

Journal of Social Sciences and Humanity Studies (JSSHS)



An International Peer-reviewed journal

Number of issues per year: 6

ISSN: 2356-8801 (Print)

ISSN: 2356-8852 (Online)

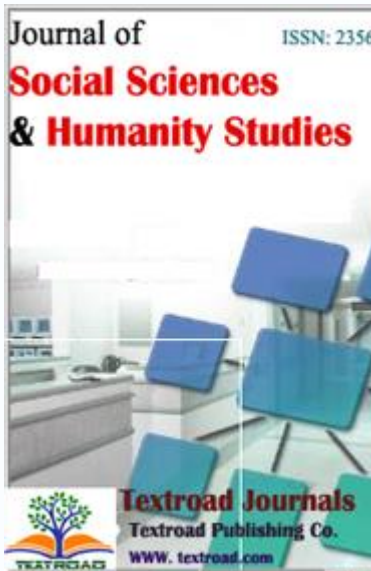
Volume 4, Issue 5, October 2018



Journal of Social Sciences and Humanity Studies

J. Soc. Sci. Hum. Stud. 2018., Vol. 4 No. 5: pp. 1-24, Year 2018

Journal of Social Sciences and Humanity Studies (JSSHS)
Bimonthly Publication



Number of issues per year: 6
ISSN: 2356-8801 (Print)
ISSN: 2356-8852 (Online)

Journal of Social Sciences and Humanity Studies (JSSHS) is a peer reviewed, open access international scientific journal dedicated for publication of high quality original research articles as well as review articles in the all areas of Journal of Social Sciences and Humanity Studies.

Journal of Social Sciences and Humanity Studies (JSSHS) is devoted to the rapid publication of original and significant research in...

Scope

- | | | |
|---|--------------------------|-------------------------|
| Acrobatics | Anthropology | Archeology |
| Arts | Business studies | Criminology |
| Communication studies | Corporate governance | Cross cultural studies |
| Demography | Development studies | Economics |
| Education | Environmental Studies | Ethics |
| Geography | Government | History |
| Industrial relations | Information science | International relations |
| Journalism | Law | Library science |
| Linguistics | Literature | Management |
| Market Research | Marriage and family life | Media studies |
| Methodology | Neuroscience | Paralegal |
| Performing arts (Comedy, Dance, Magic, Music, Opera, Film, Juggling, Marching Arts, Brass Bands, Theatre, Visual Arts, Drawing, Painting) | Philosophy | Political science |
| Population Studies | Psychology | Public administration |
| Religious studies | Social welfare | Sociology |
| Trade | Visual arts | Women studies |

Editorial Board

Editor -in-Chief

William Ebomoyi

Ph.D., Professor, Department of Health Studies, College of Health Sciences, Chicago State University, **USA**.

E-mail: editor@textroad.com

Associate Editors

Prof. Dr. Sarwoko Mangkoedihardjo

Professor, Professional Engineer of Indonesian Society of Sanitary and Environmental Engineers, **Indonesia**

Saeid Chekani Azar

PhD of Veterinary Physiology; Faculty of Veterinary, Department of Physiology, Ataturk University, Erzurum 25010, **Turkey**.

Dr. Ravi Kant

Assistant Professor, M.A. (Economics) M.Ed., NET & Ph.D. in Education, Bihar, **India**.

Dr. Sandra Pacios Pujado

University of Pennsylvania, Philadelphia, PA, **USA**.

Vishal Patil, PhD

Materials Research Laboratory, University of California, Santa Barbara, CA, **USA**.

Dr. YUBAO CUI

Associate Professor, Department of Laboratory Medicine, Yancheng Health Vocational & Technical College, Jiangsu Province, P. R. **China**

Chulho Kim

Ph.D., Associate Professor, Department of Advertising & PR, College of Social Science, Cheongju University, **South Korea**

Raja S Payyavula

Research Associate, Bio Science Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee, **USA**.

Dr. Zhihong Song

The Ames Laboratory of US DOE, 2238 MBB Iowa State University, IA 54411 **USA**.

Prof. Dr. Valdenir José Belinelo

Department of Health Sciences and Postgraduate Program in Tropical Agriculture, Federal University of Espirito Santo (UFES, São Mateus, ES, **Brazil**

Dr. Chandrasekar Raman

Research Associate, Department of Biochemistry & Molecular Biophysics, Biotechnology Core Facility, 238, Burt Hall, Kansas State University, Manhattan 66506, KS, **USA**.

Mr. Jiban Shrestha

Scientist (Plant Breeding and Genetics), Nepal Agricultural Research Council, National Maize Research Program, Rampur, Chitwan, **Nepal**

Dr. Nadeem Javaid

Ph.D. (University of Paris-Est, France), Assistant Professor, Center for Advanced Studies in Telecommunications (CAST), COMSATS Institute of IT, Islamabad, **Pakistan**

Dr. Syamkumar Siv Pillai

Program Manager-National Clean Plant Network – Fruit Trees, Washington State University, **USA**

Dr. Hala Ahmed Hafez Kandil

Professor Researcher, National Research Centre, Plant Nutrition Dept. El-Bhouth St. Dokki, Giza, **Egypt**.

Prof. Dr. Aziza Sharaby

Pests and Plant Protection Department, National Research Center, Cairo, **Egypt**

Prof. Dr. Sanaa T. El-Sayed

Ex Head of Biochemistry Department, Professor of Biochemistry, Genetic Engineering & Biotechnology Division, National Research Centre, **Egypt**

Dr. Pratap V. Naikwade

M.Sc., Ph.D. Head, Department. of Botany, ASP College, Devrukh. Maharashtra, **India**.

Dr. Tarig Osman Khider

Associate Professor, University of Bahri-Sudan, College of Applied and Industrial Sciences, Department of Pulp and Paper Technology, **Sudan**

Dr. Hayman Z. Metwally

Associate Professor of Space Science Cairo University Egypt and Vice Dean of Quality Assurance and Development Hayel University **KSA**.

Dr. Nawfal Jebbor

Department of Physics, Moulay Ismail University, Meknes, **Morocco**.

Dr. Eng. Ahmed Kadhim Hussein

Assistant Professor, Department of Mechanical Engineering, College of Engineering, University of Babylon, Republic of **Iraq**.

Prof. Dr. Abd El Fady Beshara Morcos

Ass. Prof. of Relativistic Astrophysics and Cosmology, National Research Institute of Astronomy and Geophysics, **Egypt**.

Zohre Bahrami

Shahid Beheshti University of Medical Sciences, Tehran, **Iran**. Researcher and Methodology Adviser.

Dr. Ayhan Kapsuzoglu

Department of Banking and Finance, Yildirim Beyazit University, **Turkey**.

Dr. Charalambos Tsekeris

Department of Psychology, Panteion University of Social and Political Sciences, Athens, **Greece**.

Dr. Mahdi Zowghi

Industrial and System Engineering, Management and Soft Computing, London Business and engineering School, **United Kingdom**.

Dr. Tomislav Jurendic

Bioquanta Ltd. for Research and Development, Koprivnica, **Croatia**

Dr. Hanna Bolibok-Bragoszewska

Warsaw University of Life Sciences, **Poland**.

Dr. Alaa Abdelwahed Abdelbary

Prof. of Computational and Applied Mathematics, Arab Academy for Science and Technology & Maritime Transport, **Egypt**.

Dr. N R Birasal

Associate Professor, Zoology Department, KLE Society's G H College, HAVERI – 581 110, Karnataka state, **India**.

Dr. Nawab Ali Khan

Professor of Human Resource Management, College of Business Administration, Salman Bin Abdulaziz University, Post Box:165, Al Kharj - 11942 **Kingdom of Saudi Arabia**

Editors

Jasem Manouchehri

Instructor in Sport Management, College of Physical Education and Sport Sciences, Islamic Azad University, Central Tehran Branch, Tehran, **Iran**

Prof. Dr. Tarek Ahmed Shokeir

Professor and Consultant, Department of Obstetrics & Gynaecology, Fertility Care Unit, Mansoura University Teaching Hospitals, Mansoura Faculty of Medicine, **Egypt**

Leila Falahati

Department of Resource Management and Consumer Studies, Faculty of Human Ecology, University Putra **Malaysia**.

Dr. Ali Elnaeim Musa

University of Bahri, Sudan College of Applied and Industrial Sciences, **Sudan**

Prof. Dr. Magda M.A. Sabbour

Professor, Department of Pests and Plant Protection- National Research Centre, Cairo, **Egypt**.

Dr. Basharia Abd Rub Alrasoul Abd Allah Yousef

Deputy Dean at Faculty of Engineering, University of Bahri, Khartoum, **Sudan**

Dr. Jinu John

Associate Professor (Biotechnology), Jinu Bhavan, Chepra (P. O), Kottarakara, Kollam (Dist.), Kerala – 691520; **India**.

Dr. Sunil Kumar

Assistant Professor, Department of Mathematics, National Institute of Technology, Jamshedpur, 831014, Jharkhand, **India**

Zairi Ismael Rizman

Senior Lecturer, Faculty of Electrical Engineering, Universiti Teknologi MARA (UiTM) (Terengganu) **Malaysia**

Muhammad Attique Khan Shahid,

Associate Professor of Physics, Department of Physics, GC University, Faisalabad. **Pakistan**. PNRA certified Health Physicist, RPO, RSO Atomic and Nuclear Physics Lab

Dr.Vuda Sreenivasarao

Department of Computer and Information Technology, Defence University College, Deberzeit, **Ethiopia**

Dr. Mohdammed Israil

Post Doctoral Fellow, University Sains Malaysia, Pulau Penang, **Malaysia**.

Dr. S. Ravichandran

Assistant Professor, Department of Physics, Sathyabama University, **India**

Dr. Sukumar Senthil Kumar

School of Mathematical Sciences, Universiti Sains Malaysia, **Malaysia**.

Seifedine Kadry

American University of the Middle East, **Kuwait**.

Dr. Ho Soon Min

Senior Lecturer, Faculty of Applied Sciences, INTI International University, Persiaran Perdana BBN, Putra Nilai, Negeri Sembilan, **Malaysia**.

Dr. Ezzat Molouk Kenawy

Economic Department, Faculty of Commerce, Kafr El-Sheikh University, **Egypt**.

Dr. Farooq Ahmad Gujar

Centre for Advanced Studies in Pure and Applied Mathematics, Bahauddin Zakariya University, Multan, 60800, **Pakistan**. & Head of Institution / Principal / Associate Professor of Mathematics.

Dr. Seshadri Sekhar. Tirumala

Principal, Chirala Engineering College, **India**.

Dr. Tarek Y. El-Hariri

Associated Professor, Egyptian Petroleum Research Institute, Exploration Department, **Egypt**.

Dr Mamode Khan Naushad

Department of Economics and Statistics, Faculty of social studies and humanities, University of Mauritius, **Mauritius**.

Dhahri Amel

Research professor, Research Unit: Materials, Energy and Renewable Energies (MEER)-Science Faculty of Gafsa, Tunisia.

Dr. Muhammad Waqas Anwar

COMSATS Institute of Information Technology, University Road, 22060, Abbottabad, **Pakistan**.

Prof. Dr. Abdul-Kareem J.Al-Bermany

Advance Polymer Laboratory, Physics Department/College of Science/Babylon University, **Iraq**.

Dr. Syed Zulfiqar Ali Shah

Chairman Higher Studies and Research, Faculty of Management Sciences, International Islamic University Islamabad, **Pakistan**.

Saima Anis Mustafa

Assistant Professor in COMSATS Institute of Information Technology, University Road, Abbottabad, **Pakistan**

Dr.K.V.L.N.ACHARYULU

Faculty of Science, Department of Mathematics, Bapatla Engineering college, Bapatla, **India**.

Maryam Ahmadian

Post Doctoral Fellow, Department of Social and Development Sciences, Faculty of Human Ecology, Universiti Putra, UPM Serdang, Selangor, **Malaysia**.

Abdel Baset Hasonah,

PhD, Associate professor of Marketing, Head of marketing Department Al Isra University - Amman, **Jordan**

Muhamad Fazil bin Ahmad

Asst. Prof. Universiti Sultan Zainal Abidin, Terengganu, **Malaysia**.

Shaukat Amer

CPA, Assistant Professor, Department of Management Sciences, COMSATS Institute of Information Technology, Attock, **Pakistan**.

Naveed Ahmed

Assistant Professor, Department of business administration, Indus International Institute, 2-Km, Jampur Road, Dera Ghazi Khan, **Pakistan**

Rab Nawaz Lodhi

PhD (ABD), Management Sciences (Bahria University Islamabad), Lecturer: Department of Management Sciences, COMSATS Institute of Information Technology, Sahiwal, **Pakistan**.

International Licensed Trainer - NVivo Qualitative Research: QSR International Limited Australia

Dr. Majid Sharifi Rad

Department of Range and Watershed Management, Faculty of Natural Resources, University of **Zabol**

Dr. Muhammad Naeem

LECTURER, Department of Information Technology, Hazara University, **Mansehra**.

