PROCEEDINGS

1st INTERNATIONAL MULTIDISCIPLINARY CONFERENCE

ON SUFISM AND MODERN SCIENCES

22-23 NOVEMBER, 2022



PROF. DR. PERVEEN MUNSHI
VICE CHANCELLOR AND PATRON

UNIVERSITY OF SUFISM AND MODERN SCIENCES

BHITSHAH, SINDH

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)



1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE OF SUFISM AND MODERN SCIENCES (IMCSMS)



In the name of Allah, the Most Merciful, the Most Kind

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON ISLAM AND MODERN SCIENCES (IMCSMS)

CONFERENCE DAY 1

INAUGURATION GLIMPSES





Honorable Vice Chancellor, invited guests and audience standing in respect of national anthem

CONFERENCE DAY 1

GLIMPSES



Starting from left side of 1st row Mr. Muhammad Mureed Rahimoon, Secretary Universities and Boards Department GoS. Prof. Dr. Perveen Munshi, Vice Chancellor, University of Sufism and Modern Sciences, Bhitshah. Prof. Dr. Naseem Akhtar, Director Institute of Siraiki Language Bahauddin Zakariya University, Prof. Dr. Fateh Muhammad Marri, Vice Chancellor Agriculture University, Tandojam. Prof. Dr. Farman Ali Shah, Registrar, University of Sufism and Modern Sciences Bhitshah and Syed Madad Ali Shah, Former Vice Chancellor, Shaheed Benazir Bhutto University of Technology & Skill Development Khairpur, sharing their views about conference.

CONFERENCE DAY 1

GLIMPSES



Worthy Vice Chancellor Prof.Dr Perveen Munshi presenting souvenir to the Chief Guest Mr. Muhammad Mureed Rahimoon, Secretary Universities and Boards Department GoS



CONFERENCE DAY 1

GLIMPSES



Worthy Vice Chancellor Prof. Dr. Perveen Munshi presenting souvenir to Prof. Dr. Fateh Muhammad Marri, Vice Chancellor Sindh Agriculture University, Tandojam



Worthy Vice Chancellor Prof. Dr. Perveen Munshi presenting souvenir to Syed Madad Ali Shah, Former Vice Chancellor Shaheed Benazir Bhutto University of Technology & Skill Development, Khairpur



Worthy Vice Chancellor Prof. Dr. Perveen Munshi presenting souvenir to Prof. Dr. Naseem Akhtar, Director Institute of Siraiki Language Bahauddin Zakariya University

CONFERENCE DAY 1

GLIMPSES









CONFERENCE DAY 1

GLIMPSES

RESEARCH POSTER PRESENTATION








Poster presenters explaining their research work to conference participants, visitors, keynote speakers and guests.

CONFERENCE DAY 1

PARALLEL SESSIONS GLIMPSES

TRACK: SUFISM/MODERN SCIENCES



Visit of Parallel Sessions (Sufism and Modern Sciences Track) by Honorable Vice Chancellor Prof. Dr. Perveen Munshi.

CONFERENCE DAY 1

SPIRITUAL EVENING (روحانی شام) GLIMPSES











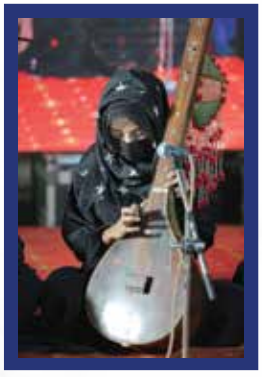


CONFERENCE DAY 1

SPRITUAL EVENING (روحانی شام) GLIMPSES













CONFERENCE DAY 2

MEMBERS OF PANEL DISCUSSION



PROF. DR. ZAHID HUSSAIN ABRO
Pro - Vice Chancellor QUEST,
Benazirabad



PROF. DR. SHUJAAT MUBARAK
IoBM Karachi



PROF. DR. FAIZEH MIRZA
University of Karachi



Dr. SHER MUHAMMAD MEHRANI
University of Karachi



DR. SHOUKAT ALI UJJAN
Secretary
Sindh public Service Commission
Hyderabad



DR. AKHTIAR Ali
University of Sufism and Modern
Sciences, Bhitshah



DR. MUHAMMAD ARSHAD
University of Veterinary & Animal
Sciences, Lahore



MEMBERS OF PANEL DISCUSSION

CONFERENCE DAY 2

PARALLEL SESSIONS GLIMPSES

(TRACK:SUFISM/MODERN SCIENCES)








Scholars presenting their research papers online

CONFERENCE DAY 2

CONFERENCE CONCLUDING SESSION



Starting from left Side Prof. Dr. Perveen Munshi, Vice Chancellor, University of Sufism and Modern Sciences, Bhitshah. Chief Guest Mr. Munawar Ali Mahesar, (DG, Culture Department GoS). Ms. Yasmeen Marri, Member Syndicate.







CONFERENCE DAY 2

CONFERENCE CONCLUDING SESSION



Chief Guest Mr. Munawar Ali Mahesar, (DG, Culture Department GoS) addressing the audience





CONFERENCE DAY 2

CONFERENCE CONCLUDING SESSION







Worthy Vice Chancellor Prof. Dr. Perveen Munshi presenting souvenir to the Guests

CONFERENCE DAY 2

CONFERENCE CONCLUDING SESSION





Mr. Munawar Ali Mahesar and Worthy Vice Chancellor Prof. Dr. Perveen Munshi Presenting souvenir to the Invited Speakers



CONFERENCE DAY 2

CONFERENCE CONCLUDING SESSION













Chief Guest Mr. Munawar Ali Mahesar and Worthy Vice Chancellor Prof. Dr. Perveen Munshi Presenting souvenir to the Invited Speakers

INTERNATIONAL KEYNOTE SPEAKERS



PROF. DR.

HUSEYIN KARA

TURKEY



PROF. DR.

HASSNAIN ABBAS KHAN

SAUDI ARABIA



PROF. DR.

M. SHAFRY MOHAMMAD

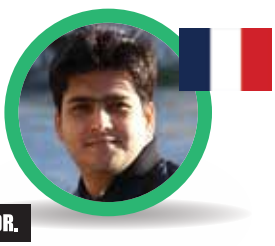
MALAYSIA



DR.

NAVEED R KHAN

MALAYSIA



DR.

ASAD ALI

FRANCE

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

PANEL OF NATIONAL EXPERTS



PROF.DR

SYED MADAD ALI SHAH

FORMER VICE CHANCELLOR
SHAHEED BENAZIR BHUTTO UNIVERSITY
OF TECHNOLOGY & SKILL DEVELOPMENT
KHAIRPUR



PROF. DR.

ZAHID HUSSAIN ABRO

PRO VICE CHANCELLOR,
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TECHNOLOGY, NAWABSHAH



PROF. DR.

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AKHTIAR ALI

UNIVERSITY OF SUFISM
AND MODERN SCIENCES
BHITSHAH-SINDH

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (UMS)

PROCEEDINGS



1st

MULTIDISCIPLINARY CONFERENCE

ON SUFISM AND MODERN SCIENCS

Organized by

University of Sufism and Modern Sciences, Bhitshah

PROF. DR. PERVEEN MUNSHI

VICE CHANCELLOR AND PATRON IN CHIEF

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

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Dr. Qasim Memon

Secretary
Dr. Gulzar Ahmed

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1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

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BAHRIA UNIVERSITY KARACHI CAMPUS

DR. FAYAZ TUNIO
ASSISTANT PROFESSOR
SZABUL KARACHI

DR. KAZI MOINUDDIN ABRO
ASSOCIATE PROFESSOR
MUISTD, MEHRAN UNIVERSITY, JAMSHORO

DR. KAZI MOINUDDIN ABRO
ASSOCIATE PROFESSOR
MUISTD, MEHRAN UNIVERSITY, JAMSHORO

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCMS)

Preface

The University of Sufism and Modern Sciences (USMS) is situated in Bhitshah Town, Matiari District, home to a Shrine of the Sufi Saint Hazrat Shah Abdul Latif Bhittai.

The Charter of the University of Sufism and Modern Sciences was approved on 21st November 2011 under letter No: PAS/Legis-B-21/2011 dated 21/11/2011 and was initially established as a campus of University of Sindh, Jamshoro. Now the University is itself an independent University and Prof. Dr. Parveen Munshi has been appointed as the 1st Vice Chancellor of The University of Sufism and Modern Sciences, Bhitshah.

The vision of USMS is to solve the greatest challenges of present times by accelerating progress in the disciplines of Sufism and Modern Sciences, empowering students to fulfill their academic and professional passions, strengthening support for a dynamic faculty dedicated to teaching and research, creating innovative connections among education, culture and human values and serving the community and nation by imparting the education of Sufi Saints which focuses on tolerance, harmony, love and brotherhood.

The idea of arranging 1st International Multidisciplinary Conference was conceived on basis of inculcating the environment of research and innovation. The university of Sufism and Modern Sciences Bhitshah successfully concluded its 1st International Multidisciplinary Conference on Sufism and Modern Sciences at Bhitshah in November 2022. The idea was pitched to see how the lense of Sufism assist in contemporary educational progress. To seek the scholarly insight a panel discussion was arranged on "The Modern Science through Lenses of Sufism". The call for conference paper attracted a total of 148 research papers with authors from diverse backgrounds and from all parts of Pakistan. Four International and five National keynote speakers shared their research work on contemporary and Sufism domains. A total of 92 papers were selected for the conference presentation. A two-day parallel session was arranged where scholars presented their research papers and received comments and feedback from the session chair.

The Roohani Shaam was arranged as a part of conference to shed light upon contribution of Sufism in building values like integrity, honesty, modesty and harmony. The poets presented the message of love, harmony and accepting diversity in form of Sufi songs.

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

Acknowledgement

The 1st Multidisciplinary Conference on Sufism and Modern Sciences is outcome of untiring efforts, dedication and commitment of organizing committee members. The support of worthy Vice Chancellor, Prof. Dr. Perveen Munshi has served as a key motivation to carry out all conference related tasks actively.

Organizing Committee

Prof. Dr. Perveen Munshi *Vice Chancellor* *University of Sufism and Modern Sciences*	*Chief Patron*
Prof. Dr. Farman Ali Shah *Registrar* *University of Sufism and Modern Sciences*	*Chief Organizer*
Dr. Akhtiar Ali *Director Academics* *University of Sufism and Modern Sciences*	*Organizer*
Dr. M. Qasim Memon	*Co-organizer*
Dr. Gulzar Ahmed	*Secretary*
Mr. Saddam Hussain	*Member*
Mr. Danish Riaz	*Member*
Mr. Wasif Ali Shah	*Member*
Mr. Shahid Hussain	*Member*
Mr. Shoban Vistaro	*Member*
Dr. Taskeen Zehra	*Member*
Ms. Sakeena Jumani	*Member*
Mr. Anees H Jamali	*Member*
Mr. Syed Ghufran Hassan Naqvi	*Member*

The publishing of this book at your hand now has become possible due to efforts of organizing team and other members of university whose names are not present in list.

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

MESSAGE FROM THE DESK OF

CHIEF MINISTER, SINDH



For crating the strong connection with the organizations, within and outside the country, to build the academic and research collaboration and cooperation within the universities and other research organization; an international conference is a better platform. The University of Sufism and Modern Sciences Bhitshah, Sindh is doing an appreciable effort by Organizing International Conference of Sufism and Modern Sciences on 22nd & 23rd November, 2022 at Bhitshah.

Sufism and Modern Sciences are in need to be elaborated with its effectiveness along with potential interdisciplinary linkages. In the subjected conference, the researchers from the country and outside are contributing their novel research works and sharing the ways and means to get benefit from the distinct fields of Sufism and Modern Science.

The long history of Sindh has the credit of having a peaceful society where from different faiths have been living in a harmony for centuries. For a university in Sindh, organizing such an international multidisciplinary conference also promotes such human values with an ease. Therefore, this conference may have more positive effect and a light to move forward. It is believed that participation of different members from academia and other fields of life will underline the promotion of interfaith harmony and peace in the society. This conference is going to spread the message of tolerance and love in the society along with the development in the science sector through the use of modern sciences.

In the end, I would like to appreciate the efforts of Prof. Dr. Parveen Munshi, the Vice Chancellor of the University of Sufism and Modern Sciences (USMS), Bhitshah and the Organizing Committee

Wish them a successful conference!

****

SYED MURAD ALI SHAH,
CHIEF MINISTER, SINDH

MESSAGE FROM THE DESK OF

VICE CHANCELLOR - USMS



The University of Sufism and Modern Sciences (USMS) has always set aside the constraints that deemed difficult to others. We with given limited human and tangible resources have always surprised the academia and society in achieving milestones for our students, faculty and community. The organization of the International Conference on Sufism and Modern Sciences (IMCSMS-22) in USMS Bhitshah indicates continuation of our commitment to the significance of enlightening the community with international academic standards.

The USMS is organizing IMCSMS on 23-23 November-22. This signifies our commitment towards much needed direction of research. I, as a Vice Chancellor of USMS, and as an academician have always encouraged and emphasized the significance of research culture. In direction of research, USMS has put in place a Research & Publication Center on Sufi Studies.

IMCSMS-22 provides a wonderful opportunity for local researchers to meet international speakers and researchers. Along-with this IMCSMS also provides a forum to present research on Sufism and Modern Sciences. IMCSMS also provides a unique opportunity to engage the scholars in areas which have not received much attention in the recent past i.e (Sufism).

In the end, I welcome distinguished International Speakers, Researchers, Guests, Business Community and Sponsors for their participation, valuable input, contribution and support.

I appreciate the efforts of organizing committee and pray for the success of 1st International Multidisciplinary Conference on Sufism and Modern Sciences.

PROF. DR. PARVEEN MUNSHI
VICE CHANCELLOR - USMS

MESSAGE FROM THE DESK OF

SECRETARY TO GOVERNMENT OF SINDH UNIVERSITIES & BOARDS DEPARTMENT



It gives me immense pleasure and profound satisfaction to express my heartfelt appreciation and sincere admiration to the organizing committee for exhibiting outstanding performance, making laudable achievement by organizing this International Conference.

Sindh is a province of virtually limitless in terms of Sufi shrines ranging from the lakes to plains of Sindh, ideal for windsurfing, through the plains rich with cultural and historical mausoleums. Yet, over the past seven decades, little attention has been paid to this component of national as well as spiritual importance. Boosting Sufism and Modern sciences for the economic growth of Sindh is among the top priorities of our government.

I am glad to see the manuscript of the shrines with scientific approach, which shine light to the lesser known but amazing Sufi's role in Sindh as well as in Pakistan, identifying potential opportunities for promoting Sufi teachings across the country.

It is a matter of great satisfaction to note that both individuals and organizations have extended full support to accomplish this significant Conference, this gives me immense pleasure and pride to write a few words at the occasion of This International Multi-Disciplinary Conference On Sufism and Modern Sciences (23 November 2022). As the delegates from abroad and local have sent their valued research to present in the two different tracks of Sufism and Modern Sciences through multiple sessions scheduled by organizing Committee. IMCSMS-2022 is a joint effort of staff and the faculty of this University under the dynamic leadership of professor Dr. Parveen Munshi, the Vice Chancellor in collaboration with Sindh Higher Education Commission.

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

The most pleasant aspect of this conference connects Sufism and Modern Sciences through research papers by the intellectuals with historical facts and modern belief(s) providing a wonderful brief between the present and distant past especially interesting in research undertaken by the intellectuals going back to the origin of Sufism in the 6th century. The researchers on Sufism and modern science takes us on a fascinating journey of Sufism to Modern Sciences, that brings vibrant and diverse history of Sindh as well as Pakistan.

This conference provides a wonderful forum to refresh knowledge base and explore and share the ideas in Modern Sciences. A combination of the two topics; modern sciences and Sufism may lead to nice merger of the ideas to societal development with the humanitarian peace, tolerance and human harmony may be the main theme of the Sufism; which is the demand of the time in both, developing and the developed world. It has been informed by the Organizing Committee that the conference papers and keynote speeches have focused on development in the fields of Information Technology, Artificial Intelligence, Cyber Security, Networking, Python programming, Data Science, Clouds Computing, Software Engineering, Education, Economics and Business Administration along with a countable research topic in Sufism are well discussed and presented in the conference. The Conference will strive to offer plenty of opportunities to meet and interact with the leading scientists and researchers, friends and colleagues as well.

This international conference focuses mainly on highlighting the importance of Sufism and cultural heritage as shrines. I believe through this conference the significant effort has been made to raise awareness regarding 'need to preserve' these milestones pointing to our collective past. The University of Sufism and Modern Sciences is focusing and working with dedication and commitment of those areas where extra efforts in compiling this informative monograph to establish the linkage of Sufism and Modern Sciences. I also acknowledge the consulted efforts of the University who had completed the initial task of ancient highway and identified all important shrines and monuments with comparison to Modern Sciences.

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

I am sure this effort will prove this milestone in preserving our built heritage Sufism message and connect with the modern science to meet the challenges and keep aware the masses, this is what we owe to out future generations.

I pray for the success of the Conference along with recommendations for support and provision of resources from authorities concerned.

MUHAMMAD MUREED RAHIMOON
SECRETARY TO GOVERNMENT OF SINDH
UNIVERSITIES & BOARDS DEPARTMENT

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMDSMS)

MESSAGE FROM THE DESK OF
EDITOR



The University of Sufism and Modern Sciences (USMS) Bhitshah is a newly established public sector university. Prof. Dr. Parveen Munshi has been serving as a founding Vice Chancellor since 2016. The worthy Vice Chancellor has been placing all resources to inculcate the rich environment of learning for youth of Pakistan. Beside her many important steps, one of the dreams was to arrange conference here at Bhitshah so that the students of USMS receive first-hand information of research activities.

In line with the guidance of worthy Vice Chancellor and unwavering support from other members of conference, Alhamdulillah, with limited resources the conference successfully attracted researchers, academicians and other renowned figures of the society who have joined us in a conference held at Bhitshah in November 2022.

The organizing committee received a total of 152 research papers and after scrutiny 92 papers were finalized for in-person and online presentation in two-day parallel sessions. Beside, this panel discussion was arranged on the topic of "The Sufism as a Lense to see the Modern Knowledge" the panelist consist of renowned experts coming from diverse educational and research background.

On behalf of the Worthy Vice Chancellor, I extend my heartfelt thanks and appreciation to our sponsors who have supported to make the conference happen in a smooth way.

In addition, as a organizer of conference and Editor of Conference Proceeding, I am thankful to Mr. Saddam Hussain and Mr. Danish Riaz for proof reading of conference proceeding documents.

DR. AKHTIAR ALI
EDITOR

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

Zeeshan Qureshi[1]
University of Sufism and Modern Sciences,Bhitshah

INTERNET OF THINGS SECURITY ANALYSIS: A HIERARCHAL SURVEY

Abstract

The purpose of this review study is to analyse IOT Security and privacy issues. Adetailed taxonomy of IOT attacks have been highlighted in which various attacks are discussed according to IOT's layers. IOT is a combination of four-layer architecture, which includes Application layer, Middle-ware layer, Network Layer and Perception layer. The user level layer includes IOT Application and Technology. Middle ware uses connectivity of complex programs. Network layer is about connectivity of IOT substructure and Perception layer is about physics instruments. All the layers are vulnerable to threats and can be attacked by the hackers. The study is about highlighting all the attacks and threats.

1. Introduction: Internet of things(IOT) has been one of the growing and leading technology now a days. IOT is about creating the data by thing[1]. It's a collection of physical devices communicating via Internet. The physical devices are embedded that interact with internal states and external environment. In other words sensing, communication and decisions are made by objects. The object further can be described as industrial robots, goods, smart phones, censors and electrical equipment's.[2] IOT is combination of four layer architecture shown in figure1.0The purpose of our study is the analyse IOT security and privacy issues.

1.1. Application layer: includes all applications of IOT, that can be smart homes, smart cities, smart health, animal tracking and many more. The layer is responsible to handle and process data through middleware layer also it provides quality of service to the end user.

1.2. Middle-ware layer: is application that works as an intermediate between communicating devices of IoT. Middleware creates a bridge between dissimilar, difficult and current programs. It may provide strong and additional storage capability.

1.3. Network layer:It provides fundamental connectivity of IOT devices.The data is taken from Lower layer and Resent to Upper layers. The transfer of data can be performed using wired or wireless, ZigBee, WiFi, Bluetooth, 3G are the prominent technologies which are used in this layer.

1.4. Perception layer:the layer is responsible for collecting information about the environment, it uses sensors to detect smart objects in surrounding. RFID tags, cameras, sensors, wireless and sensor network (WSN) are the major technologies used in this layer.

2. IoT attack taxonomy:Criminals motive is to gain access, attackers will always keep attempting different techniques to alter the normal operations of the IOT system and this problem will keep growing. We now put our concern to Exploration of the IoT attacks and its privacy/security problems according to layer wise, based itsarchitecture.

2.1. IOT security and privacy issues on Application layer:-the diagram 1.1 highlights several security issues in application layer. The major attack in this layer focuses on unauthorized access of confidential data. The cybercriminal usually exploits the vulnerability of application and program, for example code injection, buffer overflow are techniques also to obtain permission as a legitimate user by faking identity.

2.1.1. Cryptanalysis: The techniquegets the encryption key through plaintext or ciphertext. cryptanalysis attacks has few more types which are listed below.

a) Cipher text Only Attack: The cybercriminalaccesses the ciphertext and control the corelated plaintext.

b) Known Plaintext Attack: here attacker knows some parts of the cipher text.

The purpose is to decrypt the next part of the cipher text by using known information.

c) Chosen Plaintext Attack: here he searches for encryption key by using what plaintext is encrypted.

d) Chosen Ciphertext Attack: By selecting the method of plaintext of chosen ciphertext by which the encryption key can be found by attacker easily[4].

2.1.2. Man in the middle:Attacker grabs the key while users are communicating and exchanging key[4].

2.1.3. Code injection: Attackerinjectsmalevolentprogram in the Computer system by creating program errors. The sole purposes is to get data, have system control, and to Spread worms [2].

2.1.4. Buffer overflow : Cybercriminal writes a extensivesequence of data to a specified area, resulting in overflow of the sequence past its pre-defined region of residence. The result can be modification of other data causes execution of malicious code and destruction of the program control flow. Buffer overflows represent one of the most common attacks on software and applications[2].

