employing the partial wavelet, wavelet coherence, and multiple wavelet coherence techniques. The results from the wavelet coherence show that in the short and medium term, there is significant comovement between ecological footprint and trade openness for Mexico and Indonesia, with trade openness driving ecological footprint positively at high and medium frequencies. Moreover, at all frequencies, trade openness drives ecological footprint positively for Nigeria and Turkey. The study validates that trade openness leads to the ecological footprint hypothesis in each nation. Furthermore, the multiple and partial wavelet coherence undoubtedly strengthens the occurrences spotted through the wavelet coherence in each nation. Based on these findings, policy recommendations are put forward.

- 91 Spatial pattern and driving factors for interprovincial water use in China: Based on SNA and LMDI/ Zhang, Chenjun; Huang, Hailiang; Chiu, Yung-ho, pp. 2198–2227

China, the world's largest developing country, faces a severe water shortage. As the government has set a goal of limiting water use to $7000 \times 10^8 \text{ m}^3$ by 2035, how to control the increase in water use will be a thorny issue for China. Unbalanced and uncoordinated regional socio-economic development is an important feature of China. Research on the interaction between provincial water use will help to optimize the rational allocation of water resources and control of water use. In this paper, SNA (social network analysis) method is first used to explore the characteristics of social network relationship between inter-provincial water use, construct a two-stage model of SNA–LMDI, and decompose the driving factors of inter-provincial water use evolution. We found the following points. (1) From 2000 to 2018, the spatial correlation network structure of water use is tending to be stable, and the stability and risk resistance of the whole network are enhanced. (2) From different angles to quantify the centrality analysis, can be found that eastern provinces located right in the heart of water network, obviously larger impact on water resources utilization in other provinces, Shanghai and Beijing is located in the former two, and central and western provinces in the edge position. (3) The national water use spatial correlation network can be divided into four blocks, net beneficial block, bidirectional spillover block, brokers block, and net spillover block. (4) Technological progress and industrial structure adjustment were the primary and secondary factors inhibiting the increase of total water use, while income increase was the main factor promoting the increase of total water use, population scale expansion had a weak role in promoting the increase of total water use. Some policy implications are put forward related to our research conclusions.

- 92 Asymmetric nexus of coal consumption with environmental quality and economic growth: Evidence from BRICS, E7, and Fragile Five countries by novel quantile approaches/ Kartal, Mustafa Tevfik; Ertuğrul, Hasan Murat; Ayhan, Fatih, pp. 2228–2247

The study analyzes the asymmetric nexus of coal consumption with environmental quality and economic growth. In this context, the study focuses on eight leading emerging countries that take place in BRICS, E7, and Fragile Five groups. Also, the study uses yearly data from 1989 to 2021 and performs novel quantile methods, such as Granger Causality-in-Quantiles and Quantile-on-Quantile Regression (QQR). Also, quantile regression is used for robustness check. The results present that (i) there are causalities from coal consumption to both environmental quality and economic growth at 10% significance, whereas quantile and country-based results differ; (ii) effects of coal consumption on environmental quality are much stronger in lower quantiles for Brazil, Indonesia, India, South Africa, and, Turkey, but in higher quantiles for China, Mexico, and Russia; (iii) effects of coal consumption on economic growth are much stronger in lower quantiles for Brazil, Indonesia, India, Russia, South Africa, and Turkey; in higher quantiles for China; lower and middle quantiles for Russia; and all quantiles for Mexico; and (iv) the robustness of the QQR results are validated. Hence, empirical outcomes underline the highly crucial effects of coal consumption on environmental quality and economic growth in the countries. The results imply that policymakers should focus on efforts to decrease coal consumption gradually by applying a macro transition plan to increase environmental quality without causing economic decline by considering changing effects of coal consumption at quantiles and countries.

- 93 The impact of non-renewable energy production and energy usage on carbon emissions: Evidence from China/ Zhang, YunQian; Li, Li; Chien, FengSheng, pp. 2248–2269

A high level of carbon dioxide (CO₂) emission has become a global issue due to extensive production and energy usage that needs regulators' attention and researchers' emphasis. Hence, the study aims to explore the effectiveness of energy production and usage on carbon dioxide emission in China. The current study has taken the electricity production from oil, coal and nuclear as the measurement of energy production, while fossil fuel energy consumption and energy use have been taken as the measurement of energy usage, and energy import has been taken as the control variable. The secondary data has been gathered using a secondary source like World Bank from 1991 to 2020. The Quantile Autoregressive Distributed Lag (QARDL) was employed by the study to examine the linkage among variables, while the Augmented Dickey–Fuller (ADF) test was adopted to check the stationarity. The results revealed that electricity production from oil, coal and nuclear has a positive connection with CO₂ emission. The findings also exposed that the FFEC, energy import, and energy use also have a positive linkage with CO₂ emission. This study monitors the policymakers while establishing regulations to control CO₂ emissions by limiting the country's energy production and usage.



Indian Council of Social Science Research
National Social Science Documentation Centre



Indian Social Science Periodical Literature (INSSPEL)

Indian Social Science Periodical Literature (INSSPEL) is an important indexing database. Earlier INSSPEL database covered only Economics and Political Science periodicals, but the current one will be exhaustive. It includes the Indian journals which are under UGC-CARE List, journals subscribed by NASSDOC, and ICSSR-suggested journals. The service will largely benefit the researchers who are pursuing social science research in India or in India and anyone can access this database upon his/her registration.

- 94 India needs a minimum income guarantee post-pandemic: the design and the cost/ Mehrotra, Santosh; Kumar, Rakesh Ranjan; Rajagopalan, Anjana, pp. 1-25
Amidst increasing joblessness and indebtedness presented by employment and debt surveys, a minimum standard of living for India's poor is under threat. The exogenous shock of COVID-19 to the incomes of the poor has made the case for a minimum income guarantee urgent. Recent schemes inspired by universal basic income (UBI) debates have gathered momentum. Rather than a quasi-UBI doing away with existing developmental programmes, this paper makes a case for and presents the design of a better method of targeting transfers as a supplement to income from livelihoods, keeping fiscal and labour market outcomes in mind.
- 95 Determinants of school dropouts in India: a study through survival analysis approach/ Garg, Mausam Kumar; Chowdhury, Poulomi; Sheikh, Illias, pp. 26-48
The present study aims to study the risk of school dropouts in India using retrospective approach to apply Cox proportional hazard model. Using the 75th round of NSSO data, it is observed that around 74 per cent of population aged 18 years and above have dropped out from school before reaching 12th standard. The survival approach provides strong causal evidence that factors like caste division, wealth quintile, type of institution, and regional difference play a pivotal role in determining school dropouts in India. Further, no interest in education, distance from school, unable to cope up/ failure in studies and financial constraint are the major reasons which elevate the risk of school dropouts. Among these reasons, no interest in education and unable to cope up/ failure in studies are related to quality of education, whereas financial constraint and distance from schooling are related to poor public-school delivery in India. Among female population, marriage is an important factor of school attrition. Therefore, the study underscores the importance of better school infrastructure and quality of affordable and accessible education to improve the school enrolment for further levels of education. The study recommends implementing school-based programmes aimed at preventing early marriage among females to mitigate the risk of increased school dropout rates.
- 96 Understanding environmentally sustainable Indian travel behaviour: an analysis of 2011 census data/ Saigal, Taru; Vaish, Arun Kr; Rao, N. V. M, pp. 49-76
Using census data of non-agricultural workers for 2011, this study aims to examine trends and determinants of travel behaviour in India. Descriptive statistics accompanied by a beta regression model of proportional outcomes are implemented on the obtained data. The study finds that men are the dominant users of motorized transport in the country. Most workers travel a short distance of less than 5 km, irrespective of area or gender. Population density, the share of married population and the share of rural population in a district significantly influence the share of environmentally sustainable travel behaviour displayed by that region. To the best of our comprehension, this is one of the primary studies elucidating the comparison of travel behaviour in rural-urban areas of Indian states. Not many studies in India have addressed the issue of influence of socio-demographic factors on environmentally sustainable travel choices. With this analysis, policymakers in the transportation sector can get a clearer idea of the behaviour and demands of different divisions of society. The findings of this study demand the evolution of infrastructure of public transportation and non-motorized transportation in the country in such a way that is both efficient and secure to neither impede the goals of empowerment or sustainability.
- 97 Financial literacy and gender gap: a study of Punjab state of India/ Bansal, Deepty; Kaur, Lavneet, pp. 77-101

Financial literacy helps individuals to make sound financial decisions by improving their level of financial knowledge, attitude and skills, hence leading to effective financial management. It promotes financial inclusion by improving access to financial products and services. This paper examines the level of financial literacy among the people of rural areas of Punjab. The study is based on primary data and a multi-stage stratified proportional random sampling method has been used to collect the data from the respondents of different districts of Punjab. The main focus of the study is to find the level of financial literacy and to analyse the gender gap in financial literacy in rural areas of Punjab. Four main components of financial literacy have been identified and a financial literacy index is formed. OECD/ INFE and NCFE methodologies for measuring financial literacy have also been used. The results of the study show a lower level of financial literacy and a significant gender gap in financial literacy among the respondents of rural Punjab. It is found that 28.3% of the males and just 9.8% of the females are financially literate. The study also highlights the impact of different socio-economic and demographic parameters on the level of financial literacy of male and female respondents.

- 98 Understanding the demographic changes in Kerala: an exploration/ Goswami, Baishali, pp. 102–121

This study examines the current trajectory of demographic transition in Kerala in the light of existing trends experienced worldwide with regard to advanced mortality and fertility transitions. The findings suggest that Kerala is yet to confirm the onset of advanced stages of transitions in line with the global experiences. In mortality, there still remains untapped potential in the state to postpone the age-specific mortality rates from degenerative diseases from the age group of 70 + further to 80 + . The study recommends, instead of considering the ‘elderly’ as a group, targeted interventions are required to address the intra-group differentials in an age-sex disaggregated manner across major killer diseases in the advanced age groups. Similarly, the total fertility rate in Kerala is hovering around 1.7 to 1.9 children per woman for over three decades showing limited signs of rapid decline further. A strong sense of ‘familism’ in the state may have postponed the onset or full experience of the advanced fertility transition and the associated societal changes, known as second demographic transition. Following these changes in fertility and mortality, a drastic decline in the share of the young workforce (aged 20–34 years) between 1991 and 2011 within the working age population has been observed and the trend may continue in the coming years as well. Void in young workers has facilitated migration of young labourers from other states. The future pace of transition, therefore, will be determined by how fast the in-migrants are integrated with the current level of human development of the state.

- 99 Mechanisation and factor productivities: the case of Kerala coir industry/ Raseena, K. K, pp. 122–131

The present research is an attempt to evaluate the impact of mechanisation on the performance of coir industry of Kerala using factor productivities. The analysis is expected to yield wider policy implications regarding mechanisation of coir industry for its betterment. The study uses primary data collected from 115 coir manufacturers of Alappuzha District by using simple random sampling. It starts with measuring the degree of mechanisation. Then various firms under coir industry of Kerala are categorised in to 4 levels of mechanisation, namely, traditional firms, low mechanised firms, medium mechanised firms and high mechanised firms. The study highlights that, at higher levels of mechanisation, the firms cannot utilise their full capacity mainly due to market inefficiencies. Both the raw materials and the product markets are inefficient to tap the full capacity of the firms. The existence of X-inefficiency may be one of the reasons for low level of mechanisation within the industry. This analysis calls for government-market interventions for better performance of this industry. At the same time the study highlights that the lower mechanised firms can perform better only if the production techniques are up to date.

- 100 Understanding backwardness in the aspirational districts of Eastern Uttar Pradesh/ Maurya, Nagendra Kumar; Misra, Roli, pp. 132–155

The Eastern Uttar Pradesh (UP), comprising 28 districts, is officially designated as the most backward region in Uttar Pradesh and each district faces situational factors of development which are unique to it. Using a household survey conducted on 560 households in Balrampur, Shravasti, Bahraich, and Siddharthnagar, this paper aims to understand the dynamics of backwardness in the aspirational districts of the Eastern UP. The study employs Gini coefficient, Lorenz curve, and MPI (based on Alkire and Foster (2010) methodology) to understand the nature and causes of income inequality and multi-dimensional poverty. The factors, which affect MPI, have been identified with the help of multiple tobit regression analysis. The findings reveal the presence of significant income inequalities among districts, social groups, and areas of residence. Multi-dimensionally poor were the highest in Shravasti (61.5%) followed by Balrampur (54.5%), Bahraich (37.6%), and Siddharth Nagar (34.9%). Regression results show that area of residence, region, caste, education level of the family head, income of the household, and out-of-pocket health expenditure, are the statistically significant determinants of the MPI. The paper suggests that the policy makers should first enhance the income levels of the household and then remove high income inequality. Providing urban amenities, education, ensuring a regular source of income along with cost effective and timely availability of healthcare services can prove more effective in reducing backwardness and making them 'Aspirational' in the real sense.

- 101 Do exports enhance savings in the developing economies? An analysis of Maizels' hypothesis/ Trofimov, Ivan D; Aris, Nazaria Md, pp. 156–185

The paper examines the effects of exports, alongside other relevant variables, on aggregate savings in developing economies over 1980–2018 period. The analysis is performed for a large panel consisting of 33 developing economies, as well as smaller panels, including economies in Latin America, Africa, Asia, the least developed and oil-exporting economies. The paper conducts a series of panels unit root tests and employs panel cointegration, autoregressive distributed lag (ARDL) and vector autoregression (VAR) models. The results were consistent across the panels: in each region (group of economies) and in developing economies as a whole, exports had positive effects on savings. The effects of GDP growth rate and non-export component of GDP were likewise positive, in line with Keynesian view of savings function and with Maizels' (Exports and economic growth of developing countries, Cambridge University Press, Cambridge, 1968) hypothesis of higher contribution of exports (than non-export part of GDP) to savings (particularly in the export-oriented economies). Foreign capital inflows and changes in terms of trade had positive and negative contribution to savings, respectively.

- 102 Determinants of economic resilience response in sub-Saharan Africa to a common exogenous shock: roles of demographic differences, exchange rate regimes and institutional quality/Nchofoung, Tii N.; Ngouhouo, Ibrahim, pp. 186–213

The objective of this paper is to investigate the determinants of economic resilience in sub-Saharan African (SSA) countries. The analyses focus on the roles played by demographic structures, exchange rate regimes and institutional quality. We use the panel data technique for 22 SSA countries during the period 1996–2018 via the system GMM method of estimation. The results of the analyses indicate that sectoral diversity, industrialisation, trade openness, human capital and population growth rate are determinants of economic resilience. Moreover, demographic trends, institutional quality and exchange rate regimes, when considered, greatly explain resilience in SSA countries. Policy implications are discussed.

- 103 Mixed-methods analysis of multidimensional conditions for the Human Development Index: a fuzzy set qualitative comparative analysis (FsQCA) study/ Yagmur, Ayten; Gürsoy, Seren; Gunbayı, İlhan, pp. 214–23

The aim of this study was to determine whether the conditions of origin (health, education, income) for the Human Development Index as well as the conditions of the Gender Equality Index, Corruption Perception Index, and Human Freedom Index created causal results. Various configurations of parameters were analyzed using set theory. Specifically, fuzzy sets qualitative comparative analysis (FsQCA) method was used. Using data from different databases for 2019, 143/ 147 countries were included in the study. As a result of the research, six most likely configurations for human development conditions emerged which are summarized.

- 104 Kazakhstan: extractive resources, governance and inclusive development/ Unceta, Rafael Aguirre, pp. 235–257

Kazakhstan has large natural resources (hydrocarbons and minerals), which have enabled it to achieve a position of relative prosperity compared with other ex-Soviet countries in Central Asia. This article aims to examine the economic and social impact that the exploitation of these resources has had on the country. More specifically, it seeks to assess the consistency of the economic growth achieved, the extent of national productive diversification, as well as the wealth distribution within the Kazakh social structure. The article also attempts to appraise these effects in Kazakhstan in relation to some of the postulates of the resource curse thesis. One of them predicts that under weak and autocratic institutional frameworks, the benefits of the extractive sector tend to be captured by elites close to power. Poverty in Kazakhstan has declined overall, albeit with peaks in recent years and marked inequalities between the country's regions. Public spending on social policies (education, health, social protection) has been disproportionate and has lagged behind that of countries with comparable economic conditions. Social deprivation and civil unrest are witnessed in the country, as evidenced by the riots that rocked some of its cities in January 2022.

- 105 COVID-19, absence from work and coping strategies with income loss in Bangladesh/ Tijdens, Kea; Klaveren, Maarten van; Adib, Ahmed; Ceccon, Daniela; Chowdhury, Tahreen Tahrima, pp. 258–279

Has workplace closure due to lockdown policies to control the spread of COVID-19 affected workplace hygiene, absenteeism, income loss and coping strategies in Bangladesh? Drawing on face-to-face interviews of 1,894 employees in tea, construction, ready-made garment (RMG) and leather sectors in September–October 2020, the study shows poor supply of disinfectant and sanitizer. Absenteeism was high in April 2020 in all sectors except tea but dropped later on. Two in three workers reported income losses, due to workplace closure. 20% of workers with reduced wages received governmental food distribution and 4% cash assistance, pointing to poor implementation and rise in poverty.

- 106 Inequalities in labour market outcomes of school leavers: Does educational track matter?/ Boahen, Emmanuel Adu; Opoku, Kwadwo, pp. 280–307

This paper uses propensity score matching to investigate the differences in labour market outcomes between graduates from general education and those from technical vocational education and training (TVET). The sixth and seventh waves of the Ghana living standard survey are pooled for analysis. Findings from the study suggest that graduates from TVET have weaker earnings compared to those from general education. The study shows that the average wage of graduates from TVET is 70% of that of graduates from general education. The study revealed that the wage advantages of general education over TVET education are only present for the group of individuals with tertiary education. We find that TVET education provides more labour market advantages than general education for individuals who cannot access tertiary education. Findings from the study point towards a widening of the wage gap between the two tracks of education over the life cycle.

- 107 The 'S' in ESG and its moderating role in determining the performance-based CEO compensation/ Rath, Chetna; Deo, Malabika, pp. 309–332

This paper aims to empirically examine the moderating role of the social disclosure aspect in determining the performance-based CEO pay. Further, we have also tested whether women directors on board and academic qualification of CEOs reinforce the effect of social scores while ascertaining the pay–performance relationship. Taking 67 companies listed in NSE Nifty 100 ESG Index spanning six years from 2014 to 2019, the PCSE model is applied as a baseline methodology. Our findings are also robust to results obtained in propensity score matching and two-step system GMM model methods. The results indicate that although overall ESG disclosures are consistently significant, the social disclosure scores can affect the compensation paid to the CEOs only in the case of gender-diverse boards. The pay–performance relationship remains unaffected by CEO's academic degree, but is significant to the ownership structure and certain social-oriented policies employed by the firm.

After the 9/ 11 attacks, Afghanistan attracted world attention. The US and international community established a democratic government and started to create a long-lasting political and economic system. Unfortunately, in August 2021, the government collapsed even before the whole foreign force left the country, so Afghanistan had a legitimate government from 2001 to 2021. Two decades have passed, and much of that time has been squandered. The main economic domains—agriculture, minerals, and transit trade—remained undeveloped; reconstruction was never completed; state-building efforts in Afghanistan failed; and the country remained as poor as it was. Investment in natural resource extraction, agriculture development, and commercial mining could build a strong and stable economy, but none of these happened. Afghanistan, having huge potential for electricity production capacity, left among the lowest electricity consumption levels of the world and regional states, a tenth of the levels of the neighbouring countries, and over 80 percent of the power supplied by bordering states. Foreign forces, contractors, and aid agencies created short-lived jobs for Afghans; the opportunities for jobs were restricted in big cities, mainly in the capital, and the richest quarter of the population living in urban areas benefited. The political crisis, corruption, insecurity, conflict, and war increased poverty rather than alleviated it. Unemployment and poverty remained widespread in rural areas, which posed a threat to government developmental efforts. Unsustainable and unreliable economic and political systems were run during the last twenty years (from 2001 to 2021). Nation building efforts have not gone as planned; Afghanistan is as poor as it was with the lowest standards of living globally, and the current government, plunged into an economic and financial crisis, is not able to provide basic goods and services. Unfortunately, Afghanistan faces an uncertain future.



Indian Council of Social Science Research
National Social Science Documentation Centre



Professional Skill Development and Networking

- **Apprenticeship**

Under the Apprenticeship Act 1961, Ministry of Labour, Govt. of India, NASSDOC provides practical training/exposure for one year to the students who have passed out their B.L.I.Sc. / M.L.I.Sc. (Bachelor or Master in Library and Information Science). They are provided with a monthly stipend and certificate at the end of the year.

- **Vocational Training Program:**

Training is available for One/ Three Months for B.L.I.Sc./ M.L.I.Sc. Students to fulfil their course requirements.

- 109 Shame and Adult Learners/ Modenos, Lisa, b pp. 5–21

In this paper, I explore the ways that educators can nurture transformative learning for adult students by engaging emotions, particularly shame. I discuss how shame mitigates adult student experiences, successes, and failures in higher education, and how a relational pedagogy of vulnerability can support adult learners. This approach not only helps adult learners but reifies liberatory education for students and teachers alike, challenging hegemonic norms in higher education that often limit and exclude adult learners.

- 110 Towards a transformative lifelong learning agenda for non-traditional students at university/ Tumuheki, Peace Buhwamatsiko; Zeelen, Jacques; Openjuru, George Ladaah, pp. 22–38

Liberalisation of higher education in Uganda meant opening its provision to the private sector, and also running a public-private mix model at public institutions. Consequently, the composition and needs of the student population at universities have changed due to flexibility in provision of study programmes and access routes. Students who had previously been excluded are also joining in increasing numbers. This article uses the feminist frameworks to equality and difference, discourses of integration and exclusion, and the concepts of Othering and Other to unpack equality of access, equity and inclusivity spaces of these new types of students. The aim is to contribute towards a learning agenda that promotes quality and sustainable educational development for all. We draw our findings from the voices of non-traditional students at a public university in Uganda. We validate these with voices of other germane actors to understand better the institutional policy and practice environments available to them. The equal opportunity provision has widened access for NTS but their equity and inclusivity spaces remain inadequately filled. To achieve sustainable inclusive and equitable quality higher education, we suggest a policy, practice and provision environment that promotes a transformative lifelong learning agenda.

- 111 A Qualitative Study on Why Older Adults May Be Reluctant to Participate in Learning Activities/ Hu, Hsiao-Mei, pp. 39–55

Maintaining the abilities and utilizing, even developing the potential of older adults is currently one of the important issues in an aged society, and participation in education is an important method to maintain and develop the abilities of older adults. Exploring the factors that discourage older adults from participating in learning activities is important in promoting their educational participation. Therefore, this paper focuses on understanding why older adults may be reluctant to participate in learning activities. This study utilized an interview approach to gain an in-depth understanding of the perspectives of older adults, with 24 participants involved in the study. The interview data was analysed using open coding, axial coding, and selective coding for qualitative data analysis and to draw conclusions. The results indicated that older adults may be reluctant to participate in education, which may be influenced by factors such as age, physical condition, education level, economic status, lifestyle, interpersonal relationships, transportation, and the types of courses available. According to the findings, two important issues regarding older adult education were identified: personal difficulties and curriculum structure. Based on the research results, this study provides suggestions for future reference in planning older adult education.

- 112 “If you’re not happy there, you’re never going to find what you want”: Examining the transfer choice process for swirllers/ Buenaflor, Shannon Hayes; Lukszo, Casey Maliszewski; LaFave, Allison, pp. 56–73

Recent research reveals that many students are “swirling,” or transferring more than one time, and not always vertically. This rise in swirllers suggests that some students choose transfer institutions that do not fit their needs. Yet, very little research examines the choices students make as they seek to transfer from one school to another, and there is even less information about the experience of adult learners who transfer multiple times. The purpose of this descriptive case study is to explore the experiences and transfer college decision process of students who have transferred multiple times. Through examining the narratives of five swirling students, most of whom are adult learners, we aim to provide recommendations on how institutions can better support the choice process of non-traditional students and adult learners.