Dr. Sohrab Mirsaedi

Centre of Electrical Energy Systems (CEES), Faculty of Electrical Engineering (FKE), Universiti Teknologi Malaysia (UTM), 81310 Skudai, Johor, **Malaysia**

Farhan Altaee

Ministry of Science and Technology, **Iraq-Baghdad**

Dr. Hafiz Abdul Wahab

Assistant Professor of Mathematics, Department of Mathematics, Hazara University Mansehra **Pakistan**

Table of Contents, October 2018

Sayed Amir Hussain Shah, Dr. Naeem Ahmed, Dr. Muhammad Umair Rafique

Israel - India Relations; Strategic Challenges for Iran and Pakistan

J. Soc. Sci. Hum. Stud. 2018 4(5): 1-6. [\[Abstract\]](#) [\[Full Text PDF\]](#)

Amer Al-Saleh

Road Traffic Accidents in Kuwait City: A Triangulation Approach

J. Soc. Sci. Hum. Stud. 2018 4(5): 7-18. [\[Abstract\]](#) [\[Full Text PDF\]](#)

Syed Anwar Ali Shah, Assad Us Samad

A Comparative Study of Emotion Metaphor between English and Khwar

J. Soc. Sci. Hum. Stud. 2018 4(5): 19-24. [\[Abstract\]](#) [\[Full Text PDF\]](#)



Israel - India Relations; Strategic Challenges for Iran and Pakistan

Sayed Amir Hussain Shah¹, Dr. Naeem Ahmed², Dr. Muhammad Umair Rafique³

¹PhD Scholar, Department of International Relations, University of Karachi

²Associate Professor, Department of International Relations, University of Karachi

³Assistant Professor, Faculty of Social Sciences, Shaheed Zulfiqar Ali Bhutto
Institute of Science and Technology, Karachi

Received: May 21, 2018
Accepted: August 11, 2018

ABSTRACT

Asia is the most inhabited and diversified region in the world. The geo-political and geo-strategic significance of the region is already affirmed in the global order. The continent is comprising on numerous tenuous states involved in inter-state clangs and clanks, therefore, it forms the most perilous security complex in the world. Asia maintains high level of significance in terms of political, economic, geographic, strategic, cultural, industrial and military point of view in international community. Notwithstanding, regional development within the Asian states severely influences intercontinental politics. Recent rapprochement of Indian and Israeli governments to enhance cooperation in contemporary fields, especially military hardware is horrendous for both Iran and Pakistan. All four states are equipped with state of the art conventional and non-conventional weapons. India and Pakistan are already declared nuclear powers, whereas Iran and Israel are non-declared nuclear states, however, it is certain that all states have matchless missile technology and military gadgets. Iran; Israel and India; Pakistan rivalry is not a new phenomenon. This article will investigate challenges and repercussions of emerging India and Israel ties towards Iran and Pakistan in a contemporary scenario and changing regional power dynamics.

KEYWORDS: Asian politics, Strategic challenges, India-Israel relations, Iran, Pakistan

INTRODUCTION

Israel's 9th Prime Minister Benjamin Netanyahu paid a five days official visit to the Republic of India on January 15, 2018, underlining the growing ties between two major democracies, one in South Asia and one in the Middle East [1]. Netanyahu is the second Israeli leader to visit India after Ariel Sharon in 2003, where he received warm welcome by Indian Prime Minister Narendra Modi [2]. "Indian Prime Minister (Narendra) Modi is a close friend of Israel and of mine and I appreciate the fact that he will accompany me on extensive parts of my visit," Netanyahu said just before leaving for New Delhi [3]. The Israeli Prime Minister was accompanied with a large business delegation to enhance and promote bilateral cooperation in the fields of tourism, technology, agriculture and innovation. Prime Minister Netanyahu said, "On this visit I intend to strengthen bilateral relations even more. This visit is an opportunity to enhance cooperation with a global economic, security, technology and tourism power. Indian Prime Minister Modi is a close friend of Israel and of mine and I appreciate the fact that he will accompany me on extensive parts of my visit" [4]. In response to Israeli PM remarks, "Your visit to India is historic and special. It will further cement the close friendship between our nations," Modi said on Twitter [5]. "We will strengthen the existing pillars of cooperation in areas that touch the lives of our peoples. These are agriculture, science and technology, and security" twitted by Indian PM [6].

Early, in July 4, 2017, Narendra Modi became first Indian Prime Minister to visit Israel. "Prime Minister, we've been waiting for you a long time. We've been waiting almost 70 years in fact because yours is truly a historic visit. It's the first time an Indian Prime Minister is visiting Israel. We receive you with open arms. We love India. We admire your culture, we admire your history, your democracy, your commitment to progress. We view you as kindred spirits in our common quest to provide a better future for our peoples and for our world" [7]. This significant visit, the first of an Indian Prime Minister to Israel, takes place on the backdrop of marking 25 years of diplomatic relations between India and Israel, and will further upgrade the ever-growing partnership between the two countries [8]. In a joint statement PM Modi said, "My visit celebrates the strength of centuries-old links between our societies. Based on these bonds our partnership has maintained a strong and sustained upswing since the establishment of full diplomatic

*Corresponding Author: Sayed Amir Hussain Shah, PhD Scholar, Department of International Relations, University of Karachi.

relations 25 years ago. The people of Israel have built a nation on democratic principles. They have nurtured it with hard work and the spirit of innovation. You have marched on regardless of adversity and converted challenges into opportunity” [9].

METHODOLOGY

Keeping in view the type and nature of study, both qualitative and analytical techniques has been utilized. Moreover, authentic books, monographs, journals, newspapers and online resources are used to produce a quality paper for the readers.

ISRAEL – INDIA RELATIONS; A BRIEF OVERVIEW

“It took India more than four decades to establish full diplomatic relations with the Jewish state. At the bilateral level neither India nor Israel are vital to one another and they assume importance only in a larger geo-political arena. While Israel was quick to take cognizance of this, realism was a belated phenomenon in Indian foreign policy” [10]. “India and Israel established full diplomatic relations in 1992 and since then the bilateral relationship between the two countries has blossomed at the economic, military, agricultural and political levels. Both countries see themselves as isolated democracies threatened by neighbors that train, finance and encourage terrorism, therefore both countries also view their cooperative relationship as a strategic imperative” [11]. The establishment of formal diplomatic relations between India and Israel, marked the successful completion of a political process that began in the early 1920s when Indian nationalist leaders were drawn into the Arab-Jewish conflict [12]. Historically, Gandhi was a sympathetic observer of the affairs of Eastern European Jewish immigrants in South Africa, seeing them as a group of people who, like Indians, were being victimized for no fault of their own, there were others, coming from a more privileged background no doubt, who became his closest friends and on whom he depended for his social and political work both in Johannesburg and London [13].

With security point of view, India and Israel both claims imminent threat from ethno-religious minorities, fueled by their neighbors. To address the issue, both states has made several military cooperation agreements to enhance regional security and stability. The first ever weapons deal between India and Israel was about purchase of Barak-1, vertically-launched surface-to-air missiles (SAM) to intercept anti-ship cruise missiles and to counter Pakistan’s P3-C Orion maritime strike aircraft and Harpoon sea-skimming anti-ship missiles [14]. New Delhi's turn to Jerusalem for combat soldier expertise is due, in part, to disappointing results in border clashes with Pakistani forces and to last year's suicide attack by Muslim terrorist infiltrators on Indian Parliament members [15]. Presumably to equip these soldiers, India recently concluded a \$30 million agreement with Israel Military Industries (IMI) for 3,400 Tavor assault rifles, 200 Galil sniper rifles, as well as night vision and laser range finding and targeting equipment [16]. In 2005, Israel Aircraft Industries announced it was selling India 50 aerial drones (Heron) for \$220 million [17]. Israel Aerospace Industries Ltd signed a \$2.5 billion deal with India to develop an anti-aircraft system and missiles for the country, in the biggest defense contract in the history of Israel [18]. New Delhi having done military business worth around \$9 billion with Tel Aviv since the 1999 Kargil conflict [19]. Indian Army ordered thousands of Spike anti-tank missiles and peripheral equipment from Rafael Advanced Defense Systems Ltd worth \$1 billion in March, 2011 [20]. In September, 2015, the Indian government approved the air force’s request to acquire 10 Heron TP drones from Israel Aerospace Industries (IAI) that can be fitted with weapons to engage targets on the ground, an air force official with knowledge of the matter said [21]. The Indian Cabinet Committee on Security (CCS) has reportedly approved the purchase of two more Phalcon Airborne Early Warning and Control Systems (AWACS) in defense sales, totaling approximately \$3bn, from Israel [22]. India Air Force landed in Israel to participate in the biennial Blue Flag exercise, which will take place from November 2 to 16 2017, at the Ovda Airbase in southern Israel [23]. Presently, India is the largest buyer of Israeli military equipment, while Israel is India’s largest customer after Russia [24].

ANTAGONISM BETWEEN IRAN AND ISRAEL

The relationship between Israel and Iran has since the very inception of the Jewish state in 1948 been a complex function of Iran’s geo-strategic imperatives as a non-Arab, non-Sunni state in an overwhelmingly Arab and Sunni environment, and its need to find an appropriate relationship with its Arab/Sunni neighbors in order to materialize Iranian regional leadership aspirations [25]. Iran was among few countries which opposed creation of Israel and even membership to UN, nevertheless it was second Muslim country after Turkey to recognize Israel, until 1953 coup of pro-west Shah Phalvi [26]. The two countries enjoyed good relations for 30 years, but since the Islamic Revolution of

1979, Israel and Iran have been a study in enmity, despite not sharing a border or having any territorial disputes [27]. Unlike Israel's longstanding disputes with several of its Arab neighbors, Iran and Israel had a close relationship before the Iranian Revolution [28]. Israel has claims that Iran is supporting anti-Israeli proxies like Hezbollah and Islamic Jihad within the Middle East region. However, Iran mentioned several times that Israel is the mother of all evils with in the region and supporting Jundallah and People's Mujahideen of Iran.

Ayatollah Ali Khamenei in December 2000 declared Israel as "cancerous tumor" in the Middle East [29]. "The Islamic Republic has never threatened and will never threaten any country" said by Iranian supreme leader, however, Ahmadinejad addressed that "the occupying Zionist regime of Jerusalem should cease to exist in the page of time" - has been mistranslated and distorted into the notorious phrase, "Israel should be wiped off the map" by the western media [30]. The series of assassinations of Iranian nuclear scientists since 2010 has long been believed to be the work of the Israeli intelligence agency, the Mossad, but most of the speculation over the issue suggested that the Israelis sub-contracted the dirty work to Iranian rebel groups like the Mujahedin-e-Khalq (MEK) or Jundallah [31]. The relations between both states became more curtail in 2018. In February, 2018, Israel accused Iran of sending an armed drone into its territory, after which an Israeli plane was shot down while bombing positions in Syria, the first time the country had lost an aircraft in combat in 35 years [32]. Iranian forces in Syria launched around 20 rockets into the Golan Heights, according to Israel's military. Jerusalem blamed Iran's Quds Force, this is an extremely dangerous situation [33].

RIVALRY BETWEEN INDIA AND PAKISTAN

India-Pakistan relations remained unstable since the dissolution of British Indian empire. There are several historic, political, demographic and military issues behind this phenomenon. Communal riots occurred after portion of sub-continent took thousands of lives of both Hindus and Muslims migrants during independence. Another root cause is the unlawful annexation of Junagadh and Kashmir soon after independence by India. Both countries fought several wars including 1947, 1965 and 1971 war and Kargil operation. India-Pakistan border is the most volatile border in the world. Kashmir issue is as old as the both countries are; and still needs to be resolved on priority. During visit to India in March 2000, US President Mr. Clinton called Kashmir the "most dangerous place on Earth" [34]. India constantly propagating and accusing Pakistan being a supporter of Jihadi movements and radical groups. "We will, of course, reiterate to the Obama administration that, even after 26/11, Pakistan is not doing enough to crack down on terrorism emanating from its soil against India," said an official [35]. On the other hand, According to Marwa, 1979 [36], "India's military intervention in East Pakistan was an instance of the clear use of force for the achievement of limited political and security objectives. Indian policymakers' responses to the events in Pakistan were spread over a specific period of time and their decisions can be viewed in a series of distinct phases. The totality of actions involved diplomatic maneuvering in global, regional, and subcontinental geopolitical contexts. There were, in Indian perceptions, easily identified internal and external dimensions to the situation within East".

"You cannot get on the negotiating table what you could not take in the battlefield," said a senior diplomatic source, quoting a former Soviet foreign minister, when asked if the expected settlement could call for 'redistribution' of the disputed territory [37]. Numerous steps have been taken by Pakistan since last two decades to normalize tension between the two states, including cease fire on line of control (LOC). Confidence building measures (CBMs) introduced by President Musharraf were an honest effort to promote relations between both countries. The PML-N government sprung a surprise at the recent trade talks with India by offering New Delhi the most-favored nation (MFN) status with a condition. Pakistan sought access for 250-300 of its items at lowered duties [38]. Pakistan put all out efforts to stabilize relations, however, India is always avoiding to settle disputes, in reply they are accusing Pakistan for terrorist activities supporter.