2.1.5. Sensitive Data Permission/Manipulation:The attack cause manipulation of data by having an illegal access which violates user privacy. It exploits design flaws in permissionmodel. the attackersexploiting vulnerabilities in the permission model tocontrol applications in smart homes, causing problemssuch as break-in and theft [2].

2.1.6. Authentication and Authorization: An important factor in the protection of IoT security and privacy. The existing authentication mechanisms cannot provide fine-grained verification. A common problem is over-privilege that permits the device to access information without using all the required, an attacker may exploit this vulnerability to create attacks in varying degrees, the smart card has vulnerabilities in remote authentication. Additionally, because of the lack of a perfect authentication mechanism in the smart home, an attacker can perform unauthorized operations, such as opening the door[2]

2.1.7. SQL injection : Malicious code is injected into the paired Android smartphone applications[5].

2.1.8. Phishing Attack:cyberpunkfakeshimself and pretends to be a known user or legitimate institution to obtain sensitive information such as passwords and credit card details. The common medium for this attack is email, where sensitive information has been acquired by an attacker when users open the mail.[2]. Phishing attacks can be classified based on the mechanism by which the phisher can be able to access personal information of a victim. A phisher may fraud to any innocent user either by using spoofed emails or by using fake websites. Phishing is subdivided into 2 other attacks. Social Engineering and Technical subterfuge.

A. Social Engineering:-Theattempt is all aboutgrabbingentrance to systems or stealing information,which is related to an individual or a group or organizations, by using user name and Password. Thetechnique uses spoofed e-mails. The phishing attack based on social engineering isdividedinto two forms, fake websites and spoofed emails.

a) Fake WebsitesThe technique isconsidered to be phishing websites, the appearance is same as it is legitimate site visually, The method is toachieve personal informationby generating online link which is embedded with phishing emails or viaonline ads or using crack of licenced software.

b) Spoofed Emails: It is another type of phishing emails. An untrusted mail server generates emails, orsome tricks and techniquesare used to make believe that the email is sent by a trusted partyalso it is about gainingconfidenceof victim, so that he/she may not hesitate by sharing his/her personal information. Spoofed emails further subdivided into 2 more attacks, spears phishing and whaling.

i. Spear Phishing: The attacker targets specific person or organization. In 2009, major organizations like yahoo, Symantec

and the Giant google has remained victim of malware and spear phishing. This was called an Aurora attacks.

ii. Whaling: This mainly targets high profile employees of big organizations to excess highly confidential information. It is also called CEO fraud, here These attacks are even difficult to detect as they do not use malware or fake websites instead of hackers use social engineering to phish users to give away their bank credentials employee data etc..

B. Technical subterfuge: The target is to steal consumers online account in which he tries to get usernames and passwords.Also, Attacker corrupts local navigational infrastructures to misdirect consumers to counterfeit websites." The phishing based on technical subterfuge is further classified based on attacks listed below:

a) Cross-Site Scripting –The susceptibility occurs when dynamic web page present input without proper validation. A malicious JavaScript is generated in the page that is frequently used by victim side. After this, login credential can be gained easily.

b) Session Hijacking – The technique is called cookies hijacking. A session key is stolen by usingdenial-of-service attack. It is used to gain identity which helps to have an access on the unauthorised resources.

c) Malware Phishing – here malware is used to steal the data of the owner and organization.

d) DNS PoisoningA fake DNS server is used totrick the client to be trapped,it is done through malicious websitesor by installing malware into their systems.

e) Key/Screen Loggers- Key loggers are very hardto detect,with screen logging software,"virtual keyboards" have no utility at all. It capture the screen snapshots and mouse movements which are sent to the phisher who is at a remote location[6].

2.2. IOT security and privacy issues on Middleware layer:-

The layer is responsible for providingservices and interface for Upper layer to Application layer. The attack on server and database is very effective which creates hinderance in theoperation security and Information security. Itaims at virtualization of data.It creates bad quality of service. Figure 1.2 shows hierarchy of security and privacy issue of Middleware layer.

2.2.1. Virus, Worms, Trojan horse, Spyware and Aware: These are malevolent codes, and are spread via email ordownloaded something from internet[4].

2.2.2. Malicious Scripts:it inserts malicious script in the system after which the attacker can gain access[4].

2.2.3. Denial of Service:the user is blocked by attackerfrom application layer by using denying services[4]

2.2.4. Flooding Attack in Cloud:. A requests is sent by unauthorized person in thecloud, which drain out the resources in the cloud, this attack is used to affects the quality of service.[2]

2.2.5. Web Browser Attack: Web browser is used to run commandson remote servers,In the cloud, such as authentication and authorizationcommands But the browser itself cannot generateencrypted XML tokens. Attackers exploit this weakness togain access without authentication. The cloud service based on Web service can generate some metadata, which contain a large amount of content related to cloud service and service implementation. Once the attackers obtain these metadata, they may pose a threat to the cloud[2]

2.2.6. Signature Wrapping Attack: XML signature is used by cloud system to ensure the integrityof the service. The attacker modifies the eavesdropped messageswithout invalidating the signature.Attackers exploit vulnerabilities in SOAP to modify eavesdroppedmessages. Furthermore, an attacker can executearbitrary commands and operations as legitimate users[2]

2.3. IOT security and privacy issues on Network layer:-

IOT has various networks,Internet and WSN are its part, distinct protocols for distinct

networks and devices.Network layer is vulnerable for having various attacks and that can be very destructive, it may causeany networkcommunication down.

2.3.1. Traffic analysis attack: The attacker capturesand scansmessages to obtain network information[4]. Attackers deduce the pattern and load of communication, by analysing the number and the size of the transmitted datapackets. This type of attack can be applied to encrypted packets; its communication pattern can also be analysed. Three kinds of information can be obtained from WSN through traffic analysis. First, an attacker can detect the activity in the network. Secondly, an attacker can obtain the physical location of wireless access points (APs). Finally, an attacker can learn the information about the protocol type used in the transmission process[2].

2.3.2. RFID Spoofing: The attacker grabsuser credentials which is sentvia using Radio frequency identification tag. It sendsincorrect details and information, which seems to be correct and that the system acknowledges [4].

2.3.3. RFID Cloning: Incorrect data or control is inserted; it is done via cloned node by using adversary copying data by using radio frequency identification tag to another similar tag. It does not duplicate real ID of RFID tag. [4].

2.3.4. RFID Unauthorized Access: If the correct authentication is not provided in the Radio frequency identification systems thenthe adversary can observe, modify or remove information from any nodes on the network[4].

2.3.5. Man in the middle: The attack is real timeand occurs between two communicating victim nodes. The attacker disguises a node as a legitimate node that communicates with two victim[2]. The attacker over the internet intercepts the communication between the two nodes. They obtain the sensitive information by eavesdropping. This type of attack is a real-time attack, occurring betweentwo communicating victim nodes. The attacker disguisesa node as a legitimate node that communicates with twovictimsand also gains the trust oftwo nodes and obtains information about two victim nodes[4].

2.3.6. Denial of Service: An attacker can send broadcast packet which causes overflows andhuge traffic that may lead services unavailable to intended users[4]. In network, a denial-of-service attack (DoS attack) is accomplished by flooding the victim with requests, thereby generating a large amount of network traffic. This type of attack can exhaust all available resources, making network resources unavailable to users. Furthermore, many unencrypted user information can also be leaked [2].

2.3.7. Routing Information Attacks: The attackerspoofs, modify or sends routing information. The outcome will leadallowing or dropping of packets alsoforwardingincorrect data or segmenting the network[4].

2.3.8. WSN attacks: IoT networks have inherited several WSN routing attacks having small variationsin their methods to cope with IoT paradigm.

These attacks are discussed further below.

I. Blackhole and selective and forward attack: It will drop all packets it receives, instead of forwarding them, resembling a blackhole" in the network and causing a Denial of Service. A more sophisticated attack would forward packets from selected protocols and drop the rest; for example, forwarding RPL control messages and ICMPv6 packets, and dropping everything else. This is known as Selective and Forward attack.The main difference between blackhole and selectiveforward attacks relies in their purpose: Blackhole attack is intended to create a DoS inside the network, while Selective and Forward's target is to make a big disruption in routing paths.

II. Sinkhole Attack: Here, malevolentnodes try to sink as much traffic as possible by advertising a fabricatedroute with better metrics. This will attract nearby neighbours to send their traffic through the adversaries -By itself, sinkhole attacks are not disruptive, but when theyare combined with other types of attacks

(e.g., blackhole orwormhole attacks); where the passing traffic can be altered,forged or used for spoofing; the new mixture makes a verypowerful attack.

III. Clone ID: malevolentnode(s) gets the identity of another legitimate node.

IV. HELLO Flood Attacks: When any node likes to connect a network, most of the time it starts by broadcasting a "HELLO" message. In RPL, DIO messages are considered as HELLO messages. An attacker can send DIO messages with strong routing metrics and/or strong signal; then it might just disappear or reduce its transmission power to normal This is known as Hello Flood Attack. Another effect of such attack is the exhaustion of legitimate nodes and network congestion due to increased control overhead[7].

I. Sybil attack: This attack is done throughmalevolentnode stealing several identities from authenticnodes. It is classified into three types:-

i. SA-1, SA-1 has all nodes unchanged and the malevolent nodes are arranged in one space having strong bonding. The goal of these nodes is to disguise itself and change data so that it can steal the credentials of legitimate nodes on the network.

ii. SA-2, In this type with bondingmalevolent nodes are spreadamong legitimate nodes. The major concern is todisruptthe routing topology.

iii. SA-3, It inherit the functionality of SA-2, the nodes do not keep long relationships with theirneighbours.thedetectionof SA-3 types nodes isharder due to having its capability to be mobile[7][8].

2.3.9. RPL attacks: Thisattacktransformscontrol messages, they alsorecognized as alteration and Spoof Attacks.

1. Direct Attacks,Thecyberhacker attacks by flooding packetsby using routing tables by keeping storing mode active.

a) Flooding Attacks: Internal and external attackers are responsible forgenerating huge amount of traffic in a network and that may cause nodes and links unavailable. The purpose is todrain outthe network resources. HELLOflood attack technique is applied.

b) Routing Table Overload Attacks: In this attack,broadcastor flooding of Dao messages are routed on fake routes to target nodes on the networks. It maycause memory overflow.

2. Indirect attacks: The malevolent nodes make other nodes to make network overloaded.It is done by combining rank attacks, DAG inconsistency attacks and version number attacks.

a) Increased Rank Attacks: It voluntarily increases the rank value of a RPL node to create loops in the network.

b) DAG Inconsistency Attacks:when RPL node finds it inconsistent because of it receives the packet value having Down 'O' bit. Ifthe path of the packet ismismatched the rank relationship,It may lead to a loop in the graph.

c) Version Number Attacks: The version number is a mandatory field of all DIO message. It is spreadwithout any change down the DODAG graph and is incremented by the root only.

3. Sub optimization: In this type the network have no converge to the bestform.

a) Routing Table Falsification Attacks:Here, it is possible to imitateor change routing information to advertise falsified routes to other nodes. This attack can be performed in the RPL network by modifying or forging DAO control messages to build fake downward routes. This can only be done when the storing mode is enabled.

b) Sinkhole Attacks: This attack is performed in twophases. First, falsified data is advertised to attract no of users on the network.Secondly, getting the traffic in an illegitimate manner, it modifies or drops it.

c) Wormhole Attacks: It is also classified as asetof RPL attacker nodes, here,this type of attack alters the routing path and channelsrouting information to alternativepart of the network, nodes which are vague, they ensure each other as if they

are in the similar neighbourhood. It results, non-optimized routes of the nodes on the network.

d) Routing Information Replay Attacks: The target is toarchivesvalid control messages from other nodes and send them later in the network. The attack is destructive,if it is a dynamic network,also topology and the routing paths oftenaltered.

e) Worst Parent Attacks. The result is that the given path is not optimized due to deficient performance by choosing systematically the worst chosen parent conferring to the objective function.

4. Isolation attacks: The objective is to keep the nodes separate from each other so that they must not have their connectivity with root nodes.

a) Black hole Attacks: Here, packets are dropped that are supposed to be sent on the network. Ifjoinedwith a sinkhole attack can be very destructive and can create the loss of a large part of the traffic. It can be observed as a type of denial-of-service attack.

b) DAO Inconsistency Attacks: the route is no longer valid in the routing table of the child due to; a node has a downward route that was beforeknown from a DAO message.

5. Eavesdroppingattacks:Here, themalevolentnodes perform eavesdropping activities like, sniffing and examiningthe traffic of the network.

a) Sniffing Attacks This attack is vulnerable for wired and wireless networks. Theattacker directly capture the packets from the shared medium.

b) Traffic Analysis Attacks:- This attackuse the features and patterns of the traffic on alink, routing information can be gained.

6. Misappropriation Attacks. It allows the hacker to gain knowledge about network and its topologyto intercept a large part of the traffic.

a) Decreased Rank Attacks: It causesmalevolentnode illegitimately toadvertise a lower rank value, it over claims its performance.

b) Identity Attacks it's a combination of spoofing and sybil attacks. combining both may cause CloningID's; here the nodes pretends that they are legitimate. The objective is to sniff the network traffic to detectthe root node. If hacker succeeds, he spoofs the address of the DODAG root and get the control on the network[9].

1.1. IOT security and privacy issues on Perception layer:-

Perception layer uses sensor technology and ad hoc network technology is used by sensors to dynamically modify the network topology plusThey use wireless communication due to the variety of deployment environment, the attacker can easily access the connected features of the device via physical attacks.

1.1.1. Node Tampering:A physically changeis done, the sole purpose is togain sensitive information such as encryption key[4]

1.1.2. RF Interference on RFIDs:In this method Dos attack is carried by transferring noise signals via radio frequency signals[4]

1.1.3. Node Jamming:It is about disturbing the wireless communication by using Denial of service attack and technique[4]

1.1.4. Malicious Node Injection: Here the process of injectingmalevolentnode between two or more nodes is performed,Data isalteredandcirculatedto other nodes[4].

1.1.5. Tag Cloning: Here RFID tags are cloned, relevantinformation is obtainedby using reverse engineering[2].

1.1.6. Sleep Deprivation Attack : Here Hacker consume more power that causesnodes shut down[4] The devices in this layer have some limitations due to less power of the battery[2].

1.1.7. Spoofing Attack:Theattacks may cause packet loss during transmissionprocess. It also accelerates the utilizationofnode power, it may causediminishingthe node lifetime on the network.[2]

1.1.8. Eavesdropping:Antennasare used with the help of RFID to record information

[2].

1.1.9. Side-Channel Attacks. Here plaintext or cipher text messages are used, it is about processing time or power utilizationof the computersfor encrypting/decrypting data, also for computation of security channels[5].

1.1.10. RF Jamming: Here RFID tags are used toattack all the signals within its range[2].

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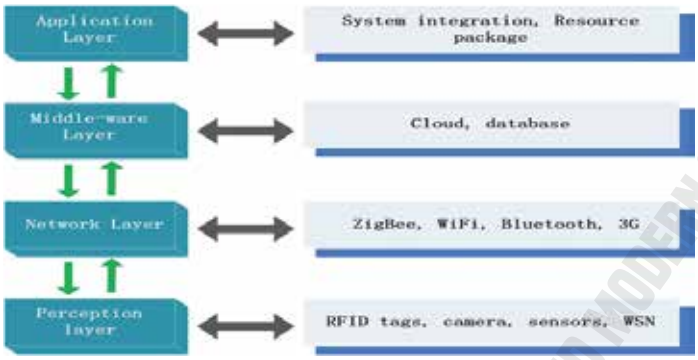
1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

Annex



K. Chen et al.
Figure 1.0

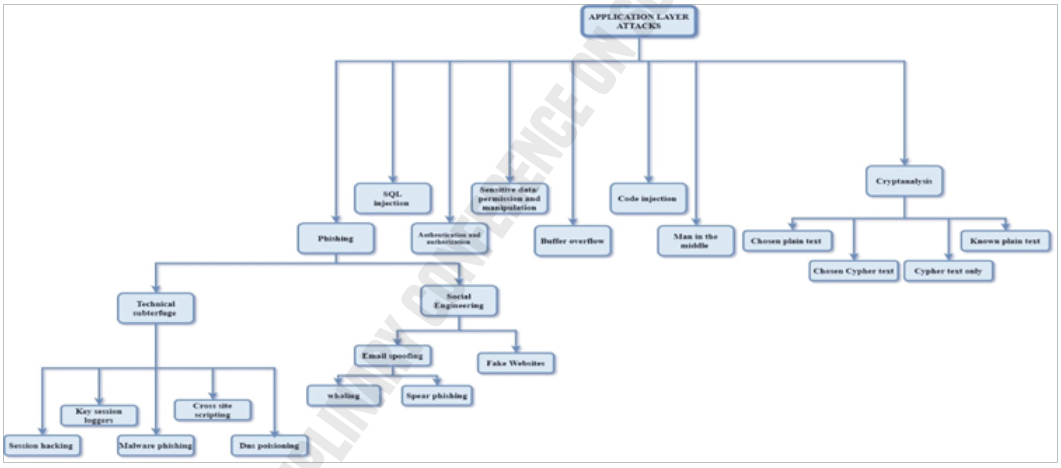


Figure 1.1

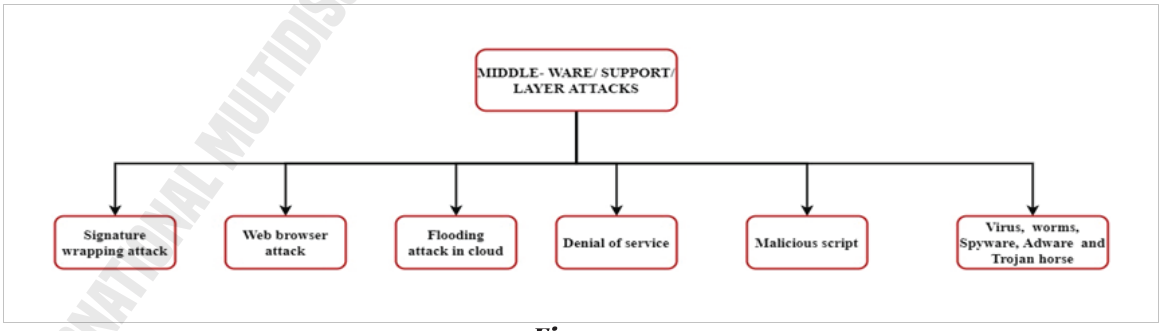


Figure 1.2

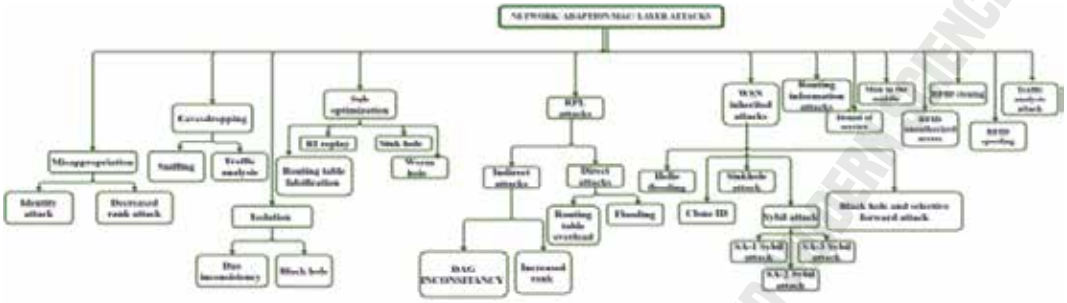


Figure 1.3

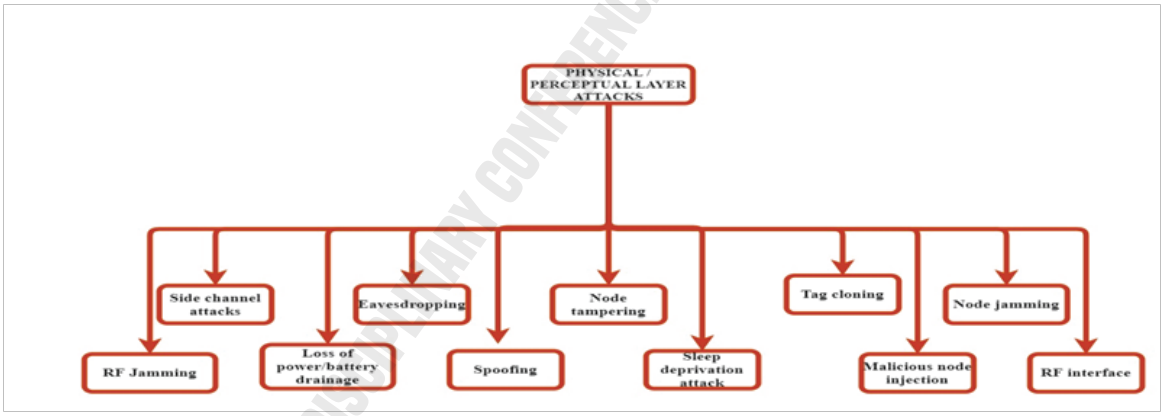


Figure 1.4

Abdul Haque[1]
University of Sindh, Jamshoro

EXPLORING THE EFFECTS OF COMPUTER SCIENCE UNPLUGGED (CS UNPLUGGED) ACTIVITIES ON DEVELOPING COMPUTATIONAL THINKING IN ELEMENTARY SCHOOL STUDENTS

Abstract

The importance of Computer education is widely acknowledged across the world. It is envisioned as a 21st-century skill and is considered a cornerstone for the success of students in their careers. Computer education is somewhat focusing directly on the development of computational thinking skills among students.The present study aims to explore how computational thinking can be developed by using CS unplugged activities, which is beneficial for the student's learning and their performances as compared to the traditional way of learning. The design of the study was a pre-test-post-test equivalent control group design. There was a different treatment pattern applied during the experiment. The upper elementary classes of V to VII students at Mubashir School of Excellence in Hyderabad constituted the population of the study. The sample consisted of 64 students. During the experiment period of 12-week duration, the experimental group received the treatment of CS Unplugged activities. Meanwhile, the control group was taught through the traditional method. The results show that the CS Unplugged activities were more effective than the usual method in teaching computer science and developing computational thinking at the upper elementary level

KEYWORDS
CS UNPLUGGED ACTIVITIES, COMPUTATIONAL THINKING.