- 113 Game-based learning: Teaching child welfare workers to engage child sex trafficking victims using “Case By Case”/ Rubenstein, Amelia; Eisler, Alexandra; Carr, Nadine Finigan, pp. 74–83
- Child sex trafficking (CST) is the exchange of something of value for any sexual act with a minor. Public child welfare agencies are responsible for serving CST victims. In response to the critical need for training child welfare workers on engaging survivors of CST, we describe an innovative game-based training model used to train over 1000 workers in Maryland. The “Case-By-Case” game uses case studies to shape small group discussions, role playing, skill drills for child welfare workers to build their capacity to identify and engage survivors. Initial evaluations indicate a significant increase in knowledge and self-efficacy for training participants. The model may hold promise for social work education in this critical area, as well as for other types of professional training for social workers.
- 114 Relevance and effectiveness of primary school teachers’ professional development policy and practices in Oromia regional state, Ethiopia/ Geletu, Girma M, pp. 84–111
- The study evaluated the relevance and effectiveness of primary school teachers’ professional development policy and practices in Oromia Regional State. The researcher used a mixed method with concurrent triangulation design. The researcher selected a total of 618 samples of the study using different sampling techniques such as purposive, convenience, stratified, and simple random sampling techniques. The data were collected from primary sources of data such as teachers, mentors, principals, supervisors, coordinating committees, and parents using questionnaires, interview, focus group discussion, document examination, and observation. The researcher analyzed the data using mean, standard deviation, one-way ANOVA and post-hoc test, and thematic narration. The findings of study showed that teachers’ professional development practices were powerless to update professional competencies and improve professional and innovative pedagogical practices in classrooms. Primary school teachers were not learning proficiently from continuous professional development practices to ensure basic and specific professional competencies required in classrooms. The implementations of reflective activities such as action researches, classroom observation, differentiated learning, collaborative learning, microteaching, and lesson studies couldn’t contribute to practical changes. The study forecasts the requirement of context specific policy framework and practical toolkit for newly deployed and experienced teachers rather than focusing on the generic policy document.
- 115 Work-integrated (adult) learning: Un-stigmatizing blue-collar adult learners in Singapore by embracing visibility/ Chua, Catherine Siew Kheng; Soo, Johannah Li Mei; Raza, Kashif, pp. 112–130
- ‘Continuous meritocracy’ was introduced in Singapore to redefine the concepts of talent and ability in Singapore society. This expanded meaning of meritocracy serves as another way to further support the SkillsFuture Singapore movement (Skillsfuture Singapore, 2023b), which was launched in 2016. ‘Continuous meritocracy’ complements Work-Integrated Learning (WIL) programs, which were to provide adult learners opportunities to integrate practical work experiences with academic learning. However, to fully operationalize WIL in the domain of adult learners, this paper points out that it is vital for the Singapore government and the different stakeholders to endorse the different forms of successes by making them more visible in the society. Utilizing Pierre Bourdieu’s key theoretical concepts, this paper discusses the relationship between blue-collar adult learners’ dispositions and WIL and proposes an exosystemic approach that is based on work-integrated (adult) learning (WIAL) to transform the Singapore blue-collar workers’ habitus with the aim to visualize ‘continuous meritocracy’ at the ground level.
- 116 Lifelong learning intention of adults in business sector: A case study from Vietnam/ Pham, Lam Tra; Dau,Thoa Thi Kim; Tran, Hoa Anh, pp. 131–151

In the context of Industry 4.0, research on lifelong learning intention (LLI) and adoption is valuable for developing a learning society. However, prior studies on LLI of adults have primarily focused on the impact of individual characteristics or environment sporadically. There is a lack of research approaching LLI of adults. In emerging markets like Vietnam, although lifelong learning is an essential competence, scholars have not focused on this issue. Therefore, this study has built a path model to explain factors affecting the LLI of Vietnamese adults in the business sector by integrating individual and social antecedents forming LLI. We empirically analyse the data obtained through a survey of 417 adults. The findings that are established using SmartPLS certify that attitude, social influence, perceived behavioural control, voluntariness and self-efficacy are significant determinants of both the perceived usefulness of lifelong learning (PUoLL) and LLI of adults. While jobs relevant in the business sector have impacted PUoLL, it is not directly the relation to LLI. The study establishes a strong positive influence of PUoLL on the LLI of adults in the business sector. The results provide important insights for policymakers, educators, scholars and learners to develop strategies for lifelong learning for adults.

- 117 Associations between education, information-processing skills, and job automation risk in the United States/ Narine, Donnette; Yamashita, Takashi; Karam, Rita, pp. 152–169

Job automation is a topical issue in a technology-driven labor market. However, greater amounts of human capital (e.g., b often measured by education, and information-processing skills, including adult literacy) are linked with job security. A knowledgeable and skilled labor force better resists unemployment and/ or rebounds from job disruption brought on by job automation. Therefore, the purpose of this study was to advance understanding of the association between educational attainment and literacy, and job automation risk. Using the 2012/ 2014/ 2017 Program for the International Assessment of Adult Competencies (PIAAC) data, survey-weighted linear regression was used to model the risk of job automation as a function of education, and literacy proficiency. Higher educational attainment (college or higher vs. less than high school: $b = -18.23$, $p < .05$) and greater literacy proficiency (score 0–500 points: $b = -.038$, $p < .05$) were associated with a decrease in job automation risk among the U.S. workforce.

- 118 Wage heterogeneity in the graduate market: Industry and public-private differences in Chile / Didier, Nicolas, pp. 170–192

Lifelong education has proven to be a significant challenge in the policy arena. The combination of formal education and labor-centered institutions has pressed the development of different mechanisms to understand the role of human capital accumulation in socioeconomic mobility and organizational performance. While the narratives of lifelong education have primed labor and educational studies across developed economies, in the case of developing economies, those logics appear contested by development economics conditions. In this paper, I use the context of the expansion of the graduate educational market and its policy reforms to analyze how a developing economy copes with a change in the availability of a highly educated workforce. Using panel and pseudo-panel data, I examine the evolution of educational returns for the graduate workforce in Chile between 1990 and 2018, considering the differences between industries and public and private sectors. The results point out that there are no public-private differences and high heterogeneity across economic sectors. The policy- and individual-level consequences are discussed.

- 119 Continuing Education and Perception of Community Learning Centres: A Case Study of the University of Ghana Community Learning Centres, Ghana / Agyekum, Boadi; Ali, Waad; Kotey, Robert Lawrence Afutu, pp. 193–215

Diverse national and local policies represent efforts to guarantee inclusive and equitable quality education and provide lifelong learning for all (SDG4). Their effects have the potential to alter local access to education. There has been a lot of research on the factors that led certain universities to embrace distance learning programs in their local communities, but relatively little has been done to examine how these changes can affect the perceptions of the larger community approach to investigating public opinion. This study investigates community perceptions of distance learning through community learning centres in Ghana's port city, Tema Metropolis – which supports various educational activities – using semi-structured interviews. Although community members expressed concerns about the possible socio-economic effects of learning centres, we discovered that individual students who used the learning centres were driven to pursue distance learning largely for its educational advantages. Our research demonstrates that the scope and speed of distance learning made possible by community learning centres has influenced local communities such as the Tema Metropolis and beyond. To guarantee that community learning centres encouraged by DE policy are administered effectively and fairly, such implications must be considered in research, policy, and planning.

- 120 Towards a theory of African learning city/ Biao, Idowu; Tsimane, Ditiro, pp. 216–232

This article discusses the UNESCO concept of learning city in relation to the peculiarities of the African city. After reviewing earlier theoretical frameworks recommended for the promotion of learning city projects within sub-Saharan Africa, the article comes to the conclusion that those earlier theoretical frameworks are prescriptive. Upon further analysis of the peculiarities of the African city, the article opines that only within a reflexive theoretical framework that is supported by traditional African pedagogies would a learning city project in sub-Saharan Africa succeed.

- 121 Egbé and Kánàkò traditional hunting methods: Implications for community policing and women's involvement in socio-economic sustainability in South West Nigeria/Anyikwa, Blessing Egbichi; Yinusa, Oyekunle; Adewunmi, Adetomiwa Anuoluwapo, pp. 233–247

Over the years, Nigerian society has the belief that given the potency of kánàkò (collision of time and space) and egbé (teleportation), it can only be applied by men while neglecting the role of women in its application for national safety. The study examines egbé and kánàkò and implications for community policing and women's involvement in socio-economic sustainability in South West Nigeria. Three research questions were raised and answered to guide this study. The study adopts the qualitative research approach anchored on ethnographic research design. A purposive sampling technique was used to select 36 participants from six (6) communities in Ōgun, Oyó, and Osun states. Recordings, observations, key informant interviews, and focus group discussions were used to gather qualitative data. Findings from the study revealed that egbé and kánàkò could be useful for military and paramilitary agencies if appropriately implemented to ensure community policing and national safety, amongst others. The study recommends, amongst others, that the hunters' association and government should properly sensitize women in the hunting profession on their role to enhance the preservation of these traditional means of fortifications and not become weapons that will render these fortifications irrelevant.

- 122 Adult learners' perceptions of distance education/ Åkerfeldt, Anna; Bergdahl, Nina; Hrastinski, Stefan, pp. 248–266

Research informing adult education teachers' didactic practices in distance education is scarce. Approaching the adult learner's perspectives on how distance education is perceived is key to informing future initiatives. This study explores adult learners' perception of distance education, concentrating on aspects such as, social presence, course structure, and perceived learning and satisfaction. A survey was distributed to teachers (n = 78) in five schools organising adult distance education. Findings show that teacher accessibility and course structure correlated positively with social presence and perceived learning and satisfaction. Overall, adult learners are satisfied with their distance teaching. A challenge facing adult distance education is to create a sense of social presence despite the high demand for flexibility. Thus, we explored learner perceptions of benefits and challenges in distance education and structured these into social, cognitive, spatio-temporal, emotional, and technical dimensions. Findings reveal that one challenge in the social dimension was a lack of connection with peers, and a benefit in the cognitive dimension referred to autonomy and self-regulation. These findings are important as educational institutions and policymakers may strive for high flexibility, which in turn may lead to lower group cohesion and a lack of social presence.

- 123 Programming for adult learners' success in developmental reading and writing: Equity and access/ Shidler, Linda; Payne, Kelly; Cutchin, Jeffrey, pp. 267–279

Research has shown upwards of 40% of adult learners entering community college may need developmental education intervention in reading and writing skills. Of those who enroll in developmental education, a large portion will never receive college-level credit and will leave the community college. This research investigated a compressed reading and writing developmental education course for adult learners in a community college setting. The newly designed course integrated skill development, contextualized the content, and connected students and teachers in a meaningful way. The developmental education reading and writing course was compressed to eight weeks and attached to a compressed (eight weeks) college-level course. The course's efficacy was analyzed using multiple patterns of outcomes including for the developmental education coursework (pre and post new design), gateway courses' pass rate, and program completion. Moreover, this research compares the outcomes to national, statewide, and institutional data. The review of the patterns of gateway course success before and after implementation (2009–2020) saw mixed results when examining career and technical programs and transfer-level programs. Results also showed that while college-level competency was enhanced, the outcome did not translate fully to the completion of programs of study.



Indian Council of Social Science Research
National Social Science Documentation Centre



Online Remote Access Portal for E-Resources (ORAPER)

Library members to access the scholarly content through E-resources i.e EconLit with full text, SocIndex with full text, Political Science Complete, Library, Information Science & Technology Abstracts (LISTA), Education Sources, JSTOR, PsycArticles, J-Gate Social Science Collection in the following link after due registration.

<https://nassdoceresources.remotexs.in>

- 124 When Actions Speak Louder Than Words: Adversary Perceptions of Nuclear No-First-Use Pledges / Talmadge, Caitlin; Michelini, Lisa; Narang, Vipin, pp.7–46

The United States has repeatedly debated whether to adopt a nuclear no-first-use (NFU) pledge. Advocates for such a pledge emphasize its potential advantages, including strengthening crisis stability, decreasing hostility, and bolstering non-proliferation and arms control. But these benefits depend heavily on nuclear-armed adversaries finding a U.S. NFU pledge credible. A new theory based on the logic of costly signals and tested on evidence from NFU pledges by the Soviet Union, China, and India suggests that adversaries perceive such pledges as credible only when: (1) the political relationship between a state and its adversary is already relatively benign, or (2) the state's military has no ability to engage in nuclear first use against the adversary. Empirically, these conditions rarely arise. More typically, hostile political relations combined with even latent first-use capabilities lead adversaries to distrust NFU pledges and to assume the continued possibility of being subject to first use. The implication is that changes to U.S. declaratory policy alone are unlikely to convince adversaries to disregard the prospect of U.S. nuclear first use without changes in these countries' political relationships or U.S. nuclear force posture. The beneficial effects of an NFU pledge are therefore likely to be more minimal than advocates often claim. Advocates of NFU emphasize a number of benefits that they argue would accrue from such a pledge, including strengthening crisis stability, decreasing hostility among nuclear-armed states, and bolstering non-proliferation and arms control goals.⁵ But these arguments depend to varying degrees on U.S. adversaries finding a change in U.S. declaratory policy credible—that is, opponents need to believe that an NFU pledge really would reduce the likelihood that the United States would use nuclear weapons first. If opponents do not find such a commitment credible, then the U.S. NFU pledge will not activate many of the salutary effects that advocates claim. Despite the centrality of adversary perceptions to the logic of pro-NFU arguments, there has been little systematic study of them—even though evidence is available from instances in which the Soviet Union (1977–1991), China (1964–present), and India (1999–present) have made such pledges.⁶ This article leverages such evidence to examine the conditions under which NFU pledges are more or less credible to adversaries. Our main finding is that these favorable conditions are stringent and rarely arise. We theorize that NFU pledges are credible only when the political relationship between a state and its adversary is relatively benign, or, if the relationship is hostile, when the state's military has virtually no ability to engage in nuclear first use against the adversary. Indeed, hostile political relations combined with even latent first use capabilities will lead adversaries to distrust NFU pledges. The intensity of this distrust will vary with the intensity of these political and military indicators, but the record of adversary perceptions suggests that the alignment of favorable conditions is often elusive. In short, NFU credibility must meet a high bar in the cases in which it is most relevant, and as an empirical matter it is rarely met. Nor is there evidence that NFU pledges themselves somehow bring about these conditions. The implication is that changes to U.S. declaratory policy alone are unlikely to convince adversaries to disregard the prospect of U.S. nuclear first use in the absence of other major changes in these countries' political relationships or U.S. nuclear force posture. Thus, the independent salutary effects of a NFU pledge are likely to be more minimal than advocates often claim. Our analysis proceeds in seven sections. First, we review the logic of NFU arguments to highlight the centrality of adversary perceptions to the purported NFU benefits of crisis stability, improved relations, and non-proliferation and arms control. Second, we draw on the costly signaling literature to theorize about the political and military conditions under which an NFU pledge will be credible. Third, we discuss our research strategy for testing this theory across the available evidence regarding adversary perceptions of NFU pledges by the Soviet Union, China, and India. The fourth, fifth, and sixth sections of the article examine adversary perceptions of each of these countries' pledges, comparing the predictions of our theory with those generated by the conventional wisdom about the benefits of NFU pledges. Overall, we find support for our argument that the political and military conditions required for NFU pledge credibility are stringent and difficult, though not impossible, to meet. We conclude with a discussion of the broader implications.

- 125 When Foreign Countries Push the Button / Schwartz, Joshua A, pp. 47–86

How strong are the constraints against nuclear use? Experimental studies find that a majority or near majority of citizens in multiple major powers approve of their own governments' nuclear strikes if they create military advantages or protect co-national soldiers. But what if the nuclear taboo only begins at the water's edge when individuals evaluate the use of nuclear weapons by a foreign government? Many policymakers believe that the international reaction to nuclear use would be severe, especially among allies. Yet prior studies have not tested this assumption. An identity-based theory of support for

nuclear weapons use proposes that this argument is incorrect. The public will display favoritism toward allied and partner countries because it views them as members of the in-group. Four survey experiments in the United States and India provide evidence for this theory. In contrast to many policymakers' expectations, public approval of nuclear use is not significantly lower for allies or strategic partners than for one's own government. As expected, however, approval is lower for out-groups, such as non-allied and non-partner countries. Absolute support for nuclear attacks is also high, even when it is foreign countries pushing the button. On balance, these findings are inconsistent with the existence of a nuclear taboo or strong non-use norm. Does public opinion significantly constrain policymakers from deciding to use nuclear weapons? Russia's 2022 invasion of Ukraine and nuclear threats against the West, China's large-scale expansion of its nuclear arsenal, the collapse of foundational arms control agreements like the Intermediate-Range Nuclear Forces Treaty, and nuclear proliferation crises with Iran and North Korea motivate the contemporary importance of this question for international security. Nevertheless, there is significant debate among scholars about the strength of constraints against nuclear use. Nuclear norm optimists argue that support for the use of nuclear weapons is low among both the public and policymakers.¹ There may even be a nuclear "taboo," whereby nuclear use is viewed as so morally abhorrent that it is not even considered.² On the other hand, nuclear norm pessimists contend that no such strong norm or taboo exists. In a series of cross-national experimental studies, norm pessimists find a majority or near majority of citizens would approve of nuclear strikes by their own government if those strikes offer military advantages or help save the lives of co-national soldiers. I contribute to this debate by theorizing and testing how individual-level public attitudes toward nuclear use differ depending on if the country carrying out the strike is one's own domestic government, a foreign ally or partner country, or a foreign non-allied or non-partner country. This is a question that prior research does not consider. Nuclear norm optimists do not theoretically or methodologically distinguish how reactions to the use of nuclear weapons would differ depending on the identity of the country that carries out the attack. Instead, the assumption is that nuclear use would generally be viewed unfavourably no matter who carries out the attack. Similarly, nuclear norm optimists typically analyse support for the use of nuclear weapons only by one's own government, leaving open the question of how nuclear use would be perceived by foreign audiences. Addressing how the identity of the country using nuclear weapons affects public support for their use matters because one unexplored possibility is that the nuclear taboo may only begin at the water's edge. In other words, members of the public may willingly support nuclear use by their own government but strongly oppose nuclear attacks by foreign governments. In 1950, National Security Council (NSC) 68—one of the most influential policy documents of the Cold War—contained a similar argument. Specifically, it suggested that the U.S. public would support the use of nuclear weapons by its own government, but the reaction in foreign countries to nuclear use would be "proportionately" negative, even among allies: "Although the American people would probably rally in support of [a nuclear war against the Soviet Union].... Many would doubt it was a 'just war'.... Many more, proportionately, would hold such views in other countries, particularly in Western Europe (emphasis added)."⁴ Many policymakers assume that a state's allies and partners would strongly disapprove of its nuclear use.⁵ I argue that this assumption is incorrect. My theory builds on both the well-established tendency toward in-group bias⁶ and Virtuous Violence Theory (VVT) in psychology.⁷ VVT holds that when people engage in or support violence, they typically do so to create or regulate social relationships, which are core to human happiness and well-being. People who engage in or support violence usually believe that it is the moral, or "virtuous," course of action. Citizens may be willing to support the use of violence—even nuclear violence—by their country's foreign allies and partners to maintain and foster such relationships in the face of a security threat. In fact, if foreign allies and partners are perceived as part of an individual's in-group, then their use of nuclear violence may be viewed as an ethical and virtuous act of in-group protection. Consequently, I hypothesize that the public should be no less likely to approve of a nuclear attack and no less likely to view a nuclear attack as unethical when conducted by an allied or partner country than by its own government. If true, then this hypothesis would contradict the expectations of NSC 68 and of many policymakers. On the other hand, I expect the approval of and the perceived morality of a nuclear attack to be lower when conducted by a non-allied or non-partner foreign country than by either (1) an individual's own country or (2) an ally or partner of an individual's own country. Given that non-allied and non-partner countries are not members of an individual's in-group, VVT suggests that their employment of nuclear weapons will be viewed as a less virtuous use of violence. But this does not mean that absolute support for nuclear use by non-allied or non-partner countries will be low, as predicted by nuclear norm optimists. If non-allied or non-partner foreign countries use nuclear weapons against other out-groups (e.g., terrorist organizations) that threaten the security of an individual's in-group, then that use of violence may still garner significant support.

- 126 Not So Innocent: Clerics, Monarchs, and the Ethnoreligious Cleansing of Western Europe/ Aktürk, Şener, pp. 87–136

Sizeable Jewish and Muslim communities lived across large swathes of medieval Western Europe. But all the Muslim communities and almost all the Jewish communities in polities that correspond to present-day England, France, Hungary, Italy, Portugal, and Spain were eradicated between 1064 and 1526. Most studies of ethnoreligious violence in Europe focus on communal, regional, and national political dynamics to explain its outbreak and variation. Recent scholarship shows how the Catholic Church in medieval Europe contributed to the long-term political development and the “rise of the West.” But the Church was also responsible for eradicating non-Christian minorities. Three factors explain ethnoreligious cleansing of non-Christians in medieval Western Europe: (1) the papacy as a supranational religious authority with increasing powers; (2) the dehumanization of non-Christians and their classification as monarchical property; and (3) fierce geopolitical competition among Catholic Western European monarchs that made them particularly vulnerable to papal-clerical demands to eradicate non-Christians. The extant scholarship maintains that ethnoreligious cleansing is a modern phenomenon that is often committed by nationalist actors for secular purposes. In contrast, a novel explanation highlights the central role that the supranational hierocratic actors played in ethnoreligious cleansing. These findings also contribute to understanding recent and current ethnic cleansing in places like Cambodia, Iraq, Myanmar, the Soviet Union, and Syria. Ethnic cleansing, genocide, civilian victimization, and coercive demographic engineering have been widely examined as puzzles of international relations scholarship, including in recent case studies on Africa, the Americas, Asia, and Europe.¹ Ethnic cleansing has far-reaching consequences. It fundamentally reshapes the cultural, economic, and political features of a political unit, and it is often associated with modern nation-building. Why are ethnoreligious minorities eradicated through a mixture of expulsions, forced conversions, and massacres in some polities but not in others? This article develops a novel theoretical explanation by focusing on the campaigns of ethnoreligious cleansing against non-Christians that swept across numerous Western European polities corresponding to present-day England, France, Hungary, Italy, Portugal, and Spain from the eleventh to the sixteenth centuries. Demographic engineering through ethnoreligious cleansing is a prominent feature of conflicts around the world. In the Middle East, Iran's demographic engineering in support of Bashar al-Assad's regime in Syria through ethnoreligious cleansing includes settling pro-Iranian Shiites from Afghanistan, Iraq, and Lebanon in strategic locations where Sunnis have been forcibly displaced or killed.² In Europe, Russia has been engaged in demographic engineering since it first intervened in Ukraine in 2014. Some international organizations and experts opine that Russia's war crimes constitute genocide.³ Ethnoreligious cleansing also occurs outside war zones. In South Asia, the military in Myanmar, supported by militant Buddhist monks, has been killing and systematically displacing Muslim Rohingya in what the United States recognizes as a genocide.⁴

- 127 Writing Policy Recommendations for Academic Journals: A Guide for the Perplexed/ Byman, Daniel, pp. 137–166