CONCLUSION

The emerging military ties between the India and Israel are a real threat to the security and stability of the entire region. Iran and Pakistan have a constant focus on the blooming military cooperation between the two states. India is maintaining balanced relations with Iran and have inked nine agreements, including leasing part of the Iranian port of Chabahar to an Indian company, after "substantive" bilateral talks between the Indian prime minister and the Iranian president in New Delhi [39]. However, at the same time Prime Minister Modi visited Israel, the arch enemy of Iran, and supported their cause, which reflects complex and multifaceted Indian foreign policy. Every state has the right to safe guard her national interest, meanwhile Iran has to pay especial attention to growing Indian-Israeli nixes.

Citation: Sayed Amir Hussain Shah, Dr Naeem Ahmed, Dr Muhammad Umair Rafique (2018); Israel - India Relations: Strategic Challenges for Iran and Pakistan, *Journal of Social Sciences and Humanity Studies*,4(5)1-6.

Developing proximity between India and Israel poses a serious threat to the integrity, safety and stability of a sovereign Iran.

Pakistan and Iran are sharing societal, religious, language and cultural commonalities. The relations between two states remained exemplary since inception of Pakistan. Iran was the first country recognized Pakistan as an independent state. Iran also provided logistic support to Pakistan during Indo-Pak war of 1965. Iran supports Pakistan cause on the issue of Kashmir and always voted in favor of Pakistan on international forums. Pakistan and Pakistani nations have especial feelings for their neighbor. Pakistan supported Iran cause on the issue of Palestine. Pakistan is also a leading nation who did not recognize Israel as an independent state. High ranking official meetings are conducted on periodical basis to strengthen bilateral ties. Mutual cooperation in different fields of science and technology can be envisaged between the two states. By growing nexus of Israel and India in defense technology, both countries must face strategic challenges, like; first, unwanted arms race in the region, second, increase in military expenditure, third, constant threat to regional security and stability, fourth, economic development to a sustainable level, fifth, improvement of military hardware.

REFERENCES

- [1] Pant, H. V. (January 23, 2018). India-Israel Ties Gather Momentum. *The Diplomat*. Retrieved on May 30, 2018 from <https://thediplomat.com/2018/01/india-israel-ties-gather-momentum/>
- [2] Jacob, J. (January 15, 2018). Israeli PM Benjamin Netanyahu's first India visit aims to deepen trade ties. *Hindustan Times*. Retrieved on June 10, 2018 from <https://www.hindustantimes.com/india-news/israeli-pm-benjamin-netanyahu-s-first-india-visit-aims-to-deepen-trade-ties/story-fCis4LxWgfLnMfac7UN7gN.html>
- [3] The Times of India. (January 14, 2018). Israel PM Netanyahu leaves for 'historic' visit to India. Retrieved on June 9, 2018 from <https://timesofindia.indiatimes.com/india/israel-pm-netanyahu-leaves-for-historic-visit-to-india/articleshow/62495094.cms>
- [4] Israel Ministry of Foreign Affairs. (January 13, 2018). PM Netanyahu departs on official visit to India. Retrieved on June 10, 2018 from <http://mfa.gov.il/MFA/PressRoom/2018/Pages/PM-Netanyahu-departs-on-official-visit-to-India-13-January-2018.aspx>
- [5] The Express Tribune. (January 14, 2018). Netanyahu in India for first visit by Israeli PM in 15 years. Retrieved on June 2, 2018 from <https://tribune.com.pk/story/1608655/3-netanyahu-india-first-visit-israeli-pm-15-years/>
- [6] Modi, N. (January 15, 2018). PM Modi addresses Joint press Statement with PM Netanyahu of Israel. Retrieved on June 1, 2018 from <https://www.narendramodi.in/pm-modi-israeli-pm-benjamin-netanyahu-at-joint-press-statement-538515>
- [7] Israel Prime Minister Office. (July 4, 2017). Statements by PM Netanyahu and Indian PM Narendra Modi. Retrieved on January 1, 2018 from <http://www.pmo.gov.il/English/MediaCenter/Events/Pages/eventindiaIsrael040717.aspx>
- ¹ Israel Ministry of Foreign Affairs. (June 28, 2017). Israel welcomes Indian Prime Minister Modi. Retrieved on January 3, 2018 from <http://mfa.gov.il/MFA/PressRoom/2017/Pages/Israel-welcomes-Indian-Prime-Minister-Modi-28-June-2017.aspx>
- [8] *ibid*
- [9] Kumaraswamy, P. R. (1995). India and Israel: Prelude to normalization. *Journal of South Asian and Middle Eastern Studies*, 19(2).
- [10] Jewish Virtual Library. (nd). Israel International Relations: India-Israel Relations. Retrieved on June 10, 2018 from <http://www.jewishvirtuallibrary.org/history-and-overview-of-india-israel-relations>
- [11] Kumaraswamy, P. R. (2007). India and Israel: The Diplomatic History. In *Indo-Judaic Studies in the Twenty-First Century* (pp. 212-224). Palgrave Macmillan, New York.

- [12] Chatterjee, M. (1992). Gandhi and his Jewish friends. In *Gandhi and his Jewish Friends* (pp. 39-71). Palgrave Macmillan, London.
- [13] The Jewish Institute of National Security Affairs (JINSA). (August 25, 1997). Israel-India Military and Civil Trade Ties Skyrocket. Retrieved on June 10, 2018 from <https://web.archive.org/web/20061002180249/http://www.jinsa.org/articles/articles.html/function/view/categorid/105/documentid/367/history/3%2C2359%2C947%2C653%2C105%2C367>
- [14] The Jewish Institute of National Security Affairs (JINSA). (April 8, 2003). India-Israel Military Ties Continue to Grow Troop Training to Supplement Arms Sales. Retrieved on June 10, 2018 from <https://web.archive.org/web/20061107084915/http://www.jinsa.org/articles/articles.html/function/view/categorid/1948/documentid/1971/history/3%2C2360%2C1947%2C1948%2C1971>
- [15] The Jewish Institute of National Security Affairs (JINSA). (April 8, 2003). India-Israel Military Ties Continue to Grow Troop Training to Supplement Arms Sales. Retrieved on June 10, 2018 from <https://web.archive.org/web/20061107084915/http://www.jinsa.org/articles/articles.html/function/view/categorid/1948/documentid/1971/history/3%2C2360%2C1947%2C1948%2C1971>
- [16] Herring, R. (November 11, 2005). srael Sells Drones to India Discouraged from selling weapons to China, Israel looks elsewhere for customers. Global Security. Org. Retrieved on June 10, 2018 from <https://www.globalsecurity.org/org/news/2005/051111-india-drones.htm>
- [17] Egozy, A. (July 15, 2007). IAI signs \$2.5 billion deal with India. Ynet News. Retrieved on June 11, 2018 from <https://www.ynetnews.com/articles/0,7340,L-3425400,00.html>
- [18] The Times of India. (January 19, 2010). India to hold wide-ranging strategic talks with US, Israel. Retrieved on June 05, 2018 from <https://timesofindia.indiatimes.com/india/India-to-hold-wide-ranging-strategic-talks-with-US-Israel/articleshow/5474033.cms?referral=PM>
- [19] Dagoni, R. (March 24, 2011). "Defense News": Rafael will sell the Indian Army 321 Spike launchers, 8,356 missiles, and 15 training simulators, and peripheral equipment. Globes. Retrieved on June 11, 2018 from <http://www.globes.co.il/en/article-1000633160>
- [20] Miglani, S. (September 22, 2015). India turns to Israel for armed drones as Pakistan, China build fleets. Reuters. Retrieved on June 11, 2018 from <https://in.reuters.com/article/india-israel-drones-idINKCN0RL2EC20150921>
- [21] Unnikrishnan, A. (March 6, 2016). India approves purchase of two Phalcon Warning System form Israel. Airforce Technology. Retrieved on June 11, 2018 from <https://www.airforce-technology.com/news/newsindia-approves-purchase-of-two-phalcon-warning-system-form-israel-4831275/>
- [22] Haaretz. (November 2, 2017). India Air Force in Israel for First-ever Joint Military Exercise. Retrieved on June 11, 2018 from <https://www.haaretz.com/israel-news/india-air-force-in-israel-for-first-ever-joint-military-exercise-1.5462139>
- [23] Tommy, W. (February 18, 2015). Israeli defense minister lands at India airshow to boost arms sales. Reuters. Retrieved on June 10, 2018 from <https://www.reuters.com/article/us-airshow-india-israel/israeli-defense-minister-lands-at-india-airshow-to-boost-arms-sales-idUSKBN0LM0WL20150218>
- [24] Encyclopedia Iranica. (nd). Israel; Relations with Iran. Retrieved on June 11, 2018 from <http://www.iranicaonline.org/articles/israel-i-relations-with-iran>
- [25] Rattan. (November 14, 2016). What are the reasons of enmity between Israel and Iran?. Quora. Retrieved on June 11, 2018 from <https://www.quora.com/What-are-the-reasons-of-enmity-between-Israel-and-Iran>

Citation: Sayed Amir Hussain Shah, Dr Naeem Ahmed, Dr Muhammad Umair Rafique (2018); Israel - India Relations; Strategic Challenges for Iran and Pakistan, *Journal of Social Sciences and Humanity Studies*,4(5)1-6.

- [26] Green, D.B. (May 8, 2018). From Friends to Foes: How Israel and Iran Turned Into Arch-enemies. Haaretz. Retrieved on June 11, 2018 from <https://www.haaretz.com/middle-east-news/iran/MAGAZINE-how-israel-and-iran-went-from-allies-to-enemies-1.6049884>
- [27] Sachs, N. (July 16, 2014). Israel and Iran's Role in the Middle East. Brookings. Retrieved on June 11, 2018 from <https://www.brookings.edu/testimonies/israel-and-irans-role-in-the-middle-east/>
- [28] CNN. (December 15, 2000). Iran leader urges destruction of 'cancerous' Israel. Retrieved on June 11, 2018 from <https://web.archive.org/web/20070405205037/http://archives.cnn.com/2000/WORLD/meast/12/15/mideast.iran.reut/>
- [29] Edalat, A. (April 5, 2007). The US can learn from this example of mutual respect. The Guardian. Retrieved on June 11, 2018 from <https://www.theguardian.com/commentisfree/2007/apr/05/comment.military>
- [30] Borger, J. (July 11, 2012). New book claims Mossad assassination unit killed Iranian nuclear scientists. The Guardian. Retrieved on June 11, 2018 from <https://www.theguardian.com/world/julian-borger-global-security-blog/2012/jul/11/israel-iran-nuclear-assassinations>
- [31] Alabaster, O. (May 10, 2018). Did Iran attack Israel from Syria and why would they?. The Independent. Retrieved on June 11, 2018 from <https://www.independent.co.uk/news/world/middle-east/iran-israel-attack-why-syria-golan-heights-war-air-strikes-rockets-a8345406.html>
- [32] Ward, A. (May 10, 2018). Israel and Iran are getting closer to a full-blown war. VOX. Retrieved on June 11, 2018 from <https://www.vox.com/2018/5/10/17338966/iran-israel-syria-attack-golan-heights-war-conflict>
- [33] Bhatia, S. (September 5, 2000). 'The most dangerous place on Earth. The Global and Mail. Retrieved on June 12, 2018 from <https://www.theglobeandmail.com/opinion/the-most-dangerous-place-on-earth/article769646/>
- [34] The Times of India. (January 19, 2010). India to hold wide-ranging strategic talks with US, Israel. Retrieved on June 05, 2018 from <https://timesofindia.indiatimes.com/india/India-to-hold-wide-ranging-strategic-talks-with-US-Israel/articleshow/5474033.cms?referral=PM>
- [35] Marwah, O. (1979). India's Military Intervention in East Pakistan, 1971–1972. *Modern Asian Studies*, 13(4), 549-580.
- [36] Dawn. (September 14, 2005). Musharraf, Singh may agree on new CBMs. Retrieved on June 12, 2018 from <https://www.dawn.com/news/156595>
- [37] Khan, M. Z. (January 26, 2014). MFN status for India on the cards. Dawn News. Retrieved on June 12, 2018 from <https://www.dawn.com/news/1082756>
- [38] Aljazeera. (February 19, 2018). Iran and India sign deal to deepen relations. Retrieved on June 11, 2018 from <https://www.aljazeera.com/indepth/features/iran-india-sign-deal-deepen-relations-180218131756257.html>
- [39] Aljazeera. (February 19, 2018). Iran and India sign deal to deepen relations. Retrieved on June 11, 2018 from <https://www.aljazeera.com/indepth/features/iran-india-sign-deal-deepen-relations-180218131756257.html>

Road Traffic Accidents in Kuwait City: A Triangulation Approach

Amer Al-Saleh

Sociology Department, Kuwait University

Received: June 6, 2018

Accepted: August 31, 2018

ABSTRACT

In recent decades, incidents of motor traffic accidents have increased dramatically in Kuwait, putting both passengers and pedestrians at increased risk of injury or death. The intent of this study was to research and analyze the cited causes for these accidents and in this way assist law makers and emergency services in reducing further casualties. By collecting data from interviews, focus group discussions, empirical observations, and review of secondary sources and applying a combination of quantitative and qualitative analysis (the triangulation method) to the causes of these accidents in Kuwait City in 2010–2011, this study found that flaws in highway design, driver carelessness, poor road management and maintenance, use of cell phones, alcohol and drugs, and young age/inexperience of the victims constituted the primary causes of traffic accidents in Kuwait. The author recommended a number of ameliorative measures, including a review of legislation, training, and road safety awareness campaigns. Limitations of the current study included the single geographical area of study and limited timeline; future research should include comparative studies of road traffic accidents in Kuwait and other Gulf and Arab countries. A cross-national perspective would help the government better understand the costs that road traffic accidents impose on Kuwaiti society and neighboring states.