1 INTRODUCTION

The importance of Computer education is widely acknowledged across the world. It is envisioned as a 21st-century skill and is considered a cornerstone for the success of students in their careers. Computer education is somewhat focusing directly on the development of computational thinking skills among students. Nowadays, computational thinking has received a lot of attention. Computational thinking (C.T) is the process of reformulating an intractable issue into one that we can solve, whether by reduction, embedding, transformation, or simulation. Computational thinking is a fundamental skill for all (Wing, 2006). Computational thinking is the application of computer science principles to problem-solving, system design, and behavior.

The improvement of intellectual skills is termed computtional thinking. C.T also supports learning and understanding. Apart from reading, writing, and arithmetic, it involves a series of activities that cover computer science. The five components of computational thinking, according to scholars, are abstraction, generalization, decomposition, algorithm, and debugging. Computational thinking lies at the heart of the computing curriculum; it also supports learning and thinking in other areas of the curriculum

"Computer science unplugged" are activities that have been built over several years to teach computational thinking without the use of computers. Many of the activities involve manipulatives like cards or dice. Unplugged behaviors are often interactive and kinesthetic (Kotsopoulos et al., 2017). CS Unplugged is a set of free learning activities to teach Computer Science throughgames and puzzles (Ehsan et

al., 2019).
Since the C.T is based on Seymour Papert's Constructionism theory (Marina U. Bers et al., 2019), it primarily revolves around the concepts of:
a) Learning using meaningful projects creation to share with others;
b) To create and explore the world Utilizing tangible objects;
c) Through focused studies identifying potent ideas; and
d) Learning process by inculcating self-reflection practice.
For a large number of schools around the world that lack basic technological facilities, such as electricity, Internet, laptops, mobile devices, and other electronic devices, the unplugged solution is the only option (Unnikrishnan et al., 2016). To fix the lack of learning goals, Computer Science unplugged activities are redeveloped and tested in lesson plans to ensure that any single unplugged activity will fill a complete 60-minute cycle.
By considering the seriousness of the problem this study focuses on determining the effectiveness of Computer Science (CS) unplugged approaches, which include computer science teaching without computers, for encouraging computational thinking in elementary school students.

1.1 RELATED WORK

Other scholars have addressed the study's aims, and just a few of the papers have been shared here. Yuliana et al. (2021) did a mixed-methods study with 32 students (V-grade kids aged 11-12 years) from an elementary school in Mondokan Sragen, Indonesia. They used CS Unplugged exercises to teach C.T to young students in a basic method that was relevant to minimal infrastructure in a rural place. Children's excitement for studying ICT was demonstrated through the use of CS Unplugged activities, according to the findings students showed improved performance.

Javier et al. conducted a quasi-experimental study to determine whether including unplugged activities promotes C.T in pupils in the early years of primary school. The experiment involved 84 second-grade kids in particular. They concluded that including unplugged activities in the classroom is good when considering CT, motivation, and gender (del Olmo-Muñoz et al., 2020). WeiChen Kuo and Ting-Chia Hsu (2020) used an unplugged learning material for C.T promotion named Robot City in the investigation. This study included 7th grade students from Information and Technology classrooms at a secondary school in northern Taiwan. Results stated students' computational thinking achievement was increased by playing the computational thinking board game.

Sherwood et al. (2021) investigated the integration of C.T in three elementary schools using a cross-case study. For C.T integration, they used both unplugged and plugged methods. C.T integration was shown to be varied in all schools depending on the teaching paradigm utilized. In Canton Vaud Switzerland, El-hamamsy et al. (2020) conducted a mixed-method study using a CS and Robotics integration model. This approach comprised CS Unplugged activities, which used robots instead of screens to teach robotics and CS concepts. The study size was ten schools, and the method was used to integrate CS and Robotics in the first four years of elementary schools. According to the findings, in addition to the data provided by the literature, this pilot program helps validate the suggested paradigm as a whole, which can be utilized as a model for other efforts attempting to integrate CS and/or robotics into their curricula

1.2 METHODOLOGY

The investigation of the effect of CS unplugged activities on the development of computational thinking in elementary school students used an experimental research methodology. This research is part of a quantitative study that focuses on data analysis. The numerical data is contained in the quantitative data. Experimental research is the focus of this study. As it was in a natural situation, yet factors were isolated, controlled, and altered, the researcher chose a pre and post-test experiment design signifies that the

experimental and control groups' tasks were chosen at random in this study. Both groups received a pre and post-test, with the experimental group receiving treatment. Thisexperiment period was three months, one month in each class, in the first week the pre-test was conducted, with a gap of two-days intervention started, after the intervention, a post-test was conducted at the end of the 4th week. This process will be carried out in each class. In this study, the researcher focused on upper elementary students at Mubashir School of Excellence in
Hyderabad. The Upper Elementary is the 9-12 year-olds in a VI - VII class. Or, in traditional terms, it's IV to VII class.

The data collected through pre-test, post-test, retention test, and problem-solving capabilities test was analyzed through descriptive statistics and inferential analysis. The data is analyzed descriptively followed by inferential statistical analysis, the researcher used computer software named Statistical Program for Social Sciences (SPSS). In this program, the data were analyzed through a computer, and hypotheses were tested through mean and independent sample t-tests.

1.3 RESULTS AND FINDINGS

The details of findings developed through the data analysis are as under:
CLASS V
The post-test difference between both groups, mean = 3.9000,
Std. Dev. = 5.30094 and the total number of students was 20
The T-Test for the post-test of both groups, t=2.265>01.96,
Sig=.110, which conclude that there is a significant difference between the post-tests of both groups.
Pre-test for both groups Pearson correlation value was .494 and the number of students was 20.
Post-test for both groups Pearson correlation value is .438 and the number of students is 20

CLASS VI

Table 4.14 shows that the pre-test frequency of the control group has a mean = 12.60, Std. Dev. = 1.713 and the total number of students was 10
Table 4.15 show that the pre-test frequency of the experimental group has a mean = 12.40, Std. Dev. = 2.011 and the total number of students was 10
The difference between both groups, mean =2.50, Std. Dev. = 3.629and total number of students was 20
The T-Test for the post-test of both groups, t=1.861>01.96,
Sig=.110, which conclude that there is a significant difference between the post-tests of both groups.

EXPLORING THE EFFECTS OF COMPUTER SCIENCE UNPLUGGED (CS UNPLUGGED) ACTIVITIES ON DEVELOPING COMPUTATIONAL THINKING IN ELEMENTARY SCHOOL STUDENTS

Pre-test for both groups Pearson correlation value is -3.01 and the number of students was 20,
Post-test for both groups Pearson correlation value is .225 and the number of students is 20

CLASS VII

The difference between both groups, mean = 2.50, Std. Dev. = 4.338 and N was 24
The t value is 1.608<01.96, Sig=.110, which concludes a
significant difference between post-tests of both groups.
Pre-test for both groups Pearson correlation value is .000 and N was 12,
Post-test for both groups Pearson correlation value is .366 and N was 12

Findings show that it can be said Cs unplugged is more effective than traditional methods of teaching. Through CS Unplugged activities students have improved their computational thinking. Because It was more interesting and engaging than traditional because of its graphical interface. In the traditional method students can just imagine but Cs unplugged

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activities they can do on their own. In future work, it could also be interesting to further focus on other topics, and other levels of study to foster the core CT skills by using CS Unplugged activities. In this regard, it might be interesting to compare the effects on students' CT skills if more modifications can be used, one can design their unplugged activities apart from official materials. Other programs like CS unplugged like scratch, barefoot, etc. can be also practiced to develop computational thinking at different levels of study to teach computer science.

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1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

Ali Raza[1], Zulfikar Ahmed Maher[2],Anees Muhammad[3]

University of Sufism and Modern Sciences ,Bhitshah[1 3] Agriculture University, Tandojam[2]

A DETERMINANT MODEL FOR MOBILE BANKING USE IN PAKISTAN

Abstract

In Pakistan mobile phone usage is increasing with the rise of population day by day. Wireless communication plays a vital role to provide the service and remove the barriers and will be persistence to the clients. Payment transaction can be made with the help of mobile banking where funds are shifted from person to person either by bank or directly by mobile banking serves 24/7 in Pakistan. Mobile banking was initially introduced in Kenya in 2007. The telecom company Safaricon of Kenya developed it with the product name M-PESA [1]. Mobile payment by the help of telecom companies have filled huge gap in current market. Telecom companies are normally providing financial service through mobile payment. The customer of telecom companies having mobile phones and registered SIM can transfer money to another user directly even those that does not have any bank account simply by customer must visiting any nearby Telecom company agent or franchise. He can pay cash by using mobile banking service. Mobile banking is widely used in our society, in many forms such as Easypaisa, Mobicash or Jazz cash, Zongpaymax, U paisa, UBLomni, Simsim and many others will be introduced very soon in 2020. In mobile banking, the main key factors are time liberty, cost liberty, saving swiftness and convenience. This study focuses on identifying key factors in adoption and usage of mobile banking in Pakistan.

INTRODUCTION

Pakistan Telecommunication Authority (PTA) reported 186.9 million mobile phone users in Pakistan. Telecommunication companies are providing financial service under mobile payment system services. The telecom client who has mobile phone and registered SIM, be able to transfer money directly to another mobile phone user's which doesn't compulsory any bank account. The customer only has to go any adjacent agent of telecom company give them money cash will be transfer to receiver throughout mobile banking -money service.

A mobile banking system that allows for fast, reliable, and convenient services. Therefore, Payment system based on paper is considered expensive, time consuming and inefficient. Mobile banking system which provide us multiple channels such as, mobile banking (point of Sale) terminals. Mobile banking also helps non-banked societies to enhance access to formal Financing services. Financial institutions are competing each other to introduce new system which is user friendly & cost effective for their customers? Micro-finance to alleviate poverty and develop technology services to entrepreneurs is important in allowing MFIs to collect customer information and use it faster for the collection and distribution of loans via a mobile banking system. Mobile banking reduces transaction & Costs of operation, Minor fraud risk, improve financial information quality, increased attention and customer satisfaction & loyalty. Mobile banking is commonly used in our society, in several forms for instance: Easy paisa, Mobicash or jazzcash, Zong paymax, keennu wallet, Upaisa, UBLomni , Simsim & many more other will be introduced very soon in 2020 [15, 16]. Only 18% (35 million) of Pakistan's population has internet access and a major web pile, almost 73% comes from mobile devices or tablets. The country's most recent growth, which has almost doubled in 2016, has clearly led mobile devices to drive.

Easypaisa (Telenor):
To make an mobile account use the current bank account, available everywhere and everybody can access it from its own mobile. For further information you can go through telenor franchise, telenor bank branches, telenor sales and services centre. There are so many features of Easypaisa like bill payments, money transferring with up to higher limits within the international level, Easy load, saving account balance and many more.

2. Jazzcash
*Mobilink and Jazzcash also offer mobile wallet services online payment from one of Pakistan's largest mobile operators. You can log into any mobile account by going to any mobile banking branch, Jazz franchise or business centre and jazz cash officers located in Pakistan Jazzcash can register on any mobile account. You can register by dialling *786# if you are a verified bio-metric jazz and warid customer. Themain features of Jazz cash are same as of Easypaisa*

3. Zong paymax:
Paymax provides you with a thrilling banking experience as mobile wallet solutions. Everything you do financially is a few taps away. If you have an active zong sim registered on your own behalf, a zong paymax account can be opened through a paymax shop or zong outlet. The features of zong paymax are local money transfer, cash deposit, cash withdrawal and etc

5. Upaisa:
*The actual banking account is easy to use and can always be accessed by Ufone subscribers using their own mobile phones. You may simply dial *60# or visit any Uphone service facility, ufone franchises or bank branches or selected paisa agencies with your ufone sim and CNIC. U Paisa mobile account can be opened. The features of u paisa are transfer of money to another mobile account, transfer money to person (CNIC) transfer money to other banks, make online purchase and purchase Ufone super cards as well.*

6. UBL (Omni):
Customers across Pakistan are now able to open a basic UBL Omni bank account in any of their choice UBL Omni stores, whether close to home or workplace. Their CNIC and mobile phone numbers are all they need. You can open your account with your original and original deposit amount by visiting a UBL Omni shop. The main features are (funds transfer to and without life insurance), sender money (with or without life assurance), payments on Pakistan Railway tickets, check account limits, online payment and mobile tickets for transport services. Transportation is free to transfer money to the banks' branches. The transfers are free of charge (with and without a life insurance policy).

7. Simsim:
Finja, a Pakistani startup, recently raised $1.5 million in funding, is a digital wallet solution from Simsim. It promises free e-wallet payments in real time. You must first download your application from the play store or the app store to create an account. You must fill out an application form that asks for your name, CNIC, fathers and mother's name once installed.
By 2020, Nagara bank is targeting 200 per capita mobile banking transactions & reducingCheck usage to 100 million. All payments can be made via motive banking, debit and credit cards in the future, no cash is going to be used. Anywhere online and mobile telephones can Make a financial transaction.

LITERATURE REVIEW

Many literatures reviewed and published reports have made it known that millions of dollars have been used to create the entire mobile banking system, but that potential users do not use it [1]. In mobile banking technologies, progress in the, electronics and IT were shown for everyday banking affairs. In most countries of the world, the E contract exceeds up to 50 percent, particularly in leading mobile banking countries [2]. Because of evolutionary changes, the adoption of associated strategies was ensured by banks.The Overall, smart phones are expected to be used by 25 million consumers in 2012, which represents a total of 67 million or 50% of the market share[4].

Many scientists have different names for mobile banking, such as branchless banking or mobile payments m-transfer, m-fund [5] and pocket banking [6]. Lee & Cheng [7], Introduced a mobile banking mobile business application where mobile consumers have access via their smarhones to their bank accounts. Compared to Internet-based banking, the mobile banking facility does not require space and consumers are able to access their real time accounts anywhere. [8].

According to Sharif & Afshan [9] During the last decade, Pakistan's telecommunications sector has grown multifold. With more than 140 million users and 322,683 million revenues worldwide Pakistan ranked 8th in 2014, (PTA).

Since October 2009, Easypaisa and UBL were biggest mobile banking services in Pakistan [10]. A survey conducted by Riquelme & Rios [11] in which 681 Singaporean customers found perceived usefulness; social norms and perceived risk are the fundamental factors in mobile banking usage.

The U.S. Federal Reserve reports that 68% of mobile telephony owners in the last 12 months used mobile banking, based on Forrester's study; mobile banking is going to be attractive primarily to younger customer segments that are more technologically "savvy."A third of mobile banking users say they can think about financial transactions on their phones. However, Most users are interested in fundamental transactions, like balance checking and payment bills [12]

As Pakistan grows economically, its telecommunications sector has progressed tremendously in recent years. There were more than 122 million mobile users in March 2013 and the Pakistan Telecommunications Authority is preparation for further growth with a 68.8 per cent annual telecommunication rate. In Pakistan there are six mobile operators. People who use telecommunications services in every income group because of reduced rates and foreign investments [13]

Even at the early stages of mobile banking, penetration is still needed and because most Pakistani households have mobile facilities. As organizations connect more employees and devices, mobile banking growth will play a crucial role in the coming years. Pakistan's telecommunications authority has reported recent statistics which have reached around 120.5 million cellular phone users. [14]. only 12 percent of the formal bank was adopted.

Mobile banking is rising in Pakistan as it has been reported that providers of mobile banking services have invested heavily in the mobile banking infrastructure to provide the mobile banking service for the extremely low-income population. The largest providers of mobile banking in Pakistan are United Bank Limited (UBL) with Omni and Tameer Microfinance bank Ltd with easy paisa. In addition, they manage their branchless banking pilots, Askari Commercial Bank, Waseela microfinance Bank, Meezan Ltd., HBL, MCB Bank Ltd., and the Islamic Bank Dubai.

According to a report, only 66% of mobile accounts are currently active in Pakistan of 1.4 million. That means 25 million people are using mobile banking and 170 million is a big market.

With the advent of mobile technology (Pakistan Telecommunications Agency, Pakistan's mobile banking subscription in January 2016 reached 128 million 0r 68% of the population as a whole of 187 million) and the exponential increase in use of portable devices (CTs), such as cell phones across the country.

Mobile technologies have made it possible for banks and microfinance companies to reach the country's poor and unbanked population, which was previously difficult to do. This meant the

provision and access to banking and payment services from their homes or location through the banking system for customers and the public. Taking into account increasing consumer interest in accessing banking information via mobile devices such as smart phones and tablets

PROBLEM STATEMENT:

Now a day, most of the banks in Pakistan offer mobile banking services to allow their customers to perform banking transactions at their convenience. This research is focused on the identification of the factors that influence the adoption of mobile banking in Pakistan. In Pakistan, majority of the population belongs to rural areas, where they face many problems related to use of mobile phone banking. These problems include smart phone availability, illiteracy, financial risk, and cost perception, lack of monitoring tools, power availability, psychological risk, operating risk, time risk, and perceived trust. [3]

PROPOSED FRAMEWORK AND HYPOTHESIS

(UTAUT 2) Unified theory of acceptance and technology is used, based on the standards for conducting surveys. The following is a description of all the factors involved in this study which include external factors and UTAUT 2 factors shown in figure 1:

- *Behavior Intention(BI)*
- *Risk (RSK)*
- *Trust (TRST)*
- *Facilitating Condition(FC)*
- *Convenience(CON)*
- *Habit(HBT)*
- *Performance expectancy(PE)*
- *Use Behavior (UB)*

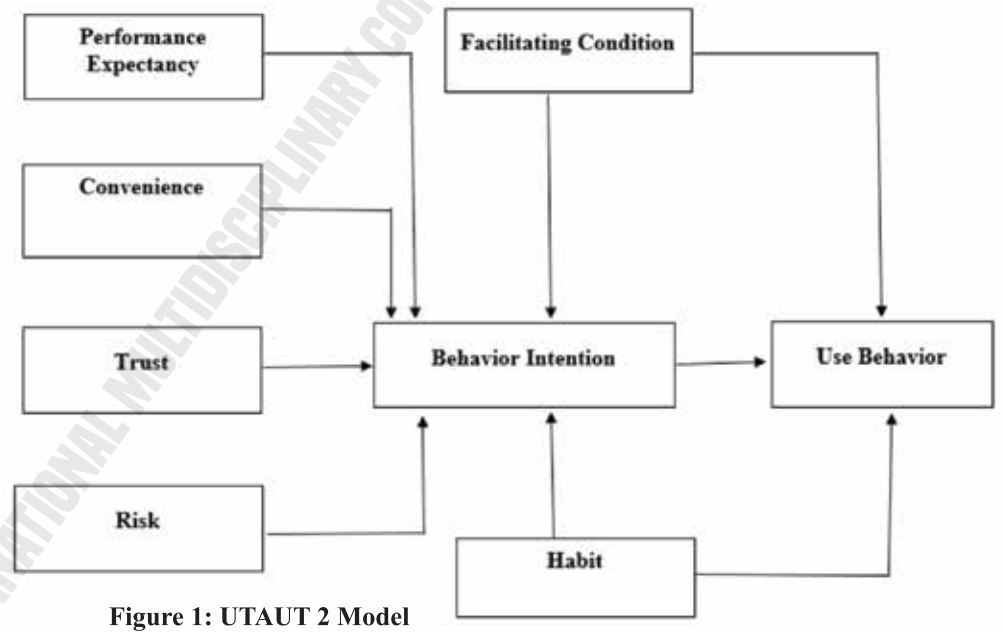

Figure 1: UTAUT 2 Model

The first six factors participate directly Intention to conduct while making it easier Condition and habit also influence the use behavior. There are no fixed factors in UTAUT 2 model. Various researchers integrate various factors according to the nature of the research subject and the requirements of certain factors

Behavior Intention (BI):

The behavior intention is that the user is willing and reticent about technology adoption. The three first factors directly influence userscomport mental intent to shape their technological acceptance intention. Starting with expected performance, which is considered one of the most important factors to shape the users' behavioral intentions. The use of a specific technology also calls for efforts to be inspected. The risk also affects users' behavior intentions, because the fear of risk wastes companies the opportunity to expand and increase productivity.

Risk: *The risk perception involved in the implementation of mobile banking also impacts the conduct of users in the adoption of services. The main risks involved in the will of users to accept mobile banking platforms include fear of loss, safety infringement and ignorance of mobile technology.*

Trust: *Trust was commonly examined and shown to be a key predictor of the perception and intention of customers in mobile banks. For example, the confidence was encouraged empirically to influence not just the intent of the customer, but also the expected performance. In his study on factors that predict the initial confidence of customers in mobile banking, he further confirmed confidence as a key determiner of customer's probabilities for mobile banking. The trust role and credibility perceived as main drivers for Iranian banking customers' adoption of mobile banking have been sustained.Facilitating Condition: The user-friendly condition plays an empirical role in the user's acceptance of technology. The easier the user is to feel, the more will a certain technology emerges.*

Habit: *Defined how far people are automatically conducting behavior through education, while habit is equated with automaticity. Though quite similarly conceptualized, the habit was organized in two ways: Habit is considered first as a previous behaviour. The second custom is as well measured as a person's belief in automatic conduct. Previous IT experiences also predicted IT health, system usage and conditions for easing.*

Performance Expectancy (PE):

Technological performance expectations directly influence the user's willingness to adopt a certain technology. Earlier research has considered the performance indication in making technology decisions on the user. The research work was carried out using the UTAUT 2 model to make technology acceptable in the banking sector. They concluded that users initially check the usefulness of the technology dependent on the technology's performance. The operating environment of users differs geopolitically and in various geopolitical situations. It cannot be done with the same regard to the adoption of technology for all users. Mobile banking technology, which provides large benefits for small and medium-sized enterprises irrespective of geo-political circumstances, is centralized and networked. Users around the world hurry to adopt mobile banking systems in the PE sector of mobile banking. Researchers from various locations around the world 8 have concluded that expectations of performance play an important role in pushing users to decide on their acceptance intentions

Use Behavior:

The previous researches, it demonstrated that technology behavior is openly determined by facilitating condition & intention. The intention of this section depends on the expected performance. The conditions for facilitation include company location, user awareness and operating environment.