Academic research can inform decision-makers on what actions to take or to avoid to make the world safer, more peaceful, and more equitable. There are many good works on bridging the gap between policymakers and academics but few on how scholars writing in academic journals can influence the policy process. In contrast to most policy-focused research, academic journals have long shelf lives and provide space for scholars to present heavily researched empirical evidence, theories, and analyses. Long, well-researched articles can, over time, shape the broader narrative for how to think about complex issues. Scholars also tend to be more objective and less partisan than policymakers. Despite the potential importance of academic work to the policy debate, many scholars receive little training on why and how to make policy recommendations. To remedy this problem, steps are offered to guide scholars as they begin developing policy recommendations for their articles. These include recognizing the dilemmas that policymakers themselves face, considering the audience before starting to write, identifying and using policy option menus, among others. When crafting recommendations, scholars should consider the long-term implications of their research on current policy as well as recommendations that might lead to more effective approaches. At the same time, scholars should consider the costs and limits of their recommendations. Climate change. The rise of China and the U.S. response. The dangers posed by ISIS and other terrorist groups. The ability of the United Nations, the IAEA, the NPT, and other institutions to manage nuclear proliferation. Civil unrest and the potential for peaceful change. Globalization's benefits and perils. These are among the most important security issues facing the world today—and they are issues that scholars can, and do, speak to regularly. Thomas Homer-Dixon's "Environmental Scarcities and Violent Conflict," John Mearsheimer's "The False Promise of International Institutions," Andrew Kydd and Barbara Walter's "The Strategies of Terrorism," Maria Stephan and Erica Chenoweth's "Why Civil Resistance Works," and Henry Farrell and Abraham Newman's "Weaponized Interdependence" are among the most-cited articles ever published in *International Security*, and their scholarly impact is considerable.¹ Beyond their theoretical contributions, these articles illustrate the potential that *International Security* and other academic journals have for speaking to policy issues. All of them contain important ideas proposing what decision-makers should consider, do, and not do to make the world a better place. Despite the potential importance of academic work to the policy debate, new scholars receive little training on why and how to make policy recommendations. Some academic journals only pay lip service to policymaking or ignore it altogether. There are many insightful works on the gap between policymakers and academics and why it should be bridged, and a host of training workshops, government funding programs, and other efforts push in this direction, often with valuable results.² Other articles stress how to craft relevant recommendations in general.³ Yet almost all these efforts focus on activities outside publishing in top academic journals, ignoring the important role that scholarly journals should play in shaping thinking on policy. This article seeks to fill this gap, advising contributors on how to write policy recommendations for articles in both *International Security* and, I hope, other high-quality academic publications that seek to inform the policy debate. Providing helpful commentary on policy is challenging—as difficult as the academic research that leads to publication in a top journal—and it is doubly difficult when doing so for an academic journal. Publication time is measured in months or even years, in contrast to blogs and current affairs journals that offer more immediate turnaround. Policymakers rarely have time to read long articles, which are the staples of journals like *International Security*, and indeed "rarely have time to read what's not urgent in their inbox," as one senior policymaker noted.⁴ Perhaps most important, it is often difficult for academics to understand a policy, let alone the pressures that policymakers face and the conflicting objectives that they try to juggle. Yet it is vital for scholars to learn the dilemmas that policymakers face and to be relevant to public and private policy debates so that their research can help make the world a better place. Engaging policy also makes for better research. By focusing on questions important to the policy world, scholars avoid the trap of scholasticism—that is, when they concentrate on internal debates rather than on the original problems that first inspired academic research. But writing serious policy recommendations requires considerable modesty: crafting effective policy is hard, and academics should recognize the limits of their findings and the difficulties of moving the policy needle. When crafting recommendations, scholars should take advantage of their objectivity and ability to challenge the prevailing wisdom. They are also well-placed to use history to learn lessons and to draw insights from large datasets. Academic journals, for their part, endure: they have long shelf lives and allow deep dives, providing space for scholars to present heavily researched empirical evidence, theories, and analyses. Long, well-researched articles can, over time, shape the broader narrative for how to think about a complex issue such as the potentially peaceful nature of democracy or how to make deterrence more robust.⁵ They may also help provide context when unexpected events occur and the policy community has little to draw on but theory and analogy. As scholars begin crafting their articles, they should try to determine their policy audience—including leaders outside

government in industry and civil society—to identify who might read their work and who might act on it. They should consider their variables, identifying ways to maximize better outcomes or minimize worse ones. To help academics think of ways to use their findings to influence policy, one strategy is to create or draw on existing menus of policy instruments (“What can diplomats do?” “How might financial tools assist with coercion or another goal?” and so on). At the same time, scholars should consider the costs and limits of their arguments, conveying enabling conditions and the level of certainty of their findings as well as their overall recommendations. Finally, they should use their academic journal work as a springboard for writing shorter pieces in policy journals, blogs, and opinion pages.

	Indian Council of Social Science Research National Social Science Documentation Centre	
<p align="center"><u>Online Remote Access Portal for E-Resources (ORAPER)</u></p> <p>Library members to access the scholarly content through E-resources i.e EconLit with full text, SocIndex with full text, Political Science Complete, Library, Information Science & Technology Abstracts (LISTA), Education Sources, JSTOR, PsycArticles, J-Gate Social Science Collection in the following link after due registration.</p> <p>https://nassdoceresources.remotexs.in</p>		

- 128 **Productivity - One More Time/** Sridhar, R; John, Roy; Damani, Navneet, pp. 1-19
The “Make in India” initiative, launched in 2014, is receiving a fresh impetus in 2023 due to developments external to the country. Global firms want to diversify and de-risk their sources of manufacturing supply to minimize supply chain snarls that unforeseen events like the Covid pandemic could bring about and avoid overreliance on a single country like China due to geopolitical tensions. India wants to harness this opportunity fully and aspires to increase the manufacturing sector’s contribution to GDP substantially and quickly. However huge challenges have to be overcome to achieve the status of a preferred supply chain partner of global firms. This paper discusses one such challenge – firm-level productivity –and suggests some ways to overcome that challenge.
- 129 **Social Security and Contract Labor in India: A Critical Analysis /** Barik, Saroj Kumar; Mohapatra, Bighnesh Dash; Sahoo, Chandan Kumar, pp. 20-35
Social security measures for contract labor should guarantee hassle-free access to various services such as disability benefits, medical facilities for injuries, compensation for loss of earning capacity due to work-related injuries, old age, dependent benefits, maternity benefits, etc. for the well-being of the contract labor along with his or her family members. Over the past century, many countries have strengthened their social security measures for their working class, and it has been regarded as an integral part of human rights for a healthy society. In India, various legislations have been enacted to protect the rights of the workers, yet the social security benefits have not reached the contract labor in real terms. This paper attempts to critically examine the various social security measures for contract labor under various labor laws in India.
- 130 **Inter-state Analysis of Manufacturing Industries in India: 2004-05 to 2019-20 /** Khosla, Rajiv; Himanshu, pp. 36-47
Since the development strategy adopted by India after Independence could not lead to the expected results, the country witnessed a reorientation of policies with mild doses of liberalization in the 1980s and a partial lifting of controls, finally giving way to a liberalized and privatized regime in 1991. However, in the post-liberalization era, notwithstanding India’s higher economic growth performance, interstate industrial growth disparities persisted. The results of this study showed that either the customary port states or those where heavy dosages of subsidies and subventions have been doled out have performed better in terms of industrialization in comparison to their counterparts. This study offers vigorous inputs for industrial policies that can catalyze the achievement of balanced industrial growth.
- 131 **An Inter-district Analysis of Infrastructural Disparities in Karnataka/** Jain, Nimisha; Makkar, Suman, pp. 48-59
This study empirically analyses interregional disparities in infrastructural facilities in 30 districts of Karnataka by dividing it into three regions-North, South and Coastal Karnataka. The cross-sectional study is based on Karnataka’s secondary data for the year 2019. Infrastructural facilities under the categories- social, financial, economic and composite- have been indexed with the help of modified principal component analysis. The analysis confirms the prevalence of a wide range of inter-regional disparities in infrastructural facilities with that being most severe in the case of financial infrastructure followed by social and economic infrastructure. Correlation analysis shows that the districts with better infrastructural facilities depict higher levels of economic growth. Strategic investment on a priority basis should be implemented to promote the balanced development of the state.
- 132 **Pros and Cons of Investment Migration in The European Union Context/** Munyama, Killion; Mulenga, John; Bhattacharyya, Som Sekhar, pp. 60-71
This paper examines the advantages and disadvantages of investment migration from the European Union (EU) perspective. Investment migration in the EU has become a topic of substantial debate. On a positive note, it can stimulate economic growth, attract foreign capital, and enhance cultural diversity. Proponents argue that it brings job opportunities and decisively contributes to local development. On the other hand, concerns arise regarding the potential abuse, such as the risks in money laundering, tax evasion, and social inequality. Therefore, striking a balance between reaping economic benefits and mitigating associated challenges poses a significant policy challenge for EU member countries as they navigate the complexities of investment migration.

- 133 Change in Indian Railways: The Strategic HR Model Perspectives/ Bose, Indranil; Ray, Nilanjan; Biswas Soma Bose; Gupta, Madhurima Das, pp. 72-83

While dealing with change, most organizations rely on change management philosophies as well as change management models. To initiate a change, organizations make assumptions, trust their beliefs, and implement various theoretical approaches. These various elements are called the 'philosophy of organizational change,' like a tool kit for an organization. This paper attempts to describe these changes using a few wellknown management philosophies. Since change is not an abrupt one-time event, it is more appropriate to consider it as a continuous event. The study has adopted change philosophies viz.; Rational, Resource, Institutional, and Psychological, and considered change management models viz.; Kurt Lewin's Three-stage Model, Force Field Analysis, and Kotter's 8-step Model.

- 134 Bibliometrics Analysis for Advancements in Economic Games/Singh, Abhishek Kumar; Kaushik, Akash; Kumar, Arvind, pp. 84-104

This study presents the current tools used in empirical research over the last two decades. To select empirical and review papers that propagated the idea of employing economic games in the last five years, we used the Preferred Reporting Items for Systematic Review and Meta-analyses (PRISMA) framework and a bibliometrics analysis. To answer the research questions, we extracted and analyzed over a thousand documents from Scopus. In order to understand the evolution and application of economic games, analyzing the progress, the fields of progress and the relevant advantages of the same in the Human Resource Management domain will be the problems looked at in this study.



Indian Council of Social Science Research
National Social Science Documentation Centre



Bibliographies on Social science Literature

**Provides ready access to bibliographic details of
Journal Articles, Books, Proceedings, Theses and
Research Reports on selective topics from the
available resources of NASSDOC.**

- 135 The Realities Behind the Rides: Exploring Gig Workers Lived Experience in Mumbai/ Palo, Sasmita; Kumar, Vivek, pp. 175-193
This research delves into the lived experiences of gig workers in Mumbai, specifically focusing on delivery partners for platforms like Swiggy and Zomato. Using a mixed methods approach, data were gathered from 182 participants between August 2023 and April 2024. The study highlights the economic, social, and familial factors influencing the choice of gig work and investigates the working conditions faced by these workers. Key findings reveal issues related to sleep quality, job satisfaction, and overall wellbeing. The study advocates for legal reforms to improve the benefits and protections for gig workers and emphasizes the need for policies that enhance their working conditions and access to mental health resources.
- 136 Deficit of Decent Work and Vulnerability of Daily Wage Workers in India: A Multi-method Analysis/ Mohapatra, Bighnesh Dash; Sahoo, Chandan Kumar, pp. 194-210
The dominance of the informal labor market and non-standard jobs in low-income countries have been posing precarious conditions for a huge population. This paper attempts to study the deficits of standard work and potential measures to curb the vulnerability of the Decent Work concept by the International Labor Organization. The magnitude of the vulnerability of urban daily wage workers in the Indian context is studied. The study has found that the dearth of decent work standards is persistent on many fronts, namely, social protection, social dialogue, employment rights, and physical and mental well-being. State intervention in the labor market and accountability of all stakeholders is desired to protect the rights of daily wage laborers in India.
- 137 New Labor Codes: What to Expect in Organized Manufacturing/ Goswami, Diti; Kujur, Sandeep Kumar, pp. 211-218
The recent labor reforms in India have generated the hope that it will empower its workers. This article examines the possible implications of the new labor legislation on supposedly protected workers in organized manufacturing. The market-driven labor reforms remain a mirage for the workers in organized manufacturing, suggesting India has a long way to go to protect its vulnerable workers.
- 138 History and Current Dilemmas of Trade Unionism in Bangladesh/ Ullah; Anam, ASM, pp. 219-228
Trade unionism in Bangladesh has evolved through various socio-political changes, reflecting the country's complex history and economic development. This brief review covers the key stages of trade union development in Bangladesh. The roots of the trade union movement in Bangladesh can be traced back to the colonial period under British rule in India. Early labor movements arose from poor working conditions in industries such as jute mills, railways, and tea plantations. After the country's Independence in 1971, trade unionism began to decline due to various global and domestic factors. This article, therefore, delineates the historical background of trade unionism and the root causes of the current skepticism. The study not only highlights the challenges but also presents groundbreaking policy implications for developing and sustaining healthy trade unionism in Bangladesh.
- 139 Competitiveness and Labor Markets: A Metaanalysis of the Leading Economies of the World/ Minz; Johnson Abhishek, pp. 229-251
The power bloc of the Global North, epitomized by the rise of the United States seems to be challenged by the developing economies of the Global South. This analysis brings into point the question of labor markets in these economies. The socio-economic indicators that highlight the situation of labor marks a useful pointer towards labor productivity which in turn remains an important aspect of national competitiveness. This paper bases its analytical framework on the Global Competitiveness Index (GCI) developed by the World Economic Forum in collaboration with Columbia University. It then reviews the labor market situation from varied sources of the International Monetary Fund (IMF), International Labour Organisation (ILO) and World Bank.
- 140 Instrumental & Integrative Responsible Leadership Behavioral Styles & Employees Wellbeing in India / Pathak, Priyanka; Jha, Sumi. pp.. 252-267

This study examines the relationship between instrumental responsible leadership behavioral styles (IS_RLBS) and integrative responsible leadership behavioral styles (IG_RLBS) and employees' well-being (WB). The study also examines the mediating role of meaningful work (MFW) in the social learning theory contexts using a quantitative approach for data collection from 230 employees from India's manufacturing and service sectors. The PROCESS macro was used to analyze the mediation effect. The findings showed that IS_RLBS and IG_RLBS significantly and positively influenced employee well-being and MFW. Moreover, MFW partially mediated the effect of IS_RLBS and IG_RLBS on employee well-being. These findings support the basis for policymakers to make appropriate policies that appreciate successful leader behaviors and enhance employee well-being.

- 141 Learning Through Experimentation & Readiness for Change: The Mediating Role of Reflective Learning/ Pahwa, Mohit, pp. 268-284

Drawing on action learning theory and transforming learning theory, the present research aims to explore the relationship between learning through experimentation and readiness for change by analyzing the mediating role of reflective learning. Hypotheses are established and tested with data collected from 268 working professionals in public and private organizations in north India. Results of structural equation modeling and bootstrapping suggest that learning through experimentation was positively related to reflective learning. Furthermore, reflective learning mediated the association between learning from experimentation and readiness for change. The findings of the study are important for reflective learning practice at the workplace, impacting the readiness for change and will help the organization to devise strategies for executing the change processes effectively.

- 142 Impact of Behavioral Correlates on Formulation of Job Satisfaction/ Saini, Garima; Baba, Majid Mubashir, pp. 285-298

This paper attempts to show the consanguinity among the professional attitude toward team building, socio-economic and cultural intelligence, and coping strategies for job satisfaction. A sample of 314 professionals from different public and private firms was taken and Structural Equation Modeling was employed with Smart Partial Least Square (PLS) 3.3 software. The results show that team building, social intelligence, and coping strategies influence job satisfaction in general. The employees' coping strategies help them come up with different situations that impede them from attaining the task they are performing that adds to their job satisfaction.

- 143 Workplace Creativity Through Employee Mindfulness: The Moderating Role of Organizational Error Tolerance/ Jha, Rashmi, pp. 299-318

This study investigates how organizational error tolerance (ET) influences employee creativity (EC) in the Indian IT service industry by proposing a moderated mediation model, drawing from the 'Interactionist Perspective of Workplace Creativity', to examine the interplay between employee mindfulness (EMF), creative process engagement (CPE), and error tolerance. The study utilized a survey method, gathering 320 data from IT employees and their supervisors in India. Analysis was conducted using SPSS 25.0 and Amos 25.0, employing hierarchical linear modeling and the PROCESS macro to test research hypotheses. The study found support for its hypotheses, indicating that the relationship between employee mindfulness and creativity is influenced by organizational error tolerance. Creative process engagement mediated this relationship, with error tolerance moderating the effect of employee mindfulness on CPE and subsequently on creativity.

- 144 Organizational Culture, Organizational Socialization Process and Self-efficacy on Work Adjustment/ Tiwari, Shurly; Sharma, Pawan Kumar, pp. 319-339

This study investigates how socialization embedded in culture can result in behavioral outcomes that can help new entrants and the organization. The study has investigated the correlation of organizational socialization, organizational culture, self-efficacy and employee work adjustment. The authors quantitatively gathered data for the study with a large sample size. The structural equation model was used to investigate the hypothesized correlations between the study variables, with 501 useable responses. A moderately high association was witnessed among organizational culture, organizational socialization, self-efficacy, and employee work adjustment. The strongest association was between organizational socialization and self-efficacy.

- 145 Introduction: Cyber-conflict – Moving from speculation to investigation/ Shandler, Ryan ; Canetti, Daphna, pp. 3–9

Investigating cyber conflict is enormously difficult. The domain is complex, quality data are sparse, international affairs are shrouded in secrecy, and despite its seeming ubiquity, cyber power has only recently entered the battlefield. In the face of these challenges, we must rise to meet the challenges of cybersecurity research by deploying creative methods that collect verifiable and probatory data, and which allow for predictive models of cyber behavior. Against this backdrop, our special issue offers a vision of cybersecurity research that embraces a culture of rigorous inquiry based on theoretically robust, and policy relevant investigation. We highlight two key features. First, research at the intersection of cybersecurity and political science must incorporate the human dimension of cyber conflict. A human security approach to cybersecurity places people as the primary objects of security and recognizes that individual-level analyses can shed light on macro-level trends. Second, cyber research must adopt rigorous, empirical methods. We embrace a broad tent of empirical data collection techniques – spanning qualitative and quantitative, experimental, and observational research. What is integral is that all scholarship abides by the highest standards of replicability and falsifiability. The articles contained in this special issue collectively form a proof of concept that expands the horizons of cybersecurity research from a substantive viewpoint (adding a human dimension to the prevalent military/ strategic analyses), and from a methodological perspective (propounding the importance of empirical scrutiny). Together, these 10 pieces of scholarship collectively affirm that there is now a critical mass of substantively diverse and empirically rigorous research in the field of cybersecurity, and that we as a community are capable of making bold, theoretically grounded, and empirically tested claims that verify how cyber power is or is not altering the nature of peace, conflict and international relations.

- 146 Cyber-enabled influence operations as a ‘center of gravity’ in cyber conflict: The example of Russian foreign interference in the 2016 US federal election/ Vičić, Jelena; Gartzke, Erik, pp. 10–27

Russia’s cyber-enabled influence operations (CEIO) have garnered significant public, academic and policy interest. 126 million Americans were reportedly exposed to Russia’s efforts to influence the 2016 US election on Facebook. Indeed, to the extent that such efforts shape political outcomes, they may prove far more consequential than other, more flamboyant forms of cyber conflict. Importantly, CEIOs highlight the human dimension of cyber conflict. Focused on ‘hacking human minds’ and affecting individuals behind keyboards, as opposed to hacking networked systems, CEIOs represent an emergent form of state cyber activity. Importantly, data for studying CEIOs are often publicly available. We employ semantic network analysis (SNA) to assess data seldom analyzed in cybersecurity research – the text of actual advertisements from a prominent CEIO. We examine the content, as well as the scope and scale of the Russian-orchestrated social media campaign. While often described as ‘disinformation,’ our analysis shows that the information utilized in the Russian CEIO was generally factually correct. Further, it appears that African Americans, not white conservatives, were the target demographic that Russia sought to influence. We conclude with speculation, based on our findings, about the likely motives for the CEIO.

- 147 Allies and diffusion of state military cybercapacity/ Kostyuk, Nadiya, pp. 44–58

Understanding the diffusion of military capabilities is a central issue in international relations. Despite this, only a few works attempt to explain this phenomenon, focusing on threats. This article explains why threats alone cannot account for cybercapacity-development diffusion and introduces a more consistent explanation: the role of alliances. Allies with cybercapacity help partner-countries without cybercapacity start developing their own capacity to increase the alliance’s overall security by reducing mutual vulnerabilities in cyberspace. Partner-countries that lack cybercapacity are eager to accept this option because it is more favorable than developing cybercapacity on their own. Partner-countries may also start investing in cybersecurity to reduce the likelihood of being abandoned in other, conventional, domains. My new cross-sectional time-series dataset on indicators of a state’s cybercapacity-development initiation for 2000–18 provides robust empirical support for this argument and offers important implications for scholarship on arms, allies, and diffusion.

- 148 Who spies on whom? Unravelling the puzzle of state-sponsored cyber economic espionage/ Akoto, William, pp. 59–71

Traditional conceptions of state-sponsored cyber economic espionage suggest that countries with different product profiles should experience high levels of espionage between them. However, this is not what we observe empirically. Incidence of economic espionage tends to be prevalent between countries with similar product and manufacturing profiles. This suggests that we may be missing critical parts of what drives state-sponsored cyber economic espionage. To help unravel this puzzle, I develop a novel theoretical framework that proposes that because attackers seek to maximize the expected utility of stolen information, they target countries that possess similar productive capabilities as themselves. Consequently, countries with dissimilar product profiles should avoid targeting each other for espionage. I test this argument using data on states' product complexities and cyber economic espionage for a global sample of countries in a dyadic analytical framework. The results robustly show that for any pair of countries, as the complexities of their products diverge, they become significantly less likely to aim espionage attempts at each other. This study thus contributes new insights to explain why cyber economic espionage appears restricted to only a small number of advanced economies. It also illustrates the utility of large-N dyadic approaches in studying state-sponsored cyber espionage.

- 149 Abducted by hackers: Using the case of Bletchley Park to construct a theory of intelligence performance that generalizes to cybersecurity/ Lindsay, Jon R, pp. 87–102

Most cyber intrusions are a form of intelligence rather than warfare, but intelligence remains undertheorized in international relations (IR). This article develops a theory of intelligence performance at the operational level, which is where technology is most likely to affect broader political and military outcomes. It uses the pragmatic method of abduction to bootstrap general theory from the historical case of Bletchley Park in World War II. This critical case of computationally enabled signals intelligence anticipates important later developments in cybersecurity. Bletchley Park was uncommonly successful due to four conditions drawn from contemporary practice of cryptography: radio networks provided connectivity; German targets created vulnerability; Britain invested in bureaucratic organization; and British personnel exercised discretion. The method of abduction is used to ground these particular conditions in IR theory, revisit the evaluation of the case, and consider historical disanalogies. The result is a more generalizable theory that can be applied to modern cybersecurity as well as traditional espionage. The overarching theme is that intelligence performance in any era depends on institutional context more than technological sophistication. The political distinctiveness of intelligence practice, in contrast to war or coercive diplomacy, is deceptive competition between rival institutions in a cooperatively constituted institutional environment. Because cyberspace is highly institutionalized, furthermore, intelligence contests become pervasive in cyberspace.

- 150 Cyberattacks and public opinion – The effect of uncertainty in guiding preferences/ Jardine, Eric; Porter, Nathaniel, pp. 103–118

When it comes to cybersecurity incidents – public opinion matters. But how do voters form opinions in the aftermath of cyberattacks that are shrouded in ambiguity? How do people account for the uncertainty inherent in cyberspace to forge preferences following attacks? This article seeks to answer these questions by introducing an uncertainty threshold mechanism predicting the level of attributional certainty required for the public to support economic, diplomatic or military responses following cyberattacks. Using a discrete-choice experimental design with 2025 US respondents, we find lower attributional certainty is associated with less support for retaliation, yet this mechanism is contingent on the suspected identity of the attacker and partisan identity. Diplomatic allies possess a reservoir of good will that amplifies the effect of uncertainty, while rivals are less often given the benefit of the doubt. We demonstrate that uncertainty encourages the use of cognitive schemas to overcome ambiguity, and that people fall back upon pre-existing and politically guided views about the suspected country behind an attack. If the ambiguity surrounding cyberattacks has typically been discussed as an operational and strategic concern, this article shifts the focus of attention to the human level and positions the mass public as a forgotten yet important party during cyber conflict.