KEY WORDS: Traffic accidents; risk theory; systems theory; triangulation method

INTRODUCTION

According to World Health Organization (WHO) estimates, 1.17million fatalities occur annually worldwide as a result of road traffic accidents [1] (World Health Organization,2011). In the Arab and Gulf states, in particular, road traffic accidents (RTAs) are increasingly recognized as an urgent social problem. In Kuwait, the discovery of oil during the mid-twentieth century transformed many aspects of life, leading to explosive immigration and population growth, accompanied by a concomitant increase in the number of vehicles and the rapid extension of the road network. The momentum for growth accelerated in the early 2000s following the removal of Saddam Hussein in nearby Iraq [2] (Kimmitt, M. 2009), and the growth of oil revenues due to high global crude prices, further increasing the expatriate population and exacerbating traffic and congestion issues on Kuwait's road network.

As a consequence, RTAs are now common in Kuwait, a country of almost 2.5 million people. Over 45,878 traffic accidents were reported in 2004alone. Hotspots include the Fahaheel Expressway (Road 30) south of the Fourth Ring Road and the Alhmadi Expressway (Road 40) south of the Fourth, Fifth, and Sixth Ring Roads [3] (Statistical Annual Report, 2012).An Interior Ministry official, citing data from the Information and Statistics Division of the General Traffic Department, indicated that 86 percent of RTA deaths were males, compared to 14 percent females. Four hundred people were killed and 8,000 injured in traffic accidents in 2012 alone, according to a report from the local daily. According to the Ministry of Interior Statistics Annual Report (2012), around 67,000 accidents were reported across Kuwait that year, the majority of which were reported in the Capital Governorate (20,762), followed by Mubarak Al- Kabeer (5,169). The data also show that the number of traffic accidents increased by 20 percent on average in each governorate.

Road Traffic Accidents in Kuwait

Prior to the implementation of more rigorous traffic safety laws in November 2001,Kuwait had one of the highest accident fatality rates in the world. To augment the new laws, over 70 traffic cameras were installed nationwide to record speed and red-light violations. Despite the improved enforcement environment, overall traffic safety has not improved in Kuwait. In 2006, for example, over 2.75 million traffic violations were recorded, including over 313,000 red-light and 840,000 speeding violations [3] (Statistical Annual Report, 2012), representing an increase over previous years.

*Corresponding Author: Amer Al-Saleh, Sociology Department, Kuwait University.
Email: amer3_@hotmail.com

According to recent studies by the General Traffic Department, 75,194 accidents occurred on Kuwaiti roads (Statistical Annual Report, 2015), which amounts to an average of 206 per day, or 8.5 per hour. Fatalities also have climbed to 493 per year, or 1.3 per day. [4] (Statistical Annual Report, 2015), This represents a rise from 2011, when a WHO study of road traffic deaths in Kuwait published in April of that year estimated the figure at 402 annually, accounting for 9.2 percent of total deaths (from all causes), or an age-adjusted death rate of 16.4 per 100,000 population. Traffic accidents rank eighth among the top 20 causes of death in Kuwait, after heart disease, stroke, influenza/pneumonia, diabetes, breast cancer, hypertension, and kidney disease[5] (World Health Organization,2011).

The National Traffic & Transport Sector Strategy for Kuwait 2009-2019 estimates that traffic congestion and accidents will cost the country 27.430 billion Kuwaiti dinars (KD) over that period, and expenditures to deal with accidents will amount to roughly 6 percent of annual GDP. The Strategy was launched by the Interior Ministry in partnership with the United Nations Development Programme and Kuwait's Supreme Council for Planning and Development to create a more efficient and safe road transportation system by reducing traffic congestion and the related economic and environmental problems. International experts at a "Traffic" conference held a few years ago in Kuwait observed the trend of growing road accidents in Kuwait, and initiated a discussion about its possible causes. These included, but were not limited to: (a) growing wealth, increasing demand for newer and faster cars; (b) growth of the automobile fleet, increasing congestion;(c) speeding; inadequate law enforcement;(d) aversion to use of public transport;(e) use of mobile phones while driving; and (f) not following basic safety rules such as wearing seat belts. A survey of newspaper reports over the years on traffic accidents by the *Arab Times* and other local dailies revealed that despite authorities' efforts to address the problem, the accident rate climbed steadily, increasing by over 40 percent between 2010 and 2012. The rationale of the current study is to confirm and investigate these causes in order to provide data that will inform decisions for policymakers, emergency services, and individuals.

This contribution is critical, as the rising trend in road traffic violations and accidents has become a salient issue for government policymakers in Kuwait, in the Ministry of Interior and related departments. A Higher Traffic Council has been established to address these issues.

For example, the Interior Ministry, examining 2010 statistics in Kuwait and other international studies, determined that texting and Internet browsing while driving were major causes of road accidents. It identified the use of hands-free technology such as Bluetooth as viable alternatives to the use of cell phones while driving. Following these determinations, the country toughened laws against the use of cellular phones while driving, supporting them with appropriate public awareness measures.

We now turn to a more detailed examination of traffic violations by type/cause in Kuwait, using data for 2006 (Table 1). A total of 2.76 million violations were recorded during that year for the country's six governorates. In addition to minor parking violations, a substantial number of total violations involved the running of red lights or excessive speed. Further, over 80,000 seat belt violations also led to elevated safety concerns [3] (Statistical Annual Report, 2012). The Ministry of Interior is now taking steps to strengthen the financial penalties associated with traffic violations. Over KD 25 million were collected in fines, the licenses of several drivers were suspended, and dozens imprisoned for serious violations.

Table 1
Traffic violations

Traffic violation	Capital	Hawally	Farwania	Al-Jahra	Al-Ahmadi	Mubarak Al-Kabeer	Others*	Total violations
Drunk driving	1	2	4	0	1	5	0	13
Red-light running	2829	10033	1612	2459	1568	3237	291689	313427
Over-speed violations	1202	4445	738	1142	942	9580	822428	840477
Driving in opposite direction	21793	29902	15470	897	4329	2783	13	75187
Driving without license	8514	14355	5796	4800	4481	13981	1	51928
Driving without license plate	2339	3148	1183	1372	1405	2586	6	12039
Seat belt violations	3098	20047	11024	4530	27146	15978	2	81825
Traffic rules violations	6730	4433	2656	790	4334	25270	26	44239
Parking violations	97883	64164	71007	34784	106967	30753	25	405583
Parking in places reserved for handicapped	1817	559	2354	279	2832	518	0	8359
All violations	291541	387773	219868	141862	266384	332887	1117170	2757485

* Traffic violations recorded live by camera

Problem Statement and Objectives

The above statistics illustrate a significant problem: Traffic incidents in Kuwait have been increasing in both frequency and severity over the last twenty years. The causes, and thus solutions, are not clearly identified. The current study will add to the literature by being the first to investigate each of these causes through triangulation of both qualitative and quantitative sources, to gain rich data for planning, accident prevention, and providing an impetus for future research. The primary objective of the present study is to explore and identify the factors contributing to high rates of automobile accidents in Kuwait City. More specifically, the study focuses on achieving the following goals: (a) describing the number of vehicular accident—related injuries and fatalities in Kuwait City in 2010 and 2011; (b) identifying the major factors that contribute to RTAs; and (c) assessing various road safety measures implemented by local officials for the purpose of accident prevention.

Research Questions

1. How many casualties (injuries and fatalities combined) occurred in Kuwait City? (review of Kuwait City hospital records, and more specifically the hospital admission cards of 2010-2011 accident victims).
2. What factors are associated with the causes of RTAs in Kuwait City? (interviews with in/outpatient accident victims at Kuwait hospitals, government officials, Kuwait City traffic police, and relevant officials from the Ministry of Health).
3. What safety measures have been implemented by local authorities to prevent RTAs in Kuwait City? (interviews with local authorities in Kuwait City).

LITERATURE REVIEW

Past investigations have demonstrated that injury and fatality rates in the UAE and in various Gulf countries are significantly higher than in the industrialized Western nations with the highest levels of vehicle ownership [6](Bener, Abu-Zidan, Bensiali, Al-Mulla, Jadaan, 2003). When framed in these terms, the importance of the issue dictates the need for greater research on automobile accidents and related hazards. Driver behavior obviously constitutes a critical factor. In any case, age, gender, marital status, training and experience, background, lifestyle, energy level, response time, vision, attentiveness, and vehicle speed also are major factors in RTAs [7] (Gregersen and Bjurulf, 1996).

Focusing only on RTA fatalities, the major factors include driving under the influence (DUI) of alcohol or drugs, excessive speed, and failure to use seatbelts [8] (Clarke et al., 2010). Among traffic fatalities, use of alcohol and/or illicit or prescription medications that impair driving skills is a frequent common denominator. A variety of studies indicates that roughly half (40–50%) of drivers involved in fatal traffic accidents had some psychoactive substance in their bloodstream [9, 10, 11]. (Carmen Del Rio et al., 2002; Drummer et al., 2003; Jones et al., 2009). Case-controlled studies have determined that the use of alcohol and/or drugs increases the risk of a traffic accident, regardless of whether the controls were fatally injured drug- and alcohol-free drivers [10] (Drummer et al., 2004) or drivers recruited at random while driving on public roads [12] (Movig et al., 2004). The risk is especially high when alcohol and drugs are used simultaneously, or when multiple illicit or prescription medications are taken [13] (Gjerde et al., 2011). A good example of the salience of drugs and alcohol in RTAs is Finland, where an average of about 108 persons perished annually (2005–2009) in RTAs involving intoxicants, out of a total of over 200 RTA fatalities overall (279 in 2009; [14] Statistics Finland, 2010). Finland's long-term target, similar to the European Union's road safety plan for 2011–2020 [15] (European Commission 2010), is to reduce the total number of fatalities by half—meaning that for Finland there would be no more than 100 deaths on the country's roads by 2025 [16] (Finnish Government, 2006).

Returning to road traffic accidents more broadly, Redelmeier and Tibshirani's ground breaking case-crossover study found that drivers were four times more likely to be involved in a traffic accident when using cell phones while driving, and that hands-free devices were not less dangerous than handheld ones [17]. This finding was later supported by McEvoy et al. [18]. Nonetheless, drivers believe that hands-free devices are far less dangerous; in some studies, drivers see them as posing no risk whatsoever [19] (Dragutinovic and Twisk 2005).

Other studies have determined that drivers adjust their phone use to fit the driving environment they perceive around them. They make fewer calls in heavier traffic, and when on the phone they reduce speed and increase the distance between their vehicle and the one in front. And although drivers who use the phone while driving are more likely to be involved in an RTA, relative crash risk does not differ according to either gender or phone type.

Theoretical Perspectives

Systems theory

Systems theory is grounded in human adjustment (or lack thereof) to the surrounding environment [20](Muhlrad et al 2005). In the realm of road transportation, this theory encompasses the following components: environment, means of transport (vehicles), and human behavior [21](Krug et al 2000). In this formulation, the means of transport comprises both the number and quality of vehicles on the road, and human behavior encompasses such traits of road users as age, gender, education, socio-economic status, and risk perception. Thus, systems theory when applied to road transportation envisions a system of traffic management and regulation designed to support and maintain traffic safety ([22, 23] Hauer, 1995:136; Button, 1993:80).

Risk theory

Risk theory, which defines risk as a person's subjective assessment of a negative event with potential consequences for themselves ([24, 25] Sjøberg & Biel 1983, Rundmo 2004 & Moen, identifies several variables believed to influence risk perceptions among the public. Social relations and media are posited to influence how individuals and societies react to potential risks ([26, 27] Slovic 1987, Olterdal, Moen, Klempe & Rundmo, 2004). Many aspects of risk need to be considered—first and foremost the probability of a negative event and the severity of its consequences. Processing and appraisal theories may also influence such assessments. Several scholars have found that the greater the impacts of a negative event, the more those impacts will be salient in the assessment of that risk, and the greater the precautionary action that will be taken to prevent an accident ([28] Rundmo & Iversen, 2004). Personal decisions involving risk-taking are a balancing act between perceptions of risk and an individual's propensity to assume risk ([29, 30] Wilde 2002; Adams 1995). Risk propensity, in turn, is affected by expected rewards; as the perceived threat or hazard increases, individuals respond by becoming more cautious. Thus, there is a "balancing behavior" between the perceived threat and willingness to assume risk, which in turn influences accident likelihood and potential rewards.

RESEARCH DESIGN AND METHODOLOGY

This study adopts a case study approach, within which the relied-upon methodology for data collection involved both qualitative and quantitative methodologies for the analysis of data from interviews, focus group discussions, empirical observations, and review of secondary sources. A common term in the social science literature to describe such joint use of qualitative and quantitative methods is "triangulation." Triangulation makes it possible for a researcher to collect data from multiple sources to address important questions from diverse points of view[31] (Baker 1999), widening the study's perspective while at the same time bolstering its validity. This approach is quite useful, for example, when an analyst seeks to examine broad patterns of social life or describe mass public reactions to social policy. Triangulation was instrumental in the following analysis of the risk factors of RTAs in Kuwait City, as it allows the public to use this information to better formulate road safety policy according to local reality and practices.