Proposed Hypothesis:

Table1. The hypothesis includes the reliable and unsustainable factors proposed. The hypothesis description is also provided below: The following:

RH #	Hypothesis	Constructs hypothetical relationship
H 1	Behavior Intention will have positive effect on use Behavior of mobile banking.	Behavior Intention → Use Behavior
H 2	Convenience will have positive effect on Behavior Intention of mobile banking.	Convenience → Behavior Intention
H 3	Facilitating Condition will have positive effect on use behavior of mobile banking.	Facilitating Condition → Use Behaviour
H 4	Facilitating Condition will have positive effect on Behavior Intention of mobile banking.	Facilitating Condition → Behaviour Intention
H 5	Habit will have positive effect on Behavior Intention of mobile banking.	Habit → Behaviour Intention
H 6	Habit will have positive effect on Use Behavior of mobile banking.	Habit → Use Behavior
H 7	Performance Expectancy will have	Performance Expectancy →

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	positive effect on Behavior Intention of mobile banking.	Behavior Intention
H 8	Risk will have a negative effect on Behavior Intention of mobile banking.	Risk ⟶ Behavior Intention
H 9	Trust will have high positive effect on behavior Intention of mobile banking.	Trust Behavior ⟶ Intention

Table 1: Proposed Hypothesis

Dependent variable:

The conceptual framework work in this research is based upon the popular UTAUT 2 theory model. The only variable dependent on the behaviour and comportment used in this research is (UB).

Use Behavior:

Use behaviour, if technology is used, is described in terms of the user's actual behaviour.

Behavior Intention:

The aim is to define the behaviour users normally intend to do with certain behaviour. It is the dimension of chances for individuals to conduct themselves, such as services. A number of factors influence behavior intent such as condition and performance facilitation. In adopting all technologies, behavior intention plays an important role.

Independent Variables:

In this particular investigation the proposed hypothesis of these independent variables is given as follows: six separate variables described in detail in section 3.2.

H2: *Convenience (CON) will have high positive effect on use Behavior Intention (BI) of mobile banking*

H3: *Facilitating condition (FC) will have positive effect on Behavior Intention (BI) of mobile banking*

H4: *Facilitating condition (FC) will have positive effect on Use Behavior (UB) of mobile banking*

H5: *Habit (HBT) will have high positive effect on use Behaviour Intention (BI) of mobile banking*

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H6: *Habit (HBT) will have high positive effect on Use Behaviour (UB) of mobile banking*

H 7: *Performance Expectancy (PE) will have positive effect on Behaviour Intention (BI) of mobile banking use*

H8: *Risk (RSK) will have positive effect on Behavior Intention (BI) of mobile banking*

H9: *Trust (TRST) will have positive effect on use Behavior Intention (BI) of mobile banking*

CONCLUSION

Mobile banking is growing every day throughout the world. In the modern world, it offers various benefits for society's welfare and facilitation. In the 21st century it plays a multidimensional role, known as the next century. The concept was historically advanced by Kenyans in 2007, and subsequently extended to developing countries. E-payment system microfinance services such as mobile banking are efficient and publicly convenient. Easypaisa, Jazz cash, Zong, U paisa, UBL (Omni) and Simsim, for example, are mobile banking examples. All these mobile banking services are effective and convenient and play an important role in today's era. The mobile banking system facilitates all payments, ensuring performance, effort expectation, easier condition, risk and confidence. In short, in today's world the use of mobile banking is a desire for time and it's easy to get to everyone.

This study also has some practical implications, apart from theoretical implications. The results show strong support for targeted mobile banking technology. The UB's positive values and other factors imply that mobile banking has become increasingly popular in small and medium-sized companies from a practical viewpoint. The risk factor, however, has a negative value and shows that risks are a major barrier to acceptance in Pakistan of mobile banking. Figure 9 gives the final theoretical UTAUT 2 model, excluding the risk factor.

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Anees Muhammad[1], Asif Ali Jamali[2], Dr Ali Raza Rang[3]

University of Sufism and Modern Sciences Bhitshah[1 3]
University of Sindh Jamshoro [2]

ICT USE BY UNIVERSITY TEACHERS: INFLUENCING FACTORS AND THE CONSEQUENCE OF COVID-19

Abstract

The use of information and communication technology (ICT) in education has become more commonplace during the past twenty years. Numerous prior studies have proven that although teachers employ technology imprecisely with the standards, students willingly embrace it. The sole purpose of this research article is to investigate the important aspects that impact academics adoption of ICT in during teaching both inside and elsewhere of the classroom, with exact interest to the vastly different attitudes that instructors have toward using ICT to educate. The fact that the majority of the world's nations were under COVID-19 lockdown during 2020 has made us appreciated that using ICT is essential to overcome the losses in higher education and engage the students in instances when onsite classes were not possible due to COVID-19 lockdown, it is the only means to impart education. The results indicate that academics are generally positive about incorporating ICT, but much more has to be done to address the challenges.

1. Introduction

Technology has overtaken the planet. The educational field has also been impacted by technology. Technology in education is a powerful instrument for increasing interaction and significance in the teaching and learning process(Ullah et al., 2019). A dynamic learning environment where students actively participate in the learning process may be created with the use of technology, whichwill increase student behavior, attendance, and academic performance(Pardo-Cueva et al., 2020) Additionally, students in classes with plenty of technology are better equipped to function in a variety of circumstances and complete challenging reasoning exercises. While many educators have been at the vanguard of incorporating technology into education, several others have been apprehensive of the shift. Several elements can influence instructors' attitudes and views, either intentionally or unintentionally influencing factors. Over the last several years, the Pakistani government has implemented a variety of IT projects for higher education to increase the sector's output, efficiency, and investment. For the benefit of all higher education students, regardless of place or time. Furthermore, HEC's student privilege standards categorically state that students have the right to use IT resources. To satisfy these objectives, instructors must integrate technology into their curriculum. Covid-19 has taken the education world by surprise, and as a result, many higher education professors are struggling to adjust to this brand-new environment. HEC aspires to provide innovative technology to scholars and institutions so that they may participate in the fourth and fifth industrial revolutions.

This research examined how instructors are supported in the growth of higher education institutions by information and communication technology and other important factors. The University of Sindh, in Pakistan, is one of the educational institutions we have chosen for our study. This study will have an impact on instructors' ability to impart cutting-edge technological education and other amenities, as well as on the availability of knowledgeable professionals for the educational sector.

2. Research Gap

There is a scarcity of research that has examined the necessity and significance of ICT in the preparation of instructors in higher education. The varied literature demonstrates that the study has reviewed the subject of the value of ICT in the training of HEI instructors. However, relatively few studies have looked into how ICT influences instructors' improvement in higher education institutions.

3. Research Objectives

After The gaps found via a study of the entire literature review and keeping significant objectives in mind were formed for the future developments of this investigation after providing a strong view of the prior studies previously mentioned. Which is: to study teachers' attitudes towards regular academic change via ICT.

4. Research Methodology

The quantitative survey (Creswell, 2014) had 60 participants who were faculty members at the University of Sindh in Pakistan. The approach for gathering data was suitability sampling. There were 150 people in the target population. After meticulously scrutinizing each response received, a total of 70 were successfully received. According to Roscoe, the response rate was 40%, which is acceptable for performing the study (1975). One study also said that the response rate has to be more than 30% in order to prevent sample biasness, Sekaran (2003). Thus, 70 out of 150 responses are enough to do the factor analysis. The study was carried out by designing an online questionnaire (Sekaran and Bougie, 2013)., and a Likert scale with 5-point was used in Google Forms. The questionnaire's first section asks for demographic information including age, gender, and employment. The questionnaire was reviewed by respondents who both regularly and infrequently utilize ICT in their institutions. The basic goal of the survey is to make sure that the things being studied have been exposed satisfactorily.

5. Data Analysis Dimensions and Results

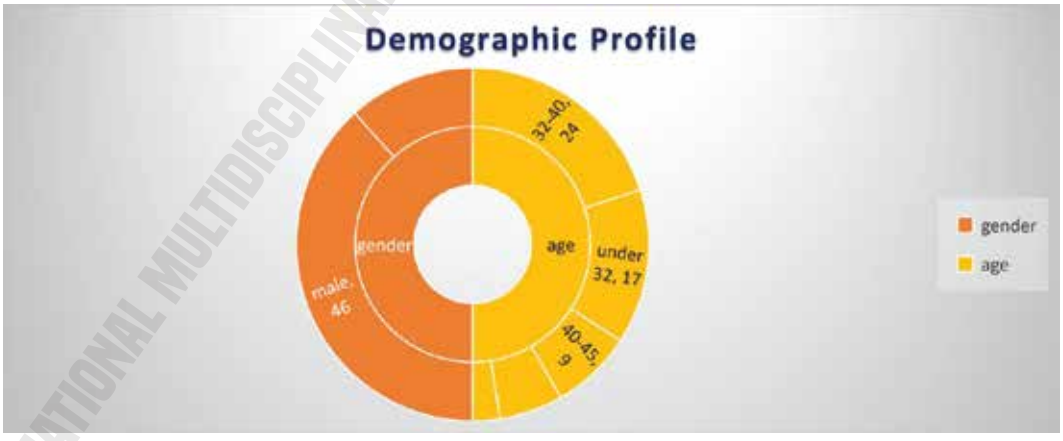

Figure 1 Demographic Detail

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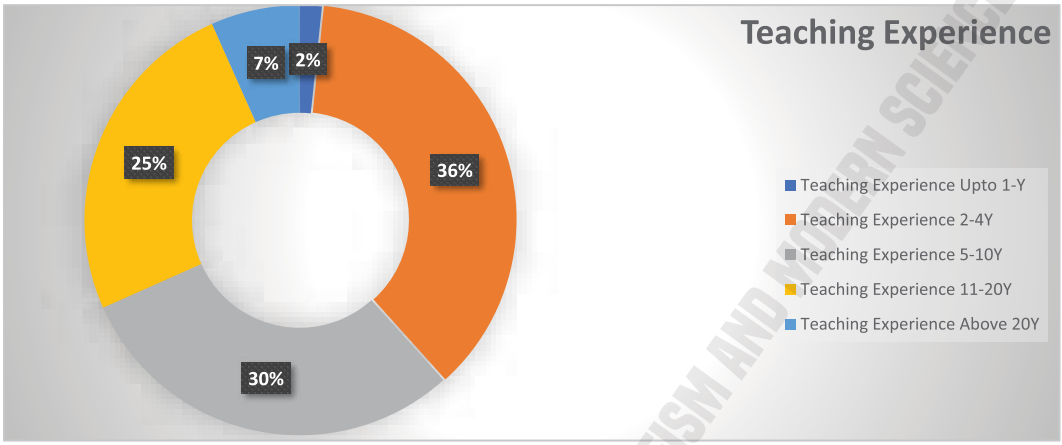

Figure 2Teaching Experience

Table 1ICT for teaching during COVID-19 Pandemic: favorable

ICT FOR TEACHING DURING COVID-19 PANDEMIC: FAVORABLE	SD %	D %	N %	A %	SA %
It improves the teaching approach easier.	8.3	6.7	15.0	40.0	30.0
Students' motivation is sparked by it.	8.3	11.7	11.7	45.0	23.3
It lets students learn spontaneously, and it's a smart approach to sustain students' focus.	8.3	13.3	16.7	36.7	25.0
The reuse of content and the eradication of board writing.	11.7	16.7	15.0	38.3	18.3

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Table 2 ICT for teaching during COVID-19 Pandemic: unfavorable

ICT FOR TEACHING DURING COVID-19 PANDEMIC: UNFAVORABLE	SD %	D %	N %	A %	SA %
Class control is challenging, and preparation is time-consuming.	13.3	31.7	23.3	13.3	18.3
I prefer the chalk and lecture methodology.	11.7	23.3	10.0	35.0	20.0
Institutional technology support is inadequate.	10.0	18.3	31.7	18.3	21.7
ICT is not required for my subject.	15.0	30.0	30.0	11.7	13.3
The lack of confidence in using ICT gets the lecture boring.	8.3	11.7	31.7	15.0	33.3

Table 3 The Effects of Covid-19

THE EFFECTS OF COVID-19	SD %	D %	N %	A %	SA %
My university provided me with instructions on how to deliver online lectures and assessments if required.	5.0	31.7	16.7	33.3	13.3
I believe that the infrastructure at my institution is adequate for online education and assessment.	1.7	36.7	18.3	31.7	11.7
I consider that onsite teaching is more effective for me than online teaching.	10.0	11.7	21.7	30.0	26.7
Students learn more efficiently in physical classes than they do online.	3.3	26.7	11.7	30.0	28.3
In the future, I'll need the additional digital capacity to address situations like this.	5.0	5.0	6.7	53.3	30.0

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6. Discussion and Conclusion

The benefits of ICT can only be realized when educators boldly and bravely embrace novel opportunities that will greatly enhance learning environments. This analysis found that while utilizing ICT for educational purposes, instructors are largely influenced by factors like personal attitudes, social attitudes, institutional technical assistance, and environmental influences. When competent digitally capable academics are only able to carry out their obligations, these conditions are in their favor in terms of ICT. In recent years, there has been a paradigm change in teaching approaches. After Covid-19, the traditional teaching approach is not outdated but will need to be significantly reinforced by ICT. The problems in developing empowering online classrooms may be solved with greater training to boost confidence and improve academic knowledge of new technology-driven practices, as well as institutional support.

7. Recommendations

• According to the results of our survey, one of the key variables impacting their usage of ICT is connected to their attitudes. So, teachers should get continual training to inform them about the advantages of digital literacy.

• As it has been observed that controlling online classrooms and producing lecture materials are demotivating concerns, HEIs must establish collaborative forums or consortiums of lecturer material from university to university in order to encourage academics.

• The scarcity of ICT infrastructure must be addressed at every degree program level in every HEI Department.

• The curriculum should be structured to be taught in a mandatory manner utilizing ICT technologies.

8. Acknowledgements

I am grateful to all the HEI academics who responded to the questionnaire and disseminated it to other academics.

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Dr. Ali Murad Lajwani
University of Sufism and Modern Sciences (USMS),
Bhitshah, Sindh, Pakistan

RITUALS AT THE SHRINE OF BHITTAI REFLECT TOLERANCE AND ENDURANCE: A SOCIOLOGICAL STUDY

Abstract

The rituals at the shrine of Shah Abdul Latif Bhittai go around the clock on awakening consciousness and creating the devotional aesthetic to recite the sacred words for self-worth as well as promotion of social cognition among the attendees. The dhamal, halka, Suha-o-Soomar, prayers of Suhni, Marvi, and other rituals disseminate the teaching of tolerance, endurance, and love for the entire creation. The Zikir is a remembrance of God. It is a thoughtful practice to learn patience, tolerance, and the capacity to reduce pain and suffering. The present research covers the entire process of arranging rituals daily, weekly, monthly, and annually. Every day at dusk time devotional dance gathers at a high pace starting from a slow rhythmic wave. As soon as it finishes the evening prayers bring a chanting voice of Zikir"O Ahad, O...Ahad". The specific peculiar words are being chronicled along with interpretation as the legacy of Shah Abdul Latif Bhittai has been transmitted from one generation to other. The qualitative research was chosen by using in-depth interviews. The interviewees were disciples, devotees, and attendees of rituals at the shrine. The flexible and deep interview was held with the custodian of the shrine as well. The respondents were engaged in an interactive process to cover the desired areas of research. Provocation without becoming annoyed, and preserving calm behavior are expected outcomes of the present research.

Keywords: *Rituals, Reflect, Tolerance, Endurance, Zikir, and Sama*

Introduction

The shrine of Hazrat Shah Abdul Latif Bhittai is a sacred place. Throughout, the year visitors attend rituals with devotion and dedication. Women are frequent and most punctual among the visitors. The Sufi rituals were safely transferred from generations through oral information. The prayers go round the clock with certain maxims at the shrine. The devotional (Dhamal/Raks-e-Darveshan) is arranged at the sun setting time. It goes for around 40 minutes – 60 minutes (1 hour) which attendees are raising their fingers keeping the movement of their feet at high and low paces. Another ritual 'Halka" is held with the same devotion. Where people from different religions participate in raising the echo of"O Ahad, Ya Ahad, "Ya Allah", and "Allah Hoo". The Sufi music "Shah-Jo-Raag" is performed round the clock at night and day times. At midnight while strings of Sur Suhni gather a rhythmic pace - women knot the head-cloth with a door. They stand beside, sit or sometimes sleep while their head-cloth is knotted with the door. This is the very unique experience of women surrendering to worldly wishes and concentrating on one goal that their hearts and breaths keep with them. The sweet milk of buffaloes is distributed among the attendees as a symbol of sweetness and harmony. When Sur Suhni comes to an end at midnight the prayers of Suhni are performed the prayer of Suhni consists of recital sacred words and selected verses from the poetry of Bhittai. Oh! Lord of the Suhni covers the entire world with your special bestow and sanctity. However, "Payer of Marui" comes early in the Morning while selected Zikir in form of verses from Bhittai is recited.

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Every Friday practice of cleaning the 'Lakhi-gate" is a ritual and monthly Suha-Soomar and Sama are held at every first Monday night. A circle is made around the fire with the rhythmic recitation of sacred words "Zikir" of Allahoo, Allahoo, Ya Ahad, Ya Ahad" performed. As per the Islamic calendar, Hazrat Shah Abdul Latif Bhittai died on 14th Safar 1752 A.D. After his death Syed Jamal Shah (Cousin of Hazrat Shah Abdul Latif Bhittai) had become the first custodian (Sajjada-Nasheen) of Bhittai's shrine. The ritual was held on the 16th Safar which was the third day of the death of Bhittai.

The shifting of the Sufi dress code is a very prominent ritual in the shrine culture. The shrine culture reflects, a dress code - a custodian wears a turban on the head; wraps the "Shaal" and wears the spiritual dress. This shifting of spiritual dress code is known as "Hal Dhaga" in the Sindhi language. This is held on the third day after the death of the Sufi saint.

Literature Review

Endurance and tolerance are the social values that enhance the capacity for life's hardships. Rituals and teaching of Sufi practice encourage sociability and patience to continue to face life hardships that give a lesson of understanding fairness with people around us. Robert E. Park has examined Sociology the social norms discovered pertaining to human values. Such values are related to concepts of endurance and tolerance. In every society, these values are maintained and transmitted over time (Robert E. Park, 2009). A Sociologist Frank W. Blackmar has viewed that history reveals that society was in a rude state in which the relations of individuals to each other and to the general social groups were not clear (Frank W. Blackmar, 2009). The harmony and soundness of social system and social structure in connection with institutional framework and fitting to the order of social dynamics(Hugo Munsterberg, 2008). According to Qushyari (465/1074), author of Al Risalo, the word Sufi was used as a generic term to describe an individual adopting a particular religious attitude based on spirituality (Farida Khanam, 2009).

The norms and assumptions that have characterized belief and action in Islam have their initial inspiration from two fundamental sources. One is scriptural, the message revealed by Allah to the Prophet Muhammad (PBUH) and recorded in the Quran. The second exemplification of that message is the perceived model pattern of the Prophet's actions (Azim Nanji, 1991). The

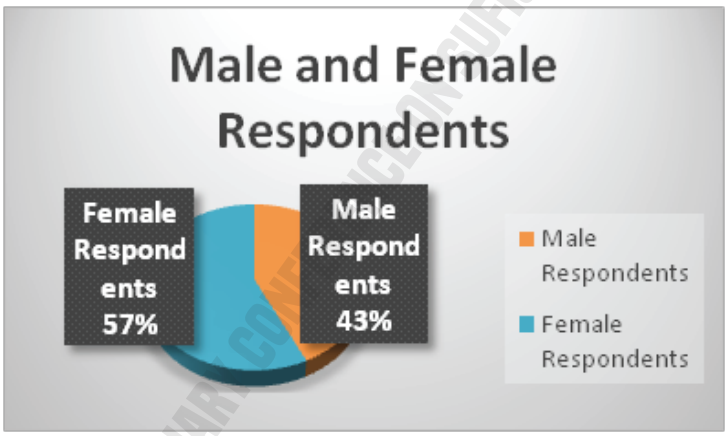
Zakir's set of pertained principles is memorized as a mystical experience. It is found in different parts of the world where the Sufi legacy is practiced (Chih 2007). Qawali is a kind of Sufi music that is performed at the shrine in the sub-continent (Hermansen 2000, 180). The Sama is a ritual in which sacred words are recited in a repetition form. The person who leads recites first and then attendees follow him with the same devotion. It is practiced in different Sufi orders alike (Lewisohn 1997). Scholars who have been rendering their services for narrating the teaching of Sufism to the Muslim world (Laffan 2011). Radio broadcasting and other media channels have been engaged to disseminate the message and teaching of Sufi saints. The Qawali has been prominent among such rituals at levels (Qureshi 1999). Transfer of Sufi ritual is a process of connecting to spiritual dimensions and formation of sociability beyond the cultural and national differences. It is aesthetic that leads to changing factors for conscious or unconscious of changed ritual onto the surrounding socio-cultural fields. Sufi music is a kind of ritual that is performed at the shrines of Sufi Saints (Robert Langer, 2012).

Research Methodology

The qualitative research was chosen by using in-depth interviews. The interviewees were disciples, devotees, and attendees.In qualitative research, participant observation was used to observe the behaviors and gestures of different attendees while they attend rituals and perform sacred words of Zikir. It was consistently practiced where people attentively focus on Zikir and they disclose their pleasure to others soon after attending the regular rituals. The ethical and spiritual strength was observed carefully. Interviews were held with scholars who were experts in literature and social science. Oral information was recorded by taking running notes. Generally, there are thousands of visitors at different intervals but 350 population was targeted during the data research, and 184 sample size was calculated out of the total number.

Analysis & Discussion

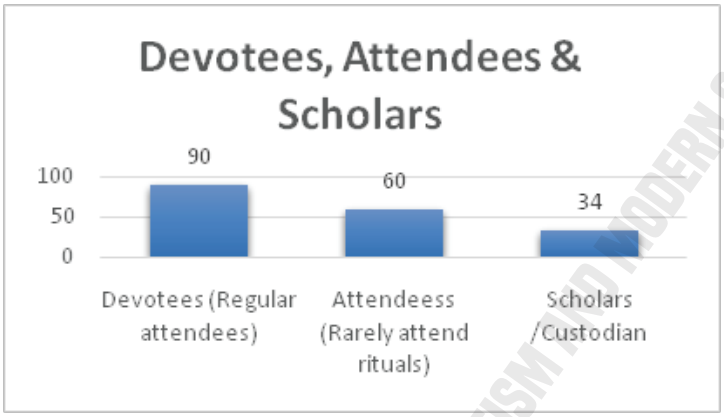
Diagram 1.1
Gender-wise Bifurcation of Respondent's



Interpretation

The above diagram shows the bifurcation of male and female respondents. 57% female respondents and 43% male respondents. There is a difference of 14% because women devotees were included in the study while they attend the ritual of knotting their clothes with the shrine door. Women weep to display a lot of patience, tolerance, and endurance. It was observed that women remained fewer speakers and more attentive than men. Inner calmness encourages one to concentrate on the ritual and practically learn the true concept of each ritual.