- 151 How cyber operations can reduce escalation pressures: Evidence from an experimental wargame study/ Jensen, Benjamin; Valeriano, Brandon, pp. 119–133

Cyber operations ranging from deception and espionage to disruption and high-end degradation have become a central feature of modern statecraft in the digital age, yet we lack a clear understanding of how decision-makers employ and respond to cyber operations in times of crisis. Our research provides theoretical mechanisms and empirical evidence for understanding how decision-makers react to cyber triggers and utilize cyber responses during crises. Specifically, we argue that the availability of cyber response creates off-ramps for non-escalatory engagement. Based on experimental wargames involving rival states with power parity in militarized disputes and randomized cyber triggers and response options, we find the availability of cyber response options reduces escalatory behavior via a substitution mechanism. In the absence of cyber response options, however, participants pursue more conventional, escalatory actions, regardless of the triggering mechanism. Our findings underscore how enhancing the availability of cyber response options might reduce strategic escalation risks and offer the space to bargain during periods of conflict.

- 152 Cyber and contentious politics: Evidence from the US radical environmental movement/ Zeitzoff, Thomas; Gold, Grace, pp. 134–149

Much of the focus of cyber conflict has been on interstate conflict. This article focuses on two interrelated questions in the important but neglected area of cyber contentious politics. First, how does the public feel about the use of different eco tactics including cyber-based tactics carried out by activists involved in the radical environmental movement, a movement that uses protest and sabotage in service of environmental causes? Second, how do anti-technology sentiment and concerns about climate change influence support for different eco tactics? To answer these questions, we conduct a survey and survey experiment on a nationally diverse sample of Americans. We find that Americans are less supportive of certain eco tactics, particularly those that involve property destruction or physical sabotage compared to cyber-based tactics. We further show that anti-technology sentiment and perceived threat from climate change are correlated with increased support for eco direct actions. Using a survey experiment we show that cyber direct actions that result in sabotage are viewed as more acceptable than kinetic actions even though they both result in the same level of destruction. Finally, we include qualitative data from interviews with activists to better understand the strategy and role that new technology and tactics play in the broader radical environmental movement.



Indian Council of Social Science Research
National Social Science Documentation Centre



Bibliographies on Social science Literature

Provides ready access to bibliographic details of Journal Articles, Books, Proceedings, Theses and Research Reports on selective topics from the available resources of NASSDOC.

- 153 Economic slowdowns and international conflict/ Jung, Sung Chul, pp. 180–196

This article examines whether and how economic slowdowns lead to military conflict. Although a weak economy (as reflected, for example, by high inflation and unemployment rates) has often been regarded as a cause of interstate conflict, this study proposes that worse economy, that is, a negative trend of growth rates, tends to make political leaders face domestic challenge from dissatisfied public and look for diversionary targets. In addition, it hypothesizes that economically troubled states will target their junior trade partners, which are less likely to retaliate harshly. The results, based on an analysis of directed dyads from 1950 to 2010, show that a state is more likely to initiate military conflict when economic growth slows. When the initiator is an autocracy and the target is a democracy, this aggression is likely directed toward a vulnerable trade partner. However, a potential initiator's political unrest does not increase the tendency to target a junior economic partner. These findings suggest that an autocracy's slowing economy can threaten a politically dissimilar and economically dependent state, and that political and economic unrest have different effects on diversionary conflict as these factors interact with the domestic and international environments. Given our globalized economy and the current erosion of democracy worldwide, we could experience more frequent conflicts between economically troubled autocracies and their junior trade partners.

- 154 The impact of negative oil shocks on military spending and democracy in the oil states of the greater Middle East: Implications for the oil sanctions/ Dizaji, Sajjad F, pp. 197–213

This study examines how negative oil shocks affect military expenditures and the quality of democracy in the oil rentier states of the greater Middle East using annual data from 1990 to 2018, inclusive. The theoretical analysis suggests that a reduction in oil revenues decreases the government spending on patronages and public goods and may challenge the political power of the incumbent leader. The results of the impulse response functions based on the estimated panel vector autoregressive models indicate that the responses of the military burden and non-military expenditures (as a percentage of GDP) to negative oil shocks become negative and statistically significant after three to four years. Reductions in the financial capability of a rentier government and spending on patronages improve the political environment and quality of democracy. However, this political improvement takes some time to develop as the government may resist the reduction in its expenditures during the initial phase of oil shocks. The policy implication of these results is informative for organizations and policymakers interested in the security and political impact of oil sanctions. Restrictions on oil exports decrease the military spending of the oil rentier states and improve their democracy indices in the long run, although the short-run impacts can be negative. These results are not sensitive to different proxies for oil abundance, alternative data on military expenditures, different indicators of democracy, and different groups of oil-dependent countries.

- 155 Do we know it when we see it? (Re)-conceptualizing rebel-to-party transition/ Zaks, Sherry, pp. 246–262

In addition to providing crucial insights, the rebel-to-party literature exhibits an unacknowledged conceptual tension: despite remarkable agreement on what 'rebel-to-party transition' should capture, there are nearly as many definitions and measures as there are studies of it. I demonstrate that conceptual imprecision has an analytic ripple effect—compromising the validity of the concept, the quality of the measure, the validity of inclusion criteria, and the results of analyses. Across four existing rebel-to-party variables, scholars only agree with regard to eight transitions (out of 161) and five failures (out of hundreds). To address these limitations, I propose a novel conceptualization and measure of rebel-to-party transition—distinguishing between failures, nominal participants (the conventional benchmark for transition), and seated participants. I demonstrate that some definitions of 'failure' induce selection effects into samples, and that minimalist indicators of 'transition' introduce problematic heterogeneity into 'successes'. My analyses reveal that nominal participants are statistically indistinguishable from failures on key traits predicting transition and, moreover, seated participants consistently drive results. As such, the new conceptual framework advances the literature on conceptual and empirical grounds.

- 156 From plastic to peace: Overcoming public antipathy through environmental cooperation/ Uji, Azusa; Lim, Sijeong; Song, Jaehyun, pp. 279–293

Citizen distrust towards the rival country is a defining feature of protracted international rivalries, undermining meaningful cooperation that can lead to mutual benefits. How might governments establish a public opinion base that is more supportive of cooperation with the rival country? We argue that information about ongoing environmental cooperation with the rival country makes citizens more supportive of non-environmental cooperation by changing their beliefs about the rival's trustworthiness and facilitating extrinsic reciprocity. We investigate this potential micro-level cooperation spillover in the context of the longstanding rivalry between Japan and South Korea. Our survey-based experiment finds that information about cooperation on marine plastic pollution shapes the public's willingness to cooperate in terms of the economy and security. Importantly, however, we find asymmetric results in Japan and Korea. While Koreans are more receptive to our positive cooperation treatment, which increases their willingness to cooperate in other domains, Japanese respondents react more strongly to the negative non-cooperation treatment, which reduces their willingness to cooperate in other domains. We offer explanations for these divergent reactions based on prior interactions between the two countries. Our findings have important policy implications for conflict-ridden areas of the world beyond East Asia that increasingly face common environmental challenges.

- 157 Introducing the parliamentary deployment votes database/ Ostermann, Falk; Wagner, Wolfgang, pp. 304–316

The Parliamentary Deployment Votes Database provides data on the voting behaviour of 301 political parties in 1,022 parliamentary votes on military missions between 1990 and 2019 in 21 countries of the Global North. This special data feature introduces the database and presents descriptive statistics and basic patterns on some of its key variables: general, political, and regional characteristics of missions and votes themselves; the level of agreement; and party-political contestation. The number of deployment votes has increased over the course of the 1990s and then fluctuated around a stable annual average of 40 to 50 votes. At the same time, legislative–executive relations in security and defence policy and, as a consequence, the number of deployment votes, continue to differ substantially between countries. Whereas support for military missions has increased over time, the degree of contestation, as measured by an agreement index, differs considerably across the countries under study. Whether a political party supports a military mission depends not only on it being part of a governing coalition or in opposition but also on its political ideology: support is lowest among parties of the Radical Left, increases among green and social-democratic parties and peaks among liberal, conservative and Christian-democratic parties. Radical-right parties are less supportive than centrist parties but more supportive than radical-left parties. Regional peculiarities notwithstanding, this pattern can be found in Western and Eastern Europe, East Asia and North America. The database will be interesting for scholars of the democratic politics of military missions and particularly legislative–executive relations and political parties in security and defence policy, providing the foundations for a comparative analysis of different missions, the ideological foundations of contestation, government–opposition dynamics and legislative–executive relations in security and defence policy.

- 158 State capacity matters in ‘the middle.’ A new perspective on domestic terrorism/ Chae, Seung Hoon; Kim, Wukki, pp. 366–382

When it comes to domestic terrorism (DT), state capacity matters in ‘the middle.’ Our article aims to bring together two apparently separate strands of terrorism research: one concerning the effects of regime type; and another concerning the effects of state capacity. We argue that state capacity can reduce DT in anocracies, but not so much in full dictatorships and democracies. Terrorists seek to maximize the reach of their attacks by exposing themselves to a larger audience. As a result, regimes with higher audience costs tend to be more vulnerable to domestic terror attacks. In anocracies, there is room for state capacity to influence the audience costs of a domestic terrorist attack. In full democracies and dictatorships, on the other hand, state capacity has little influence on the audience costs of DT. Consequently, if previous studies have purported linear, U-shaped, and inverted-U-shaped links between democracy and terrorism, we argue that the shape of the relationship is contingent on the level of state capacity. Theoretically, we substantiate our argument with a two-player simultaneous game between a terrorist group and a government. On the empirical side, we conduct a series of negative binomial panel regressions upon a time-series cross-sectional dataset of no less than 108 countries from 1970 to 2007.

- 159 Cyber scares and prophylactic policies: Crossnational evidence on the effect of cyberattacks on public support for surveillance/ Arsenault, Amelia C; Kreps, Sarah E; Canetti, Daphna, pp. 413–428

While conventional terrorism has long been associated with enhanced support for surveillance, scholars have not determined whether variation in the type and outcome of terror attacks, including those emanating from cyberspace, influences public support for these policies. Further, existing studies typically examine public opinion in a single country, thereby failing to investigate cross-national trends in support for surveillance. In this article, we outline a theoretical relationship between cyberattacks and support for surveillance measures and then, through survey experiments conducted in the United States, United Kingdom, and Israel, explore whether variation in both the type (conventional or cyberterrorism) and outcome (non-lethal or lethal outcomes) of attacks influences support for a range of surveillance tactics. We find that while participants do not base their support for surveillance on attack type or outcome and do not differentiate between surveillance tactics when formulating their preferences, there are considerable cross-national differences in support. Participants from Israel generally responded more favorably to all forms of surveillance, independent of experimental treatment, with British respondents demonstrating high levels of support for CCTV cameras. American respondents, however, were generally less supportive of surveillance measures across treatments, with the differences being most notable in their relative reluctance to support the use of CCTV cameras. These findings have important implications not only for the sustainability of national policies but also for international collaboration to manage emerging risks.

- 160 Rebel human rights abuses during civil wars: Introducing the rebel human rights violations dataset/ Walsh, James Igoe; Conrad, Justin M; Whitaker, Beth Elise, pp. 477–488

Contemporary studies of civil conflict focus heavily on combatant treatment of civilians. Research on human rights (HR) abuses committed by states has benefitted from several widely available datasets on state violations. By comparison, researchers and policymakers have been limited by a dearth of data on violations committed by rebel groups. We introduce a new resource, the Rebel Human Rights Violations (RHRV) dataset, which measures the frequency with which rebel groups engage in eight HR abuses. The data include information for all rebel groups around the world between 1990 and 2018, and capture a wide range of violations, including arbitrary killing, detention, forced recruitment, property damage, torture, sexual violence, forced displacement and movement restriction. The RHRV provides new opportunities for researchers and policymakers to analyze an important aspect of civil conflict: the abuse of civilian populations by rebel groups.

- 161 Introducing the Women's Activities in Armed Rebellion (WAAR) project, 1946–2015/Loken, Meredith; Matfess, Hilary, pp. 489–499

This article introduces the Women's Activities in Armed Rebellion (WAAR) project, a multi-methods project that includes a cross-sectional dataset of women's participation in more than 370 organizations fighting in civil conflicts between 1946 and 2015. The dataset features 22 measures of women's participation in rebel organizations: it includes prevalence and presence measures of women's participation in combat, non-combat and leadership roles; details on all-female units within groups (and their primary focus – combat or support activities); and presence measures for types of support work (disaggregated into clandestine work, outreach to civilian populations and logistical support) and types of leadership activities (military or non-military) that women contribute. The WAAR project also includes a detailed, qualitative assessment of women's involvement in each organization, comprising an approximately 360-page handbook of female rebel participation in the post-WWII period. This article describes the WAAR project and suggests avenues for future research leveraging these data.

- 162 Infrastructure and authority at the state's edge: The Border Crossings of the World dataset/ Kenwick, Michael R; Simmons, Beth A; McAlexander, Richard J, pp. 500–510

The Border Crossings of the World (BCW) dataset explores state authority spatially by collecting information about infrastructure built where highways cross internationally recognized borders. This geolocated information is recorded using high-altitude imagery from 1993 to 2020. We describe how the data were collected, demonstrate the dataset's utility, and offer advice and best practices regarding use of the data. These data present clear evidence of visible and long-term state investments in authoritative displays of states' intention to 'filter' entry into and exit out of their national jurisdiction. Researchers can use these data to test theories on the causes and consequences of border hardening for security outcomes, border management cooperation, political violence, terrorism, trade and migration flows, transnational crime patterns, and human rights conditions. Because the data are precisely geolocated, they are easy to combine with existing spatial datasets.

- 163 Listening to the cultural acoustics of migrant voices: The archived conversations of the British Broadcasting Corporation and the British Library's 'Listening Project'/ Solanki, Tanvi, pp. 17–35
I examine the cultural acoustics of voice and listening in relation to the experience of migration and displacement through an analysis of a selection of digitized audio recordings of intimate one-on-one conversations between asylum seekers originally recorded by local British Broadcasting Corporation's radio stations in booths set up throughout the United Kingdom, with the unedited recordings digitally archived by the British Library for the public. My approach to this archive is constituted by a concept and practice I call listening to difference. My case studies are two Somali siblings, a Syrian father and son, and two friends from Algeria and the Congo, and their relationality to the norms of Standard British Listening. My aim is to show how listening to these conversations can make us aware of our own limiting preconceptions in our listening and when and why they occur. Listening to ourselves listening will work against aurally mediated racial ideologies as it necessitates reflecting upon our own automatized, enculturated biases, as well as that of technologies of recording and transcription such as automated speech recognition. It challenges preconceptions about those voices marked as deviating from unmarked norms long established by the legacies of European Enlightenment humanism. Critically listening to those who are othered and belong to communities radically different from our own involves the exposure of aural power differentials and is particularly urgent during a time of an unprecedented increase of refugees accompanied by an increased controlling of national borders antagonistic to refugees and immigrants.
- 164 Beyond door policies: Cultural production as a form of spatial regulation in Amsterdam nightclubs/ Koren, Timo, pp. 36–51
Understanding regulation is key to identifying and understanding the mechanisms and patterns that (re)produce social inequalities in nightclub production. Roughly speaking, researchers have focused on two forms of regulation: governmental regulation and club-led regulation. First, city councils regulate nightlife through licensing, zoning laws, nightlife districts and urban redevelopment. Second, clubs have their own incentives to regulate spaces of consumption: to ensure safety, to increase middle-class audiences' spending power and to attract audiences with high subcultural capital. Research in this vein has so far mainly focused on door policies. However, in analysing club-led regulation, a more nuanced, intricate understanding of cultural production is key. Using David Hesmondhalgh's cultural industries framework, this research argues that existing work on regulation presupposes pre-existing demand, neglecting that nightclubs also actively create demand. First, it highlights that clubs employ other, less visible but nonetheless exclusionary, production practices that are in effect before audiences even reach the door: hiring external organisations, genre-based formatting, locational strategies and guest lists. Second, it decentralises the role of door policies. Understood in relation to other nightclub cultural production practices, door policy research does not account for nightclubs' assessments of door policies, venues' financial precarity, social networks and the need to constantly attract new audiences. By doing so, I examine the workings of power in urban cultural economies by understanding cultural production as a form of spatial regulation. The research is based on 29 interviews with 36 Amsterdam-based nightlife promoters and 111 hours of short-term ethnographies in clubs and at industry events.
- 165 The spatialization of music and politics in festival spaces: The social, symbolic and emotional structuring of the Festival of Political Songs in the German Democratic Republic/ Grüning, Barbara, pp. 52–69

This article examines the genesis and development of the Festival of Political Songs (Festival des Politischen Liedes) in East Berlin under the German Democratic Republic from 1970 to 1990, looking at it as one of the main engines of the German Democratic Republic-musical field in the last twenty years of its existence. In this regard, the analysis of the empirical material (in-depth interviews and video recordings) serves first to outline the main social and cultural processes which interested the Festival from its inception to its end, and second to reflect upon some specific features of the Festival as an 'extraordinary event' in light of Bourdieu's concept of field. Departing from this perspective, I examine the genesis and development of the Festival, focusing especially on the contrasting effects produced by its institutionalization and internationalization and the ways these impacted both the Festival and the musical field: from the creation of music scenes, to the development of professional careers in different fields of cultural production and the mixing of mainstream and alternative musical trends. The final aim is to highlight the different understandings of publicness and openness associated with the Festival that defined its social, spatial and emotional structure during its twenty-year lifespan.

- 166 From London to Bali: Raymond Williams and communication as transport and social networks/ Subijanto, Rianne, pp. 129–145

This article unearths Raymond Williams' approach to communication as transport and social networks. Existing literature argues that the field of communication's withdrawal from the study of transport leads to at least two setbacks: media presentism and a narrowed meaning of communication and culture. This article excavates Williams' concept of 'communication as transport and social networks' by first revisiting his larger method of cultural materialism that sees communication as a whole complex assemblage of different modes of communication to facilitate connection. This is then followed by a discussion on the use of this concept in his various works and, more intensively, in *The Country and the City*. To emphasize Williams' relevance to contemporary contexts, the next part of the article deals with an analysis of how digital media and contemporary transport networks facilitate the reproduction of Bali as a paradise. This article calls for a more dialectical understanding of communication that includes the inextricable relations between mobility and sociality, the material and the symbolic, and the transmission and the ritual in shaping human lives.

- 167 Mapping the music of migration: Emergent themes and challenges/ Gardner, Abigail; Hansen, Kai Arne, pp. 3–16

This article adds to existing scholarship on music and migration by presenting and reflecting on the work undertaken in the project 'Mapping the Music of Migration' (2019–2021, www.mamumi.eu), which comprised partners from seven European countries and focused on storytelling about music and its potential to enable intercultural exchange and counter negative stereotypes. The key activities of the project involved the collection of migrants' 'Song Stories' – personal stories about music – which were made publicly available through an interactive app. The article outlines the background and findings of the project and presents critical reflections on the various circumstances that shaped our process and results. The main objective is to give readers an insight into the key challenges and outcomes of the project, thereby calling attention to a range of themes and tensions that are of relevance to future studies of music and migration.

- 168 On joining the editorial team of European Journal of Cultural Studies in its 25th year/ Kay, Jilly Boyce, pp. 146–156

In this essay, I discuss my appointment as co-editor of this journal within the context of its history across its 25 years of life thus far, as well as within the field of cultural studies more broadly. I briefly consider the value and crucial importance of conjunctural analysis, cultural studies' complex but crucial relationship to Marxism, and the generative feminist possibilities of engaging with, rather than ignoring or wholly disavowing, 'classic' theories of media and culture that may be problematic or limited. I also briefly identify some areas of inquiry that I see as important focal points for future cultural studies scholarship, particularly around contemporary mutations of popular and conservative feminisms, popular left politics, and the 'culture wars'.

- 169 Becoming apart: Drag and the practice of immanent resistance in postsocialist Belgrade/ Filipović, Andrija, pp. 159–174

This article considers forms of drag in Belgrade that are critical of contemporary Serbian society and analyzes ways in which drag both participates in, and critically relates to, the postsocialist transitional socioeconomic environment, especially the creative industries. Becoming a part of the creative industries (re)produces drag, as well as lesbian, gay, bisexual, and transgender subjects as consumers, while the ‘becoming apart’ of drag offers possible sites of resistance to the dominant cultural, social and economic model. As some performances – by the Ephemeral Confessions collective, Dajana Ho and Dragoslavia – are critical of both current forms of capitalism and of cis-hetero-patriarchal regimes of gender and sexuality, as well as of the ethno-nationalist narrative that has shaped the region of former Yugoslavia, analysis of the Belgrade drag scene results in a conceptualization of a critical practice that is immanent to what is being critiqued – immanent resistance.

- 170 Analyzing the Justice and Development Party’s changing discourse on the headscarf issue as the constitutive part of its drift toward authoritarian politics in Turkey/ Yazar, Betül, pp. 175–194

Despite its long history since the late Ottoman period in Turkey, this article focuses on the headscarf issue within a particular period; since 2002, when the Justice and Development Party has been in power. Women’s issues have always occupied a large space in the Justice and Development Party’s project(s), which articulate diverse narrative lines ranging from conservatism to liberalism. The article aims to unravel this diverse insight into the Justice and Development Party’s politics within the context of its recent political drift toward authoritarianism while particularly focusing on its headscarf discourses. It argues that the Justice and Development Party’s political drift toward authoritarianism resulted in the replacement of the earlier politics of consensus/ ‘non-defiance’, which refers to a conservatism that denies radicalism and avoids emphasizing controversial issues like the headscarf, with the politics of dissensus/ defiance that reveal social tensions and political conflicts such as those between Islamic and secular sectors, through revitalizing the old debate on the headscarf issue. In this sense, the lifting of the headscarf bans in public institutions in 2008 can be read as a symptom, not of the Justice and Development Party’s earlier liberal stand, but of the beginning of its shift toward authoritarianism based on its religious-nationalist project, which made use of this liberal right of pious women in enhancing the gaps between oppositional groups and in consolidating its social basis. This earlier attempt has been followed by continuous use of the headscarf as a symbol drawing a border between ‘us’ and ‘them’ and signifying outrages and moral crisis for which the Justice and Development Party blamed the oppositional groups. Within this context, the article questions the ways in which the headscarf as a political symbol along with other conservative policies targeting female bodies and sexualities took a part in the constitution and consolidation of the Justice and Development Party’s radical right alliance and its authoritarian regime.

- 171 The Good, the Bad and the Disney: Employing princesses to examine Hungarian tweens’ understanding of gender/ Zsubori, Anna, pp. 195–214

By relying on diverse scholarly works within several fields – such as communication, cultural, feminist media, film and tweenhood studies – on the one hand, and conducting audience research with Hungarian informants on the other, this interdisciplinary study, as part of a bigger project, examines Hungarian tweenagers’ negotiation of gender. It does so by investigating the concept of ‘the’ princess, including but not limited to Disney Princesses, while offering unique contributions on both theoretical and methodological levels. Theoretically, it shines a light on the limitations of applying Western, post-feminist, liberal theories in a non-Western, post-socialist and ‘illiberal’ environment, and it discusses complexities of the Princess Phenomenon which have been overlooked in academia. From a methodological perspective, it presents innovative short-term ethnographic approaches, specifically in terms of conducting a gender-centred audience study with young people in an anti-gender milieu. To achieve these objectives, this work first introduces the historical, social and political contexts in contemporary Hungary. This is followed by a discussion of the theoretical and methodological approaches which it was necessary to consider before undertaking the fieldwork in Hungary. The article then analyses Hungarian children’s notions of gender by discussing their ideas about ‘the’ princess as a concept. Finally, as a summary, this study outlines its contributions to diverse academic disciplines.

- 172 Beyond ‘reifying whiteness’ in feminist media studies/ Dosekun, Simidele, pp. 295–308

In this talk, I turn a Black and transnational feminist reflexive eye on the field of feminist media studies, to surface for critical consideration a certain ‘story that we tell’ about race, more specifically about the visibly dominant whiteness, in the global North, of the kinds of media texts and cultures that commonly comprise our objects of analysis. I show that there is a repeated critical claim to the effect that the texts and cultures ‘reify whiteness’. Interrogating and faulting some of the variously methodological, epistemological and ontological premises and effects of the claim, I argue that it is itself performative: it contributes to the very reification that it decries, not least by seemingly serving to explain and justify why, in a given piece of scholarship, further questions about race cannot really be attended to. I argue that we need to go beyond reifying whiteness in feminist media studies, so that we can attempt to offer more complete and rigorous consideration of the racial politics of what we study and how, and indeed who we are, our various positionalities, as not only scholars of media but also audiences, consumers and users ourselves.