Qualitative methodology

The qualitative research methodology utilized here employs several alternative techniques: interviews, participant observation, and focus group discussions. This approach supports an understanding of the daily lives of those affected by RTAs [32](Limb and Dawyer, 2001). More specifically, here it was used to collect primary data via interviews with accident victims (at Kuwaiti hospitals), police and hospital officials, the author's own observations, as well as information gleaned from interviews and a focus group of government officials concerning measures implemented to reduce the frequency of RTAs in Kuwait City.

Quantitative methodology

The quantitative data used in this study were compiled from a review of the hospital records of road accident victims admitted to two large hospitals in Kuwait City from 2010 to 2011; a checklist/questionnaire form was devised to collect such data. The purpose was to assess patterns and trends of RTA injuries and fatalities in Kuwait City during 2010–2011.

All hospital records were systematically reviewed and manually sorted to limit the information to that relevant for the years 2010 and 2011. The questionnaire was then used to select out specific individual information about these accident victims from the hospital records. The data were analyzed by the Statistical Package for the Social Sciences (SPSS), a widely used software package that produces a variety of statistical tables and performs some simple statistical computations. Standard

statistical tables were generated to examine the relationship between the outcome variables of fatalities or injuries and the exposure variables of age and gender. The results were then summarized to reveal the patterns that are discussed below.

Sample selection

Two hospitals in Kuwait City—Mubarak Alkabber and Alammiri—as well as the Ministry of Interior were selected for the collection of data on RTA victims in Kuwait City. The two hospitals provide emergency services to RTA victims and are repositories of information about traffic accidents, type of vehicles involved, number of injured persons, number of fatalities, and location of accident. The Ministry of Interior, in addition to holding responsibility for ensuring that traffic rules and regulations are enforced, also records and evaluates the probable causes of traffic accidents in Kuwait City.

In any study that relies on interviews as part of its research design, sampling is an important consideration in decisions concerning the persons to be interviewed, so as to properly represent the larger population [33](Patton,1990) and to reduce bias in the results [34](Flick 1998). The sample of respondents selected for this study carefully considered the balance between men and women; although both genders are not equally represented among the driving population, both were included representatively in the sample. The focus of the interview sample on RTA victims is understandable, as a person who is directly injured by the hazard will be in a better position to explain from a personal perspective the feeling of danger or risk from that particular phenomenon [25] (Moen & Rundmo, 2004).The victims are the very first people who experience the effects of road traffic accidents , followed by government officials (first responders) responsible for public safety, and then the owners of the vehicles sustaining property damage[35](The National Council of Road Traffic Safety in Kuwait).

Reliability and validity

An interview with a police commander in the Ministry of Interior revealed that police records are generally not updated as more recent information becomes available (post-accident), but hospital records can be updated to reflect changes in the condition of accident victims. This provides an example of how use of triangulation made it possible to verify and cover gaps in information commonly encountered when reliance is placed solely on a single source of information.

It should be noted that confirmation of data reliability per se was not the primary objective of the research. In order for the study to be fully replicable, it would have to follow strict rules of quantitative research. This was not the case here because the study is not fully quantitative. Therefore its findings may not be replicable even if the same general methods of data collection (triangulation) are employed, since the specific setting of the study and period of time in which it was conducted would quite likely influence the results. Field work undertaken by different people at different times could easily produce different results [31] (Baker 1999).

RESULTS OF QUANTITATIVE ANALYSIS

RTA trends in Kuwait City

As shown in Table 2, road traffic accidents of all types increased in Kuwait City over the years covered in this study (2010 and 2011). The striking takeaway from the table 2is the sheer magnitude of the incidence of RTAs: 65,861 in 2010 and 75,194 in 2011.

Table 2
Kuwait City Road Traffic Accidents by Category and Year

Type of Violation	2010	2011
Collision	64938	74177
Run Over	336	374
Rollover	478	540
Others	109	103
Total	65861	75194

Source: Police records and hospitals reports (2010–2011)

Injuries versus fatalities

Table 3 shows the trend in terms of the severity of RTA causalities (minor injury, severe injury, fatality) on Kuwait City roadways in 2010 and 2011. For the two years in aggregate, there were 2624 causalities of all types with an average of 41% minor injuries, 26% severe injuries, and 33% fatalities. As is evident, casualties of all types increased from 2010 to 2011. If anything, the overall picture is understated, as many accidents go unreported, and police only receive information about

these accidents through insurance companies seeking to verify their occurrence when processing claims filed by their customers.

The aforementioned interview with the Interior Ministry police commander yielded some insight into the factors contributing to the surge in casualties in Kuwait City. Among the more common factors, he mentioned dangerous driving behavior and driving under the influence of alcohol and drugs. Interviews with accident victims shed light on additional factors at work. One victim interviewed indicated that inadequate traffic separation, absence of road signage, and high traffic volume greatly increase the frequency of RTAs in Kuwait City. Use of highway frontage for unintended purposes, such as a market space for local traders, also contributes to traffic accidents in the city.

Table 3
Levels of Injury and Percentage of Incidence

Type of Injury	2010	Percentage	2011	Percentage	Total	Percentage
Minor Injury	500	43%	585	40%	1085	41%
Severe Injury	286	25%	386	26%	672	26%
Death	374	32%	493	34%	867	33%
Total	1160	100%	1464	100	2624	100%

Source: Police records and hospitals reports. (2010–2011)

Fatalities by gender

Table 4 presents the distribution of fatalities by gender in Kuwait City. In total, there were 867 traffic fatalities in 2010–2011, involving a much higher incidence among males (87%) compared to females (13%). An underlying cause of this disparity is that males are more likely to be involved in RTAs because their daily activities and careers involve more travel.

Table 4
Distribution of RTA Fatalities by Gender (Kuwait City)

Death	2010	2011	Total	Percentage
Male	315	437	752	87%
Female	59	56	115	13%
Total	374	493	867	100%

Source: Police records and hospitals reports. (2010–2011)

Fatalities by age

Table 5 provides data on fatalities by various age cohorts. The highest percentage shares of overall fatalities belong to the age groups 21-30, 31-40, 11-20, and 41-50 years, respectively. These findings are consistent with studies elsewhere in the region (Bener et al. 1992), where the majority of fatalities involved males less than 30 years old.

Table 5
Distribution of RTA Fatalities by Age (Kuwait City)

Age	2010	Percentage	2011	Percentage	Total	Percentage
1-10 years	16	4.3%	30	6.1%	46	5.3%
11-20 years	66	17.6%	99	20.1%	165	19.0%
21-30 years	100	26.7%	111	22.5%	211	24.3%
31-40 years	77	20.6%	102	20.7%	179	21.0%
41-50 years	54	14.4%	73	14.8%	127	15.0%
51-60 years	30	8.0%	41	8.3%	71	8.1%
61 and above	30	8.0%	36	7.3%	66	7.1%
Unknown	1	0.3%	1	0.2%	2	0.2%
Total	374	100%	493	100%	867	100%

Source: Police records and hospitals reports. (2010 – 2011)

Results of Qualitative Analysis

A crisis of traffic fatalities in Kuwait

Recently, the head of Kuwait's Traffic Safety Society acknowledged that Kuwait now has the highest fatality rate per accident in the world: 17 deaths per 100,000 accidents. A primary factor, he related, are overcrowded roads: built to handle 700,000 vehicles, Kuwait's roadways actually serve over twice this number (1.6 million). If unaddressed, the problem will only worsen over time, as roughly 80,000 new vehicles are added each year.

Confronted with the problems of overcrowded roads, driving under the influence, and (increasingly) distracted drivers, Kuwait's Ministry of Interior was compelled to formulate a strategic

vision to address the rapidly worsening road safety conditions revealed by the 2010 and 2011 statistics. Among other measures, the Ministry has toughened legislation restricting use of cell phones while driving, supported the new laws with public awareness programs, and advocated alternative hands-free technologies.

Mystique of the automobile

Despite Kuwait's alarming accident statistics, the mystique of the automobile lives on. In Kuwait, the automobile is a deeply entrenched symbol of social status and freedom. Owning a fast car may give drivers a feeling of superiority over others who use public mass transport or operate a less powerful vehicle.

In addition to providing the thrill of speed, adventure, and freedom, an automobile provides a means of self-congratulation, a reward to its owner and an outward a sign of how hard he has worked to possess it. A luxury car is thus a way its owner can publically to pamper himself. To many drivers, cars are simply entrancing. The feeling of speed and motion, the roar of the engine, and the blur of lights and colors can nearly mesmerize driver, who may feel a deep connection with the machine. Of course, the joys of driving are not felt by all: for many elderly, piloting a complicated vehicle through challenging and risky road conditions is not an experience to anticipate with pleasure.

Many young people expressed a special admiration and interest in their cars, spending considerable time maintaining their vehicles and ensuring they were in good condition both aesthetically and mechanically. A male noted that "I always talked about my car and how I loved to drive it." In another example, a female stated: "I would not wish to damage my car in any way. My car was a pride and joy. I would even pick parking spaces away from other vehicles so that it wouldn't get marked or damaged."

Risk-taking youth

Young Kuwaitis usually know in principle how to use the roads safely, although some acknowledge that their behavior becomes more careless as they grow older. But with increasing independence, teenagers who spend less time under adult supervision may start to take risks they would not otherwise have taken had their parents been watching. Although teens report that they have more frequently been involved in "common risk" behavior, many believed their improved ability to see over the steering wheel, judge distances, and drive at higher speeds meant that even when taking risks they were not exposing themselves to appreciably greater danger. While some admitted to taking "common risks," many were unable to explain why, seemingly doing so subconsciously. Some Kuwaiti teenagers explained this in terms of not wanting to waste time: rather than stopping at crossings they proceed through, because it takes "too long" for the light to change. Others suggest that behaving too cautiously not "cool." Some young Kuwaitis argued that risk-taking at crossings was not a choice but a necessity, due to the lack of designated crossing places. However, there is scant evidence that building more crossings would produce a corresponding increase in their use. Most youthful Kuwaitis rarely stop at crossings, even where they are abundant.

Many of the young Kuwaitis interviewed had been involved in a pedestrian RTA or knew of an acquaintance who had. However, even such personal experiences failed to alter their longer-term decision-making. Interviews with young accident victims, or with youths who have known someone involved in one, highlight another discrepancy: when asked what would deter them from risk-taking behavior on the road, most responded "if it happened to me." In reality, however, such personal experiences rarely affect actual behavior. For instance, teens who had witnessed serious accidents believed that it changed their behavior only for a few days thereafter; they soon resumed risky actions during everyday driving. Continuing to engage in risky behavior may in part reflect Kuwaiti teenagers' idea of what is "serious." Most Kuwaiti adults consider bruises, cuts, and broken bones to be serious outcomes (these are part of the definition used in official RTA statistics). However, many young Kuwaitis do not view such injuries as deserving particular concern. To some Kuwaiti teenagers, only accidents that kill or permanently maim are deemed "serious."

Dangerous driving

In the interviews, hazardous driving behavior was associated with the majority of accidents, and particularly: high-speed driving, following too closely, racing, and dangerous passing maneuvers. Excessive speed was involved in almost all cases. In one interview, a witness observed that: "My first impression was that [the car] was traveling far too fast to negotiate the bend safely . . . I could see his hands turning the steering wheel to his right in a large movement, his whole body movement and body language gave me the impression of panic." Another witness observed that the style of a male driver

could be altered by the presence of other males in the vehicle, increasing his bravado and propensity for risk-taking. In contrast, a female passenger stated that: "He always drove safely with me in the car. He drove faster when the boys were in the car. I had not experienced him driving excessively fast myself." Her statements reflected a positive view of the ability of the driver, even though he had later perished in a vehicular accident. Similarly, the female partner of another individual reported that the driver was excellent, given that he was still young and had not gained much experience: "He never drove fast with me or [their baby] in the car and certainly wouldn't do so if the roads were potentially risky. He constantly talked about other accidents he'd seen to and from work, which always reassured me that he'd drive safely."

Inexperience and overconfidence

However, the assessments by men of other drivers were not always so positive. A good example is a father's evaluation of his own son: "He was in my eyes a typical young driver. He had a few bumps and things. I would say he was a confident driver but at times over confident. He sometimes drove and I would say, 'Stop, drop me off.' I think his driving just needed maturity." These evaluations of driving ability typically were linked to the young driver's failure to fully comply with safety regulations. Although most young Kuwaitis followed safety regulations, failure to wear a seatbelt or helmet implies overconfidence among such drivers in terms of their ability to avoid accidents while driving. In a particularly salient case, despite involvement in an accident one week prior to his death, the driver opted not to put on a seatbelt. A friend described this driver's outlook as follows: "I can say that [with respect to] the habit of wearing a seatbelt, he found it too restrictive. I had asked him if he was wearing one when he hit the van [referring to prior collision]. He said he had not but had been able to brace himself on that occasion against the steering wheel."