Diagram 1.2
Categorical Information Respondent's



Interpretation

The above diagram shows the categorical distribution of respondents 90 devotees, 60 attendees and 34 scholars including the custodian. The regular attendees were firm in belief that social changes occur after attending the rituals. It was discovered that they feel a mental relief and physical well-being with association to rituals on regular basis. It is a treasure of folk-wisdom and that could be discovered with scientific experiments as narrated by the scholar respondents.

Table 1.1
Time-wise Rotation of Daily Rituals

S#	Ritual	Time/duration	Zikir
01	Devotional Dance Raks-e-Darveshan	- 05:30 pm (40 – 50 minutes	- Drum beating - Pacing motion of feet
02	Evening prayers (Halka)	- 06:30 pm - 40 minutes	- Prayers Ya Ahad, Ya Allah - 12 & 09 numeric
03	Shah-Jo-Raag	- 09-00 am – 05:30 pm - 09:30 pm – 05:05:30	- Oh Meenyan - Ya Ahad, Oh Toon Allah - Bajhkyaen Allah
04	Knot tied with shrine door	- 11:00pm – 12:30pm - 1 hour 30minutes	- Umeed Allah mein
05	Prayers of Suhni	- 12:00pm – 12:30pm - 30 minutes	-
06	Prayers of Marui	- 05:00am – 05:30am - 30 minutes	

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Interpretation

The daily prayers go round the clock – almost 24 hours with a short interval on each day. The rituals convey basic two dimensions 1) it is a practice of purification of heart and soul by getting close to the creator (Allah) – it offers a behavioral change to withdraw from worldly things and become more tolerate 2) secondly search for the inner peace demonstrate cooperation with humankind and entire creation – display endurance despite the life hardships.

Conclusion

The rituals at the shrine of Hazrat Shah Abdul Latif Bhittai are Sufi narratives that are orally framed curricula of peace, love for humankind, harmony, tolerance, and endurance. It is a mystical dimension of Islam. Rituals go daily, weekly, monthly and annual timeframe. It sheds ample light on the Sufi practice of Zikir or constant remembrance of God through prayers, specific formulae, and customary recitations, as well as langar (distribution of food), Sufi music, and other rituals. It is highly needed to frame it in a scientific way to discover more reliable academic goals forfuture generations. The framed curriculum of human well-being and constructive behaviors.

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Dr. Ghulam Qasim Bughio.

Ex-HoD, Department of Business Administration,
Preston University, Karachi Sindh.&
Visiting Faculty Member, Department of Business Administration,
The Shaikh Ayaz University, Shikarpur Sindh

ERADICATION POVERTY IN RURAL SINDH, PAKISTAN: A NEED OF EFFICIENT IRRIGATION MANAGEMENT. ‹ A CASE STUDY OF DISTRICT BNADIN PROVINCE OF SINDH›.

Abstract

Purpose-Poverty exists throughout the world but its nature is different. According to Economic survey of Pakistan 2017-2018, 12.5% poverty exists in urban areas of Pakistan. It is indicated that in rural areas of Pakistan has more than double poverty as compared and 30.7% in rural areas to urban areas. Pakistan is being developing country where 2 percentage of irrigation shortage was pointed out in summerseason and 18.5 percentage in winter season as a result reduction in output level that decrease income of grower.

Design/methodology/approach-The data was collected using adopted questionnaire through convenience sampling technique from district Badin, Sindh. The sample size was consisted of 300 small grower and their farms were situated at front, middle and tail end of canals. For the analysis various statistical techniques have been applied such as reliability analysis and multiple regression analysis based on this study research objectives in the IBM SPSS statistics version 21.

Findings- Based on predictable results, the grower of tail end suffer more because they get less supply as estimated 25% in summer as well as 45% in winter season. Their income is less and even theycannot meet requirements of basic needs. It is evident that poverty exists in tail end rural areas of Sindh, Pakistan.

Originality/value- In previous studies research scholars investigated overall impact of irrigation system on agriculture sector of Pakistan. This study gives insight impact of effective irrigation managementin to rural areas of Sindh, Pakistan. This study can be extended to other provinces of Pakistan and less developed countries which are also facing poverty problem in their province and countryrespectively.

Key words: *Eradication poverty, Irrigation Management, Multiple regressions, rural areas.*

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Introduction :

The Pakistan is an agricultural based economy as agricultural contribution towards GDP is about 19 percent and employs 43 % of labour force. It is the major source of foreign exchange earnings and support growth to adjoining sectors. However, the rural sector suffers from the poverty as their bread and butter remain limited to agricultural sector. They face the problem of shortage of water, obsolete technology, low quality seed, lack of knowledge, natural calamities, as a result low output, lower savings, less investments are made in the economy and gradually cause the people to live below the poverty line and they stand an ideal workforce. The social action Programme, Pakistan poverty alleviation fund, micro credit, Khushal Pakistan program and food support program has been reported from time to time to alleviate the poverty. But efficient irrigation system has not been given the too much importance that can help to reduce the poverty through the proper and timely allocation of water to the peasants across the country as per the country resources. As per Pakistan Agricultural Statistics report (2015-16) 80 percent are small growers Pakistan has been facing shortage of water about 2 % in summer and 18.5 during winter season.

This study tries to observe the factors that are responsible for rural poverty in District Badin, Sindh. Additionally, based on data, provide strategies for eradicating poverty among small farmers/growers.

Research Methodology

This study using convenient sampling interviewed 300 small growers who were residing and farming their land at the front, middle, and at the end of canal in district Badin. Initially Descriptive analysis is conducted and finally mixed method is used and cross checking of the calculated results is made by employing regression OLS method.

Hypotheses :

On the basis of theoretical literature and empirical studies, it is hypothesized that

H1 = Extension of Irrigation facility (Irrf :) affects land under cultivation.

$Lncul = B0 + \beta 1\ Irrf: + \mu$ ----------equation (1)

H2 = More Cultivated land (Cultln :) can affects output of the farmers.

$Output = \alpha 0 + \alpha 1 cultln: + \epsilon$ ----------equation- (2)

H3 = Increased output affects the income (Y) of the Growers.

$Y = \Phi 0 + \Phi 1 output + e$ ---------- equation (3)

H4 = Increased Income of the growers affects Poverty in Rural area.

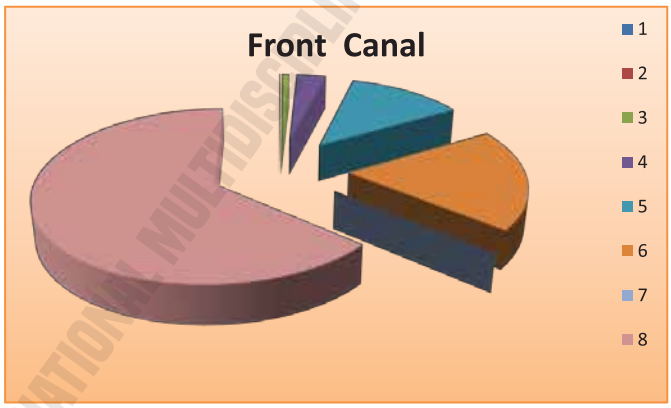
$Poverty = \Omega 0 + \Omega 1 income + \mu$---------- equation (4)

Here
B0 and Φ0 = are intercepts.
While
α1,Φ1 and β1 are regressors.
€ And μ are error terms.

Average Gross and Net Income of Wheat Crop of each Grower during Winter Season in District Badin, Sindh Province, Pakistan, during year 2017-18.

Size of Farms Below 1-12 Acres	Number of Small Growers	Yield per Acre Rice (in Munds)	Market Rate per Manud (in Rupees)	Gross Income of Per Acre (in Rupees)	Cost of Production Per Acre Yield (in Rupees)	Net Income of Grower per acre (in Rupees)	Average Size of Farm (in Acre)	Total Net Income of Growers (inRupees)
Front Canal	80	45	1250	56,250	19,500	36,750	7	2,57,250
Middle Canal	104	43	1220	52,460	19,300	33,160	5.5	1,82,380
Tail End Canal	116	40	1200	48,00	18,800	29,200	3.3	96,360

Source:-Survey Data 2017-18.
The above data illustrated through Diagram's



Number of Small Growers	80
Yield Per Acres Rice (in Maunds)	45
Market Rate Per Manud (in Rs:)	1250
Gross Income of Per Acre (in Rs:)	56250
Cost of Production Per Acre Yield (in Rs:)	19600
Net Income of Grower per acre (in Rupees)	36750
Average Size of Farm (in Acre)	7
Total Net Income of Growers (in Rupees)	257250

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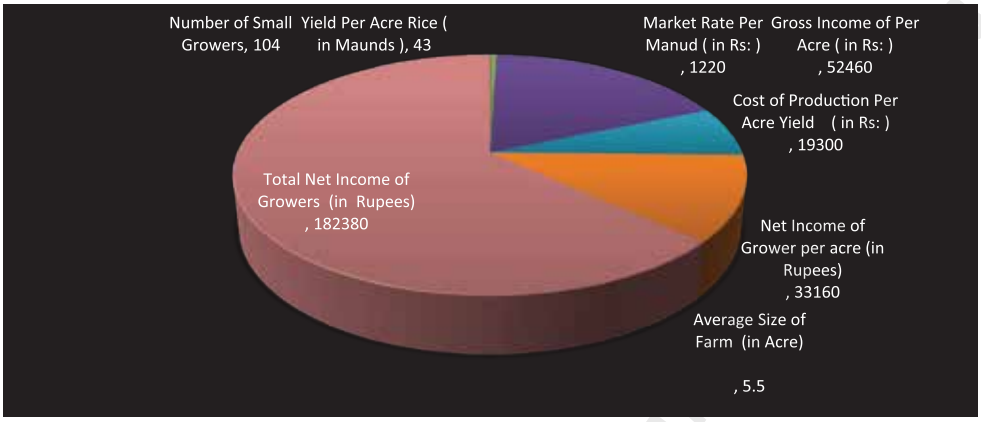
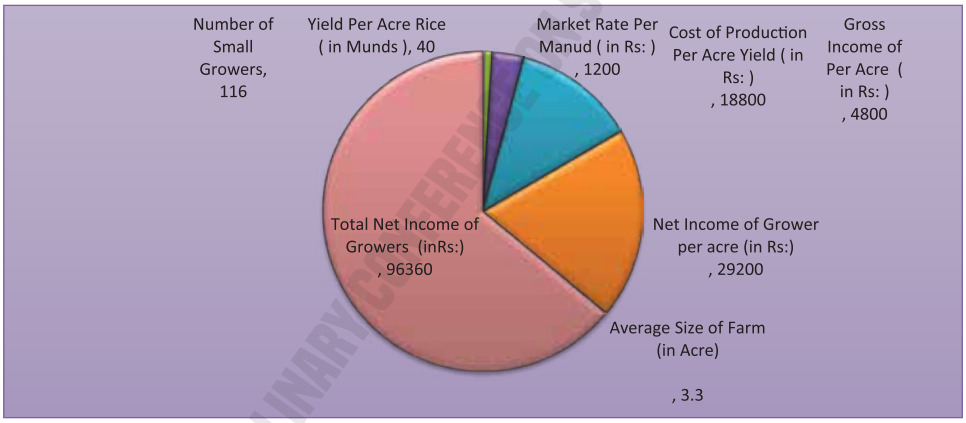
MIDDLE CANAL



TAIL END CANAL.



Regression Results
ON THE BASIS OF COLLECTED DATA.

Depend: Variable	*Regressor*	*Intercept*	*B coefficient*	*T value*	*P value*
Lncult:	*Irri: facility*	*-1.217*	*0.350*	*4.025*	*0.01*
Output	*Cultln:*	*423.40*	*0.253*	*4.847*	*0.004*
Income	*Output*	*221.43*	*0.342*	*5.734*	*0.000*
Poverty	*Income*	*-121.63*	*-0.147*	*9.687*	*0.002*

Conclusion:

The key objective of this study is to analyze the effect of efficient irrigation system on the poverty in district Badin. This study has used mixed method. The qualitative analysis determined poverty on the basis of cost of basic needs 3030/ suggested by planning commission of Pakistan as benchmark criteria. It has been observed that the grower residing and farming their land at the end of canal could not meet their basic needs as their income was insufficient as a result they suffer poverty. The average net income of each Grower of that area was Rs: 14,558/-. The average size of family was 6 members. Therefore they could not be provided Basic Needs Requirements. The statistical results reveal that 1 % increase in irrigation facility leads to increase the land cultivation by 0.35 percent. And one percent increase in cultivation of land results 0.25 percent increase in output. While one percent increase in output increase the income by 0.34 percent and finally one unit increase in income helps to reduce the poverty by 0.14 percent.

SUGGESTIONS:

In the radiance of examined results it is suggested that appropriate and opportune portion of water system water amount through superior water the executives should be made to build the land development, expand yield, and to rise per capita pay/income to lessen the destitution in the rustic regions. Moreover, the public authority of Pakistan is encouraged to present land changes. Since these changes are excessively fundamental for the more horticultural creation in provincial regions and to diminish the neediness in such regions.

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Dr. Samina Rafique[1] Ms. Faiqa Attique[2]
University of Sufism and Modern Sciences, Bhitshah, Sindh. [1.]
University of Sargodha, Pakistan[2]

STUDENTS' SOCIO-ECONOMIC PROMINENCE AND PRACTICES OF E-LEARNING DURING COVID-19

Abstract

E-learning has become a compulsory part of all educational institutions such as schools, colleges and universities in and around the world as a result of the COVID-19 pandemic crisis. This deadly situation backfires the offline teaching-learning process. E-learning offers an effective teaching-learning method that gets the best of students. This grid was developed for the purpose of investigate effect of students' Socioeconomic Status(SES) and their experiences of e-learning during COVID-19 that changes their behavior regarding studies. The accessibility of technology has great impact on students' learning. The purpose of this grid might be to understand how an individual perceives different SES and their experiences during online learning caused by COVID-19. This grid focuses on 20 elements (Respondents) and 19 constructs. The researcher used quantitative methodology and simple random sampling technique was used to select the sample size. The targeted population was university students from Punjab and Sindh who enroll online courses. The sample size of this study was N=20 students.The result shows that there was non-significant difference among students of SES impactand students' experiences regarding e-learning during COVID-19. The result shows that the null hypotheses was fail to reject the difference among students of SES and impact students' experiences regarding e-learning during COVID-19.It is recommended that the future study will be conducted on psychological impact of students' on their academic achievement during COVID-19.

Key words: Students' experiences, e-learning, SES effect, COVID-19

Introduction

Due to the rapid spread of the Covid-19 pandemic, most of the world experiences a lockdown that also affects the entire education ecosystem. The spread of COVID-19 has led to the closure of educational institutions of Pakistan. Such closure has accelerated the development of online learning environments within those institutions so that learning is not disrupted. The coronavirus pandemic has tested the centers willingness to deal with a crisis that requires online and external action. Many are unprepared, but it is important to consider the reasons for offering students an online class beyond the hours of confinement. The closure of educational institutions affects more than 70% of the student population worldwide. As a result, all educational activities have to be abruptly transferred within virtual systems. The transition from physical to virtual is relatively fast and typically takes several days at the university level, where

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decisions are more centered. This situation can be considered as a unique and innovative setting because without the pandemic, and it would never have been possible to force institutions, professors and students to go from physical to virtual in a short time.

By expanding participation rates in Pakistan, more socio-economic backgrounds of students are encouraged to pursue university courses, and they hope to use digital technologies and demonstrate digital literature. This study used data from a 2020 survey of university students to investigate socioeconomic differences and their experiences about e-learning during Covid-19. There is also no variation in sharing to course materials, experiences and differences between socioeconomic statuses of university students according to accessibility of e-learning resources. However, students receiving government support are less commonly used technologies related to disciplinary or creative skills than receiving content (McKenzie & Pizzica, 2014). Mohammadi, et al. (2011) emphasizes the role of e-learning and its application in the language learning process and compares it to traditional forms of language learning. It also offered the advantages and disadvantages of e-learning in language learning. In identifying relevant studies, researchers have been able to incorporate this thinking into their research into the role of e-learning in the COVID19 crisis and demonstrate its importance in several areas. There may be a subtle digital divide, with students with financial disabilities less likely to engage with technologies, will be helpful for more in their future work.

Background

The COVID-19 pandemic is affecting humanity both in terms of health, because of the many victims who die or become more severely ill and are benefiting from medical recovery, and through a larger Socio-Economic scale, due to the severe economic crisis, and the social consequences of temporary or prolonged job losses, the reduction of income, the dramatic restriction on the free exercise of fundamental rights and freedoms. The global spread of coronavirus disease (COVID-19) is provoking a series of public health responses. School and university closures are among the most popular social and, physical distance measures used to reduce the spread of this infectious virus. Many countries in Asia and Europe have verified publicly school closures. The pandemic of COVID-19 has overgrown since its first appearance in a genuinely global phenomenon. Although securing face-to-face education is vital in the social transmission of the virus, a brief reflection on the emergence of the virus provides context. The first reported date of illness for COVID-19 was December 1, 2019, and the early hospital admission was December 16, 2019 (Huang et al., 2020, p. 499).

E-learning is considered a new method of teaching rather than a personal education. E-learning can offer and share materials in various formats such as emails, slides, videos, PDFs, and Word documents. It also holds webinars (live online lessons), communicating with teachers through messages and chat forums is also an option available to the user. Using e-learning can be considered bridged, making you feel like you are in the classroom.

SES E-Learning Challenges

In times of limited mobility and contact, the need for digital learning also heralds the enormous economic diversity that is widespread in society. The digital transformation of higher education institutions is an enthusiastic resolution involving various education stakeholders, the possibilities of applying ICT to all spheres of life are at a consecutive level. Due to inequalities in the socio-economic status of students, some rely on computers and free internet in academies (Demirbilek, 2014), and due to the closure of

institutions, the shifting process between groups of students is expected to be slow. It cannot be denied that students with a low socio-economic background will certainly find it difficult to anticipate expectations as they will not be able to go to the institution due to the pandemic. The results of Fishbane and Tomer's (2020) research on what students should do without internet access during this Covid-19 pandemic show that as poverty levels rise community, the number of internet access speeds is declining rapidly and it also implies that students who do not have or have low socio-economic power can afford a broadband connection are the most vulnerable to being late or facing additional challenges to identifying others in online learning. Parents from different socio-economic backgrounds may have different capacities (both cognitive and non-cognitive skills) and the ability to support their children in their learning process at home education during the lockdown. Students from a less privileged background are more likely to have access to digital resources at home, more likely to have a proper home learning environment, and more likely to have nutritional deficiencies. According to The Global Economy 2017, nearly 30% of Pakistan's population lives without electricity. Another survey conducted by Sri Lankan showed that as of December 2017, only 57% of Pakistan had a mobile phone. Only 22% of them had a Smartphone. The rest have set without an internet connection.

The most popular opposition to online classes comes from students living in remote parts of the country - Gilgit Baltistan, Balochistan, and Afghanistan's border region. They point out that their cities have no electricity, let alone internet services. Online classes and exams are not accessible to them, putting them at a disadvantage for students from larger cities. The latest available figures from Pakistan's official telecommunication authority from a November 2019 survey found that only 36.2% of the country's population has access to the internet - and this includes users using the internet over 2.5G or EDGE. According to the internet coverage map, different parts of Balochistan, Gilgit Baltistan, and Khyber Pakhtunkhwa do not have internet coverage.

Theme of the Study

The researcher focuses on SES impact and students' experiences regarding e-learning (assurance of support with appropriate instructions, responsiveness of availability of instructor, accessibility of learning content, and quality of instructions and materials provided by instructor) during pandemic of COVID-19. In this repertory grid researcher focuses to find out the relationship of SES impact and students' experiences of e-learning during COVID-19.

Methodology

Directory Grid Methods derived from the ideas of Kelly (1955) and Osgood et al. (1957). They construct it possible to investigate the links between environment and behavior and draw on the theory of personal construction, believing that absolute truth or objective reality does not exist.

The purpose of this grid might be to understand how an individual perceives different SES and their experiences during online learning caused by COVID-19. This grid focuses on 20 elements (Respondents) and 19 constructs. The researcher used quantitative methodology and simple random sampling technique was used to select the sample size. The targeted population was university students from Punjab and Sindh who enroll online courses. The sample size of this study was N=20 students. Researcher online (WhatsApp & Facebook) administered this questionnaire.

In order to select participants for survey, researcher developed a questionnaire consisting of 19 questions. The questions were carryout the factors related to SES & students' e-learning experiences correspond to in the questions.

Conclusion

This repertory grid study was useful for developing technological tool for e-learning purposes and personal construction for student experiences for e-learning during COVID-19, helping each individual become more effective in his or her goal of becoming a "personal construct". Kelly's view of a personal construct is that of a person who classifies, categorizes, and constructs theories about his world, examines them against his personal experience, evaluates and revises his theories to anticipate events and effective action. In conclusion, this study showed that E-learning has become popular with students around the world, especially the closing period due to the war COVID-19. The result shows that there was non-significant difference among students of SES and impact, students' experiences regarding e-learning during COVID-19. This study shows that mostly students faces difficulties regarding e-learning due to some challenges of assurance of support with appropriate instructions, responsiveness of availability of instructor, accessibility of learning content, and quality of instructions and materials provided by instructor. Mostly students have accessibility of technological resources for learning purposes.

Recommendations

This study was conduct only one variable due to time limitations future study will be conduct more than one variable. It is recommended that the future study will be conducted on psychological impact of students' on their academic achievement during COVID-19. It is recommended that the future study will be conduct for on mixed method research. This study further recommended that e-learning is suitable for everyone, if they have accessibility of technological resources and instructor guidance when students' needed. It eliminated the restriction of specific content, student's access easily learning content from everywhere and anytime.Recommendations are to train faculty to use online techniques and provide accessibility of technological resources for students that reduced cognitive load and increased engagement.