- 173 #GirlBossing the university side hustle: Entrepreneurial femininities, postfeminism and the veneer of ‘female success’ in times of crisis/ Allen, Kim; Finn, Kirsty, pp. 333–351

Against a backdrop of the growing crisis in higher education, the economic fallout of the COVID-19 pandemic and a longer-term precarisation of the youth and graduate labour market, the last 2 years have witnessed an increased visibility and promotion of flexible, entrepreneurial and often digitally mediated forms of self-employment addressed at young women, including the ‘side hustle’. With media declarations such as ‘the university side hustle has come of age’, universities themselves have begun embedding initiatives that seemingly help students launch a ‘student side hustle’ as they turn passions into entrepreneurial projects. The student side hustle has been advocated as a feasible way of not only supplementing income while studying but also investing in one’s future employability in the context of increasingly uncertain graduate outcomes. In this article we connect the emergence of the student side hustle to a broader postfeminist landscape in which (young) women are invited to engage in entrepreneurial self-employment through the promise of ‘passionate work’, financial autonomy and time-freedom. We demonstrate that in the context of higher education, where women outnumber men and dominate the degree subjects increasingly badged as ‘low value’ due to declining graduate outcomes, institutional incitements to engage in the student side hustle are distinctly gendered. Crucially, we contend that this framing and promotion of the student side hustle – in which women become the ‘poster girls’ of entrepreneurialism – works to facilitate and sustain the myths and ideals of postfeminist success while masking the ongoing crises and gendered inequalities that underpin contemporary higher education and the graduate labour market.

- 174 Best friends forever – really? The group of friends as the ideal model of sociability in children’s animations/ Saarenmaa, Laura, pp. 215–231

This article explores the intensifying friendship ideal current in children’s media culture. The article argues that children’s animations, such as Lego Friends, educate children about a desirable model of sociability, namely that of the closed group of friends. While the recent research on friendship has focused on the technological mechanisms of friendship in specific textual practices and platforms, the concept of friendship itself and its cultural re-significances has received less attention. In this analysis, Lego Friends is approached from the perspective of popular cultural meaning making: how and in relation to what are friendships represented as not only valuable but also necessary social relationships. Drawing on Stuart Hall’s theory of articulation, the article suggests that the intensifying friendship ideal reflects the contemporary adult concern of social exclusion, rooted in neoliberal economic insecurities.

- 175 The body as theme and tool of activism in young people/ Martins, João Carlos Figueira; Campos, Ricardo Marnoto de Oliveira, pp. 232–252

The body occupies a prominent place in the social sciences literature, where it is understood to be an important social marker. The body is either used to classify and supervise individuals and certain social groups, or as a tool for individual agency. The body might, for this reason, be conceived as a political device in the sense that the structures of power and dominant groups have always applied methods or control, surveillance and regulation over it. Thus, several social groups have, throughout history, been stigmatised, diminished or supervised based on their skin colour, gender or sexual orientation. Equally, the body also functions as a tool of resistance, disruption and affront to the ruling norms and the status quo. In this article, we base our arguments on research developed in Portugal on young people's activism and citizenship. Our project focussed on creative forms of engaged citizenship and political participation encompassing a range of practices, particularly in the context of activism. This article is based on interviews conducted with young activists, focussing on the way in which the body assumes a central role in their political efforts and artistic practices. We have concluded that it occupies a prominent place in their discourses, becoming either a source of inspiration or a tool for their activist endeavours.

- 176 'It takes a long time to become young': A critical feminist intersectional study of Vogue's Non-Issue/ Kenalemag-Palm, Lane M, pp. 253–274

Older female celebrities are increasingly visible in popular media culture, but what kinds of representations are being offered? By deploying a feminist intersectional perspective and adopting Multimodal Critical Discourse Analysis (MCDA), this article interrogates how British Vogue's Non-Issue communicates ideas and values about ageing and how the magazine constructs discourses through which women's ageing is understood. The analysis shows that the Non-Issue represents older women as radical and empowered subjects. The rhetoric of freedom and choice, central to postfeminism, is prominent in the magazine and aligns with neoliberal discourses of successful ageing. Such discourses encourage women to confine themselves to never-ending, rigid forms of self-surveillance, self-monitoring and self-disciplining that ultimately subject the older female body to a 'new' set of bodily inscriptions and prescriptions that reinforce patriarchal standards of beauty. These standards of beauty are, however, challenged in the magazine through a recuperated do-it-yourself discourse of punk spirit rebellion that works to commodify women's empowerment, yet still reduces women to how they look.

- 177 Post-racial politics, pre-emption and in/ security/ Sharma, Sanjay; Nijjar, Jasbinder S, pp. 275–294
 Militarized policing strategies aiming to identify and nullify risks to national security in Western nations have become central to the biopolitical regulation of racialized populations. While the disproportionate impact of pre-emptive counter-terrorism policing on 'Muslim' populations has been highlighted, the post-racial techno-politics of predictive policing as a mode of securitization remain overlooked. This article argues that the 'war on terror' is governed by a state of crisis that conditions a pre-emptive biopolitics of containment against (unknown) future threats. We examine how predictive policing is progressively dependent on the computational production of risk to avert impending terror. As such, extant forms of counter-terrorism algorithmic profiling are shown to mobilize post-racial calculative logics that renew racial oppression while appearing race-neutral. These predictive systems and pre-emptive actions, while seeking to securitize the future by identifying and nullifying suspects, evasively remake race as risky, thus rendering security indistinguishable from insecurity. Hence, we assert that state securitization is haunted by a profound sense of racialized dread over terrorism, for it can only resort to containing, rather than resolving, the perceived threat of race.
- 178 Beyond 'reifying whiteness' in feminist media studies/ Simidele, Dosekun, pp. 295–308

In this talk, I turn a Black and transnational feminist reflexive eye on the field of feminist media studies, to surface for critical consideration a certain 'story that we tell' about race, more specifically about the visibly dominant whiteness, in the global North, of the kinds of media texts and cultures that commonly comprise our objects of analysis. I show that there is a repeated critical claim to the effect that the texts and cultures 'reify whiteness'. Interrogating and faulting some of the variously methodological, epistemological and ontological premises and effects of the claim, I argue that it is itself performative: it contributes to the very reification that it decries, not least by seemingly serving to explain and justify why, in a given piece of scholarship, further questions about race cannot really be attended to. I argue that we need to go beyond reifying whiteness in feminist media studies, so that we can attempt to offer more complete and rigorous consideration of the racial politics of what we study and how, and indeed who we are, our various positionalities, as not only scholars of media but also audiences, consumers and users ourselves.

- 179 The politics of vulnerability in the influencer economy/ Duffy, Brooke Erin; Ononye, Anuli; Sawey, Megan, pp. 352–370

This paper analyses the working practices of several feminist creative and cultural enterprises in London (which I term ‘feminist CCIs’). In particular, it shows how pandemic precarity has driven feminist CCIs towards more entrepreneurial, self-promotional, and self-branding practices in order to sustain their work. Drawing on both digital ethnographic material and interviews with 12 workers in feminist CCIs conducted online between 2020 and 2022, the article provides insights into the landscape and contemporary realities of arts and cultural funding within these fields. It considers how decades of austerity measures and cuts have forced some feminist CCIs to operate independently outside of the UK public sector funding models. Survival tactics include adopting corporate funding models, subscription and membership schemes, platformisation and digitalisation. Focusing on funding, money and subjectivity, it unpacks the contradictions these imperatives bring to feminist politics: tensions about which some feminist CCI workers themselves are aware of and critical of. In the process, this paper considers how activism, feminism, entrepreneurialism, and precarity are fused together and negotiated in this form of ‘freelance feminism’.

- 180 ‘We live in a capitalist world, we need to survive!’: Feminist cultural work, platform capitalism, and pandemic precarity/ Curran-Troop, Hannah, pp. 371–388

This paper analyses the working practices of several feminist creative and cultural enterprises in London (which I term ‘feminist CCIs’). In particular, it shows how pandemic precarity has driven feminist CCIs towards more entrepreneurial, self-promotional, and self-branding practices in order to sustain their work. Drawing on both digital ethnographic material and interviews with 12 workers in feminist CCIs conducted online between 2020 and 2022, the article provides insights into the landscape and contemporary realities of arts and cultural funding within these fields. It considers how decades of austerity measures and cuts have forced some feminist CCIs to operate independently outside of the UK public sector funding models. Survival tactics include adopting corporate funding models, subscription and membership schemes, platformisation and digitalisation. Focusing on funding, money and subjectivity, it unpacks the contradictions these imperatives bring to feminist politics: tensions about which some feminist CCI workers themselves are aware of and critical of. In the process, this paper considers how activism, feminism, entrepreneurialism, and precarity are fused together and negotiated in this form of ‘freelance feminism’.

- 181 White and gendered aesthetics and attitudes of #pandemicbaking and #quarantinebaking/ Sobande, Francesca, pp. 389–407

Foodwork is a political matter, and baking is no exception. Many messages are associated with the symbolic significance of baking, such as idealised notions of white, middle-class domesticity, femininity and visibility. The rise in home-baking during the COVID-19 pandemic resulted in a surge in social media content, which conveys much about the different meanings ascribed to baking. Relatedly, scholarship on ‘COVID-19 foodwork, race, gender, class and food justice’ highlights that intersecting oppressions are implicated in such matters. Drawing on different lines of research that specify and address structural power relations (e.g. gendered whiteness), I analyse the aesthetics and accompanying attitudes conveyed via Instagram posts about #pandemicbaking and #quarantinebaking. In doing so, I draw and build on critical studies of whiteness and digital food media, and connections between consumerism and COVID-19. This work considers what such online content suggests about the relationship between a ‘feminised, white, aestheticised ethos’ and digital discourse and depictions regarding food, family, domesticity, work and rest. Consequently, this research ponders over whether the labour and framing involved in documenting #pandemicbaking and #quarantinebaking on Instagram reflects a neoliberal form of entrepreneurial ‘freelance feminism’, which is animated by the tension between the ‘frequently polarized figures of “the feminist” and “the housewife”’. I examine the significance of three key themes related to #pandemicbaking and #quarantinebaking: (1) Gendered domestic labour and digital depictions and discourses of motherhood; (2) productivity, pausing and so-called ‘soulfulness’; and (3) domestic minimalism and aesthetics of whiteness. In turn, this article critically reflects on the relationship between mediated constructions of gendered whiteness and baking, while echoing calls for more research that explicitly addresses dynamics between digital whiteness, class, aesthetics, gendered racial capitalism, foodwork, feminism and online content creation.

- 182 The intimacy triple bind: Structural inequalities and relational labour in the influencer industry/ Glatt, Zoë, pp. 424–440

The careers of social media content creators, or influencers, live or die by their ability to cultivate and maintain an invested audience-community. To this end, they are encouraged to practise what has been framed as ‘emotional labour’ (Hochschild, 2002 [1983]) and ‘relational labour’ (Baym, 2018), commodifying their personalities, lives and tastes in order to build ‘authentic’ self-brands and intimacy with audiences. Drawing on an ethnographic study of the London influencer industry (2017–2023), this article examines emotional/ relational labour through an intersectional feminist lens, foregrounding the ways in which structural inequalities shape relationships between creators and their audiences. The tolls of managing audience relationships are higher for marginalised creators – especially those making stigmatised and less brandable content genres – who find themselves on an uneven playing field in the challenges they face as well as the coping strategies at their disposal. These creators are in an intimacy triple bind, already at higher risk of trolling and harassment, yet under increased pressure to perform relational labour, adversely opening them up to further harms in the form of weaponised intimacy. This article explores four key tactics that creators employ in response to such conditions, as they navigate relational labour and boundaries with audiences: (1) leaning into making rather than being content; (2) (dis)engaging with anti-fans through silence; (3) retreating into private community spaces, away from the exposure of public platforms; and, in parallel, (4) turning off public comments. The adverse experiences of marginalised creators who speak about their identities and experiences online raise serious concerns about the viability of content creation as a career for these groups, as well as the lack of accountability and responsibility that platforms show towards the creators who generate profit for them.

- 183 Selling feminist stories: Popular feminism, authenticity and happiness/ Lauri, Johanna; Lauri, Marcus, pp. 457–473

By interviewing Swedish feminist activists who sell commodities to serve feminist purposes, this study focuses on how they articulate their engagement and make it intelligible. To untangle how articulations about feminist businesses may stabilise, reshape and challenge feminist values and engagement, we use theories of popular feminism alongside discourse theory to capture its contingencies. The analysis shows that, rather than enhancing sales by the use of feminism, the interviewees articulate an interest in spreading feminism through the sale of commodities. They understand their commodities to be ‘authentic’ and ‘truly’ feminist, thereby distancing themselves from corporations that use feminism to brand their products. However, this aligns precisely with the dominant contemporary corporate branding discourse of authenticity, understood as untainted by capitalism. The interviewees want to provide their customers with confidence, a dominant trait of popular feminism, through the display of feminist expression. A quest for visibility tends to absorb political aspects, which is further illustrated in the expressed wish to avoid an aggressive, provocative or explicitly political address. Understanding popular feminism as a discursive struggle, we conclude that the domination of a happy, confidence-building feminism will render more confrontational and radical versions of feminism less visible.

- 184 The emergence and undermining of sex worker-led freelance feminism/ Simpson, Jessica, pp. 491–497

Using one sex worker-led collective as a case example, this paper explores how feminism, precarious work and entrepreneurialism coexist together in contradictory ways. I begin by highlighting how freelance work within UK strip clubs creates precarity and hostile work environments for sex workers when coupled with exploitative managerial practices; however, when similar, equally precarious gig work and promotional activities are combined with sex worker-led collectivist practices, they can instead be used to advance feminist politics. The paper then shifts to a discussion of how the transformative potential of the sex worker collective and their efforts to fight for labour rights and safer working conditions are continually and violently undermined by the feminism of those outside the stripping industry and with access to more privilege, power, and resources. While there are many different feminisms, the article ends by arguing for the ongoing need to seek some reconciliation within the movement to ensure that the voices and concerns of those most marginalised remain at the centre of politics and action.

- 185 The female entrepreneur: Fragments of a genealogy/ Littler, Jo, pp. 498–508

This short article, based on a lecture, offers fragments for a genealogy of female entrepreneurship in the Global North. It argues that in business and management books and social texts, the entrepreneur has historically been overwhelmingly figured as male – as ‘entrepreneurial man’. Yet, over the past few decades, encouraged by both gender mainstreaming and neoliberal feminism, the symbolic locus of entrepreneurialism in popular culture has increasingly gravitated towards women. It shows how we might trace a mediated evolution of female entrepreneurialism and its ideologies: from tragic 1950s entrepreneurial stars, through to the plucky shoulder-padded heroines of women’s magazines and films of the 1980s, through to the girlbosses, Instagram entrepreneurs and hustle culture of the present. What, it asks, is happening to the female entrepreneur in an era of neoliberal crisis? And what ‘left feminist’ alternatives to, or intersections with, this figure might be in our midst, or on the horizon?

- 186 What is ‘freelance feminism’?/ Curran-Troop, Hannah; Gill, Rosalind; Littler, Jo, pp. 317–332

This article introduces the concept of ‘freelance feminism’: a term we use to highlight how a combination of casualised precarious labour and platformised entrepreneurialism constitute a key terrain through which contemporary feminist work is enacted. The article proposes that this term can be a way to understand new formations and constellations of activity which are being shaped in the intersections between precarity, feminism and entrepreneurialism. How, in what ways, and with what consequences are feminist activism and platformised entrepreneurialism becoming entwined? How are new forms of self-promotion, self-branding and precarity shaping feminist cultures? Are entrepreneurial projects more broadly taking on feminist forms and, if so, how can we understand their politics? To explore these issues, the article examines in turn (1) neoliberal, short-term, precarious labour in the cultural industries and its exacerbation during the pandemic, (2) contemporary entrepreneurial ‘platformisation’ and (3) the increased visibility of feminism in contemporary popular culture. It concludes by introducing the range of articles in the special issue.

- 187 Feminist activists discuss practices of monetisation: Digital feminist activism, neoliberalism and subjectivity/ Scharff, Christina, pp. 408–423

This article explores the politics of ‘freelance feminism’ by drawing on 30 qualitative in-depth interviews with digital feminist activists. By documenting and analysing the different ways in which digital feminist activism can be monetised, the article shows that the potential to generate income is frequently discussed by, and contemplated among, activists. As this article argues, the monetisation of digital feminist activism goes beyond the application of market principles to political protest movements. When activism is monetised, activists’ emotional investments and passion become mobilised and tied to income generation. At the same time, and through emphases on self-branding and ‘authenticity’, activists’ selves are formed and rearranged in line with neoliberal values of entrepreneurialism and market competition. This article therefore shows that the workings of neoliberalism in digital feminist activism play out on an economic level, and also on the levels of affect and subjectivity.

- 188 #ButNotMaternity: Analysing Instagram posts of reproductive politics under pandemic crisis/ Benedictis, Sara De; Mendes, Kaitlynn, pp. 441–456

In this article, we perform a thematic analysis of a sample of 70 #ButNotMaternity Instagram posts. #ButNotMaternity is a hashtag that emerged in the United Kingdom during the COVID-19 pandemic whereby the public, healthcare workers and campaigners shared experiences and concerns about pandemic maternity care restrictions and their disproportionate disadvantages for pregnant women. In the article, we analyse four themes that emerged from our thematic analysis – Individual experiences, loneliness and overcoming adversity, Voicing anger and absurdity, Mobilising anger and calls to action and Coordinated activism. Thinking about #ButNotMaternity in the context of ‘freelance feminism’, our article has a twofold aim. First, we explore the concept of ‘freelance feminism’ through #ButNotMaternity, asking to what extent this campaign draws from freelance tactics. Second, we use the hashtag to illuminate maternity inequality and modes of resistance during the COVID-19 pandemic. Through our thematic analysis, we argue that while ‘freelance feminism’ might be becoming hegemonic as a dominant mode of organising feminist activism and resistance, inspired by Malik et al. (2020), we also showcase how creative campaigns are potential places where collective action, structural critique and resistance may emerge.

- 189 Romantic opportunism: Doing the work of structures in post-feminist creative industries/ Bandinelli, Carolina, pp. 474–490

This article contributes to feminist cultural studies on the creative industries by offering an ethnographic account of the lifeworld of a female and creative entrepreneur. Drawing on interview data and ethnographic observations collected over the course of 10 years, I offer a thick description of the personal and professional trajectories of Alexandra, through the rise and fall of her fashion brand and first marriage and on to her second marriage and new job as an employee for a marketing firm. I focus on the ways in which she becomes her own microstructure, building connection between love and career in a de-regulated and de-territorialised environment. I argue that she engages in what I call 'romantic opportunism', a biographical device that enables her to spot instrumental connections between different dimensions of life, whilst unifying them into a romantic plot. The story of Alexandra can therefore be seen as an instantiation of 'freelance feminism', whereby life emerges as the combination of parallel and interdependent projects.

190 The emergence and undermining of sex worker-led freelance feminism/ Simpson, Jessica pp. 491–497

Using one sex worker-led collective as a case example, this paper explores how feminism, precarious work and entrepreneurialism coexist together in contradictory ways. I begin by highlighting how freelance work within UK strip clubs creates precarity and hostile work environments for sex workers when coupled with exploitative managerial practices; however, when similar, equally precarious gig work and promotional activities are combined with sex worker-led collectivist practices, they can instead be used to advance feminist politics. The paper then shifts to a discussion of how the transformative potential of the sex worker collective and their efforts to fight for labour rights and safer working conditions are continually and violently undermined by the feminism of those outside the stripping industry and with access to more privilege, power, and resources. While there are many different feminisms, the article ends by arguing for the ongoing need to seek some reconciliation within the movement to ensure that the voices and concerns of those most marginalised remain at the centre of politics and action.



Indian Council of Social Science Research
National Social Science Documentation Centre



Professional Skill Development and Networking

- **Apprenticeship**

Under the Apprenticeship Act 1961, Ministry of Labour, Govt. of India, NASSDOC provides practical training/exposure for one year to the students who have passed out their B.L.I.Sc. / M.L.I.Sc. (Bachelor or Master in Library and Information Science). They are provided with a monthly stipend and certificate at the end of the year.

- **Vocational Training Program:**

Training is available for One/ Three Months for B.L.I.Sc./ M.L.I.Sc. Students to fulfil their course requirements.

- 191 Community versus society: The normative vision of sociality in joint self-education/ Matusov, Eugene, pp. 3–29

In this theoretical essay, I argue that the normative sociality – i.e., a normative way of being together – for joint self-education is society based on pluralism and tolerance of culturally and educationally diverse communities and individual educatees, their synergy, voluntary participation, and acceptance of the final sovereignty of their educational decision-making. I rejected a widespread proposal that community (e.g., a “community of learners”) should be the vision of this norm for such educational sociality. At the same time, I accept that an empirical community can be a very important part of a normative notion of society as applied to joint self-education. Balancing between communal, often centripetal, and societal, often centrifugal, processes is often necessary for maintaining a successful joint self-education endeavor.

- 192 Philosophy of friendship with a place as interpretive support for cultural psychology/ Kunc, Aleksandra, pp. 30–47

Why is it important for cultural psychology to look attentively and inspirationally into the depths of the problem of friendship? Focussing on the cultural empowerment of a man, the search for meaning in life, but also in the art of life which binds *ars bene vivendi* with *ars bene moriendi*, cultural psychology should not lose sight of the art of friendship, but also of its connection with mobile practices of the contemporary world, for in this space of encounters friendship constitutes a philosophical recommendation and a cultural challenge. I propose therefore turn to the philosophical and cultural space in order to analyse the experience of friendship with a place, interpretively extracting those elements of experience that are crucial for in-depth and contextual thinking about man. Here cultural psychology can find inspiration. I deliberately refer to the transcultural space to indicate the possibilities of experiencing the problem of being in a place. Philosophy of friendship anchored in a transcultural context helps to bring out the multi-dimensionality of the experience of self and the Other, which complements psychological research.

- 193 Career decision-making as dynamic semiosis: Autoethnographic trajectory equifinality modeling/ Tsuchimoto, Teppei; Sato, Tatsuya, pp. 48–69

This study aims to describe and analyze the career decision-making of the first author in the context of life trajectory using autoethnographic trajectory equifinality modeling (Auto-TEM). The life story and analysis of the first author indicate that career decision-making is a constant pre-constructive process in the life trajectory of an individual. This process is a semiotic and trans-action one between the individual and society. In other words, career decision-making is an issue of the cultural psychology of dynamic semiosis, which is concerned with understanding the manner in which the life trajectory of a person promotes or inhibits socio-culturalism and not only a subject of matching and self-esteem. Alternatively, we emphasize that career decision-making for an individual is an act of meaning with a unique ontological aspect. We propose the value of Auto-TEM as a qualitative method for describing such a dynamic career decision-making process. The autoethnographic viewpoint renders possible the understandings of the dynamics of the personal–collective culture synthesis for the subject.

- 194 Exploring the depth of Marion Dönhoff’s psyche: A Cultural Psychogram/ Fircks, Enno von, pp. 70–94

The present article is a psychogram about Marion Gräfin Dönhoff. I am deciphering the life of the countess on the basis of Boesch’s symbolic action theory. By the psychogram I am exploring the action field (needs and goals) of Dönhoff that I argue can only be understood while drawing on her relation to her socio-cultural environment. Born in a noble family in Königsberg – in a castle – she is a child of a highly politicized family with a moral ethos. Very early on she comes in contact with the general history or the history of her family both intertwined one with the other, goes to Frankfurt for her studies in the 1930ies, completes her dissertation in Basel (1936), leads castle Friedrichstein economically in the 1940ies, joins the inner-German resistance, flees from castle Friedrichstein in 1944 and becomes a journalist in the post-war decade in Germany. I argue that Dönhoff was exposed to specific cultural life-patterns catalyzing the ground-theme of her life, the political, practical and social involvement with the people’s lives which helps them to preserve meaning. By the notion of interrelated action fields – directed towards a common ground-theme – I am also proposing an extension of Boeschian Cultural Psychology.