Another example of overconfidence and an inflated sense of driving skills involved two cars that were racing. Police interviews of the male driver of the second car, who was unharmed, revealed the following: "He agreed that he had been driving 2 to 3 car lengths behind at approximately 100 km per hour. He did not consider this to be an unsafe following distance."

In another example, a rear-seat passenger stated: "I also saw at least one large arrow shape, pointing to our left. I knew this to mean that we should stay on our own side of the road. [The front seat passenger] was shouting, 'What are you doing? You are not going to make that!' or [something] similar. I became aware that we were now on the wrong side of the road...As this was happening I heard [the front seat passenger] shout a second time. This sounded much more urgent than before, as he said, 'We're not going to make that.'" The Interior Ministry report on this incident reads in part as follows: "A citizen in his teens died and another sustained severe injuries and additional fractures during a traffic accident on the Fahaheel Expressway. Acting on information the Operations Room of the Interior Ministry received in that concern; paramedics with security operatives rushed to the scene and carried the injured person to Al-Adan Hospital for medical attention, while the remains of the victim were deposited to Forensics."

Families of road accident victims who were interviewed indicated that often the guilty are not the ones who pay the full price for their violations. A young widow said her husband died when a speeding motorist lost control and crashed into his car. In another example, two Kuwaiti girls were killed at the scene when a bus failed to stop at a red light and crashed into their car. Family members indicated that these instances underscore the need to institute very severe punishments against traffic violations, adding that: "Violations like jumping a red light should be treated like first degree crime." Some also emphasized the need to apply the laws equally to all, "citizens and expatriates alike, to ensure that everyone respects the rules of the road."

DISCUSSION

This paper has examined both the distribution and trends of RTAs based on interviews conducted with accident victims, a leading government traffic official (police commander in the Interior Ministry), focus group discussions with officials including from the Ministry of Health, and hospital personnel in Kuwait City in 2010 and 2011. The number of accidents and fatalities increased in each of these years, putting both passengers' and pedestrians at heightened risk of injury or death on the road. Young males are especially susceptible to RTAs in Kuwait City, reflecting a predilection toward risk-taking [36, 37, 38] Iversen & Rundmo, 2002; Oltedal, & Rundmo, 2006; Lund & Rundmo, 2009) that has been found to play a role in RTAs throughout the world. Young drivers are more prone to faulty risk perception, and may feel some degree of invulnerability to traffic risks [39, 40]. (Weinstein, 1984; Deery 1999). Our qualitative analysis has shown that flaws in highway design, driver carelessness, poor road management and vehicle maintenance, alcohol and drug use, and inexperience

and overconfidence on the part of young drivers all play a major role in the incidence of traffic accidents in Kuwait. The Interior Ministry police commander also identified the following arrest-worthy vehicular offenses in Kuwait City that are commonly associated with RTAs: crowding too many passengers into a vehicle, driving while intoxicated, speeding, failure to use a seatbelt, driving without a license, driving without headlights turned on, failure to have insurance, worn-out tires, absence of side mirrors, and overloading of trucks with cargo.

Other hazards identified by the commander involve the design of the roadway itself, which is typically too narrow (accommodating only two lanes so that passing is impossible or hazardous), in need of repair, and lacking sufficient signage and traffic separation.

He also mentioned that Kuwaiti roadways are not well equipped with features that could accommodate the diverse characteristics and behavior of road users, vehicles, traffic, and the environment. More specifically, systems theory envisages a highway *system* designed to regulate traffic flow and to ensure that drivers observe road use regulations in order to maintain traffic safety [22, 23](Hauer, 1995:136; Button, 1993:80). Yet interviews with accident victims reveal that inadequate signage and poorly designed (or uncontrolled) intersections and access ramps onto main roadways are major risk factors leading to traffic accidents in Kuwait City. According to systems theory, all of these risk factors represent contradictions within the traffic system.

In addition to systemic risk factors, most interviewees stated that driving while using a cell phone is one of the more prominent human behavioral traits leading to RTAs in Kuwait City.

Some accident victims (vehicle passengers) observed that their mishaps were caused by drivers using a cellular phone immediately preceding the accident, when the driver was concentrating on the phone. It was at this time that the victims began to sense instability in the automobile's movement just prior to the collision with another vehicle. This finding is consistent with international experience [29, 30](Wilde, 2002; Adams 1995).

Discussions with both the traffic police and accident victims also revealed a widespread view that the driving profession (i.e., commercial drivers, those who operate a vehicle as the primary activity connected with their employment) appear to be less educated than the general population in Kuwait City. Consequently, the quality of drivers is one of the risk factors leading to RTAs in the city. Complaints commonly voiced by the public about commercial drivers, and verified by the police, include the following: (a) commercial vehicles in Kuwait City are operating at speeds higher than appropriate for specific road and traffic conditions; (b) commercial operators do not pay adequate attention to the needs of non-motorized traffic and other road users; and (c) some drivers of commercial vehicles are under the influence of alcohol and drugs. Hospital personnel also observed during the interviews that all drivers, but especially those who spend the greatest time on the road, need to be more proactive in seeking regular medical exams to ensure their major sensory as well as vital organs (e.g., eyes, ears, heart) are in good condition and functioning properly. This could lessen the risk of accidents resulting from such hazards as a driver's failure to see a smaller vehicle at night, or a driver suffering a heart attack and losing control of the vehicle.

CONCLUSION

Improved education concerning traffic safety is an important first step in the battle to reduce RTA injuries and fatalities. It is important that this effort focus first and foremost on Kuwaiti youth—as age and inexperience, cell phone use, carelessness, and alcohol and drugs are major factors in Kuwaiti RTAs—so that the country's future drivers will be safe and knowledgeable road users. This will also begin to address the issue of undereducated professional drivers. Teaching and learning should start before students reach driving age, so that bad driving behaviors do not have to be unlearned, and in order to instill a culture and awareness of road safety at an early age. Student-centered techniques should be incorporated into the appropriate curricula and could include field trips, role playing, group discussions, demonstrations, exercises, and projects. A national driver's license database should be developed and implemented.

The government could also play an important role in other areas. However, for this to happen, road safety must be accorded a priority not only in the budgetary process, but also in terms of enacting expanded and improved legislation (such as laws restricting cellular phone use while driving), accelerating policy implementation, and increasing community involvement. Surveillance and law enforcement efforts should be enhanced, especially during nights and weekends, when the risks of RTAs from driving under the influence increase dramatically. And in order to crack down on RTAs related to mobile phone use, the police should be required to determine whether a mobile phone is in use in vehicle at the time of an accident.

Limitations and Future Recommendations

The limitations of the current study include sample size and method, which may impact generalizability. Though the research is focused on Kuwait specifically, by limiting research to urban hospitals the study potentially leaves gaps on issues that occur outside Kuwait City. An important focus of future research should be on the comparative study of RTAs in Kuwait and other Gulf and Arab countries. Such a cross-national perspective will help the government better understand the true costs that road traffic accidents impose both on Kuwaiti society and on the politics of neighboring states.

REFERENCES

1. World Health Organization (2011). A 5-year Health Organization Strategy for Road Traffic Injury Prevention. Geneva Switzerland. Norwegian University of Science and Technology Library Database.
2. Kimmitt, M. 2009. Measuring Iraq. Middle East Strategy at Harvard (MESH). John. M. Olin Institute For Strategic Studies: Harvard University.
3. Statistical Annual Report (2012), Ministry of Interior's Directorate of Road Traffic Accidents, Kuwait City, State of Kuwait.
4. Statistical Annual Report (2015), Ministry of Interior's Directorate of Road Traffic Accidents, Kuwait City, State of Kuwait.
5. World Health Organization (2011). A 5-year Health Organization Strategy for Road Traffic Injury Prevention. Geneva Switzerland. Norwegian University of Science and Technology Library Database.
6. Bener A, Abu-Zidan FM, Bensiali AK, Al-Mulla AAK, Jadaan KS. (2003). Strategy to improve road safety in developing countries. *Saudi Med J*; 24: 603-608.
7. Gregersen, N. P., Bjurulf, P. (1996). Young novice drivers: Toward a model of their accident involvement. *Accident Anal Prev*, 28: 229-241.
8. Clarke, D.D., Ward, P., Bartle, C., Truman, W. (2010). Killer crashes: fatal road traffic accidents in the UK. *Accident Anal. Prev.* 42 (2), 764–770.
9. Carmen Del Rio, M., Gomez, J., Sancho, M., Alvarez, F.J. (2002). Alcohol, illicit drugs and medicinal drugs in fatally injured drivers in Spain between 1991 and 2000. *Forensic Sci. Int.* 127 (1-2), 63–70.
10. Drummer, O.H., Gerostamoulos, J., Batziris, H., Chu, M., Caplehorn, J.R., Robertson, M.D., Swann, P. (2003). The incidence of drugs in drivers killed in Australian road traffic crashes. *Forensic Sci. Int.* 134 (2-3), 154–162.
11. Jones, A.W., Kugelberg, F.C., Holmgren, A., Ahlner, J. (2009). Five-year update on the occurrence of alcohol and other drugs in blood samples from drivers killed in road-traffic crashes in Sweden. *Forensic Sci. Int.* 186 (1–3), 56–62.
12. Movig, K.L., Mathijssen, M.P., Nagel, P.H., Van Egmond, T., De Gier, J.J., Leufkens, H.G., Egberts, A.C. (2004). Psychoactive substance use and the risk of motor vehicle accidents. *Accid. Anal. Prev.* 36 (4): 631–636.
13. Gjerde, H., Normann, P.T., Christophersen, A.S., Samuelsen, S.O., Morland, J. (2011). Alcohol, psychoactive drugs and fatal road traffic accidents in Norway: a case–control study. *Accident. Anal. Prev.* 43 (3), 1197–1203.
14. Statistics Finland, 2010. (Road Traffic Accidents). Helsinki.
15. European Commission Road safety. (2010) http://ec.europa.eu/transport/road_safety/specialist/statistics/trends/index_en.htm (accessed 09.06.10).

16. Finnish Government. (2006). Valtioneuvoston periaatepäätös tieliikenteen turvallisuuden parantamisesta 09.06.06 (Finnish Government's Decision of the Improvement of Road Traffic Safety 09.06.06).
17. Redelmeier, D.A., and Tibshirani, R.J. (1997). Association between cellular telephone Calls And motor vehicle collisions. *N Engl J Med*; 336 (7):453-458.
18. McEvoy SP, Stevenson R, McCartt T, Woodward M, Haworth C, Palamura P, Cercarelli R. (2005). Role of Mobile Phones in Motor Vehicle Crashes Resulting in Hospital Attendance: A Case-Crossover Study. *Br. Med. J.*, 331: 7514.
19. Dragutinovic N, Twisk D. (2005). *Use of Mobile Phones While Driving. Effects on Road Safety: A Literature Review*. SWOV, Institute for Road Safety Research, Leidschendam, The Netherlands.
20. Muhlrad N, Lassarre S. (2005) Systems approach to injury control. New Delhi, Macmillan India Ltd.
21. Krug, E. G, Sharma, G. K, Lozano, R. (2000). The global burden of injuries. *American Journal of public Health*, 90: 523-526.
22. Hauer, E. (1995). On Exposure and Accident Rate. *Traffic Engineering and Control* 36: 134-138.
23. Button, K. J. (1993), *Transport, the Environment and Economic Policy*. Edward Elgar, London.
24. Sjöberg, L. and A. Biel (1983), Mood and Belief- Value Correlations. *Acta Psychologica* 53: 253-270.
25. Moen, B.E. and T. Rundmo,. (2004). Worrying about Transport Risks In: Rundmo, T. and B.E. Moen (eds). *Risk Judgement and Safety in Transport*. Rotunde Publication Number 87, Trondheim.
26. Slovic, P (1987). Perception of risk. *Science*. 236, 280-285.
27. Oltedal, S., Moen, B. E., Klempe, H., & Rundmo, T. (2004). Explaining risk perception. An evaluation of cultural theory. Trondheim: Rotunde Publikasjoner.
28. Rundmo, T. & Iversen, H. (2004) Risk perception and driving behavior among adolescents in two Norwegian countries before and after traffic safety campaign. *Safety science*, 42, 1-21.
29. Wilde, G.J.S. (2002). Does risk homeostasis theory have implications for road safety? *British Medical Journal*. 324, 1149-1152.
30. Adams, J.G.U. (1995). *Risk*. London: UCL Press.
31. Baker, T. L. (1999). *Doing Social Research*. (3rd Ed.). McGraw-Hill Companies Inc
32. Limb, N. and Dawyer, C. (2001). *Qualitative Methodologies for Geographers: Issues and Debate*: Oxford University Press Inc
33. Patton, M.Q. (1990) *Qualitative Evaluation and Research Methods* (2nd edition), Newbury Park, CA: Sage publications Ltd, London
34. Flick, U. (1998). *An Introduction to Qualitative Research*: Sage Publications Ltd, London
35. PLEASE VERIFY Annual Report (2010) and (2011). Ministry of Health, Hospital Record Registration, Kuwait City, State of Kuwait.
36. Iversen, H., & Rundmo, T. (2002). Personality, risky driving and accident involvement among Norwegian drivers. *Personality and Individual Differences*, 33, 1251–1263.