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Taskeen Zahra Buriro[1], Bakhtawar Memon[2], Qammarun Nisa Jatoi[3]

University of Sufsim and Modern Sciences [1 3]

University of Sindh[2]

THE PREVALENCE AND AFTERMATH OF WORKPLACE BULLYING: A REVIEW PAPER FOR FUTURE AGENDA

Abstract

Workplace bullying has a negative impact on the efficiency of the working force and combined productivity of any organization. As per the literature available on "Workplace bullying" the concept is widely discussed and acknowledged in different aspects globally. With the available literature, it is still the need of hour to find the gaps in the literature to cope with bullying taking place in an organization. The aim of this study is to explore the concept of workplace bullying in available literature and share a combined review with possible areas for research in future. This study offers the structured review on a total of 40 research articles. By the end of the review, this paper will be able to answer all the queries regarding the concepts of bullying. This review will provide awareness about Workplace bullying, discuss solutions, and bring attention to the laws regarding Workplace bullying and suggest future implications.

Key Words: *Workplace bullying, Outcomes of bullying, Coping with bullying*

1. INTRODUCTION

The creation of a hostile working environment is a result of workplace bullying which is frequent and persistent negative actions towards one or more individuals (Rigby, 2002). The repeated hurtful negative act or acts constitute workplace bullying. These acts involve criticism and humiliation and cause distress, fear, or harm to the victim (individual) are physical, verbal, or psychological (Akella, 2016). The Overruling the victim decision, openly flaunting one's status and power, professionally attacking the victim, shifting opinions are included in workplace bullying. Today, the world is growing in so many dimensions day by day. In this scenario and today's modern workplace, bullying can have multiple and drastic effects on both, the people, and the organizations. The bullying can cause destruction in not only physical health but also mental health (Yildirim, 2009). For a modern workplace, workplace bullying has been predicted as harmful feature with long term destructive effects not only on individuals but also for organizations (Hutchinson, Vickers, Jackson, and Wilkes, 2005). The workplace bullying is hateful mix of embarrassment, pressure, damage of performance, and repeated exploitation of one employee which is targeted by one or more employees (Margaret, 2007).

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1.2.Statement of Problem:

For a modern workplace, workplace bullying has been predicted as harmful feature with long term destructive effects not only on individuals but also for organizations.

For this reason, this review paper will help in understanding the workplace bullying concept and its different aspects which affects the organizations as well as individuals.

1.3.Significance:

With a significant rise in the workplace statistics, it is pivotal for the researchers to understand the concept of workplace bullying and its impacts, demages and aftereffects of it. This study will help the researchers in reading and understanding the literature regarding workplace bullying. Further this study will suggest the future gaps related to workplace bullying.

1.4.Aim and Objective:

The aim of this study is to explore the concept of workplace bullying in available literature.

•To explore the recent literature from year 2017-2021 on workplace bullying

1.5.Research Question

Based on aim and objective following question has been made:

•What are the recent literatures from year 2017-2021 on workplace bullying

2.METHODOLOGY

By using following databases electronic searches were performed; Theses, different journals such as Taylor & Francis, SAGE journals, Science direct, Springer, Emerald etc. Search strategies employed included key words such as: workplace bullying, types of bullying, Impact of workplace bullying on: Individual and organization. A total sixty articles were downloaded from online databases. Out of 40articles, 7 articles were excluded because they were review, non- empirical papers opinion or editorial. The criteria of selection of articles is that they are original and empirical. Another criteria for selection of articles is that they should report studies which focuses on data. Primary data collection methods were selected for this paper. Eventually 33 research articles on workplace bullying were selected and reviewed.

The articles were screened and analyzedfrom the last 5 year (2007 to 2021). Out of 33 research studies; 3 were qualitative studies, using semi-structured interview which is used to find the effects and occurrence of bullying. While remaining 30 research papers were Quantitative studies that used to questionnaire or survey to find the effects of bullying.

1.FINDINGS FROM REVIEW:

Sandvik, et al., (2007) conducted the study on prevalence of workplace bullying in US workers. The study concluded the effect of bullying on the people who witnessed it rather being bullied. Deniz and Ertosun, (2010) conducted the study on the relationship between workplace bullying and the employees who face this type of behavior are considered as "victim". The study showed that there was strong relationship between type of personality and individuals who experience workplace or mobbing.Magee, et al., (2015) conducted study on relationship between workplace bullying psychological distress and sleep quality. The results showed that compared with no bullying, different categories of bullying like occasional bullying, frequent bullying, indirect bullying, task related bullying had relationship with poor sleep quality. Attell, et al., (2017) conducted study on Gender and race differences in the methods which related to workplace bullying and poor psychological conditions. The data was collected from 2010 health and retirement study. The study concludes that workplace bullying has more impact on females and persons of color, negative relationship between workplace bullying and job stressor. And, protective mechanism which is used

to reduce the workplace bullying is supported by co-workers. Nielsen,et al., (2017) conducted the study on relationship of bullying to all-cause disability retirement and variance in disability retirement. This study also examines gender differences in the relationship. The study concludes that there significance between bullying and risk of disability retirement. The study also shows that after adjusting for job demands and lack of job control, the relationship remain significant. Non bullied employees have lower risk of disability than both bullied men and women of same gender and higher risk of disability for women.

Coetzee and Dyk, (2017) conducted study on relationship between workplace bullying and turnover intention and the mediating effect of work engagement on this relationship.. Study concludes that work related bullying and person related bullying were related to low levels of strength and commitment which results high turnover intention where work engagement acts as a partial mediator Khalique, et al., (2018) conducted the study on the impact of workplace bullying on intention to leave, task performance, perceived organizational support, job satisfaction.. Results conclude that their significant impact of workplace bullying on intention to leave, task performance and perceived organizational support didn't mediate the relationship.

Yoo and Lee, (2018) conducted the study on relationship between workplace bullying and employees' well-being which includes occupational health and quality of life. This study also examines whether work family conflict mediate this association or not. To analyze the data multiple mediation analysis was used to analyze the data. Results concludes that Employees have low level of occupational health and lower levels of quality of life, are more exposed to workplace bullying. This study shows that greater work to family conflict occur when more exposure to workplace bullying was associated, which results lower the occupational health and level of quality of life.

Salin and Notelaers, (2019) conducted study on witnessing workplace bullying and its effect on well-being and employees attitude. Through violation of psychological contract learning, this study help to increase our understanding about the reasons of bullying that may cause negative impact for witnesses. Results concludes that witnessing bullying not necessarily produce stress outcomes but affects work-related attitudes. Results also concludes that effects of bullying not only on impacts targets but also affects the employee organization relationship.

Yao et al., (2020) conducted study on workplace bullying and its impact on employee knowledge hiding. This study also focuses on underlying mechanism between workplace bullying and employee knowledge hiding. The results of this study conclude that there is a positive relationship between workplace bullying and employee knowledge hiding, between workplace bullying and knowledge hiding; organizational identification and emotional exhaustion.

Buriro et al., (2021) Conducted study on horizontal and vertical workplace bullying which focuses on the impact of perceived organizational support and workplace bullying and their impacts on turn over intention of employees. The study concludes that superiors are more involved bullying as compared to the colleagues. .It shows that perceived organizational support has more negative relationship with bullying by superiors than bullying by colleagues. It also shows that there is negative relationship between perceived organizational support and turnover intention and bullying by superiors are more involved in turnover intention than by colleagues.

1.CONCLUDE

There have been multiple research articles on workplace bullying that have indicated different factors since last five years. Present study explored various researchers to deal the topic in-depth about the prevalence and aftermath of workplace bullying to present a present a collective review paper for future agenda. Workplace bullying has a negative impact on the efficiency of the working

force and combined productivity of any organization.

It is important for researchers to recognize the impacts, damages, and aftereffects of workplace bullying. With the increase of organizational development, the workplace bullying is increasing and requires to be addressed. With the available literature, it is still the need of hour to find the gaps in the literature to cope with bullying taking place in an organization. As the availability of literature that are explored from different aspects could give diverse ways for the authorities to implement the working models. This study could give a handful of research that explore the workplace bullying altogether could be used as guide by the authorities of different organizations, law makers, policy makers and future research that want to learn about the subject in detail. Further the study prompts more research and innovation that support the workplace bullying to back the idea of safe and accepting working place for everyone.

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1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

Faizah Mustafa Rahuja
University of Sindh, Jamshoro

EFFECT OF ONLINE VOCABULARY GAMES AS A TOOL FOR INCIDENTAL LEARNING OF VOCABULARY AT THE ELEMENTARY LEVEL

ABSTRACT
Vocabulary plays a crucial role in language learning. In literature, intentional and incidental learning are found crucial for English language learners. ICT-based online tools are proven helpful in teaching-learning situations. Online vocabulary games are not only engaging and entertaining tools for the users but can be a fun tool for promoting incidental learning of Vocabulary of any language. Nowadays, children spend many hours playing online games, and most of the online games are in the English language, these games can serve as a vocabulary-building tool. This experimental research focuses to study the effects of online vocabulary games as a tool to develop incidental learning of vocabulary at the elementary level. The pre-test-post-test equivalent groups' design was used in this experiment. There was a different treatment pattern applied during the experiment. The elementary classes of 6th to 8th students at GGHS LUMHS Colony Jamshoro constituted the population of the study. The sample consisted of 118 students. During the experiment period of 12-week duration, the experimental group received the treatment of online Vocabulary games. Meanwhile, the control group was taught through the traditional method.The results show that the online vocabulary games were more effective than the usual method of teaching vocabulary incidentally at the elementary level.

KEYWORDS
VOCABULARY, INCIDENTAL VOCABULARY LEARNING, ONLINE VOCABULARY GAMES.

1 INTRODUCTION

Language proficiency depends on the vocabulary of that particular language. As described by (Chen & Chung, 2008), one of the most important aspects of foreign language learning, especially in academic environments, is vocabulary. Students should begin learning English with vocabulary to master the English language. The value of vocabulary in learning English cannot be overstated, for, without it, one will be unable to express ourselves in all language skills which are speaking, listening, writing, andreading.

The vocabulary items are what make the language a coherent whole, the value of vocabulary has been mentioned within the lines, "a strong carrier of meaning" (Criado, 2013). Similarly, (Criado, 2013) made the argument that a person who says "I wonder if you could lend me your..." might not be able to communicate effectively without using the term "calculator," even though it is often sufficient to simply say "Calculator?" As a result, it's possible to argue that using a large vocabulary is the secret to good communication.

Vocabulary plays a vital part in understanding a foreign/target language. Vocabulary is described as the use of terms and phrases to convey information about a concept(Myers &Ankrum, 2018) and the use of words in a

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foreign language for a particular reason to convey amessage(Bounded et al., 2010). It is also possible to suggest that vocabulary is more than just a single word and that each piece of vocabulary should be referred to as an "object" rather than a "word"(Leki & Ur, 1989).

Vocabulary connects all language skills i.e speaking, listening, reading, and writing. Students must knowsufficient words amount and knowledge about their usage ineffective communication in a foreign/target language. Modern Methods and tools are found effective in teaching various curricular concepts at different levels. Since learning a language is a difficult task that can be exhausting at times (AydanErsöz, 2000). Linguists, academicians, and scholars have undertaken various studies to discuss the complexities of learning and teaching a language and to increase the efficacy of the lessons. Many studies indicate efficient tools and strategies to learn vocabulary, nowadays ELT teachers are focusing on games to improve students' vocabulary by using different games either paper games or online games by using incidental vocabulary learning strategies. The existing studies have discovered the possibility of incidental learning of vocabulary through online games.

One of the major problems of incidental vocabulary learning that came up in the research of learning vocabulary is the limitation of sources or media in learning vocabulary. This research is expected to contribute toa variety of resources that can be used by English learners, in vocabulary through online vocabulary games at the elementary level.

Turgut &Origin (2009) researched L2 vocabulary learning in digital games. They observed and interviewed students in Turkey while they played a range of digital games in English. They noted that motivation to play games and repetition of words in games helped L2 vocabulary learning. Participants reported using several vocabulary learning strategies: guessing from context, looking-up words in online dictionaries, and asking adjacent friends for meanings. Another study related to the computer game for vocabulary learning is done by Huang & Yang (2014)in investigating incidental vocabulary learning in MMORPG games. The results of this study showed that there was a progress difference between the pre-test and post-test for learners' vocabulary abilities, which reveals that learners' vocabulary abilities have improved after they used the MMORPG language learning environment. Learners were not only immersed in high-quality 3D virtual reality scenes and enjoyed interesting game tasks, but also acquired vocabulary incidentally. Therefore, learning new vocabulary in enjoyable and out-of-the-ordinary ways may assist students to learn vocabulary.

2 METHODOLOGY

This study was based on a hypothesis, which claims that vocabulary can be learned incidentally from playing online vocabulary games. Accordingly, experimental research was designed to examine the effect of this type of learning on SL/FL participants.As this was a small-scale experimental study only one high school was selected for the experiment. This is a single-gender girls' school who were selected and conveniently took part in this study. Specifically, there wereapproximately 118students in elementary-level classes from 6th to 8th. The sample selected randomly for the experimentation was divided into two equal groups of students from each grade. These participants, whose ages ranged from 9 to 13, were studying the English language as a compulsory subject. The course in which the present study was conducted was English compulsory. As a whole, the study lasted for 3 months which the participants took part.

The data collected through pre-test, post-test, and the participant's scores on the pre-test, ranging from zero to 40 were specified. This data was analyzed through version 23 of the

SPSS software package. In this program, the data were analyzed through a computer, and hypotheses were tested through mean and independent sample t-tests.

3 FINDINGS AND CONCLUSION

Based on the conducted research and discussion, the conclusion can be drawn that there was an incidental vocabulary acquisition in the experimental group. It was proved by the result of the two tests; the pre-test and post-test where the experimental group got better achievement than the control group. The statistical analysis of the average pre-test and post-test scores of both groups showed an improvement in students' achievement. By using online vocabulary games students can enjoy learning. They incidentally learn some new vocabulary without pressure. Online Vocabulary games help them to remember the new vocabulary interestingly. They also actively answer questions with more confidence. From the result, theresearcher concludes that incidental vocabulary acquisition took place via online vocabulary games and enhanced learners' interest as well.

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1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

Hina Agha

Bahria University Business School, Karachi, Sindh, Pakistan

BUSINESS STUDIES DEPARTMENTBAHRIA UNIVERSITY BUSINESS SCHOOLKARACHI, SINDH, PAKISTAN

Abstract

Every state wants to increase and enhance the efficiency and performance of its firms operating in that state to improve its overall economy. In this order they use many techniques, one of the best techniques to improve its state owned firm's efficiency and financial performance is privatization. In this study we examine the impact of privatization on financial performance of firms. We use pre and post privatization data to determine the change in financial performance and find out whether the change is positive or negative. The total population included 172 companies of which we took 36 companies in our study. We use financial performance as dependent variable and privatization as independent variable which consist of two related groups' pre and post privatization. We used paired sample t- test technique to analyze the data. In order to find out financial performance of the firms we measure profitability, liquidity and debt ratios and for calculating these ratios we measure ROE, ROA , Gross profit, current ratio, acid test ratio, debt ratio and long term debt ratio. After careful analysis of data we find out a positive significant relationship between financial performance and privatization. That means after privatization most firms shows improvement in their financial performance. We also concluded that there are some other factors as well other than privatization that improves firm's financial performance. In short we can say that there is a mixture of strategies with privatisation to improve financial performance of state owned enterprises.

Keywords:

RETURN ON EQUITY (ROE), RETURN ON ASSETS (ROA), GROSS PROFIT(GP),CURRENT RATIO (CR), ACID TEST RATIO (ATR), DEBT RATIO (DBR), LONG TERM DEBT RATIO (LTDR), STATE OWNED ENTERPRISES (SOES), GROSS DOMESTIC PRODUCT (GDP).

1. Introduction

Every state wants to increase the efficiency and performance of its firms operating in the country. There are many ways through which this objective can be achieved but the most popular way to increase the efficiency and enhance the performance of state owned firms is to convert them into privatized firms. Al-Sarhan, M. and Presley,M. R. (2001) . In most countries privatization is considered as the most effective tool for improving efficiency and enhancing financial performance of state owned firms. Privatization can be defined by some researchers as the transfer of ownership of production operations from private to public sector. According to IMF and World Bank's definition privatization occurs only when government sells its shares to public and decrease it holding in the entity to less than 25 percent. World bank (2004). The process of privatisation was

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initiated in 1970's throughout the world as it is taken the most accurate step for improving performances. Europe Italy, Germany was also taken privatisation as a remedy for the poor performance of state owned companies in 1990,s, it is also observed that privately owned firms are worked more efficiently as compare t o state owned firms.Ogden, S. (1990).

In Pakistan, during 1970s, private firms w ere taken into government control and ownership under the intense nationalization program but after this nationalization, this led to economic deterioration and after few years the performance and management started going down so there was a need arose for privatization , and the government of that time start thinking for privatized those firms again. In 1990s the de nationalization process was started. It was first inaugurated by the time Prime MinisterNawaz Sharif , in order to enhance the performance of the nationalized industries towards market economy, immediately after the economic recession of Soviet Union in 1989-90. Khan, I.A. and Hijazi, S. (2003). The program was launched to increase the GDP and the economic and social conditions of Pakistan. In this study we will discuss whether the privatisation process has a positive impact on the firms' financial performance by comparing the pre and post privatisation financial results of those firms. For this purpose, we took financial performance as dependent Variable and privatisation as independent variable which constituted two related groups i.e. before and after privatisation. To measure the dependent variable i.e. financial performance of the firms we analyse three sub variables including profitability, liquidity and debt ratios of the firms. To measure these three variables in order to examine financial performance we have to calculate the ROE, ROA, GROSS PROFIT, CURRTENT RATIO, ACID TEST RATIO, DEBT RATIO, LONG TERM DEBT RATIO.

1.2. Significance of the study

Privatisation is one of the greatest challenges which are faced by the government all over the world. There are many ways to privatize the SOES. This study helps to evaluate the impact of privatisation on financial performance of non financial institutions. It would be helpful for the government to take decisions about the privatization of its enterprises and to evaluate its effects on the economic growth of the country.

1.3. Objectives of the research

The objective of the study is to be understand that the privatization of SOEs has a positive or negative significant impact on financial performance of a firm or weather it has no significant impact on it .

1.6. Research problem:

It has suggested by the financial analysis of financial performance of the SOEs, that they are not satisfactory despite massive budget allocation and subsidies to them.The SOEs has been proven the inefficient and wasteful services and low quality products.Moreover, most of those enterprises are overstaffed and pricing at below cost resulting in losses which is a burden on the GDP. To cover these financial losses state need to increases tax revenues. Most of the governments are not capable in providing capital to SOEs. (World Bank, 2004). Most of the studies on privatization in developing countires did not considered the financial performances post privatisation. Although a number of empirical studies have been conducted in order to find out the solution for the problems facing by SOEs, not much focused has been given to privatisation as a key tool for the betterment of SOEs. William L. Megginson (2017). Mehmood, K. A. and Faridi, M.Z.(2013) found that the strategy of privatisation of Kenya Airways for improving the operating and financial performance may be

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successful but some other factors are also responsible. Also the researchers observed that no study has been taken fully the impact of privatisation on financial performance in developing countries.Ghafoor, A. and Weiss, J. (1999) has been taken into consideration the impact of privatisation on financial performance of electrical sector but they also mentioned that no studied fully concentrated on all he sectors of the Pakistan's firms in order to see the impact on privatisation on their financial performance, therefore this research is intended to find out the solution for the research question, "Has privatisation have any impact on the financial performance of Ex- state owned enterprises now listed on the PSX"?

2. Literature Review

Boubakri , N. and Claude, J. (1998) examines the financial performance of 79 companies taken from 21 countries which experienced full or half privatization process during the years 1980 to 1992. They use typical financial accounting variables to find out the results. The study finds out that there is an increase in profitability, operating efficiency and in employment level. But they also find there are some other important factors as well which effects financial performance of a firm

Khan, I.A. and Hijazi, S. (2003) This paper determine the impact of privatisation on employment and output of firms in Pakistan. This study uses edible oil and cement sectors to analyse the impact of pre and post privatisation on the firms. At to theoretical extent, privatisation has show improvement at financial

level but some consequences at social level also it shows at empirical level that privatisation show negative results in short run but in long run it has positive impacts. In shorts study conclude that there are many problems in the system and privatisation is not the only solution

William L. M. and Natalie, L. S. (2006)Supports the privatization. According to this study very little study goes against the privatisation but most of the researches show that privatization has positive impacts on firm performance and efficiency. Also there is no negative impact on the employment ratio and no downsizing found in major divested firm. They took sample from telecommunication, electricity and energy sectors companies and their pre and post data analysis shows that privatization has good impacts on their infrastructure and efficiency. Also in this study they examine different studies on the impact of privatisation on developing countries' economies. Most studies shows that after privatisation the operating and financial performance shows better results, only few studies show that there is no impact of privatisation on performance. In this study they took many companies from different developing countries and apply different methodology tools to find out the impacts of privatisation. The results show that privatisation would have positive impacts if it is implemented with restrictions of the system.

Wood, J. (2007) This study describes that in UK there was 40 years monopoly in electricity system by state owned company after that in 1980s the new government decided that this sector should be privatized. Afterwards, the electricity sector went under privatization process and now there are more than many companies in this sector performing well in terms of financial returns and operating efficiencies as well.

Al-Sarhan, M. and Presley,M. R. (2001) this article is based on the study that find out that different sectors and individuals are in the support of privatization in Suadia Arabia or not. The private sector general public all are in support of privatization and in their opinion privatization will benefit the economy and help the country to compete more closely with the global world.

Rizzo, M. (2002) This paper focuses the impacts of privatisation of the Dar es Salaam transport system. It begins with the decline in the profits of public sector transport company and the first

inauguration of the market of private buses in 1983. The study than moves to the post privatisation impact on the revenues as well as effects on economy and the employees. For study a questionnaire had been used to find out the results and the results shows that there is a positive impact of privatisation on econmy and employees of transport system but there is a need of state control over the this system.

Forster,T.H. and Mouly, V.S.,(2006) the purpose of this article is to study the privatisation process and its effects on organisational change in the electricity sector in the Gambia. The results of the research tell that change processes that are endogenous are more emphasis to achieve their desired objectives when compared to exogenous changes. Qualitative approach is used in methodology this study shows that less development countries are not properly implemented the process and hence could not get the desired results. First there is a need to implement all the strategies properly than the privatization would be successful in less developed countries. This study also suggest the work should be done on ll the sectors o the country in order to find out an accumulated impact.

Makhija, A.K., (2006). this article studies the need of privatization in India. India is also a developing country and it needs SOEs to reforms into privatized units as the corruption has been increasing in SOEs, the public is also now in favour of privatization but there is no such progress is showing towards privatization of state owned enterprises. Although privatization is not the only solution of better results but it would be a step towards better performance as the control over managers would be increases in privatized firms.