- 195 Conceptualising Bhāvana: How do contemplative Hindu traditions inform understanding emotions and well-being?/ Pandit, Shilpa Ashok, pp. 95–114

There are more than 150 (grand and micro) theories of emotion. Even as European phenomenological perspectives do mention self and agency, the mainstream discourse on emotion in psychology is quite limited in presenting a coherent theory of affective process. A key aspect of Euro-American theories of emotion is that, these theories are topographically flat, thus, unable to provide mechanisms of transformation of emotion relevant for well-being. In this paper, a theory-based framework for emotional transformation through understanding Indian concepts in āyurveda, yoga sutras and the nāṭya is discussed. Second, the paper proposes that it is Śānta (the Indian conceptualisation of peace) alone that permits a substantive possibility to a radical re-emotion or experiencing and articulating well-being. The concept for a radical re-emotion is called Bhāvanā, indicating the possibility of conscious and radical re-creation and re-imagination of affective relationships with objects, concepts, processes and people in the world, re-orienting from the isolated 're-appraisal', 'self-regulation and control' of emotion as discussed in the mainstream paradigm. The paper contends that these culturally relevant models educate and inform global psychology theory and applied practice.

- 196 Coping strategies and social representations of bullies among bullying victims from individualistic and collectivist societies/ Grothaus, Christin, pp. 115–136

The effects bullying has on victims' mental, emotional, and physical well-being depend on the coping strategies applied. As coping can be influenced by the environment in which it occurs, scholars have started to explore differences in coping across cultural contexts. However, qualitative research on the role of culture in coping with bullying victimization and social representations of bullies remains scarce. This study compares the coping strategies of US and Thai students with help of 28 in-depth interviews and 60 autobiographical written reflections. Findings revealed several differences in coping across groups. Thai students often tried to stay connected with the bully and felt guilty expressing anger. They assigned less responsibility and intention to the bully. This was only the case among US students if the bully was young. While Thai students laughed along to fit in, US students laughed off bullies to demonstrate that they did not care. Thai students regularly blamed themselves and tried to adapt their appearance and behavior. Whereas US students stressed how bullying helped them to become more resilient, Thai students highlighted increased tolerance. The possible role of culture in coping with bullying victimization, particularly of collectivist and individualistic cultural value orientations, as well as the role of social representations of bullies, is being discussed.

- 197 Children's death and bereavement in antiquity. A psychological and anthropological analysis of the attachment relationships and coping with loss/ Commodari, Elena; Rosa, Valentina Lucia La, pp. 137–149

Child death is a rare event, especially in industrialized countries. On the contrary, early deaths were frequent in ancient Rome, especially in the first years of life. For example, it was estimated that about 30–40 per cent of children died within the first year of life. For this reason, the low emotional involvement of the parents for their newborns and infants has been hypothesized. This commentary aims to discuss the psychological response to child death in antiquity, focusing on ancient Rome, by analyzing a marble epigraph conserved at the Louvre Museum: the epigraph of Iulia Florentina. Specifically, the idea of parents' lack of emotional investment in children in antiquity is disproved by modern theories of psychology and psychoanalysis that highlight the universal nature of the attachment bond between child and caregiver. Further studies combining the historical–archaeological and psychological perspectives will help investigate this topic further.

- 198 Repairing the breach: identity narratives of a Latin American woman in Andalusia/ Mata-Benítez, Manuel L de la; Español, Alicia; Villar-Toribio, Cristina del, pp. 150–172

Migration can be understood as a breach in life experience, creating a transition, and identity narratives as a strategy to repair this breach. Our study focuses on how two classical dilemmas that characterize this process are navigated in the narrative of migration of the participant (An Ecuadorian migrant woman in Andalusia): self versus others, and continuity of the self over time, despite changes. A semi-structured interview was conducted to achieve the objectives of the study. The interview was transcribed and analyzed on three axes: 1) Migration settings, identifying the dominant spaces of interaction where the migration narrative takes place; 2) Migration I-positions and voices, identifying the I-positions and voices involved in the narrative; and 3) Continuities and discontinuities in the identity narrative. The results demonstrated that the main settings and positions in the narrative were related to nationality, gender, and religion in relation to the dilemmas of self versus others and continuity versus change. These positions help the participant negotiate self-continuity in front of the changes associated with migration and the resistance against xenophobic discourses and positions in the host country. Results support the analysis of the transition processes associated to migration based on the concept of proculturation.

- 199 The Chinese ring of time/ Castelli, Alberto, pp. 173–191

While Western thinking is a linear belief system set in motion by Christianity, Chinese reasoning conceives changes within a circular process that holds together repetition and transformation. Making sense of this is simply to recognize that depending on how we consider the nature of history, we will also partake in a different imprint on society as a whole. The transition from socialist to post-socialist China is also the drift from the stability guaranteed by Chinese philosophy to the individualism offered by the logic of marketization. Over the sociological implosion of Chinese cyclicity, China places its quest for a new identity.

- 200 Deaf Identity Salience: Tracing Daphne’s Deaf Identity Salience Through Switched at Birth/ DeCarsky, Ryan; Harvey, Penny; Johnston, Sally W, pp. 192–215

Mainstream television scarcely features Deaf persons. When they do, they are usually cameo, secondary, and rarely multidimensional characters. This paper examines Deaf identity of a main character, Daphne Vasquez, on the popular show Switched at Birth. We analyze moments where Daphne’s identity, a constructed Deaf identity, is showcased. We map how her identity is salient across seasons and then examine key moments of identity formation as Daphne negotiates her Deafness. We find a strong display of Deaf identity salience and impactful moments in the show that resulted in more positive, holistic representations of Deafness. In recent years, the media has come under increased scrutiny for limited representations of minority identities; this case study seeks to contribute to that conversation by studying a show explicitly focused on increased representation. This work is important as it not only examines a show which successfully features a character with a traditionally stigmatized identity but simultaneously quantifies how that identity is invoked as a message to viewers. This paper bridges cultural sociology with social psychology to gain a deeper understanding of the importance of identity representation in entertainment media and comments directly on the social impact of Daphne’s character on Deaf presence in 21st century media.

- 201 Reification of infant-directed speech? Exploring assumptions shaping infant-directed speech research/ Weinstein, Netanel; Baldwin, Dare, pp. 216–242

The seemingly ubiquitous tendency of caregivers to speak to infants in special ways has captivated the interest of scholars across diverse disciplines for over a century. As a result, this phenomenon has been characterized in quite different ways. Here, we highlight the shift from early definitions of “baby-talk” which implied that the nature of speech directed towards infants would vary in different sociolinguistic contexts, to later terms such as “motherese” or “infant-directed speech” (IDS) which came to refer to a specific set of features, some of which were argued to represent a universal, optimal and culturally invariant form of speech. These divergent conceptualizations of IDS thus reflect broader disciplinary tensions pertaining to the role allotted to cultural processes in psychological research. We hope to contribute to this literature by pointing to the complexity associated with identifying discrete categories of speech (i.e., baby-talk and motherese/ IDS) within a complex multi-dimensional sociolinguistic landscape. We also highlight ways in which a lack of attention to the cultural context of infant-caregiver interactions may have led to biased characterizations of IDS. Furthermore, these biases may implicitly penetrate the nature of empirical work on IDS as well. We end with a series of suggestions for future directions.

- 202 Cultural understandings of fathering and fatherhood in India: An exploration of lived experiences/ Goel, Yukta; Mishra, Shefali, pp. 245–278

Conceptualization of fathers as an essential begetter survives within and through their relationship in family through ages. However, within and behind this word, a social-construct, the journey of fathers remains non-located in researches on parenting in India. Thus, this study aims to develop an indigenous conceptualization of fatherhood in the cultural realm of India from father's and child's perspective. Carried out in eight two-child families in Delhi, the study is done through semi-structured interviews with fathers and Draw and tell method with their elder child (7–11 years). Thematic analysis of both father's and children's narratives helped create seven themes within each. The themes from father's narratives include multiple shades of "father", 'being a father': a world within, learnings about 'being a father', father as enablers of child's 'becoming', picturing 'ideal' fathers, cultural mountings and 'cultures' of fatherhood. The themes obtained from children's narratives include father as a playtime partner, inspiring figure, mainstay, shield, involved, not-so-involved. Viewed holistically, this study holds implications for parenting practices and policy makers in positive direction.

- 203 Nurturing patriotism and national pride: An ethnographic exploration into the everyday worlds of Yekolo temari in Washera Qenie School/ Kassa, Taglo, pp. 279–299

Anchored in an ethnographic fieldwork in rural Ethiopia, involving 66 children (12–18 years old) and 17 church scholars, this article looks at how a traditional school of the Ethiopian Orthodox Church nurtures sentiments of patriotism and national pride in Yekolo temari (children in the school). The findings revealed a multitude of pedagogical approaches that the church school employed. The school system also provided the students with ample cultural resources that enhance their national pride and patriotic feeling. This research has practical implications and contributes to the literature on national identity (re)construction, specifically on ways of cultivating patriotism and national pride among school children.

- 204 The experiences of non-indigenous ethnic minority psychotherapists residing and practicing in Aotearoa New Zealand/ Alexander, Mihili Udari; Tudor, Keith, pp. 300–324

The bicultural nation that is Aotearoa New Zealand is now a multi-ethnic society, home to many non-indigenous ethnic minority communities. This study explored the perceptions and experiences of four self-identifying non-indigenous ethnic minority psychotherapists living in this country. Specifically, it answers the question: "What are the predominant themes that can be identified in the accounts of non-Māori ethnic minority psychotherapists, residing and practicing within the bicultural context of Aotearoa New Zealand?" Semi-structured interviews with participants explored their lived everyday experiences in both personal and professional spheres. Data were analysed using thematic analysis and yielded three themes: (1) "Acculturation to mainstream" captures the personal challenges participants encountered as immigrants in relocating and adapting to mainstream Aotearoa New Zealand culture; (2) "Encountering Indigenous culture" describes participants' experiences of coming into contact with indigenous Māori culture, and ensuing perceptions and understandings; (3) "Relating to biculturalism" describes how the participants understand and make meaning of biculturalism in Aotearoa New Zealand. Understanding these participants' experiences can help non-indigenous ethnic minority psychotherapists become better informed and politically aware, and may empower them to negotiate a more meaningful position in a bicultural nation.

- 205 Indigenous people in urban context and historical memory: Paths for psychology indigenous people in urban context and psychology/ Feldmann, Mariana; Guzzo, Raquel Souza Lobo, pp. 325–344

This article summarizes the results of a doctoral thesis based on the psychosocial perspective and was justified by the indigenous presence in the city and the lack of public policies that respond to the real demands of the population. It aimed to investigate who the indigenous people are in an urban context and how historical memory is present in the construction of their identity, identifying them as a tool of resistance to colonization. Based on the Participation-Action-Research, the sources of information were field diaries and interviews with three indigenous representatives from two organized groups. From the Constructive-Interpretive Analysis, it can be concluded that the historical memory is configured as a tool in which it expands the identity dimension, making it possible to recognize oneself as an indigenous person from the historical records of memory, favoring the strengthening and

resistance in the face of violence experienced in everyday life. In addition, the importance of collective spaces for strengthening the subject was evident.

- 206 Exploring the Understanding of Globalization: A Qualitative Study of the Urban, Educated, Middle-Class, Young Indians/ Kapoor, Bhumika; Sondhi, Vanita, b pp. 367–386

The discipline of psychology is increasingly recognizing the pervasive impact of the ever-changing socio-cultural contexts in which people are embedded. This dynamic nature of the social world is immensely impacted by globalization. As a phenomenon of psychological interest, globalization wields numerous changes across different domains and appears to continuously shape the contours of people's experiences. Keeping this in mind, exploring people's perceptions and understanding of globalization can serve as a good starting point to discover its diverse implications. Thus, this research focused on the experiences of urban, educated, middle-class, young people from the metropolitan context of Delhi-NCR, India. To this end, semi-structured interviews were conducted with 32 participants (M = 14, F = 18) between the ages of 18 to 28 years. Data were subjected to reflexive thematic analysis, using inductive coding. Emergent themes and subthemes, related to participants' notions about globalization and its resultant socio-cultural changes along with their implications are thoroughly discussed.

- 207 Nuha: A study of the conduct of everyday life of a British Yemeni young person/ Ahmed, Huda Kamel, pp. 387–410

There is a lack of research that focuses on the lived experiences of British Yemeni young people in the UK as they pertain to their learning and development. This paper aims to bridge the gap by exploring the case of Nuha, an 18-year-old British Yemeni young woman, as she navigates the conduct of her everyday life. The paper presents a developed conceptual model and associated methodological approach for exploring Nuha. It does so by first reviewing what might be viewed as dominant approaches to the study of ethnic young people's experiences that advocate a social identity theory. A critique of such thinking is developed that takes issue with much of this writing that has the potential for an essentialised abstracted approach. The paper instead advocates the use of a subjectively focused, practice orientated and yet culturally sensitive approach to exploring human behaviour in the context of the conduct of everyday life. Based on an analytical matrix that is developed from such thinking, I examine Nuha's life experiences using Dreier's theory of a person. In doing so, I recognise the additional importance of personhood in practice that provide a reference point for exploring more deeply the learning and development of Nuha. The research is generated through a case study narrative that is analysed dialectically through theory, recognising how theory is simultaneously driven by the data. The paper concludes with arguments made about the centrality of an extended and developed sense of the conduct of everyday life to get at the nuanced evolving sense of being and doing for British Yemeni young people.

- 208 Imagining Life Beyond a Crisis: A Four Quadrant Model to Conceptualize Possible Futures/ Power, Séamus A.; Schaeffer, Merlin; Morton, Thomas, pp. 411–430

In this article we report evidence from a series of semi-structured interviews with a broad sample of people living in Denmark (n = 21), about their perspectives on the future during the first months of the global Covid-19 pandemic. The thematic and discursive analyses, based on an abductive ontology, illustrate imaginings of the future along two vectors: individual to collective and descriptive to moral. On a descriptive and individual level, people imagined getting through the pandemic on a myopic day-by-day basis; on a descriptive and collective level, people imagined changes to work and socializing. Their future was bound and curtailed by their immediate present. On a moral and individual level, respondents were less detailed in their reports, but some vowed to change their behaviors. On a moral and collective level, respondents reported what the world should be like and discussed changes to environmental behaviors such as traveling, commuting, and work. The model suggests the domain of individual moral imaginings is the most difficult domain for people to imagine beyond the practicalities of their everyday lives. The implications of this model for comprehending imaginations of the future are discussed.

- 209 Making worldviews work: A heuristic, a planet scan, a case and their transversal implication/
Renteria-Urriarte, Xabier, pp. 431–453

A worldview is, very basically, formed by tenets on the nature of the world and on the way of knowing it held by persons, social groups, intellectual currents or ethnic cultures. It is a term widely used in social sciences, but often left aside in daily research work because of being considered a vague term. Lax definitions are the reason, but such symbolic worlds will not disappear even if we do not refer to them, and we need operational and heuristic conceptualizations, both to analyze such symbolic parameters as a study objective and to refer to them as the appropriate understanding contexts of other topics. Here, definitions with a multidimensional structure that imply heuristic potential are specified as a solution; previous proposals are reviewed; the needs for improvement are set out; and a consequent conceptualization is proposed. Then onto-epistemic tenets of the main cultures on Earth and of history are briefly described as such worldviews, a case in Basque culture tested to assess the heuristic potential, and an outstanding 'transversal' implication is advanced: worldviews should not only be considered multidimensional concepts with heuristic potential, but also formed with areas around prototypes by cognitive-linguistic operators across the tenets.

- 210 Shock and the materialist conception of art: Considerations for a politicised cultural psychology/
Malherbe, Nick, pp. 454–475

The materialist conception of art understands art in relation to the material conditions within and by which art is produced and consumed. For cultural psychology, the materialist conception of art has been useful for developing insights into how individual perceptions are shaped, and are shaped by, culture as a collectively produced and historically embedded site of meaning-making. However, in much of cultural psychology, the relationship between progressive politics and the materialist conception of art remains under-appreciated. In this article, I consider how cultural psychologists might strengthen this relation through artistic shock, that is, a subjective, perceptual, and/ or historiographical rupture brought about through the experience of art. In particular, I outline how Bertolt Brecht and Walter Benjamin theorised and practiced artistic shock, and examine what the work of these thinkers could mean for cultural psychologists working with political collectives to grapple with psychopolitical questions related to subjectivity, contradiction, and memory. I conclude by reflecting on how future work that seeks to politicise cultural psychology might engage with the materialist conception of art.



Indian Council of Social Science Research
National Social Science Documentation Centre



Library Membership

Post Graduate Students / Doctoral / Post-Doctoral scholars, Faculty members, Non-Teaching Staff, Writers, Freelancers, Journalists etc. can become members of the library.

Library Membership Fee:

- Institution - Rs. 10000/- PA
- ICSSR Beneficiary - Rs. 800/- PA
- Consultant Membership - Rs. 900/- PA
- Bi-Annual - Rs. 500/- PA
- Monthly Membership - Rs. 100/- PM
- No Membership Fee for Staff of ICSSR, its Research Institutes & Regional Centres and Guest Members for a day.

- 211 The class basis of racialisation: The missing link in neo-Marxist analysis of racism/ Ogunrotifa, Ayodeji Bayo, pp. 3–21

Racialisation is a Marxist concept that has been utilised to understand racism patterns and reproduction in Western societies for more than three decades. In Marxist parlance, racialisation is the ideological process through which the state racialised a section of the population (ethnic minorities) for political purposes. The centrality of the state in racialisation discourse has inhibited the class basis that underpins racialisation. This article articulates the class analysis of racialisation, positing that racialisation stems from racism ideology that the Western ruling class utilised to divide the people along the ethnic line as a means of preserving and maintaining ruling class influence and prestige in society and protecting the capitalist system from being challenged by the unity of the people along the class line. Racialisation is utilised to reproduce racism, using media, laws, regulations and institutional practices to entrench division and disunity in society and preserve their control system under capitalism. In discussing the future of racism, this article critiques the current anti-racism campaign/ movement founded and rooted in race discourse and race consciousness and argues that a shift from race consciousness to racialised consciousness is pivotal towards deconstruction and eradicating all vestiges of racism in the global society. The article concludes that racialised consciousness would act as a political unifier in anti-racism campaigns and connects the struggles of Black working and middle class with that of the White working and middle class in terms of collaboration and solidarity, to collectively challenge the capitalist system that is responsible for oppression, inequality and racism on class lines.

- 212 Contemporary class composition analysis: The politics of production and the autonomy of the political/ Pitts, Frederick Harry, pp. 23–48



The political and organisational routes opened up on the contemporary left following the financial crisis have seen a revival of class composition analysis as a means of comprehending a broad array of social and economic phenomena both within and beyond the workplace. Contextualising contemporary class composition analysis as a long-standing component of autonomist Marxism, this article argues that its application amid the left's electoral turn exposes to scrutiny deeper-running weaknesses. The article first presents a history of class composition analysis through operaismo into postoperaismo. The second part of the article discusses four interconnected new directions in class composition analysis: Hardt and Negri's Assembly; the analysis of social composition offered by the Notes from Below collective; Keir Milburn's analysis of 'generation left'; and, finally, the uptake of some of these ideas among commentators on the left of the British Labour Party like Paul Mason. The article then discusses the theoretical and strategic implications of these contributions through the prism of critiques of class composition analysis put forward by other theorists in the autonomist Marxist tradition. Noting the possible limitations confronting the application of class composition analysis to contemporary challenges faced by the post-crisis left, the penultimate section considers Labour Process Theory as a theoretical alternative implicit in recent critiques of contemporary class composition analysis, arguing that while Labour Process Theory's analysis of the 'politics of production' captures the contingency of the connection between the workplace and formal politics, it leaves unresolved the lack of a distinctive theory of the latter on the contemporary left. The final section reconnects the discussion to the legacy of operaismo by exploring Mario Tronti's recently translated work on the 'autonomy of the political' as a more substantial articulation of the specificity of politics against the backdrop of class conflict at the point of production. The conclusion relates this back to recent strategic issues in the Labour Party and broader labour movement.

- 213 Abstraction, idealization, and concretization: A discussion of Leszek Nowak's interpretation of Karl Marx's method/ Hernandez, Josafat, pp. 49–73

In this article, an interpretation of Marx's notions of abstraction and concretization is presented. Unlike Leszek Nowak's approach, Marx's use of idealizations is not a reversible process of adding and removing idealizing assumptions. Marx had a richer use of the term abstraction, one in which concretization involves a creative moment of conceptual innovation. Marx adds new variables and new assumptions and elaborates new categories at different levels of abstraction in order to show the unity between appearances and essences. De-idealization, according to Marx, involves both recomposition and de-isolation. Also, concretization, for Marx, does not follow a linear approximation to reality, but rather a hermeneutical circle that is constantly in the process of reframing categories to provide answers to different questions. As a case study, this article shows an interpretation of Marx's labor theory of value.

- 214 A methodological interpretation of the circuits of capital/ Ninos, Giannis, pp. 75–93
 This article investigates Marx's method in the analysis of the circuits of capital, as it is carried out in *Capital* vol. 2, in an attempt to clarify some key aspects of the well-known problem in Marxist literature on the relation between the logical and the historical. The central question on this topic is whether Marx's analysis is logical/ structural or historical. The approach elaborated upon in this article extends beyond the one-sidedness of both views which deny any kind of correlation between logical and historical sequences and the views claiming that the articulation of *Capital's* argument exposes a set of historical stages. We will argue that dialectic, namely, the method of ascent from the abstract to the concrete, represents, first and foremost, the inner articulation of the structure of a given self-developing object, and at the same time implicitly represents its historical development. Hence, taking Marx's analysis of the circuits of capital as a case study, this article aspires to identify the fundamental movement of the systematic dialectic, which characterizes the entire *Capital* and explains the fundamental function of the relation between the logical and the historical.
- 215 Strategies of continuity and discontinuity in the interpretation of Marx's work: The case for discontinuity/ Cowling, Mark, pp. 95–117
 The publication of Marx's *Economic and Philosophical Manuscripts (EPM)* in German in 1933 immediately triggered off debate as to where the document fitted in Marx's theories generally. The obvious possibilities were first, that these writings could be dismissed as juvenilia, and that Marxism as understood by figures as diverse as Lenin, Kautsky, Bernstein, Rosa Luxemburg and Trotsky, none of whom said anything significant about alienation, could be studied and argued about while disregarding the EPM. Second, there were actually numerous reappearances of the theory of alienation in the writings of Marx after 1847, and the alienation theory must be very important in his mature writings. In what follows, I will argue the case for the unfashionable first alternative, but also be reviewing many of the arguments for and against continuity in Marx's work, hopefully making the article useful irrespective of which side one takes.
- 216 Situating platform gig economy in the formal subsumption of reproductive labor: Transnational migrant domestic workers and the continuum of exploitation and precarity/ Yin, Siyuan, pp. 119–133
 In conversation with critical platform and labor studies, which tend to focus on drivers and food delivery workers, this article seeks to expand our understanding of the platform gig economy from the perspective of reproductive labor and migrant domestic workers. The exploitation of women's unpaid and low-paid reproductive work has persisted throughout various stages of capitalist development. Migrant domestic workers' underpaid reproductive labor becomes an essential site for primitive capital accumulation and the production of the labor force in the contemporary neoliberal global economy. Building upon analyses of the historical and contemporary circumstances of transnational migrant domestic workers in Canada, I argue that digital labor platforms become a technology-enabled, capital-driven force in the larger commodification and exploitation process of migrant workers' reproductive labor, and such processes are underpinned by entangled structural and institutional forces of the uneven capitalist development, racism, patriarchy, and the state's discriminatory (im)migration and labor policies. The article suggests that understanding the seeming prevalence of platform work should be situated in the continuous formal subsumption of reproductive labor and the class immobility of migrant domestic workers, and labor activism and movements should contest the entwined power dominations beyond merely demanding regulations over platforms.
- 217 Revolution and restoration in post-war East Asia: A Gramscian approach to the 'history problem'/ Gray, Kevin, pp. 135–156

While tensions over historical issues between Japan and South Korea have long served to impede US strategic goals in East Asia, mainstream International Relations theory has largely been unable to explain the stubborn persistence of such issues. Instead, I interpret East Asia's post-war history through the lens of Gramsci's concept of passive revolution, thereby situating the 'history problem' in the context of the dialectical relations between state (re)formation, geopolitical contestation and transnational capital accumulation in the post-war era. I argue that US intervention in 1945 was a process in which a set of state–society relations was established whereby democratising tendencies from below were repressed through the establishment of US-aligned capitalist regimes. This implied the partial restoration of certain aspects of the pre-1945 regimes in a manner that served to forestall any genuine coming to terms with past colonial history. Gramsci's concept of passive revolution thus provides a framework for rethinking how bilateral relations between countries can be explained with reference to the broader dynamics of geopolitical contestation, transnational capital accumulation and the dynamics of state–society contestation within national social formations. While existing empirical applications of passive revolution have typically focused on particular national instances of state formation and transformation, I argue that the concept can be utilised to analyse the region-wide processes whereby the US empire was established in the aftermath of the Second World War, and by extension, how supranational processes of passive revolution subsequently generated their own tensions and contradictions as manifested in contested bilateral relations between states.