37. Oltedal, S., & Rundmo, T. (2006). The effects of personality and gender on risky driving behaviour and accident involvement. *Safety Science*, 44, 621-628.
38. Lund, I.O., & Rundmo, T. (2009). Cross-cultural comparisons of traffic safety, risk perception, attitudes and behavior. *Safety Science*, 47, pp. 547-553.
39. Weinstein, N. (1984). Why it won't happen to me: Perceptions of risk factors and susceptibility. *Health Psychology* 3, 431-457.
40. Deery, H. A. (1999). Hazard and risk perception among young novice drivers. *Journal of Safety Research*, 30, pp. 225-236.

A Comparative Study of Emotion Metaphor between English and Khwar

Syed Anwar Ali Shah¹, Assad Us Samad²

¹Lecturer in English, Department of English University of Chitral, Khyber Pakhtunkhwa Pakistan.

²Ph.D Scholar at the Institute of Education and Research University of Peshawar Pakistan.

Received: July 1, 2018

Accepted: September 26, 2018

ABSTRACT

The traditional linguists failed to clarify the metaphor as indispensable part of our cognitive mechanism instead of being perceived as language phenomenon. But the modern linguists like Lakoff and Johnson conducted their research on metaphor from the perspective of both language and philosophy and published the masterpiece titled "Metaphor We Live By". Hence, the research article deals with the cognitive linguistics approach, which is used to make a comparative analysis between Khwar and English emotion metaphors. Thus, it is based on the theoretical framework of Lakoff and Johnson by keeping in view the qualitative paradigm and employing the Content Analyses as methodology. The data has been analyzed on the bases of the aforementioned technique to explore the convergence and divergence in terms of conceptual metaphors of the basic emotions, i.e. LOVE in Khwar and English.

KEYWORDS: conceptual metaphor, love, emotions, comparative analysis

INTRODUCTION

This research aims to comparatively analyze the conceptual metaphors in English and Khwar focusing on the emotional concepts, i.e. love. The study is based on one of the Lakoff and Johnson (1980) branded three types of conceptual metaphors, which are being used in natural languages.[1]. The first is Structural metaphor, i.e. one concept is structured on the basis of other; for example LOVE IS FIRE, (*ASHQI ANGAR*) – this concept is highly structured and clearly described. As the philosophers of the British school of Philosophy suggested the following:

“...thought is governed by two laws. The first is contiguity—ideas that are frequently experienced together get associated in the mind. Thereafter, when one is activated, the other is activated too. The other law is resemblance: when two ideas are similar, whatever has been associated with the first idea is automatically associated with the second (Pinker, 1997: 113).

The conceptual metaphor is a property of words and a linguistics phenomenon. Second, it would be used for particular artistic/rhetorical purposes, i.e. 'All the world's a stage' by Shakespeare is one of the glaring example. Thirdly, it based on semblance in the course of the two entities for comparison and identification. The fourth, it shows the mindful and intentional use of words with special talent, to convey a specific message comprehensively. The fifth, it is a figure of speech for special effects of everyday human communication, thought and reasoning[2].

Consequently, conceptual metaphor embodies the manner of thoughts; and influences every individual in cognition of the world. It is a main component of psycholinguistic. The people use conceptual metaphors in both spoken and written languages consciously or unconsciously to shape their perceptions (Lakoff & Johnson, 1980, p. 3). The speech communities across the world use the conceptual metaphors in their respective languages having similarities and differences. The similarities might be due to the universality of conceptual metaphors. However, the natures of some of the conceptual metaphors across the nation are different and reflect opposite cultural meanings, connotations and way of thinking [3].

As the conceptual metaphor often appears, when an abstract concept is being conversed, because it might be very difficult to mention as it is. Therefore, the conceptual metaphors may serve of conveying the exact message precisely. Thus, metaphor may conventionally recognize as a linguistic trend and cognitive tool for colloquial usage by different speech communities for the conceptualizations of various domains of information. Therefore, a simple way to formalize conceptual metaphor is all the preceding expressions' manifestation, i.e. LIFE IS A JOURNEY. (*ZINDAGAN YEE MUSAFARY*) There the use of capital letters illustrate that the specific phrasing doesn't appear in language as such, whereas it lies beneath in our concept (Lakoff & Johnson, 1980). Hence, the mechanism of a

*Corresponding Author: Syed Anwar Ali Shah. (Principal Author). Lecturer in English, Department of English University of Chitral, Khyber Pakhtunkhwa Pakistan.

I.D- syedanwar_chitral@yahoo.com Cell no- +92345-4793553

conceptual system relates to the human experiences drawn from physical and physiological existence in their respective cultural domains. These fundamental practices might involve in the perceptions and motor movements of body. As a result, human beings adopted ideas that might develop in their concepts and latter converted into conceptual metaphors, which have a complete structure and would be extend throughout their speeches by both the English and Khowar speech communities.

Hence, the aforementioned discussion provides a clear ground for this research article, which explore the conceptual metaphors of emotions in English and Khowar languages. The former is an international language and considered to be organic language (Said, 1979). The latter is a language of small speech community, spoken in a landlocked region of KP District Chitral (Pakistan). Besides, the study aims to explore conceptual metaphors of Khowar language having similarities and difference with that of English language.[4]. Thus, language is the main component of culture, which provides identity to its speakers; the growing influence of the capitalist culture (English language) put the cultural identity of the other nations into jeopardy. The importance of Khowar language could be seen in the study of Makness (2005) University of London has taken advantage of the Khowar language to study and to criticize the local culture of Khowar speech community[5]. Moreover, the study will reveal whether Khowar language has the capabilities to converse the abstract ideas through conceptual metaphor. In fact, there is a vital need to study Khowar metaphor from a cognitive linguistic viewpoint to uncover the conceptual metaphor of LOVE, which is the best cognitive tool in expressing their intensity whether related to English or not.

Statement of the problem:

The study attempts to address the problems of the universality or the variation in emotion conceptual metaphors of English and Khowar languages. Moreover, whether Khowar language has the capabilities to converse the abstract ideas through conceptual metaphor of emotions with reference to that of English language. Language is one of the main components of culture, which lays an intellectual foundation of nationalism, perspective shaping and ways of thinking of a nation.

Significance of the study

This study is significant that no cross-linguistic based study of emotion Metaphors of English and Khowar has yet been conducted. As metaphors have been considered ‘a set of logical mapping of the source domain and the target domain’. However, the shared conceptual metaphors in English and Khowar exhibit deviations as well similarities in the metaphorical expression. Besides, the study is significant in term to contribute the existing literature on the topic. Moreover it provides a precocious measure of preventing the cultural traits of the regional language Khowar in the phase of global (English) before extinction.

Objectives of the study:

The proposed study intends to:

- Explore cultural shades of meaning found in the conceptual metaphor in English and Khowar.
- Compare and contrast the meaning of the conceptual metaphor of emotions in English and Khowar.

Research Questions:

- What are the cultural shades of meaning found in the conceptual metaphor in English and Khowar?
- How are the similarities and differences in the metaphorical expressions of emotions in English and Khowar?

Delimitation Of The Study:

The study is delimited to the exploration conceptual metaphors, which are related to the emotional concepts, i.e. love, The main purpose of this study is to analyze the metaphorical structure of the aforementioned emotion concepts in Khowar; and to compare it with the structural expression of English for analyzing the emotional terms in different contexts. It seems that the structure of conceptual metaphors of selected emotion concepts in Khowar is equivalent to the structure of English; and the differences seem to be on the more concrete level of metaphors. Besides, the aforementioned conceptual metaphors of emotion, other related metaphor could not be covered under this study.

LITERATURE REVIEW

Eubanks (1999) says that metaphor has two-parts expressions, i.e. something is something else. It seems that he has drawn his conclusion from the proposition of Aristotle. As Aristotle upholds that a metaphor has two main discursive scenes, i.e. the place from where it has originated, and the place where it has been reallocated. Thus, he claims that it is made of two components, which would be easily extracted or concealed. Hence, the two parts of a metaphor work on each other by sharing some obvious expression[6].

Max Black (1962) offers a special view of metaphors. He calls Aristotle's theory a comparison theory, in which pre-existing similarities would be compared terms between each other. Thus, Black suggests a substitute view, as he argues, when we say "MAN IS A WOLF" we do not simply project the pre-existing characteristics of a wolf onto man but rather newly involve man in a system of commonplaces or "implicative complex" about wolf. As the metaphor "MAN IS WOLF" manipulates both our ideas of man and wolf. Subsequently, since Black's view, the Metaphor theory has undergone a radical transformation[7].

Lakoff and Johnson (1980) claim that our conceptual system has the capacity both to think as well as an act, which is basically metaphoric in nature. Moreover, they profess that the way we as human thinks, what we experiences, and what we do on a daily basis, are the great deal of the substances of metaphors. Hence, metaphor functions at the conceptual level. Thus, metaphor is a cognitive mechanism, through which the human being conceives of their world around. In addition, the human being communicates this metaphorical conceptual explanation through language, which reflects the metaphorical nature of the concepts, viz. metaphorical linguistics expression. According to Lakoff and Johnson, in metaphor interpretation, the human being understands one kind of thing/experience in term of another different kind of thing. In the conceptual metaphor, for instance, ARGUMENT IS WAR, in the aforementioned example we understand argument in terms of war. It is because the structure of war is mapped onto the structure of argument, subsequently, it reveals there semblance between both war and argument[8].

Lakoff and Turner (1989) believe the mapping of metaphor is unidirectional. As we use metaphor to map certain conceptual properties of a conceptual source domain onto a conceptual target domain to create a new understanding of the target domain. Thus, the mapping takes place at the conceptual metaphor level. Besides, they also exhibit that it is possible for two unusual conceptual metaphors to involve the same domains, for instance, MACHINES ARE PEOPLE and PEOPLE ARE MACHINES. The difference would be which one of the domains ought to be source domain, and which one would be the target domain for each respective metaphor. To illustrate the aforementioned point, Lakoff and Turner (1989) tip to the conceptual metaphor "MACHINES ARE PEOPLE" and make the definite claim that the conceptual metaphor, MACHINES ARE PEOPLE, allows us to think of machines as having attributes of people. In addition, when we switch this metaphor around to PEOPLE ARE MACHINES different deductions are made because different attributes are mapped between the two domains. Machines are people and they need to be treated with care. People are machines because people sometimes function automatically, without thinking, just like machines. In this debate, they mean, you will end up with different interpretations depending on which of the two domains is functioning as source domain and which is the target domain. Moreover, from this observation, they concluded that the mapping in conceptual metaphors is unidirectional and not bi-directional. In addition, they elaborate, when the relation between the source domain and the target domain is switched, so that, the source domain and target domain would exchange their roles, and thus the derived meaning will also be changed, it is because the mapping always comes from the source domain to the target domain. This is one of the specific attributes of the source domain, which is mapped onto the target domain. The aforementioned literature review has provided me a clear insight about this research study[9].

METHODOLOGY

This study is qualitative, which is one of the types of scientific research. Cresswell (1998) described that the qualitative research is an inquiry process to explore social or human problems[10]. The researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting. The aforementioned literature provided me the basic conceptual foundation of the qualitative study, which helped me in establishing the paradigm to this research article.

Qualitative Content Analysis:

The qualitative content analysis is the method of the study. In this research article the interpretation of the text data was systematically classified through coding. Hsieh and Shannon (2005) defined qualitative content analysis as “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (p.1278). Thus, The qualitative content analysis was the most suitable method for this study. As the qualitative content analysis pays attention to unique themes that illustrate the range of the meanings of the phenomenon rather than the statistical significance of the occurrence of particular texts or concepts[11].

Data Collection Strategy

Data collection is a key aspect of every research. Inaccurate data collection can impact the results of a study and ultimately lead to invalid results. In the proposed study I reviewed textual data for data collection. I selected text purposively. It means the text was selected on the bases of its relevance to the objectives and questions. Hence, the data was obtained from select books, Journal, indigenous texts of folklores, poetry and analytical works of both local and international scholars on the topic.

Data Analyses:

The qualitative was analyzed through careful reading and rereading, the textual data coding and sorting the coded segments into broader categories as well as themes.

Theoretical Framework of the study

The theoretical framework of the study was based on the Lakoff and Johnson (1980) branded of conceptual metaphor, which is being used in natural languages, i.e. Structural metaphor.

CONCEPTUAL METAPHOR OF LOVE:

As our ordinary conceptual system is fundamentally metaphorical in nature, thus, in term of which one think and act (Lakoff, & Johnson 1980). Hence, the present study shows, how our concept is metaphorical and how it structures our everyday activities. Therefore, to address the research questions the structural metaphor is taken; and the Structural Metaphor falls into the category of the most productive types of cognitive metaphor.

LOVE IS WAR

- | | | |
|---|--|---|
| 1 | English: He is known for many his rapid conquests in love. | Khowar: <i>Has her Xagha kamyab ashaqi kori asur.</i> |
| 2 | English: She fought for him but his won out. | Khowar <i>Has bo choki de tan Dusto aliko no bety.</i> |
| 3 | English: He made an ally of her mother. | Khowar: <i>Has hato nano tan dala gani asti.</i> |
| 4 | English: He over powered her. | Khowar: <i>Hasa ho zatai</i> |
| 5 | English he is slowly gaining ground with her. | Khowar: <i>Has lash kori ho tan washkey za angoyan.</i> |

The first three are seemed to be corresponding closely; and show to the literal traditions of one another. Besides, these examples also reveal that someone doesn't only talk about the love in term of war but does fight to save/secure a love relationship.