Stevenson, S. (2006) This study focuses on the privatisation in UK of utility and non utility firms. According to this study privatization gives good results in long run but in short run it seems not beneficial. If the strict control over the system persists privatisation gives good results in long run.

Boubakri, N., Cosset, C. and Guedhami, O. (2008) This article studies the effects of privatisation on corporate governance and financial and operating performance. They took data from many developing countries also including Pakistan. They study that privatisation can improvement performance but there still some areas need to be improved even after privatisation. Privatisation is not all alone can change the whole performance. They said that SOEs rationale is that they are good for state control but they have constrains because managers may think only for political benefits rather than economical benefits and also they work firstly for their own benefits rather than for the economy because of poor packages. So there is a strong need for privatisation but also changes in structure.

Scott, J.and Wallsten, J. (2010) this study about the recent changes in the telecommunication sector around the world. There are so many changes have been taken place in recent days. In this study they read about the effects of privatisation on the financial performance of telecommunication sector. the study suggest that monopoly factor plays negative role in operating performance of the sector but privatization effects well on financial performance of the telecommunication sector. This study emphasise the importance of research on the topic of privatisations and its effect on financial and operating performance of enterprises. This study tells that there is a gap and less focus on this topic. They focus on best ways to privatize a company. According to this study there are so many other factors that effects financial performance and less effects of privatisation, a firm can be improved under state ownership if well managed and administered.

Kausar, R. and Azad, T. (2012). this study tested the privatization programme's impact in developing countries and its impact on the different aspects like profitability, capital market investment , dividend, expenditures and revenue of the firms but lower debt ratios and employment of firms after privatisation. The sample consists of 33 companies from 8 sectors. In overall analysis the study find outs the significant enhancement in performance in financial, automobile, cement,

energy, fertilizer, engineering sectors' post privatization but ghee and chemical sectors were indifferent in almost all cases. Some sectors show almost similar results and shows positive impact of privatisation. Empirical evidences show that in some sectors profitability, efficiency, liquidity, debt ratios and dividend increases after privatization but the output and employment decrease in sectors after privatisation.

Mehmood, K. A. and Faridi, M.Z.(2013) article focuses on the effects of privatisation of SOEs on economic performance of Pakistan. As the political situation of Pakistan is not so go so far since starting of 2000s, foreign companies are reluctant to invest in Pakistan. They are analysing that is there any better impact by converting SOES into privatized units. For this purpose they took data from 1998 to 2008. The study found consistent and gradual increase over the period of time, in the rate of GDP/Economic Growth, after privatization. Also, this study refer that Global alliances in telecommunication are on the increase. France Telecom, Deutsche Telekom, Telia AB and others are actively involved in global ventures. But they disapproved if the telecommunication sectors are still under government control. Those countries where telecommunication sector is still under government control cannot compete efficiently and cannot efficiently become the part of globalization. The study finds outs that countries who choose a slow system toward privatization should not be allowed entry into the US telecommunication market should their global alliances with us firms be approved. The development in government sector is still a question in those countries where government still owes the financial stake in the sector.

One more studied has conducted by Bachiller, P. (2017), to find out the relationship of the performance of the companies and the ownership of the firms. A meta analysis has been conducted to find out why there is a divergence in the performance of privatized firms. A sample of 60 privatize firms has been taken and a meta analysis has conducted only to find out that the firms which are privatized through public offerings are performed much better.it is also observed by the researchers tht there I not enough studies has been done in the developing countries to find out the impact of privatisation on financial performance especially on all the sectors collectively.

William L. Megginson (2017), this research studied the economic financial and over all political development because of the privatisation of the firms. The study also find out that in 21st century the trend is in high position to privatised the firms and reduce government control as the privatized firms shows more profits and better services which in turn results in better economy. Still the researcher thinks that not enough work has been one exclusively to determine the true impact of privatisation on financial performance.

Estrin. S., Pelletier. A. (2018). Explains in their study the various objectives of privatisation of government and its impact on industrial relationship in developing country.. They tell that government has various objectives like sometimes there are political objectives while sometimes there are socio economical and sometimes to improve economy or the sector performance. Different objectives have different impact on industrial relations.

Ahmed, B., Alam, s. (2018). This article is about the impact of privatization of cement sector in Pakistan. According to this article there is no improvement in the efficiency of this sector after getting privatized. Also they have mentioned some main reasons like inappropriate planning, greater energy dependence and insecurity as well as it is over staffed. It is also stated that current problems stem primarily from organisational constraints. The solution may not be a choice between public or private ownership but to determine an appropriate corruption free structure for the institution.

Hypothesis

1. H0: The privatization process does not increase the profitability of companies.

HA: The privatization process increases the profitability of companies

2. *H0: The privatization process does not improves the liquidity ratios of companies.*
   HA: The privatization process improves the liquidity ratios of companies
3. *H0: The privatization process does not improve debt ratios of companies.*
   HA: The privatization process improves debt ratios of companies

3. Research Methodology

In this section, we will discuss the statistical techniques, population, sample size, research design and variables we used in the study. We describe method of collection of data and how we calculate all the ratios. The research design we used in this study explained the impact of privatisation by comparing the pre and post privatization financial performance of firms that got privatized. It provides a clear picture of financial performance after privatization. For this purpose, in this study we computed financial ratios and analyzed them to find out whether there is any positive impact of privatisation on financial performance of the firms.The data used in this study is based on secondary data which is taken from different sources. The sources of these data are the following specified websites.

Sources:

www.privatisation.gov.pk

www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=10530675

Annual reports of the firms that got privatised.

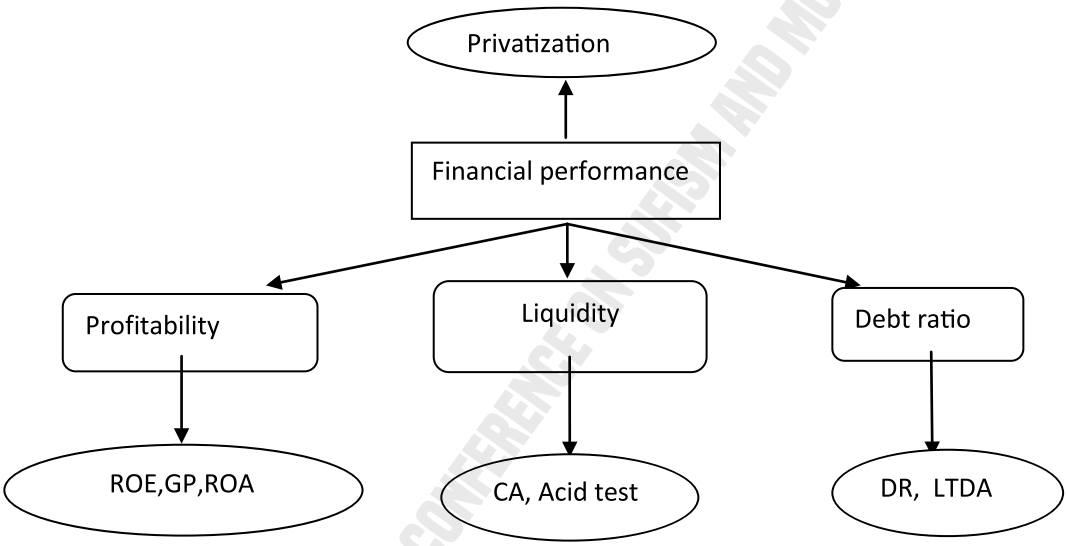
This study is focused on 35 companies. Population size i.e. total firms that got privatized is 172 from all sectors other than financial. The remaining companies are not included because of different reasons mentioned in Table1.In this study the dependent Variable is financial performance and independent variable is privatisation which constituted two related groups i.e. before and after privatisation. To measure the dependent variable i.e. financial performance of the firms we analyse three sub variables including profitability, liquidity and debt ratios of the firms. To measure these three variables in order to examine financial performance we have to calculate the ROE, ROA, GROSS PROFIT, CURRTENT RATIO, ACID TEST RATIO, DEBT RATIO, LONG TERM DEBT RATIO.

Table 1: Data description

Description	No.
Included in research analysis	35
Deleted due to heavy losses: outlier	15
27 % shares not transferred	14
Data is not available	48
Not included; units closed after privatization	52
Merged and renamed	8
Total	172

TheStatistical tool and technique used in this study is paired sample t-test. Dependent variable is financial performance and independent variable is privatisation. Paired t-test is the best technique for comparing and testing the difference of the data. As earlier mentioned, financial performance of the firms will be measured through three main variables which are profitability, liquidity and debt ratio and these three variables are determined by ROE,ROA, GP , CR, ATR, DR. LTDR.We can also demonstrate above equations as below

Theoretical framework



4. Data Analysis and Findings

In order to test our hypothesis, we run a paired sample t-test on a 10 years data for each firm which consist 5 years before privatisation and 5 year post privatisation of recent years. The condition of all the companies included in our study is that the government must transferred 26 percent of shares of that company. A paired t-test measures the means from a sample vary over 2 test conditions. The paired t-test is commonly used to compare a sample's mean before and after a change. The researchers test whether there is a significant difference comes in between the observations in condition 1 and condition 2.

4.1. Analysis of Profitability, Liquidity and Debt ratio

Our results of the study showed that the three sub variable we use for measuring financial performance of firms i.e. profitability, liquidity and debt ratio has improves after privatisation as their measures i.e.ROE,ROA, GP , CR, ATR, DR. LTDR means are improved as shown below in the following table 3.

Table 3

Paired Samples Statistics

Variables	Mean difference	SD	t- statistics	Sig(2 tailed)
ROA After Privatisation	25.2116	10.79658	7.907	.000
ROA Before Privatisation	8.4110	6.95696		
ROE After Privatisation	25.4123	12.92454	8.609	.000
ROE Before Privatisation	6.5835	5.25569		
GP After Privatisation	20.7121	6.85272	13.383	.000
GP Before Privatisation	4.5387	2.45834		
CR After Privatisation	11.8620	2.02988	-4.765	.000
CR Before Privatisation	2.23611	11.98399		

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ATR After Privatisation	8.5555	1.15567	-7.313	.000
ATR Before Privatisation	.7055	6.29768		
DR After Privatisation	14.5193	1.26166	-6.593	.000
DR Before Privatisation	16.5812	13.83172		
LTDR After Privatisation	17.8713	1.41560	6.545	.000
LTDR Before Privatisation	28.6305	13.95145		

Table 3 shows that the mean of ROA improves significantly as shows in the table. The mean was 8.41 before privatisation and it is increases to 25.21 after privatisation. It shows the return on assets increased after privatisation and hence the profitability. Also the difference between two mean is not equal to zero and there is a significant difference between the two mean. The p value which is less than 0.05 shows that the mean of after privatisation is significantly increased as compare to before privatisation mean.

As far as the mean of ROE, It improves significantly from 6.58 before privatisation to 25.14 after privatisation. The difference is 18.82 before and after mean. The difference is huge because of the long period's difference between pre and post data. The results are statistically significant proved through t- test. The mean of gross profit improves significantly as shows in the table. The mean was 4.5 before privatisation and it is increases to 20.7 after privatisation.The mean of current ratio improves significantly as shows in the table. The mean was 2.23 before privatisation and it is increases to 11.23 after privatisation. The mean of acid test ratio improves significantly as shows in the table. The mean was 16.91 before privatisation and it is decreases to 14.58 after privatisation. The mean of acid test ratio improves significantly as shows in the table. The mean was 29.87 before privatisation and it is decreases to 17.63 after privatisation, it shows the long term debt ratio decreased after privatisation at 95 percent confidence interval and hence the overall debt ratio of the firm.

.5. Conclusion and Implications

The conclusion of our study is that privatization has significant positive impact on financial performance of firms after got privatized because most of theformer state owned enterprises showed improvement in their financial ratios. But we also suggest that there are some more factors that affect financial performance of the firms and there must be a mixture of strategies with the lead of privatisation to improve the financial performance.Our findings proved that privatisation has positive impacts on financial performance on most of the firms. The results have rejected the entire null hypothesis. The first null hypothesis was that privatisation does not increase the profitability of companies. Our results has proved that after privatisation firm's profitability has been increased, hence the first null hypothesis rejected. The second null hypothesis was that privatisation process does not improves the liquidity ratios of companies. Our results proved that liquidity has improved after privatisation and findings has rejected second null hypothesis as current ratio and acid test ratio has improved. Third null hypothesis was that privatisation process does not improve debt ratios of companies. Our results also rejected third null hypothesis as debt ratio improved after privatisation. So results has been proved that financial performance has improved after privatisation in most of the companies and privatisation has a significant positive impact on firms 'financial performance

5.1. Implications for theory

We can describe that state should focuses on good governance, good policy making, and supportive environment for guidance and offers incentives for private sector so that they can provide effective and efficient goods and services. Also some SOEs like PIA can be privatized in order to improve its worse financial conditions. As the study suggested that with some other aspects, privatisation plays a vital role in improving financial conditions. With other measures like strict laws and accountability system, privatisation can produce good results for the organizations like Pakistan International Airline to improve its performance in financial terms.

5.2. Limitation of the study

The major limitation which we faced in this study is in data collection especially for the pre privatised data. Some of the limitations in the process of privatisation and its successful implementation in Pakistan are some strict regulations in the country and also lack of infrastructure and other facilities. Also corruption in the system is a major hurdle in proper privatisation process.

5.7 Directions for further research

At the end, a fresh room for further researchers is there, they must undergo for a detail analysis of the firms that has privatized and find out other aspects as well that can also effect financial performance of the firms, like capital budgeting, working capital management, capital structure and other finance related decisions. Also other researchers may find other impacts of privatisation on firms like its impact on the efficiency and productivity of the firm as we only examined the financial performance in this study.

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Appendix

1.Key terms and Formulas
Following are the key terms and their definition and explanation are given in order to understand and interpret them easily.

1.1Profitability ratios
1. Gross margin, Gross profit margin
Gross margin is calculated by gross profit divided net sales.
2. Return on equity (ROE)
Return on equity is calculated by net income divided by average share holders' equity.
3. Return on assets (ROA)
Return on assets is calculated by net income divided by total assets.

1.2 Liquidity ratios
1. Current ratio (Working Capital Ratio)
Current assets are calculated by dividing current assets by current liabilities.
2. Acid-test ratio (Quick ratio)
Acid test ratio also known as quick ratio is determined by current assets less inventories plus prepayments divided by current liabilities.

1.3 Debt ratios (leveraging ratios)
1. Debt ratio
Debt ratio is calculated by total liabilities divided by total assets
2. Long Term debt Ratio.
It is equal to Long Term Debt / Total Assets

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Hussain Khawaja[1], Dr. Mohammad Azeem Qureshi[2], Prof: Dr. ParveenMunshi[3]

Institute of Business Management Karachi, Sindh, Pakistan[2]

University of Sufism & Modern Sciences Bhitshah, Sindh, Pakistan [1 3]

FINANCIAL LITERACY IN ISLAMIC FINANCE EMPIRICAL EVIDENCE FROM URBAN CENTER

ABSTRACT

There is a great concern from an expert on how do the individualsmake their financial choices and the impact of their decision on financial wellbeing. A large number of researchers have shown concern that individuals in developing countries as well as developed countries do not acquire financial literacy which leads to inefficient decision making. A decision requires a great deal of knowledge and expertise and this impacts family financial well-being. Informal learning from mass communication or family member does not provide sufficient expertise to deal with today's challenging market offering and this leads to erroneousfinancial decisions. Islamic financial product knowledge is one such financial product whose complete knowledge is not attained by investors generally and therefore they choose a traditional financial product. The key objective of this study is to determine the relationship between financial literacy and intention to choose Islamic financial products. A total of 323 questionnaires were shared out of which 281 were administered. These respondents shared a diverse background ranging from college students to investors of the market. Moreover, Smart PLS 3.3.2 was incorporate to analyze model fitness through PLS-SEM. The results of the study shows that there is a significant mediating effect of financial literacy among financial attitude and financial behavior, financial wellbeing, Influenced financial decision, and Islamic financial services. However, there is an insignificant mediation effect of financial literacy on Islamic financialproduct knowledge and financial behavior, financial well-being, influenced financial decision, and Islamic financial services. This study can help financial decision-makers to improve their financial literacy before incorporating financial alternatives.

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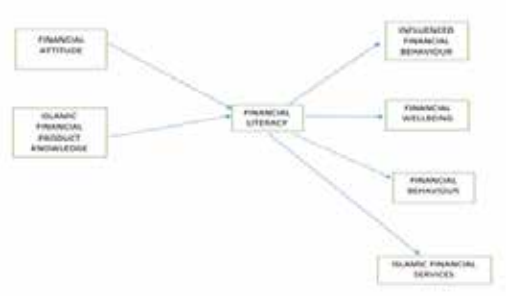
Keywords:
Financial literacy, Financial behavior, Islamic financial services, financial well-being, Influenced financial decision, financial attitude

Introduction

In today's dynamic environment, everything has evolved rapidly in the banking environment. Islamic banking has brought a new dimension to financial investors. Islamic banking has caught the eye of many investors making the industry more competitive than ever(Zaman et al., 2017). With the financial crisis and market bubble, economists have questioned the accuracy of traditional financial to accurately anticipate financial outcomes. This has brought a surge for alternative financial approaches which take into consideration of psychology and other social sciences variables which may help precisely in predicting investor's behavior. Although most Islamic banks are located in the Middle East and Islamic countries, investors all over the world have shown great interest in Islamic banking. The major preamble of the Islamic financial system is based on a Riba-free mode of financing(Zaman et al., 2017). According to an Islamic point of view, investors not only need to know the products the financial market is offering But also the market offer is according to shariah law and approved by the shariah board.(Albaity & Rahman, 2019). This understanding is developed through financial literacy which helps evaluate different financial offerings. Since there are thousands of products available in the market evaluating their elements needs financial expertise (Albaity & Rahman, 2019). Information asymmetry has led to major problems in the past and one of the reasons for that is the lack of financial expertise to evaluate key information. As investors lack key expertise, they are unable to assess the market situation and therefore uncertainty and disappointment (Albaity & Rahman, 2019). On average, people in Pakistan have a low level of financial understanding. This is the reason people don't often understand technical reports and financial information published in a newspaper or on a website. One of the major issues is that most people have never gotten any financial or economic training, thus they lack basic information, making it difficult to learn new things. Due to a lack of basic knowledge, it is difficult to make sound decisions, and as a result, people frequently adopt risky positions, resulting in debt and a lack of funds. This result in a financial decision based on financial behavior influenced by awareness and intellectual abilities. As a result of novel financial products, financial literacy and the need to improve it are receiving more attention.(Zaman et al., 2017).

Past studies have defined financial literacy in terms of financial behavior, financial attitude, financial planning, financial ability to evaluate multidimensional market opportunities (Paper et al., 2019). These studies have provided evidence on the potential of financial literacy and efficient financial decisions. Studies have also shown that financial literacy is gained at the later stage of life but financial literacy should be taught from childhood. This enables a person to develop a sense of efficient and effective decision-making ability in the later stages of life(Grohmann et al., 2015).

CONCEPTUAL FRAMEWORK



Hypothesis:

H1: there is a mediating effect of financial literacy between:
A: financial attitude and influenced financial behavior
B: financial attitude and financial behavior
C: Financial attitude and Islamic Financial Services
D: financial attitude and financial wellbeing
H2: there is a mediating effect of financial literacy between
A: Islamic financial product knowledge and Influenced financial behavior
B: Islamic financial product knowledge and financial behavior
C: Islamic Financial Product Knowledge and Islamic Financial Services
D: Islamic Financial Product Knowledge and financial wellbeing

4. Results:

4.1 Profile of the respondent:

According to the demographics statistics presented in this study after collecting all the data from the relevant sample, out of 314 responses, 177 (55.4%) were males and 137 (44.6%) were female. The majority of the respondents were between the age group of (26-35) (39.7%). Almost all the respondents have received some form of formal education ranging from Matriculation to Master & above. (26.3%) (83) were intermediate while (13.3%) (42) Were master or above.

4.2 Descriptive statistics:
Table 1: Descriptive Analysis

The above table shows the mean, standard deviation, skewness, kurtosis, and Cronbach's alpha of the data. The data did not have any missing value and follow a univariate normal distribution as the value of skewness is less than ±3 and kurtosis less than ±7 Kline (2004). To run a regression analysis, data hould follow a normal distribution as in this case data is within the required range.

4.2 Construct's Reliability:
The construct reliability is referred to as the ability of the construct to measure consistently what it wants to measure(Azhar et al., 2018). The reliability of normally distributed data is checked through Cronbach's Alpha denoted by α. Even though adopted instruments used in previous studies have shown required Cronbach's alpha values, however, reliability needs to be checked again to account for the difference in culture and demographics (Santos, 1999). According to (Pallant, 2001), Cronbach's alpha value above 0.60 is considered (Azhar et al., 2018). Therefore consistency of the instruments was evaluated using Cronbach's alpha value, detailed analysis is depicted in the table above.
Table 1 showed that the reliability of Financial Literacy is highest (α=0.962 M=2.546, S.D=0.883) and the reliability of Influenced Financial Decision is lowest at (α=0.610 M=2.228, S.D=0.437)

4.3 Construct Validity

The construct validity evaluates the ability of the construct to measure what it is supposed to measure (Fink, 2010). The constructs adopted in this research were used in previous studies but due to cultural and demographic difference validity of the constructs need to reconfirm. The construct validity is determined through convergent validity and discriminant validity. According to (Fornell and Larcker, 1981) the convergent validity is assessed through average variance explained the cutoff value of which should be above 0.40 when the composite reliability is above 0.70. In this research, all the average variable explained values are above 0.452 and composite

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reliability of all the variables is above 0.70, this supports the claim of convergent validity and reliability (Hair et al, 2009).

4.4 Discriminant Validity Test

The discriminant validity is used to evaluate the uniqueness of constructs (Hair et al., 2009). The criteria for evaluating the discriminant validity is the square root of the variance should be greater than the pair of correlations. The below table depicts that condition of discriminant validity is sufficient (Ansari, Khalid, Jalees&Ramish, 2017; Fornell&Larcker, 1981)

Structural Equation Modeling and Mediation Analysis:

This research is conducted taken into account cross-section data and therefore Harmon's Single Factor Test is suggested for evaluating the common method bias. As per recommendations, the test of single factor test should be able to explain the variance of more than 40%. This would suggest that there is less chance of common method bias. In this, the CMB is greater than 40% and therefore the criteria are fulfilled (Ali, 2016; Reams, 2013).