	<p>Indian Council of Social Science Research National Social Science Documentation Centre <u>NASSDOC: Research Information Series 1</u></p>	
<ul style="list-style-type: none"> • <u>New Arrivals: List of New Additions with Summaries</u> <p>NASSDOC has been bringing out "New Arrivals: List of New Additions with Summaries" contains a list of Reference Works, New Books, acquired during the period and available for use in the National Social Science Documentation Centre of ICSSR.</p> <p>In the main text, entries are arranged by Author, followed by bibliographical details and a summary of the document. Books with editors have been arranged by title. The subject index is given at the end in which subject refers to the serial number of the entry in the main text.</p> <p>Interested readers can consult the listed titles by visiting the library.</p>		

- 218 On the project of a Marxist-feminist international: a project in movement/ Clua-Losada, Mònica; Haug, Frigga, pp. 197–209

This interview with Frigga Haug explores the thirteen theses which were developed collectively during three different international conferences and Frigga Haug authored the 13 theses. The goal was to make the feminist movement sustainable with a Marxist spirit and to bring Marxism to life. The theses are a work in progress, a framework for the foundation of a Marxist-feminist international, they are sustainable enough for them to stand the test through the specific changed conditions of our historically determined spaces of movement, and flexible enough that they would not harden into chains.

- 219 Idealism and biologism in social reproduction theory: A materialist critique/ Goikoetxea, Jule, pp. 211–230

The article gives a materialist interpretation of the first, second and third Marxist-feminist Theses through a critical analysis of the Unitary Theory of Social Reproduction. It argues that Social Reproduction Theory resorts to idealism and biologism when explaining male domination. A meta-critical incision will be carried out by studying the use Social Reproduction Theory makes of categories such as 'production', 'reproduction', 'exploitation' and 'oppression', in that these categories are addressed as historical while the categories of 'women' and 'men' are de-historicized and naturalized. According to Unitary Theories, 'women' are not material, historical products of patriarchy but biological beings (biologism) that have been culturally devalued (idealism). This leads to an essentialist ontology where 'women' and 'men' precede the relations of production that create them. This idea obstructs the formation of a materialist philosophy of praxis.

- 220 Francophone materialist feminism, the missing link: Towards a Marxist feminism that accounts for the interlockedness of sex, race and class/ Falquet, Jules, pp. 231–251

This article discusses the Marxist-Feminist Theses III and VIII. It is based on the 'French-speaking materialist feminist' theoretical perspective that has been developed at the end of the 1970s by Colette Guillaumin (with the concept of 'sexage'), Monique Wittig (with the concept of 'straight mind'), Nicole-Claude Mathieu, Christine Delphy and other members of the *Nouvelles Questions Féministes* journal's board. The article first presents this theorization, which is too unknown to many English-speaking theorists. It then shows how 'French-speaking materialist feminist' theoretical perspective fully demonstrated that 'sex' was a structural social relation as much as class is (Gender relations are relations of production). The article also analyses how this theoretical perspective enables us to pay a deep attention to the 'race question'. Therefore, it appears as the missing link that can help bridging at least two important theoretical and political gaps: first, between Marxist feminism and lesbian theory, and, second, between Black feminism and Marxist feminism.

- 221 On Motley feminism: A Decolonising Marxism for a thesis 14 of Marxism-feminism/ Dinerstein, Ana Cecilia, pp. 253–271

The article enhances Frigga Haug's theses on Marxism-feminism by discussing a silence in the theses regarding the internal colonialism of the feminist movement that continue creating racialised hierarchies among White feminist and indigenous people and women of colour and their struggles. The author contends that Marxism-Feminism is failing to find new ways to understand diversity due to the influence of traditional Eurocentric Marxism. To tackle the problem, Marxism-feminism requires a decolonising Marxism that draws on 'late Marx' and recent Marxist and feminist theoretical developments aiming to criticise and de-Westernise and de-Eurocentralise Marxism. The author explores four elements for a 'decolonising' Marxism (value theory, subsumption and social formation, linear development of radical change and temporality of struggles) and discusses its implications on Marxism-feminism towards a possible thesis 14 on Marxism-feminism.

- 222 Class, capitalism, and the postcolonial question/ Dhawan, Nikita; Varela, María do Mar Castro, pp. 273–286

Colonialism emerged as a tumultuous collision between Western and precolonial power structures, resulting in an unexpected convergence of colonial and indigenous patriarchal ideologies. This had paradoxical consequences, such as the mutual reinforcement of these ideologies. In colonized societies, gender, sexuality, race, class, and religious distinctions became intricately intertwined, giving rise to complex systems of domination. As a result, postcolonial feminists caution against overly simplistic analyses that solely concentrate on single dimensions like race or class, or gender in isolation, without recognizing their interconnected and mutually co-constituting nature. Postcolonial feminism emphasizes the need to avoid universalizing tendencies that overlook the unique particulars of different contexts.

- 223 Social reproduction theory and critical state theory after the COVID-19 syndemic/ Calvet, Clara Camps; Martí, Jordi Bonet; Monera, Rosa Ortiz, b pp. 287–301

This article offers an insight into the challenges faced by social movements when attempting to politicize the crisis of reproduction which took place during the COVID-19 syndemic in the city of Barcelona. The analysis provided here expands on the analysis of social reproduction theory and, more broadly, on Marxist feminist approaches. In fact, one of the factors accounting for the absence of politicization during the syndemic is the type of responses given to the emergency by the authoritarian neoliberal state, which were beyond those envisaged by the 10th thesis theorized by Marxism-Feminism and social reproduction theory. Thus, in this article, we argue that this situation is an opportunity to establish a dialogue between critical state theory and Marxism-Feminism to understand how the agency of the state may condition the social reproduction of life and block the emancipatory possibilities of care and the social struggles regarding the crisis of care, complementing thus the 10th thesis of Marxism-Feminism.

- 224 ‘County lines’: racism, safeguarding and statecraft in Britain/ Koch, Insa; Williams, Patrick; Wroe, Lauren, pp. 3–26

Government policies relating to dealers in ‘county lines’ drugs trafficking cases have been welcomed as a departure from punitive approaches to drugs and ‘gang’ policing, in that those on the bottom rung of the drugs economy of heroin and crack cocaine are no longer treated as criminals but as potential victims and ‘modern slaves’ in need of protection. However, our research suggests not so much a radical break with previous modes of policing as that the term ‘county lines’ emerged as a logical extension of the government’s racist and classist language surrounding ‘gangs’, knife crime and youth violence. Policies implemented in the name of safeguarding the vulnerable also act as a gateway for criminalisation not just under drugs laws but also modern slavery legislation. The government’s discovery of, and responses to, ‘county lines’ hinge on a moral crisis in the making, which ultimately deepens the state’s pre-emptive and violent criminalisation of the ‘Black criminal other’ at a time of deep political crisis.



Indian Council of Social Science Research
National Social Science Documentation Centre



Online Remote Access Portal for E-Resources (ORAPER)

Library members to access the scholarly content through E-resources i.e EconLit with full text, SocIndex with full text, Political Science Complete, Library, Information Science & Technology Abstracts (LISTA), Education Sources, JSTOR, PsycArticles, J-Gate Social Science Collection in the following link after due registration.
<https://nassdoceresources.remotexs.in>

- 225 Disabling Palestine: the case of Gaza's Great March of Return/ Obermaier, Lena, b pp. 27–46

This article examines Israel's policies of deliberate disablement and debilitation during the Great March of Return in Gaza between March 2018 and December 2019. The orchestrated attacks on Palestinians during the Great March of Return were the latest incidents on a trajectory of premeditatively produced mass injuries and impairments in the Israeli settler-colonial context. The disabling of Palestinians and the debilitation of Palestinian health and rehabilitative infrastructures should be seen as part of Israel's settler-colonial 'logic of elimination'. Disabling the Palestinian body politic is a way to systematically erase indigenous people from the land, in this case from Gaza which has, in the words of Rashid Khalidi, refused to be a 'docile ghetto'. Injuries should therefore not be seen as mere by-products of war, categorised as collateral damage, or even as a 'humanitarian' alternative to death.

- 226 Sectarianism as racism: the collective punishment of Alevi communities in Turkey/ Yonucu, Deniz, pp. 47–68

Drawing on the case of state-sanctioned violence and discrimination against Alevis, a historically stigmatised and persecuted ethnosectarian community in Turkey, this article shows that sectarian identities can also be raced. The case of Alevis in Turkey not only indicates how sectarianism can function as a form of racism but also offers an example of the connection between the production of race and the politics of death. Approaching racism as a punitive mechanism and form of collective punishment that punishes racialised communities at different levels and that constantly reminds them of the possibility of what Gilmore terms 'premature death', the article offers a new and nuanced understanding of the multiple modalities of racism in Turkey. Rather than viewing racism in Turkey as merely an imitative form of European racism, this article shows that racism in Turkey is also informed by the country's own imperial past. Turkey provides fertile ground for examining both western and non-western forms of racism and the intersections between the two.

- 227 Lathrop Preservation Campaign: social mobilisation to save public housing in Chicago/ Williams, Cameron; Miller, Madison; Jimenez, Ramiro, pp. 69–91

This article provides an ethnographic account of the Lathrop Preservation Campaign, a grassroots effort to prevent the demolition of Lathrop Homes, one of the most diverse public housing developments in Chicago, Illinois. In 2000, the Chicago Housing Association implemented a Plan for Transformation to redevelop public housing throughout the city, based on a nationwide effort to deconcentrate poverty in subsidised housing and create mixed-income communities. The Lathrop Preservation Campaign, which consisted of residents, organisers and allies, worked to stop the demolition of Lathrop Homes, minimise the loss of public housing units and to prevent the displacement of residents. Through participant observation and interviews, the authors trace how the community came together to challenge the use of poverty deconcentration programmes and to mobilise around issues of historic preservation and racial discrimination.



Indian Council of Social Science Research
National Social Science Documentation Centre



Online Remote Access Portal for E-Resources (ORAPER)

Library members to access the scholarly content through E-resources i.e EconLit with full text, SocIndex with full text, Political Science Complete, Library, Information Science & Technology Abstracts (LISTA), Education Sources, JSTOR, PsycArticles, J-Gate Social Science Collection in the following link after due registration.
<https://nassdoceresources.remotexs.in>

- 228 Racist inferences and flawed data: drill rap lyrics as criminal evidence in group prosecutions/ Quinn, Eithne, pp. 3–25

Drill rap lyrics are used regularly by police and prosecutors as evidence against young Black working-class defendants in UK criminal cases. Though this practice is of mounting public concern, its discursive mechanisms remain poorly understood, shrouded by the police and courts. This article exposes and explains state interpretations of drill lyrics in the preparation of serious crime cases. It considers how the state uses violent rap lyrics to build secondary liability in group prosecutions by exploiting drill's power to invoke stereotypes and mislead the court. The author focuses on a 2020 joint enterprise murder case in London, in which she served as a rap expert, to give a concrete illustration of how the state tries to use rap lyrics of little or no relevance to incriminate. This article contends that rap-facilitated group prosecutions encapsulate processes of racist carcerality – targeting young Black people through their expressive culture – which are in need of concerted challenge and transformational change.

- 229 Majority jury verdicts in England and Wales: a vestige of white supremacy?/ Waller, Nisha; Sakande, Naima, pp. 26–52

In England and Wales, the requirement for a unanimous jury verdict in criminal cases was abolished in 1967, marking a significant departure from a centuries-old legal tradition. Majority verdicts are now common practice, yet no research to date explores the origins of this sudden change to the jury system. In contrast, recent research in the US uncovered a connection between the conception of majority verdicts in Louisiana and Jim Crow era law-making, finding that majority verdicts were strategically introduced to suppress the black juror vote and facilitate quicker convictions to fuel free prison labour. The US Supreme Court later outlawed majority verdicts in a case known as *Ramos v. Louisiana*, amid recognition of their racist origins. Adopting the critical epistemological position guiding the US research, we consider how race and class underpinned the decision to introduce majority verdicts in England and Wales. Drawing on Home Office files and other archival materials, we find that an increase in eligible jurors from different racial and class backgrounds led to a perceived decline in the 'calibre' of jurors – reflective of wider public anxieties about Commonwealth immigration, Black Power and white disenfranchisement. We conclude that a desire to dilute the influence of 'coloured' migrants on juries contributed to the introduction of majority verdicts in England and Wales.

- 230 Dismissal, legibility and the normalising of colonial misrecognition/ Sheth, Falguni, pp. 53–73

The judicial act of dismissal in discrimination cases involving diasporic or minority populations is part of a larger cultural approach to diasporic subjects. Racial dismissal includes judicial as well as larger cultural forms of dismissal, whereby an authority judges a speaker's grievances as implausible or unworthy of consideration, often due to cases of misrecognition or illegibility to a hegemonic culture or authority. Here the author draws on Kristie Dotson's notion of epistemic silencing, which illustrates that grievances from diasporic subjects are dismissed because they fall outside settler-colonial norms, and are apprehended as trivial or illegitimate. Hence, dismissal is based on a sustained and protected misrecognition of diasporic populations.

- 231 Life next to a landfill: urban marginality, environmental injustice and the Roma/ Škobla, Daniel; Filčák, Richard. pp. 74–91

The site known as Lipnica is a segregated Roma settlement built on the edge of a municipal landfill in the district town of Turčany, central Slovakia (fictitious names have been used for the site and the town). The settlement emerged as a result of processes rooted in neoliberal economic restructuring, accompanied by a sharp rise in unemployment in the 1990s. The settlement was originally built to provide temporary housing for those who were in arrears for rent in municipal flats, and originally consisted of one apartment building and several modular cabins. In the following years it expanded, and today it is an ethnic quasi-ghetto for approximately 400 Roma inhabitants. From a theoretical perspective, an analysis of the Lipnica settlement is situated at the intersection of critical race theory and environmental justice theory. In this article, we describe the trajectory leading to the formation of the settlement and analyse how the impoverishment of the Roma, coupled with the construction of the community as 'maladjusted' anti-social others, facilitated their spatial exclusion. We conclude that the case demythologises culturising explanations for the emergence of Roma settlements, by using

empirical data to show how Lipnica developed as a result of intentional discriminatory policies of the local ruling class used against an ethnic minority.

232 Is multi-polarity the new non-alignment?/ Harris, Jerry, pp. 92–105

While tensions over historical issues between Japan and South Korea have long served to impede US strategic goals in East Asia, mainstream International Relations theory has largely been unable to explain the stubborn persistence of such issues. Instead, I interpret East Asia's post-war history through the lens of Gramsci's concept of passive revolution, thereby situating the 'history problem' in the context of the dialectical relations between state (re)formation, geopolitical contestation and transnational capital accumulation in the post-war era. I argue that US intervention in 1945 was a process in which a set of state–society relations was established whereby democratising tendencies from below were repressed through the establishment of US-aligned capitalist regimes. This implied the partial restoration of certain aspects of the pre-1945 regimes in a manner that served to forestall any genuine coming to terms with past colonial history. Gramsci's concept of passive revolution thus provides a framework for rethinking how bilateral relations between countries can be explained with reference to the broader dynamics of geopolitical contestation, transnational capital accumulation and the dynamics of state–society contestation within national social formations. While existing empirical applications of passive revolution have typically focused on particular national instances of state formation and transformation, I argue that the concept can be utilised to analyse the region-wide processes whereby the US empire was established in the aftermath of the Second World War, and by extension, how supranational processes of passive revolution subsequently generated their own tensions and contradictions as manifested in contested bilateral relations between states.

Author Index

Author Name	S. No.
Abbass, Kashif	31
Abid, Mehdi	70
Adebayo, Tomiwa Sunday	35, 59,78,90
Adewunmi, Adetomiwa Anuoluwapo	121
Adib, Ahmed	105
Agyekum, Boadi	119
Ahmad, Ishfaq	57
Ahmaruzzaman, Md	22
Ahmed, Huda Kamel	207
Akadiri, Seyi Saint	37
Åkerfeldt, Anna	122
Akoto, William	148
Aktürk, Şener	126
Alam, Md Shabbir	59
Alexander, Mihili Udari	204
Al-Faryan, Mamdouh Abdulaziz Saleh	5
Al-Faryan, Saleh,	79
Ali, Waad	119
Allen, Kim	173
Alsaleh, Mohd	68
Amin, Nabila	31
Amudha, A	73
Anam, ASM	138
Ang, Hao	85
Anyikwa, Blessing Egbichi	121
Appiah, Michael	88
Arce, Rafael de	83
Aris, Nazaria Md.	101
Arsenault, Amelia C	159
Ayhan, Fatih	92
Baba, Majid Mubashir	142
Bai, Puxian	81
Bala, Dahiru A	66
Baldwin, Dare	201
Bandinelli, Carolina	189
Bansal, Deepty	97
Barik, Saroj Kumar	129
Bassyouni, M	46
Batool, Masooma	57
Benedictis, Sara De	188
Benyadry, Sara	72
Bera, Pinki	63
Bergdahl, Nina	122
Bhattacharyya, Som Sekhar	132
Bian, Yaojun	1
Biao, Idowu	120
Biswas, Soma Bose	133

Boahen, Emmanuel Adu	106
Bolarinwa, Fatimah Ololade	9
Bose, Indranil	133
Buenaflor, Shannon Hayes	112
Byman, Daniel	127
Cai , Xuesen	45, 48
Calvet, Clara Camps	236
Campos, Ricardo Marnoto de Oliveira	175
Canetti, Daphna	145, 159
Carr, Nadine Finigan	113
Castelli, Alberto	199
Ceccon, Daniela	105
Chae, Seung Hoon	158
Chakraborty, Oveepsa	50
Chang, Xiyin	74
Chen, Jinke	16
Chen, Luteng	16
Chen, Pengyu	3
Chen, Qiyong	75
Chen, Xifan	43
Chien, Fengsheng	14, 93
Chikh, Madjid	84
Chishti, Muhammad Zubair	41
Chiu, Yung-ho	18, 91
Choi, Si Won	89
Chowdhury, Poulomi	95
Chowdhury, Tahreen Tahrima	105
Chua, Catherine Siew Kheng	115
Clua-Losada, Mònica	231
Commodari, Elena	197
Conrad, Justin M	160
Cowling, Mark	228
Curran-Troop, Hannah	180, 186, 213
Cutchin, Jeffrey	123
Damani, Navneet	128
Das, Biplab	50
Das, Narasingha	63
Dau, Thoa Thi Kim	116
DeCarsky, Ryan	200
Deo, Malabika	107
Dhawan, Nikita	235
Didier, Nicolas	118
Dinerstein, Ana Cecilia	234
Diwania, Sourav	77, 80
Dizaji, Sajjad F	154
Dogan, Eyup	41
Dongfang	62
Dosekun, Simidele	172
Duffy, Brooke Erin	179
Eisler, Alexandra	113
Emir, Firat	47
Ertuğrul, Hasan Murat	92
Español, Alicia	198

Eteba, Ahmed	46
Eweade, Babatunde S	33
Falquet, Jules	233
Fang, Shyang-Chyuan	7
Faraz, Sadia Muniza	13
Feldmann, Mariana	205
Filčák, Richard	244
Filipović, Andrija,	169
Finn, Kirsty	173
Fircks, Enno von	194
Fuinhas, José Alberto	40
Gardner, Abigail	167
Garg, Mausam Kumar	95
Gartzke, Erik	146
Geletu, Girma M	114
Gill, Rosalind	186
Glatt, Zoë	182
Gnangoin, Yobouet Thierry	76
Goel, Yukta	202
Goikoetxea, Jule	232
Gold, Grace	152
Goswami, Baishali	98
Goswami, Diti	137
Gray, Kevin	230
Grothaus, Christin	196
Grüning, Barbara	165
Gu, Kuiying	27
Guo, Xiaopeng	62
Gupta, Madhurima Das	133
Gupta, Naveen Kumar	32
Gürsoy, Sergen	103
Guzzo, Raquel Souza Lobo	205
Gyamfi, Bright Akwasi	88
Ha, Le Thanh	44
Halim, Md. Abdul	42
Halim, Mohammed	72
Hansen, Kai Arne	167
Hao, Yu	56
Harris, Jerry	245
Harvey, Penny	200
Haug, Frigga	231
He, Zhi-Wen	2
Hernandez, Josafat	226
Himanshu	130
Ho, Chien-Wei	65
Hong, Jong Ho	55
Hrastinski, Stefan	122
Hu, Hsiao-Mei	111
Huang, Chi-Jui	54
Huang, Chong	10
Huang, Hailiang	91
Huang, Kuei-Ying	18
Hui, Xin	67

Huilan, Wu	37
Hussain, Murid	21
Hussain, Sadam	47
Ibaaz, Khalid	82
Ibrahim, Ridwan Lanre	5,9,79
Ilo, Obianuju Patience	58
Irfan, Muhammad	1, 35
Islam, Muhammad Remanul	86
Jain, Nimisha	131
Jamil, Farrukh	21
Jardine, Eric	150
Jensen, Benjamin	151
Jeon, Wooyoung	15
Jha, Rashmi	143
Jha, Sumi	140
Jiang, Cailou	20
Jimenez, Ramiro	240
Jin, Xin	38
Johnson, Abhishek	139
Johnston, Sally W	200
Jung, Sung Chul	153
Junsong, Liu	79
Kaci, Ghania Mohand	84
Kamble, Sachin	82
Kang, Sung Hoon	55
Kapoor, Bhumika	206
Karam, Rita	117
Kartal, Mustafa Tevfik	92
Kassa, Taglo	203
Kataria, Mubashar Aslam	34
Kaur, Lavneet	97
Kaushik, Akash	134
Kay, Jilly Boyce	168
Kenalemang-Palm, Lame M	176
Kenwick, Michael R	162
Khan, Tasir	57
Khan, Uzma	59
Khetrapal, Pavan	77, 80
Khosla, Rajiv	130
Khouya, Ahmed	72
Kim, Sehwan	15
Kim, Wukki	158
Kirikkaleli, Dervis	90
Klaveren, Maarten van	105
Koch, Insa	237
Kohsaka, Ryo	61
Kohyama, Satomi	61
Kooi, Ong Siew	86
Koren, Timo	164
Kostyuk, Nadiya	147
Kotey, Robert Lawrence	119
Kreps, Sarah E	159
Krishnamoorthi, K	12