LOVE AS A MADNESS

- | | |
|---|---|
| English: I am crazy about her. | Khowar: <i>Ha komoro ma ahchaka asur.</i> |
| English: She drives me out of my mind. | Khowar: <i>Ha komoro ma gadari kori asur.</i> |
| English: He constantly raves about her. | Khowar: <i>Hasa ho zahno nische asur.</i> |
| English: He has gone made over her. | Khowar: <i>Hasa ho achto gadari bety asur.</i> |
| English: I am just wild about Nasima. | Khowar: <i>Nasimo poshe masoro kiagh nishaeran.</i> |

English: I am insane about her. Khowar: *Awa ho poshe dewana boman.*

In the above instance of the conceptual metaphors the first three have very close relation with each other and seems to be the translation of each other in both English and Khowar. On the other hand, the later three are different both in expression and structure. Hence, love as madness is frequently used in both the languages; and the existence of the relevant metaphors are per-determined in the understudy languages. It is because the metaphors are involved our basic instinct as well as reaction and unalienable part of our developments (Lakoff, & Johnson; 1980).

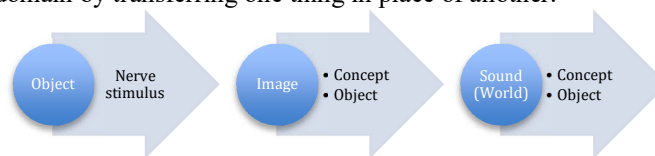
LOVE IS MAGIC:

- | | | |
|---|----------|--|
| 1 | English: | She <i>cast her spell</i> over me. |
| | Khovar: | Ha Komoro ma sora tan Jado kory asur. |
| 2 | English: | The <i>magic</i> is gone. |
| | Khovar: | Ho Jado asar ma sora khatum hoy. |
| 3 | English: | I was <i>spellbound</i> . |
| | Khovar: | Mata kigh kori asony. |
| 4 | English: | She had <i>hypnotized me</i> . |
| | Khovar: | Ha Komoro ma zahno ta washki zinga asur. |
| 5 | English: | He has <i>in trance me</i> . |
| | Khovar: | Ha ta ha Komoro bahush koriasur. |
| 6 | English: | I am <i>charmed</i> by him. |
| | Khovar: | Ha Daq ma ta washki zinga asur. |
| 7 | English: | She is <i>bewitching</i> . |
| | Khovar: | Ha Komoro tan shaalio jado koyan |

The human beings have been fascinated by the magic for time immemorial, which provided an explanation to unknown. The above-mentioned examples show that the speakers of both the languages try to find out the very sensation of love through magic. These metaphors are enormously prolific in Khovar. Moreover, the verb ‘*Hoshoganik*’ (meaning *to hypnotize, to cast spell*) is most commonly used when talking about women’s ability to charm men, and not vice versa. “In the Khovar mythology women are thought to have power over forces of evil, darkness and disease” it give details the Old Khow tradition of matriarchies, where the function of woman as mediator between the husband and the ancient goddess.

CONCLUSION

The conceptual metaphor is the projection of property and structure from one conceptual domain to another conceptual domain by transferring one thing in place of another.



Thus, the comparative analyses of the conceptualization of the basic emotion in this article show that English and Khovar shares similarities in some major conceptual metaphors of love. It is because of emotional concepts, which are embodied, either based on bodily experiences of human being or physiological functioning of human body’s close relation. Hence, these similarities substantiate that metaphors aren’t erratic but are embodied and motivated by the physiological truth.

The variation also exist in the conceptualizations of love metaphors between the understudy languages, it is because of the influences of concrete-historical as well as conventional-culture reasons. It is obvious that culture shapes and influences in making the concepts and cognition of the world around the inhabitants. The native speakers of English holds the “old west humoural cultural doctrine”, while the speech community of Khovar takes the old Khow traditions and culture as a model. Hence, it shows the differences in expressing of the love metaphors of emotions.

In a nutshell, the conceptual metaphors of love are predominantly originated from physical experiences. On the other hand, at the same time, cultural models influence the conceptual metaphors of love. Hence, emotion metaphors of love in both the languages are illustrated by cognitive frequency and cultural-diversity.

REFERENCES

- [1] Black, Max (1962). *Models and Metaphors: Studies in Language and Philosophy*. Ithaca: Cornell University Press.
- [2] Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing five design* Thousand Oaks, CA: Sage.
- [3] Eubanks, P. (1999). Conceptual metaphors as rhetorical response: A reconsideration of metaphor. *Written Communication* 16 (2): 171-199.
- [4] Faizi, I. (1989) "*Chitral Lok Virsa*". Pakistan: Islamabad; Lok Virsa, press.
- [5] Hsieh, H. F., & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- [6] Kövecses, Z. (2000) *Metaphor and Emotion: Language, Culture, and Bodyin Human Feeling*. New York: Cambridge University Press.
- [7] Lakoff, G. & Johnson, M. (1980) *Metaphors We Live By*. Chicago: University of Chicago Press.
- [8] Lakoff, G. and M. Turner, (1989) *More than cool reason: A field guide to poetic metaphor*. Chicago: Chicago University press.
- [9] Marsden. M. (2005) "*Living Islam: Muslim Religious Experience in Pakistan's North-West Frontier*". Cambridge: Cambridge University press.
- [10] Pinker, S. (1997) "How The Mind Works". New York: W. W. Norton & Companies.
- [11] Said, W.E. (1979) "Orientalism". United State: Panteon Books, 186-90.

INSTRUCTION TO AUTHORS

Manuscript Submission:

Send your manuscript with attachment by mailing it to submit@textroad.com, textroadjournals@gmail.com along with [covering letter](#).

Manuscript Preparation:

- * Title
- * Author names and addresses
- * Abstracts (Not more than 300 words)
- * Key words
- * Introduction
- * Materials and Methods
- * Results and Discussions
- * References (Use numbering in the text instead of full references).
Give full references at the end of the file
- * Photographs should be of high quality (Minimum 300-600 dpi)
- * Graphs should be in clearly visible form so that it may become easy to redraw
- * The manuscript must be submitted in MS-WORD file format.

INSTRUCTIONS TO AUTHORS

Submission

Submit manuscripts as e-mail attachment to the Editorial Office at:

textroadjournals@gmail.com or submit@textroad.com along with [covering letter](#). A manuscript number will be mailed to the corresponding author same day or within 48 hours. The authors may also suggest two to four reviewers for the manuscript (JBASR may designate other reviewers). There is no page limit. The submitting author takes responsibility for the paper during submission and peer review.

Terms of Submission

Papers must be submitted on the understanding that they have not been published elsewhere (except in the form of an abstract or as part of a published lecture, review, or thesis) and are not currently under consideration by another journal. The submitting author is responsible for ensuring that the article's publication has been approved by all the other coauthors. All enquiries concerning the publication of accepted papers should be addressed to editor@textroad.com.

Review Process

All manuscripts are reviewed by an editor and members of the Editorial Board or qualified outside reviewers. Decisions will be made as rapidly as possible, and the journal strives to return reviewers' comments to authors within one or two weeks. The editorial board will re-review manuscripts that are accepted pending revision. It is the goal of the JBASR to publish manuscripts within 4 weeks after submission.

Style of Manuscripts

Manuscripts should be written in clear, concise and grammatically correct English (with 10 font size and Times New Roman font style) so that they are intelligible to the professional reader who is not a specialist in any particular field. Manuscripts that do not conform to these requirements and the following manuscript format may be returned to the author prior to review for correction. The entire manuscript, including references, should be typed single spaced on one side of the paper. All pages should be numbered consecutively in the bottom centre starting from the title page. The manuscript should be presented in the following order.

Title and Authorship Information

The title should be a brief phrase (capitalize first letter of each word in the title) describing the contents of the paper. The Title Page should include the authors' full names and affiliations, the name of the corresponding author along with phone, fax and E-mail information. Present addresses of authors should appear as a footnote.

Abstract

All manuscripts should not exceed 250-300 words and should describe the scope, hypothesis or rationale for the work and the main findings. Complete sentences, active verbs, and the abstract should be written in the past tense. Standard nomenclature should be used and abbreviations should be avoided. No literature should be cited.

Keywords

Key words (5-7 words) should be provided below the Abstract to assist with indexing of the article. These should not duplicate key words from the title.

Introduction

This section should include sufficient background information, provide a clear statement of the problem, the relevant literature on the subject, and the proposed approach or solution. The aims of the manuscript should be clearly stated. The introduction should not contain either findings or conclusions. It should be understandable to colleagues from a broad range of scientific disciplines.

Materials and Methods

This should be complete enough to provide sufficient detail to allow the work to be repeated by others. However, only truly new procedures should be described in detail; previously published procedures should be cited, and important modifications of published procedures should be mentioned briefly. Capitalize trade names and include the manufacturer's name and address. Subheadings should be used. Methods in general use need not be described in detail.

Results

Results should be presented in a logical sequence in the text, tables and figures; repetitive presentation of the same data in different forms should be avoided. The results should not contain material appropriate to the Discussion. It should be written in the past tense when describing findings in the authors' experiments. Results should be explained, but largely without referring to the literature.

Discussion

The discussion should consider the results in relation to any hypotheses advanced in the Introduction and place the study in the context of other work. Results and Discussion sections can be combined.

Conclusions

If an optional conclusion section is used, its content should not substantially duplicate the abstract.

Acknowledgment

The acknowledgments of people, grants, funds, etc should be brief.

References

Bibliographic references in the text appear like [1, 2, 5, 6], using square brace in superscript. References should be numbered consecutively, with style:

Journal paper:

1. Hadjibabaie, M., N. Rastkari, A.Rezaie and M. Abdollahi, 2005. The Adverse Drug Reaction in the Gastrointestinal Tract: An Overview. *Intl. J. Pharmacol.*, 1 (1): 1-8.

Books:

1. Daniel A. Potter, 2002. *Destructive turfgrass insects: Biology, diagnosis and control*. Wiley Canada Publishers, pp: 24-67.

Chapters in Book:

1. Bray R.A., 1994. The leucaena psyllid. In: *Forage Tree Legumes in Tropical Agriculture* (eds R.C. Gutteridge and H.M. Shelton) pp. 283-291. CAB International, Oxford.

Titles of journals should be given in full. 'In press' can only be used to cite manuscripts actually accepted for publication in a journal. Citations such as 'manuscript in preparation' or 'manuscript submitted' are not permitted. Data from such manuscripts can only be mentioned in the text as 'unpublished data'.

A Report:

1. Makarewicz, J.C., T. Lewis and P. Bertram, 1995. Epilimnetic phytoplankton and zooplankton biomass and species composition in Lake Michigan, 1983-1992. U.S. EPA Great Lakes National Program, Chicago, IL. EPA 905-R-95-009.

Conference Proceedings:

1. Stock, A., 2004. Signal Transduction in Bacteria. In the Proceedings of the 2004 Markey Scholars Conference, pp: 80-89.

A Thesis:

1. Strunk, J.L., 1991. The extraction of mercury from sediment and the geochemical partitioning of mercury in sediments from Lake Superior, M. S. thesis, Michigan State Univ., East Lansing, MI.

Tables and Equations

Tables and equations should not be submitted in a format exceeding the A4 page size (in portrait form). **All tables should be embedded within the manuscript, and must be captioned and numbered sequentially.** Each table should be on a separate page, numbered consecutively in Arabic numerals and supplied with a heading and a legend. Tables should be self-explanatory without reference to the text.

Figures / Illustrations / Photographs

Graphics should be supplied as high resolution (at least 300-600 dp.i.) electronic files. Digital images supplied only as low-resolution print-outs cannot be used. Graphs, diagrams, chromatograms, photos, etc. should be prepared as clear, original positives, suitable for reproduction. **All figures should be embedded within the manuscript, and must be captioned and numbered sequentially.**

Proofs

Proofs will be sent via e-mail as an Acrobat PDF file (e-mail attachment) and should be returned within 3 days of receipt. Page proofs are considered to be the final version of the manuscript. With the exception of typographical or minor clerical errors, no changes will be made in the manuscript at the proof stage.

Check List

We recommend that you ask a colleague to read over your paper prior to submission to ensure it is of a high standard and conforms to a high level of scientific writing.

Before submission of your manuscript, please check that:

- All references cited in the text are included in the reference section.
- All figures and tables are cited in the text.
- Figures are at least 300 d.p.i.
- The pages are numbered.



[Home](#)

[Journals](#)

[Instructions to Authors](#)

[Manuscript Submission](#)

[Join Us](#)

[Contact Us](#)



Journal of Basic and Applied Scientific Research



Journal of Social Sciences and Humanity Studies



Journal of Basic and Applied Chemistry



Journal of Basic Sciences and Applied Research



Journal of Applied Environmental and Biological Sciences



Journal of Computer Sciences and Communication



Journal of Pharmaceutical and Biomedical Sciences



Journal of Engineering and Higher Technology



Journal of Agriculture and Food Technology



Current Economics and Management Research