Kujur, Sandeep Kumar	137
Kumar, Arvind	134
Kumar, Ashok	49
Kumar, Maneesh	77, 80
Kumar, Rakesh Ranjan	94
Kumar, S Satheesh	49
Kumar, Vivek	135
Kunce, Aleksandra	192
LaFave, Allison	112
Lai, Jia-Yu	54
Laila, Umeand	36
Lasisi, Taiwo Temitope	33
Lauri, Johanna	183
Lauri, Marcus	183
Lee, Chan Hee	55
Lee, Chien-Chiang	2
Lee, Jechan	24
Lee, Seonho	24
Li, Chang	76
Li, Jinkai	52
Li, Jizu	69
Li, Li	93
Li, Mingxing	88
Li, Rongrong	25
Li, Yanan	1
Lim, Sijeong	156
Lin, Tai-Yu	18
Lin, Zhenqing	52
Lindsay, Jon R	149
Littler, Jo	185, 186
Liu, Dehai	20
Liu, Fei	28
Liu, Heng-Yih	54
Liu, Min	60
Liu, Tingting	60
Liu, Weijiang	60
Liu, Weitao	67
Lo, Kevin	23
Loken, Meredith	161
Lukszo, Casey Maliszewski,	112
Mahía, Ramón	83
Mahrane , Achour	84
Makkar, Suman	131
Malherbe, Nick,	210
Mamdouh, Abdulaziz	79
Martí, Jordi Bonet	236
Martins, João Carlos Figueira	175
Mata-Benítez, Manuel L de la	198
Matfess, Hilary	161
Matusov, Eugene	191
Maurya, Nagendra Kumar	100
McAlexander, Richard J	162
Mehrotra, Santosh	94

Mendes, Kaitlynn	188
Miao, Yuqing	10
Michelini, Lisa	124
Miller, Madison	240
Minz	139
Mishra, Shefali	202
Misra, Roli	100
Mkhize, Ntandoyenkosi Malusi	58
Modenos, Lisa	109
Mohapatra, Bighnesh Dash	129, 136
Monera, Rosa Ortiz	236
Moon, Hong Eun	89
Morton, Thomas	208
Mughal, Nafeesa	4
Muhammad , Imran	29
Mulenga, John	132
Munyama, Killion	132
Mupit, Muazzin	86
Narang, Vipin	124
Narine, Donnette	117
Nchofoung, Tii N.	102
Ngouhouo, Ibrahim	102
Nijjar, Jasbinder S	177
Ninos, Giannis	227
Nkomo, S'phumelele Lucky	58
Noorollahi , Younes	51
Obermaier, Lena	238
Odu, Ada Tony	37
Ogunrotifa, Ayodeji Bayo	224
Olanrele, Iyabo Adeola	40
Ononye, Anuli	179
Onwe, Joshua Chukwuma	29
Openjuru, George Ladaah	110
Opoku, Kwadwo	106
Ostermann, Falk	157
Oudani, Mustapha	82
Pahwa, Mohit	141
Pali, Harveer Singh	32
Palo, Sasmita	135
Panahi, Mostafa	51
Pandit, Shilpa Ashok	195
Park , JaeHyung	17
Park , Young-Kwon	24
Pathak, Priyanka	140
Payne, Kelly	123
Peng, Zhongwen	64
Pham, Lam Tra	116
Pitts, Frederick Harry	225
Porter, Nathaniel	150
Pourarshad, Meysam	51
Power, Séamus A.	208
Prakash, A	73
Qiu, Wei	1

Quinn, Eithne	241
Rahman, Md. Mominur	42
Rajagopalan, Anjana	94
Raseena, K. K.	99
Rath, Chetna	107
Ray, Nilanjan	133
Raza, Kashif	115
Renteria-Uriarte, Xabier	209
Roy, John	128
Roy, Sujit	50
Rubenstein, Amelia	113
Saarenmaa, Laura	174
Sadaoui, Naima	70
Safi, Lutfullah	108
Sahoo, Chandan Kumar	129, 136
Saigal, Taru	96
Saini, Garima	142
Sakande, Naima	242
Saleh, Mamdouh	46
Samour, Ahmed	29
Sato, Tatsuya	193
Sawey, Megan	179
Sayyad, Muhammad Hassan	13
Schaeffer, Merlin	208
Scharff, Christina	187
Schwartz, Joshua A.	125
Sek, Siok Kun	26
Senthilrani, S	49
Sevinç, Haktan	90
Shabbir, Muhammad Salman	31
Shafiq, Iqrash	21
Shahzad, Farrukh	35
Shandler, Ryan	145
Shao, Jun	87
Sharma, Abhishek	32
Sharma, Pawan Kumar	144
Sharma, Sanjay	177
Sheikh, Illias	95
Shen, Jiahao	5
Sheth, Falguni	243
Shi, Binfeng	71
Shi, Changfeng	75
Shi, Ren Rong	62
Shi, Weiguang	28
Shidler, Linda	123
Shuaibu, Mohammed	66
Sim, Khang Yi	26
Simidele, Dosekun	178
Simmons, Beth A	162
Simpson, Jessica	184, 190
Singh, Abhishek Kumar	134
Škobla, Daniel	244
Sobande, Francesca	181

Solanki, Tanvi	163
Sondhi, Vanita	206
Song, Jaehyun	156
Song, Malin	43
Song, Xiaowei	45,48
Soo, Johannah Li Mei	115
Sridhar, R	128
Subijanto, Rianne	166
Sun, Bohan	81
Sun, Hui	27
Sun, Mengzhe	56
Sun, Ruiqi	81
Tajvar, Zarreen	13
Talmadge, Caitlin	124
Tang, Dengli	64
Tanveer, Arifa	19
Thakur, Pragya	6
Tijdens, Kea	105
Tiwari, Shurllly	144
Tran, Hoa Anh	116
Trofimov, Ivan D.	101
Tsimane, Ditiro	120
Tsuchimoto, Teppei	193
Tudor, Keith	204
Tumuheki, Peace Buhwamatsiko	110
Tuo, Siele Jean	76
Uche, Emmanuel	63
Udemba , Edmund Ntom	47
Uji, Azusa	156
Ullah	138
Ullah, Saleem	34
Unceta, Rafael Aguirre	104
Uzuner, Gizem	33
Vaish, Arun Kr.	96
Valentina Lucia La	197
Valeriano, Brandon	151
Varela, María do Mar Castro	235
Vičić, Jelena	146
Vidhya, K	12
Vijayalakshmi, VJ	73
Villar-Toribio, Cristina del	198
Wagner, Wolfgang	157
Waller, Nisha	242
Walsh, James Igoe	160
Wang, Hui	27
Wang, Jian	16
Wang, Lianghu	87
Wang, Lili	25
Wang, Qiang	25
Wang, Xiaohui	68
Weinstein, Netanel	201
Wen, Huawei	2
Whitaker, Beth Elise	160

Williams, Cameron	240
Williams, Patrick	237
Wilson, Vincent Herald	6
Woo, JongRoul	17
Wroe, Lauren	237
Wu, Bishan	30
Wu, Changsong	8, 85
Wu, Haitao	56
Xin, Yongrong	36, 74
Xue, Yan	19
Yadav, Nidhi	22
Yagmur, Ayten	103
Yamashita, Takashi	117
Yan, Xiuling	28
Yang, Haichao	53
Yang, Yiqun	23
Yang, Yuanhua	64
Yarar, Betül	170
Yi, Xin	19
Yi, Zhang	11
Yin, Kedong	10
Yin, Siyuan	229
Yinusa, Oyekunle	121
Yonucu, Deniz	239
Yoon, Hee Ha	89
Yousi, Muhammad	34
Yu, Weihua	38
Yu, Yue	75
Zabat, Lotfi	70
Zaks, Sherry	155
Zebang , Xia	11
Zeelen, Jacques	110
Zeitsoff, Thomas	152
Zha, Donglan	8
Zhang, Chenjun	91
Zhang, Jin	52
Zhang, Sheng	53
Zhang, Shuo	36
Zhang, YunQian	93
Zheng, Dongsheng	67
Zhou, Dequn	8
Zhu, Jianing	74
Zhu, Qingyuan	43
Zsubori, Anna	171
Zuhaira, Zaid	69

Keyword Index

Keywords	S. No.
Absenteeism Trends	104
Acculturation	204
Action Field	194
Adult Education	111
Adult Learners	111
Adversary Perceptions	123
African Pedagogies	119
Agriculture	81
Algorithmic Profiling	177
Anaerobic digestion	57
Ancient Rome	197
Anderson-Darling Test	56
Aqueous Solubility	45
Ars Bene Moriendi	192
Artivism	175
ASEAN Nations	30
Aspirational Districts	100
Assurance Region	42
Asymmetric Effects	26
Austerity Measures	179
Autoethnography	193
Autonomist Marxism	211
Āyurveda	195
Backwardness	99
Balanced Growth	129
Battery Cost Sensitivity	83
Behavioral Outcomes	144
Bertolt Brecht	210
Beta Regression Model	96
Bibliometric Analysis	134
Biculturalism	204
Biodegradability Enhancement	58
Biodiversity	60
Biofuel Energy	79
Biofuel Ethanol Market	51
Biographical	189
Black Feminism	172
Bootstrap ARDL Testing	29
Border Security	162
Box-Behnken Design	32
BRICS Countries	42
BRICS-T	77
British Library	163
British Yemeni Youth	207
Budget-Benefit Analysis	17
Bullying Victimization	196
Bureaucratic Barriers	40

Capacitor Allocation	73
Capital Accumulation	15
Capital Inflows	100
Capital-Abundant Cities	2
Capitalism	183
Capitalist System	211
Carbon dioxide emissions	14
Carbon Emissions	46, 47, 64, 75, 88
Carbon Neutrality	3, 9, 23, 29, 64, 65, 74
Carbon Peak	30
Catalysts	24
Catalytic Efficiency	28
Catholic Church	126
Change Philosophies	132
Child Mortality	197
Children's Animations	174
Civil War	160
Civilian Targeting	160
Clandestine Activities	161
Climate change	18
Climatic Conditions	72
CO2 Emissions	18, 59, 74
Coal Consumption	92
Coal Fly Ash	46
Cognitive Schemas	150
Cointegration Relationship	28
Colette Guillaumin	220
Collectivist Practices	190
Colonial History	232
Colonial Legacy	138
Colonialism	221
Combustion stability	15
Commonwealth Immigration	229
Community Engagement	167
Community Mobilization	227
Compensation	128
Conceptualization	209
Concretization	212
Conductive Polyaniline	86
Congestion Management	72
Conservatism	170
Contemporary	183
Contextualized Learning	123
Continuous Meritocracy	115
Corporate Culture	19
Corporate Governance	107
Correlation Analysis	131
Counterterrorism Policy	159
COVID-19	52, 105, 196
Covid-19	208

Creative Industries	189
Criminal Evidence	227
Criminalization	224
Critical Analysis	219
Critical Race Theory	231
Cultural Acoustics	163
Cultural Conceptualization	202
Cultural Differences	196
Cultural Industries	186
Cultural Intelligence	141
Cultural Misrecognition	230
Cultural Psychology	192, 193, 194, 210
Cultural Sensitivity	207
Cultural Studies	168
Culture Wars	168
Cyber Conflict	145, 152
Cyber Economic	148
Cyber Operations	148
Cyber Strategy	147
Cybersecurity	149
Cybersecurity Research	144
Cyberterrorism	159
Cyclic Voltammetry	86
Deaf Representation	200
Debilitation	225
Decarbonisation	76
Decarbonisation Strategies	62
Decision-Making	43
Decolonizing	221
Deconcentration	226
Decoupling Model	61
Deliberate Disablement	224
Democracy	153, 158
Democracy Indices	153
Democratic Republic	165
Democratization	217
Demographic Engineering	125
Demographic Structures	102
Demographic Transition	98
Developmental Education	122
Dialectical Method	214
Diasporic Populations	230
Digital Economy	3
Digital Energy	68
Digital Feminist Activism	188
Digital Inequalities	182
Digital Media	166
Digital Sabotage	151
Digitalisation	172, 173
Digitalisation	179, 180

Digitalisation	180
Direct Investment	39
Disability Benefits	129
Discrete-Choice Experiment	149
Discursive Analysis	208
Disengagement Strategies	182
Disinformation	145
Distance Learning	119
District Preference	55
Dividend Hypothesis	60
Domestic Terrorism	158
Dual-Carbon Target	62
Durbin Model	1, 27
Dyadic Analysis	148
Dynamic Correlation	84
Ecological Footprint	37, 63
Econometric Models	44
Economic Development	137
Economic Growth	3, 13, 33, 41, 59, 128, 130
Economic Inequality	94
Economic Liberalization	130
Economic Reforms	130
Economic Resilience	41
Economic Servitization	1
Economic Slowdown	153
Educational Attainment	117
Educational Inequality	95, 105
Educational Planning	118
Educational Sovereignty	191
Electric vehicle	48
Electrical Efficiency	79
Electricity Production	93
Electricity Supply	51
Electrification	5
Electrification Rate	34
Electrode thickness	12
Emerging Markets	89
Emission Reduction	16, 60
Empirical Analysis	8, 154
Empirical Estimations	40
Empirical Evidence	127
Empirical Research	134
Empirical Testing	64, 65
Employment Rights	136
Energy consumption	20, 54, 66, 75
Energy Imports	11
Energy Infrastructure	108
Energy policy	55
Energy Policy	92
Energy Policy	21

Energy-Growth	26
Engine performance	16
Entrepreneurialism	176, 207
Entrepreneurialism	184, 187
Entropy Weight Method	74
Envelopment Analysis	43
Environmental Constraints	87
Environmental Degradation	14
Environmental Impact	25
Environmental Protection	32
Environmental Sustainability	42, 47, 53
Equation Modeling	45, 116, 140, 144
Error Tolerance	143
Escalation Management	151
ESG Disclosures	106
Espionage Targeting	147
Ethical Finance	48
Ethiopian Church	203
Ethnic Discrimination	231
Ethnographic	180
Ethnographic Fieldwork	203
Ethno-Nationalism	169
Ethnosectarian Persecution	225
Euro-American Psychology	195
Eurocentric Marxism	221
European Migration Studies	167
European Union	131
European Union	67, 131
E-Waste Management	53
Expectancy	4
Extrinsic Reciprocity	156
Female Combatants	161
Female Entrepreneurship	185
Feminised Aesthetics	181
Feminism	209, 218
Feminism	190
Feminist Activism	183
Feminist Intersectionality	176
Feminist Media	178
Feminist Resistance	188
Feminist Theory	168
Ferrous Metal Industry	38
Financial Autonomy	173
Financial Literacy Index	97
Financialization	44
Flexible Study	109
Fossil Fuel	69
Freelance Feminism	186
Frigga Haug	217
FsQCA Method	103

G7 Economies	76
Game Optimization	73
Gender Equality	102
Gender Gap	96
Gender Negotiation	171
Gender Relations	220
Gendered Labor	173
Genetic Algorithm	7
Geopolitical Contestation	217, 232
Geothermal Technology	21
Gig Workers	135
Girlboss Phenomenon	185
Global Emission Reduction	80
Global warming	58, 59
Globalization	206
Government Policies	223
Granger Causality	4
Graphene Oxide	85
Green Finance	44, 48
Green Growth	2
Greenhouse Gas	51, 70
Group Cohesion	122
Growth Strategies	47
Hazardous Waste	53
Heterogeneous Energy	14
Heuristic Potential	209
Higher Education	110
Historic Preservation	227
Historical Development	214
Historical Materialism	215
Historical Tensions	216
HOMER Software	34
Human Capital	116, 118
Human Development	103
Human Rights Violations	160
Hunters' Association	120
Hybrid optimization	11
Hybrid Photovoltaic	77
Hydraulic Fracturing	69
Hydrocarbon conversion	28
Hydroelectric Power	40
Hydropower Output	68
Hysteresis Current	12
Identity Narratives	198
Illiberalism	171
Immanent Resistance	169
Incubating Effect	20
Indigenous Identity	205
Industrial Relations	136
Industrial Structure	10

Industrial Upgrading	38
Industrialization	88
Infant-Directed Speech	36
Infant-Directed Speech	201
Influence Operations	146
Informal Recycling	52
Information Criterion	57
Institutional Analysis	149
Institutional Barriers	110
Institutional Philosophy	133
Institutional Quality	101
Institutionalization	165
Interactionist Perspective	142
Intercultural Exchange	167
Interleaved Inverter	12
Internal Colonialism	220
International Monetary Fund	139
International Security	151
Interpretive Structural Modeling	6
Invention Patents	20
Investment Migration	132
Irradiance Effects	13
IT Service Industry	143
Judicial Dismissal	229
Kerogen pyrolysis	27
Knowledge Dissemination	70, 71
Kolmogorov-Smirnov Test	57
Labor Exploitation	216
Labor Legislation	137
Labor Market	105, 135
Labor Process Theory	212
Labor Rights	176, 210
Labour Organization	136, 138
Labour Rights	184, 190
Landscape Protection	61
Langmuir Isotherm	46
Learning Motivation	111
Legal Reforms	135
Lego Friends	174
Leszek Nowak	213
Life Expectancy	4
Life Trajectory	193
Lifelong Learning	116
Linguistic Bias	201
Lipnica Settlement	230
Literacy Proficiency	117
Lived Experiences	207
LMDI Decomposition	91
Lockdown Measures	24
Long-Run Cointegration	37

Machine Learning	65, 76
Macroeconomic Stability	102
Mainstream Television	200
Majority Verdicts	228
Male Domination	219
Manufacturing Skills	19
Marginalization	205
Market Inefficiencies	99
Marketization	199
Marx's Method	213
Marxism	218
Marxist Concepts	211
Marxist Historiography	215
Marxist-Feminist Theses	219
Mass Injuries	225
Materialist Interpretation	218
Maternity Benefits	129
Measurement Validity	155
Mechanization	98
Media Representation	200
Mediating Effect	10
Mediation Analysis	140
Mental Health	134
Meta-Frontier Approach	86
Metal Ferrites	22
Methodological Critique	178
Methodology	172
Metropolitan Context	206
Microteaching	114
Migration	162, 185
Migration	198
Militarized Policing	177
Military Conflict	152
Military Cooperation	146
Military Diffusion	147
Military Expenditures	154
Military Force Posture	124
Military Missions	157
MINT Nations	90
Monetization	187
Multidimensional Structure	209
Music Culture	165
Nanofluid Coolant	80
Nanoparticles	31
National Competitiveness	139
National Safety	121
Nation-Building Failures	107
Natural Dyes	13
Natural Resources	69, 104
Neoliberal Crisis	185

Neoliberal Discourses	176
Neoliberal Feminism	174, 205, 206, 207
Neoliberal Feminism	181, 186, 187
Nightlife Regulation	164
Nonproliferation	124
Nonradial Function	87
Normative Sociality	191
NSSO Data	94
Nuclear Energy	35
Nuclear Proliferation	125
Nuclear Use	125
OECD Countries	39
OKEY Scenario	50
Ordered Probit Model	54
Organizational Change	133
Organizational Psychology	142
Organized Manufacturing	137
Oxygen Index	67
Pandemic Baking	181
Pandemic Precarity	179, 180
Panel Cointegration	101
Panel Data Analysis	39, 101
Parabolic Trough	50
Pareto Optimality	30
Partisan Bias	150
Patriarchy	222
Patronage	154
Peak Load Shifting	49
Peak Oil	68
Perceived Learning	122
Philosophical	192
Photocatalysis	21
Photovoltaic Nanogrid	49
Photovoltaic Solar Cell	10
Photovoltaic Systems	72
Pierre Bourdieu	115
Pinch Analysis	82
Plastic Pollution	156
Pluralism	191
Policy Challenges	132
Policy Effectiveness	126
Policy Fragmentation	23
Policy Framework	114
Policy Harmonization	22
Policy Implementation	89
Policy Implications	35, 29, 155, 190
Policy Implications	202
Policymakers	6, 127
Political Collectives	210
Political Crisis	108

Political Device	175
Political Ideology	156
Political Science	145
Political Stability	70
Political Transition	155
Politicization	223
Pollution Metrics	62
Population Dynamics	98
Portugal	175
Post feminism	171, 202
Postcolonial Feminism	222
Postfeminism	173, 176
Power Distance Index	54
Power generation	17
Precarity	212
Premature Death	226
Primitive Accumulation	216
PRISMA Framework	133
Proculturation	198
Production Mechanisms	55
Productivities Analysis	99
Profitability Index	84
Psychoanalysis	197
Psychogram	194
Psychotherapy	204
Public Perception	119
PV Array	84
Pyrolysis	24
Python Algorithm	81
Qualitative Analysis	110
Quantile Causality	78
Quantile Regression	5, 82, 91
Quasi-Natural Experiment	81
Racialisation	210, 226
Racism	224
Racist Carcerality	228
Radical Movement	152
Raymond Williams	166
Recomposition	213
Reconciliation	184
Refugee	162
Refugee Experiences	163
Regime Type	157
Regional Disparities	37
Regional Heterogeneity	27
Regulatory Heterogeneity	63
Reification	172
Relational Pedagogy	108
Religious Symbolism	170
Renewable energy	15, 25, 61, 63

Repetition	199
Reproductive Labor	215
Resilience	196
Resistance To Colonization	205
Reverse Osmosis	6
Robustness Check	92
Rohingya Genocide	126
Romantic Opportunism	189
Rural Areas	97
Sal Biodiesel	32
School Dropout	95
Seawater Desalination	7
Secularism	170
Securitization	177
Self-Branding	182
Self-Efficacy	115
Self-Regulation	195
Sensitivity Analysis	33
Serbian Society	169
Sex Trafficking	113
Singapore	114
Skill Development	123, 127
Skill Mismatch	118
Slacks-Based Model	56
SME Growth Strategies	36
Social Deprivation	104
Social Disclosure	107
Social Exclusion	174
Social Imprint	199
Social Inequalities	164
Social Intelligence	142
Social Learning	140
Social Media	146
Social Movements	222
Social Network	91
Social Responsibility	45
Social Safety	93
Social Struggles	223
Social Work	112
Socio-Cultural Change	206
Socioeconomic determinants	55
Socioeconomic Mobility	117
Sociolinguistic	201
Soiling Mitigation	71
Solar Irradiance	77, 80
Solar Market	88
Solar Photovoltaics	11
Solar Thermal Power	49
Soot Yield Trends	66
Spain Case Study	83

Spatial Correlation	232
Spatial Gradients	67
Spatial-Temporal Evolution	73
Spill over Effects	52
State Authority	161
Strategic Investment	131
Structural Shifts	35
Student Support	112
Sub-Saharan Africa	87, 120
Surveillance Policies	158
Survivor Engagement	113
Sustainable Consumption	83
Sustainable Development	2
Sustainable Transition	85
Swirling Students	112
Symbiotic Development	1
Symbolic Communication	166
Synergistic Effect	26
Systemic Coupling	85
Teacher Accessibility	121
Teacher Competency	113
Technological Innovation	78, 128
Technological openness	18
Temperature Threshold	25
Thematic Analysis	189, 195, 205
Thematic Analysis	188, 202, 208
Theory Of Alienation	214
Thermal Energy	50
Thermal power	38
Threshold Model	9
Time-Varying Causality	34
Torture	159
Trade Openness	9, 33, 36, 78
Trade Policies	90
Trade Unionism	138
Traditional Education	203
Transesterification	22
Transformational Change	228
Transformative Learning	109, 141
Transnational Feminism	178
Travel Behaviour	95
Tweenhood	171
UNESCO	120
Universal Basic Income	94
Urban Amenities	100
Urban Mobility	96
Urban Redevelopment	164
Urban Supply Chains	75
Urbanization	5, 41, 56
Urbanization Impact	31

US Intervention	231
Utility Integration	82
Vector Autoregressive	8
Vector Regression	66
Venture capital	19
Violence Theory	124
Vocational Education	106
Volatile Matter	23
Voting Behaviour	157
Vulnerable Populations	17
Wage Gap	106
War gaming	150
Waste Management	43
Waste-Sorting Policy	71
Water Allocation Optimization	90
Water Hyacinth	58
Wavelet Coherence	8, 89
Wavelet Decomposition	7
Wealth Distribution	103
White Disenfranchisement	229
Willingness To Pay	16
Women's Involvement	121
Workforce Shrinkage	97
Workplace Integration	143
Workplace Learning	141
Workplace Policies	139
World Bank	93
Zero Emissions	79