The model of the study was analyzed through PLS-SEM analysis using Smart PLS software 3.3.2. The confirmatory factor analysis was conducted to test the model. Altogether, the model's factors were significant which fulfills the criteria of 0.40 (Ertz et al., 2016). The reliability and validity as mentioned above are also found to be significant and fulfill the criteria i.e composite reliability>0.70 AVE>0.40 and Cronbach Alpha>0.60(Azhar et al., 2018)(Fornell & Larcker, 1994)(Hair et al, 2006). To test the smulticollinearity Variance inflationary Factor Analysis was conducted. The criteria for checking no multicollinearity is 10>VIF>1(Arifin& Yusoff, 2016) In this study, VIF was found to be above 1 and below 10, therefore there is no chance of multivariate multicollinearity. To check whether the model is fit, indices are referred to. The SRMR value is 0.081 which is below the cutoff value of 0.01 (Henseler et al., 2014)& NFI show 0.673. This shows that model is in the acceptable range of goodness of fit.

Table 3: SEM Coefficient and Specific indirect effect

The above table shows the results of test indices. To test the mediation effect Bootstrapping was done using 2000 subsamples. The results depict that financial literacy has a significant effect on mediation between financial attitude and financial behavior. The mediation effect of financial literacy is also significant between Islamic Financial Service knowledge and financial behavior. Similarly, the Mediation effect of financial literacy is significant between Financial Attitude and Financial wellbeing, Islamic financial Service knowledge and financial well-being, Financial Attitude and Influenced financial decision, Islamic financial Service knowledge, and Influenced Financial decision &financial attitude and Islamic Financial Services. However, the mediation effect of financial literacy on, Islamic financial service knowledge and Islamic Financial services is not significant.

	Mean	Std: Dev:	Skewness	Kurtosis	Cronbach's Alpha
FL	2.546	0.883	1.106	-0.52	0.962
FB	1.241993	0.4632482	1.997	3.062	0.901
FWB	1.78	0.644021	1.255	1.385	0.635
IFD	2.228648	0.437104	1.791	2.295	0.610
IF	2.436197	0.398082	1.004	1.976	0.753
IFS	2.30427	0.504391	0.439	0.1148	0.930
FA	2.666904	0.635672	0.94	0.3082	0.824

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	Coefficient	T-Statistics (|O/STDEV|)	Hypothesis
FA -> FL -> FB	0.397	8.827	Supported
IBFSK -> FL -> FB	0.094	1.897	Not Supported
FA -> FL -> FWB	0.343	7.570	Supported
IBFSK -> FL -> FWB	0.081	1.927	Not Supported
FA -> FL -> IFD	0.413	9.311	Supported
IBFSK -> FL -> IFD	0.097	1.897	Not Supported
FA -> FL -> IFS	0.199	5.729	Supported
IBFSK -> FL -> IFS	0.047	1.715	Not Supported



5. Discussion& Conclusion:

Through this study, we tried to explain the impact of financial literacy on Islamic financial investment decisions. The result achieved through this study is consistent with the previous studies conducted by other scholars. To confirm the results of these hypotheses in the light of previous studies, findings are presented below.

Hypothesis 1:

H1: there is a mediating effect of financial literacy between:

A: Financial attitude and influenced financial behavior

B: Financial attitude and financial behavior

C: Financial attitude and Islamic Financial Services

D: Financial attitude and financial wellbeing

A: Financial attitude and influenced financial behavior

This hypothesis states that financial literacy mediates the relationship between financial attitudes and influenced financial decisions. This hypothesis was confirmed through the significant results obtained and presented in the table above. The results show that due to financial literacy, the financial attitude of investors is better shaped by family decisions. These results are consistent with previous studies which show that how financial knowledge whatever they have learned through family socialization has helped them make an improved decision which naturally impacts their family financial conditions. (Khawar, S., Sarwar, 2021)

H1 B: Financial attitude and financial behavior

This hypothesis states financial literacy mediates the relationship between financial literacy and financial behavior. This hypothesis was confirmed through the result presented in the table above. The results depict that the financial attitude of investors is positive towards financial behavior when financial literacy is increase. These results are consistent with the result presented in previous studies (Ameliawati, M., &Setiyani, R. 2018). Which states that the more knowledgeable the investor better is the financial behavior and better the financial decision making.

H1: C: Financial attitude and Islamic Financial Services

This hypothesis evaluates the effect of financial attitude and adoption of financial service in the presence of financial literacy. The analysis result shows significant mediation of financial literacy between financial attitude and financial literacy. This implies that as the

investor becomes knowledgeable, as more awareness is gained investors are more inclined towards using Islamic financial services. This result is consistent with the previous study. As depicted in the study by (Albaity & Rahman, 2019) which states that Islamic financial literacy, awareness, reputation, and intention to use Islamic financial services increase to a large extent.

H1: D: Financial attitude and financial wellbeing

The hypothesis states that how financial literacy helps make effective and efficient decisions leads to enriched financial well-being. This assumption is confirmed through the analysis of the study. A significant mediating relationship shows the role of financial literacy in better evaluating financial choices. These results are also consistent with a previous study conducted by (Kamakia, 2017) which shows that financially literate people are better than financial illiterate at making financial decisions.

H2: There is a mediating effect of financial literacy between

A: Islamic financial product knowledge and Influenced financial behavior
B: Islamic financial product knowledge and financial behavior
C: Islamic Financial Product Knowledge and Islamic Financial Services
D: Islamic Financial Product Knowledge and financial wellbeing

Our analysis shows that there is no mediation effect of financial literacy between Islamic financial product knowledge and financial behavior. The result shows the second hypothesis is unsubstantiated, this means that the mediation effect of financial literacy between Islamic financial product knowledge and financial behavior is insignificant. However, the direct effect shows there is a significant effect of Islamic financial product knowledge on financial literacy but this financial does not improve financial behavior, financial service adoption, financial well-being, and financial behavior of the individuals.

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Komal Ayaz Soomro[1], Iffat Batool Naqvi[2] , Tooba Hashmi[3]
Mehran University institute of science technology & development Jamshoro Sindh Pakistan [1 2 3]

TRADEOFF BETWEEN HEALTH HAZARDS AND HEALTH EXPENDITURES IN BANGLE INDUSTRY: A CASE STUDY OF HYDERABAD DISTRICT

ABSTRACT
The purpose of this study is to see what are the health risks and hazards to the workers of the bangle industry. Very limited research has been done on this area in Pakistan; Hyderabad city is famous for the bangle making and is known as the "city of bangles". This research will examine that what are the health related risks and hazards that takes place at bangle industry. Data were based on primary data, questionnaire has been made to collect data from the workers, managers and other people associated with the bangle industry. The data is taken mainly from 3 factories located at Latifabad Hyderabad.Workers and their health have a complicated relationship. Workers are exposed to a number of risks and hazards at work. The results revealed that there are many health risks and hazards at bangle factory but some of them which are frequent and dangerous are for e.g. heart disease, skin problems, injuries in the eyes, lungs disease, getting caught in fire. No resources are there for the workers and their health is at constant risk, no safety measures have been taken to prevent from all these risks and hazards. Further, As a result, the findings of this research can encourage the bangle industry to come up with a safety measures for the workers of the bangle industry. It is suggested that the manager or upper authority should give some safety measure tools or objects to the workers of the bangle industry to prevent them from any risks and hazards happens there.

KEYWORDS
Health hazards, bangle industry, diseases, safety measures, lack of resources, workers

1 Introduction

In Pakistan, Hyderabad City is very famous for bangle making, usually known as the 'City of Bangles'. Hyderabad is also the major supplier of bangles all over Pakistan and sometimes abroad (LEF, 2010; Pathan, Shah and Ilyas, 2009; Wassan, Chandio and Khatoon, 2010; Jamali, 2007).The Sindh Industrial & Trading Estate (SITE) Area, the Old City, and Latifabad are the three primary areas in which the glass bangle industry in Hyderabad (Pakistan) operates. The SITE area is a true industrial park, with a diverse range of glass bangle manufacturing businesses. (Mahato et al., 2018).The glass bangles manufacturing is believed to be started as cottage industry which gradually grown over the period of time. In Pakistan and its neighboring countries different types of glass bangles are well-liked fashion accessories. The industry caters for the need of mainly domestic market and the product

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demand increases during the festive periods. (Rana et al., 2009). As we know that small scale industries are having great importance in our economy. As per definition is concerned "the small scale industry includes all units of production, factories in which less than 1 crore are invested as fixed capital". In these factories, workers are producing the products with the help of machine or manually(Singhl, 2019).The manufacturing of bangles was registered as an industry by the Pakistan Government and got the industrial status of industry in 2007 under National Employment Policy. (Mahato et al., 2018). Health hazards are chemical, physical or biological factors in our environment thatcan have negative impacts on our short- or long-term health. Exposure can occur through touch, inhalation, and ingestion. Understanding the risks of these hazards can help us to take action to avoid or mitigate these risks. Unfortunately, there has been little research on this area, non-availability of basic facilities, in case of any accident, no compensation or medical facility is provided. It is quite important to explore their health status to improve their working conditions. (Qureshi et al., 2017). Workers are working in a very bad condition at bangle industry, no proper safety measures have been given to them.

1.1 Literature review

According to the Rana et al, there is a need of improvement in the process of making bangles. The process is very much difficult and no safety measures have been given to the workers. The process is very old and the machines which are using in bangle industry are also not up to date. The unavailability of power supply, poor road infrastructure, transportation and port related problems hinder not only the growth of the firm but also affects competitiveness and efficiency of the firm. (Singhl et al.,2019). The results show that in case of an accident, no compensation payment or medical facility is provided to the women bangle workers. no health related benefits have been given to the women workers. they work they are being doing is very dangerous and it can cause many health hazards to the women or male workers. Occupational health hazards are generally ignored. (Qureshi et al., 2017). Very limited research has been done on the health hazards of bangle industry so the research shows that the work environment in this case is comprised of the technical environment, human environment and the organizational environment. These all seemed to influence the comfort of the officers and hence their level of commitment and job satisfaction.(Nderi et al.,2017). This work analyses the role that safety leadership and working conditions play in promoting employees' safety behaviours. the authors consider four components of working conditions: work pressure, environmental conditions and occupational hazards, safety incentives and co□worker support.(Fernández etal.,2017).Researcher such as (Bansal et al.,2016) revealed that women are playing with broken glass, which is hazardous to their health. No safety measures have been given to them and they are directly exposed to the fire and glass to make the bangles.They have a variety of health issues, including fatigue, disorientation, eye burn, and burn marks on their fingers. As a result, they are unable to use the facilities. Government health spending has a considerable impact on reducing infant and child mortality which contributes to the new evidence pointing to the importance of investing in health care services and the importance of governance in improving health outcomes (Farag, M., et al, 2013).

1.2 Research gap

The research gap in this study is that very little research has been done on the health risks and hazards of bangle industry. Previous research was only limited to the home based women working so this results in the vast area of other

workers male and female both that work in the factories of bangle industry and what are the health risks and hazards to them and how we can give them recommendations to overcome this problem with a solution. (Bansal et al., 2016)

1.1.2 Research question

**How health hazards affects health expendit ures of workers of Bangle industry Hyderabad in the context of social security options available for them?*

1.1.3 Objective of the study.

**To assess the health (risks & hazards) in bangle industry Hyderabad district.*

Methodology

The following research consists of Quantitative approach. The data were collected from secondary data and some primary data from literature review, and other from the bangle factories in Hyderabad. Mainly from 3 bangle industries in Hyderabad. The technique which isused is convenient sampling because I used the samples from my convenience. I selected 3 bangle industries and filled questionnaire from workers, manager and other people involved in the bangle industry to get to know what are the health risks and hazards at bangle industry. Secondary data can be a little older if we find anything in literature but in primary data we get the latest information by using questionnaire or by doing interviews.

The bangle industries under the study:

1) Al-Zarina bangle industry

2) Ikhtiyar bano bangle industry

3) Naheed mohammad Hussain bangle industry

Results and Conclusion

To assess the health risks and hazards in bangle industry Hyderabad, the result is provided in tabular and pie chart form.

Bangle industry is an informal sector, so there is no concept of medical facility or any kind of resources to overcome the health risks and hazards at bangle industry.

Below chart shows the responses of the workers at bangle industry that have been wounded at the industry.

These results came up with the questionnaire made and ask from the workers there. With all these diseases and hazards they have to work their because they had no choice

Sr No	Wounded	Number	Percentage
1	Yes	270	54%
2	No	230	46%
	Total	500	100

The list of the diseases of health risks and hazards at bangle industry given below:

Lung disease

Cuts with glass

Respiratory problem

Injuries in the eyes

TB

Bangle industry Hyderabad most common health and hazards that take place there.

We come to know the percentage of each health risks and hazards with the help of questionnaire I have made and asked to the workers of the bangle industry.

Workers suffer most with these health risks or diseases. No proper medical facilitation have been given to them and no proper safety measures have been given to the workers.

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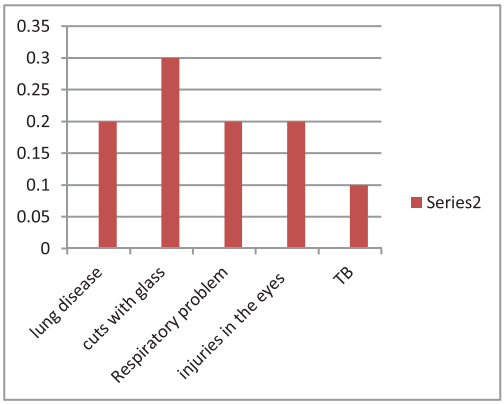

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Ms. Qammar-un-Nisa Jatoi[1], Dr. Qamar Abbas[2]; Dr. Taskeen Zehra[3]

University of Sufism and Modern Sciences (USMS), Bhitshah [1 3]

Shah Abdul Latif University, Khairpur [2]

ASSESING THE MOTIVATIONAL FACTORS OF UNDERGRADUATE STUDENTS OF MODERN SCIENCES BEHIND LEARNING ENGLISH: A CASE OF PUBLIC SECTOR UNIVERSITY, BHITSHAH

ABSTRACT

English Learning is not the product of any one isolated factor but the combination of factors e.g., social, cultural, and contextual that results in the motivation for learning goals and the success of the learner. The motivation must be stronger if Students are coming from rural and underprivileged backgrounds and do not have strong English-based instructional schooling. By knowing the motivational factors of students, English Teachers can create activities and assistance which can benefit the students. This study aims to assess the motivational factors of undergraduate students of Sufism and Modern Sciences (USMS), Bhitshah, Sindh Pakistan on their Learning of the English Language. The research Methodology is based on Quantitative Design. The Foreign Language Learning Motivation Questionnaire (FLLMQ-6) by Gonzales & Lopez (2016) was Adopted and modified. Surveys were taken from 248 students who were selected by a purposive sample. Study results were analyzed on SPSS V.26. The data was reliable as the reliability value was above 0.7. Results were generated through descriptive analysis, correlation of the variable, and multiple regression on each variable. Each motivational factor had a positive impact on English Learning. The significant beta value of all motivational factors in English learning is (20.015) that includes a desire for career and economic enhancement (0.427), the desire to become a global citizen (0.711), the desire to communicate and affiliate with foreigners .513), desire for self-satisfaction (0.635), self-efficacy (0.079), desire to be integrated with other cultures (0.711) the significant value 0.000 which shows that results are significant. Further, Future implications are also suggested.

Keywords: Motivation, motivational factors, ELT, English language learning, SLA, L2

1. INTRODUCTION

1.1. Background of the Study

The University of Sufism and Modern Science (USMS) is a tertiary level institute for higher

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education for students at Bhitshah and other remote areas near Bhitshah like Matiari and Hala. It was established in 2019 in the premises of Bhitshah, Sindh, Pakistan. It is majorly focusing on empowering the students to fulfil their academic and professional passions and outsourcing the dynamic faculty to support the quality of education and research for future improvements. Presently, university offers disciplines in Commerce, Computer Science, Information Technology and Education. The students from mentioned departments must take foundational courses of English language, majorly focusing on reading comprehensions and writing compositions, in first 2 years/ four semesters to help them succeed academically. However, students still seemed to struggle in their classes and assessments. In the scenario, students could feel demotivated and avoid producing the language. This study is based on finding the motivational factors of the undergraduate students of Modern Sciences of USMS, Bhitshah behind learning English language. The motivational factors of the students would provide a better understanding to the university and English language teachers to bring innovation in future language classes by stimulating the student's motivation.

1.2. Role of Motivation

English plays a vital role in settings of Pakistan for students in hall steps of education, more specifically in tertiary education or undergraduate level. For a student from university of any remote area like Bhitshah requires a real push to maintain both on-going socio-economic shortcomings and be active academically.As the daily demands to perform and learn bring the pressure on the students, English language becomes one of the challenges as students must acquire the language and perform in the language in their routine lectures, assignments/tasks, formal and informal assessment. For the sake of second language requirements, students go through foundational/remedial English language courses divided into first four semester by higher education policies (HEC curriculum Policy 2017 &2020) for undergraduate studies focusing on reading comprehensions and writing compositions majorly. However, the teachers and students witness less progress in English language proficiency of students. According to the observations, the lack in early founding years of students and on/off exposure to studies resulted into present level of the students. Motivation being the important factor that decides the success of the student in learning language (McDonough 1983), the students must have reason to keep on trying to improve and succeed in the language area. This entails a consistent motivationthat helps student to reach their language learning goals. There are several factors that influence English language learning, and these factors were indicated by Gardner (1982). The motivational factors are central in Second language learning for learners (Waseem &Jabeen, 2013). According to Gardner (1982). There are majorly four factors that affect the learning directly, including social and cultural context, Individual differences, the context of learning and its impact. For example, the degree of motivation of undergraduate students from university or college at any remote area indicates the presence of high intrinsic motivation as Gardner (1990) emphasis on three elements that are crucial for second language acquisition i.e., willingness, hard work and a positive attitude.

1.3. Problem statement

The students at USMS,Bhtishahseem to struggle in adjusting to their respective daily academic activities and language classesbecause of English language barriers. It's difficult to learn a second language in the absence of Motivation. Motivational factors including language learning attitudes affect

second language learning. As the undergraduate students at USMS are firstbatches, the study is needed to identify the student's region-wise uniqueness behind learning english and what are their motivational factors that could be utilized by the teachers to plan activities,tasks, and additional courses to help students achieve their language learning goals.

1.4. Significance

The study on the students' motivational factors would provide a better understanding to the university and English language teachers to improve language learning environment.Teachers could bring innovation in future language classes by stimulating the student's motivation. By knowing the factors,the English teachers can create activities, tasks, and additional assistance, accordingly. This study will help the stakeholders to understand their students' group and will be able to identify their unique needs based on their motivational factors for future planning. this would bring the contextual addition for future research in motivation and language learning area.

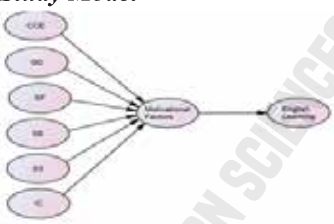
1.5. Aim and objective

This study aims to assess the motivational factors of undergraduate students of Sufism and modern Sciences (USMS), Bhitshah, Sindh Pakistan on their Learning of English Language based on their motivation for future implication. Based on aim following objective has been developed:

1.5.1. General Objective:

> To investigate the impact of motivational factors on Learning of the English Language of the undergraduate students of modern Sciences, USMS, Bhitshah.

1.5.2. Study Model



1.6. Research Hypothesis

It is hypothesized that:

> H1 Motivational factors has significant positive impact on Learning the English Language among the undergraduate students of modern Sciences, USMS, Bhitshah.

1.7. Research Question:

Based on research objective and Hypothesis following research question is prepared:

• Q1: What is the impact of Motivational factor on Learning the English Language ofundergraduate students of modern Sciences, USMS, Bhitshah?

2. MATHODOLOGY

The study is conducted within the premises of the USMS, Bhitshah. The research design of the study is quantitative. According to the Creswell (2008) those who engage in Quantitative design of inquiry deducted the theories and test them to bring unbiased statement that could be generalized and replicate the findings. The Foreign Language Learning Motivation Questionnaire (FLLMQ-6) (Gonzales & Lopez, 2016) was adapted to check the effect of motivational factors (independent variable) on English learning (Dependent variable) of the students. In the research participants were undergraduate students at the University of Sufism and Modern Sciences who were taking programs of Business (BBA), Computer Science (CS) information technologies (IT) and Education. The surveys were circulated online through google surveys to the university circles and student groups to gather the

responses of the students. Both male and female students were part of the study. Total 248 students participated in the study between the age range of 18-26 and above. After receiving the responses, the data was analyzed on SPSS. Purposive sampling was done in the research to get the results. The purposive sampling assists the researchers to choose the participants based on their knowledge and judgment which serve the purpose most ***relatively (Monette, Sullivan, &Dejong 2011). To measure motivational factors of English*** *learning of students at Bhitshah, Motivational factors being the independent variable and English learning as dependent variable. The "Foreign Language Learning Motivation Questionnaire FLLMQ-6" by Gonzales & Lopez, (2016)*

Table3.1: reliability of the research tool

Variable		N of items	Cronbach's Alpha
Motivational Factors	(CEE)	8	.835
	(GC)	8	.873
	(CF)	6	.763
	(SS)	6	.710
	(SE)	6	.600
	(IC)	6	.763
English learning	EL	6	.842
Collective Reliability		7	.76

3. RESULTS & DISCUSSION

The collected data was refined and placed in SPSS software. The baseline data was created to analyze the correlation of the factors with the English learning, assuming the factors with higher significance value affects the student's motivation highly to learn English. The Demographics (age, gender department and degree) based on the frequency of responses are provided below in table 4.1:

Table 4.1: Statistics of demographics

Demographics of students		Frequency	%
Age,	18-20	37	14.9%
	21-25	178	71.8%
	26-above	33	13.3%
Gender	Male	124	50%
	Female	124	50%
Department	BBA	96	38.7%
	CS	36	14.5%
	Education	102	41.1%
	IT	14	5.6%
Degree	Undergrade	248	100%

The descriptive analysis was run after combining the questions of each factor into factors to take out the results of the variable motivational factor to compare it with the English learning. The results could be inferred from the table 4.2 (Annex I). Among the motivational factors and learning English is shown in table 4.5 the students' responses have indicated; the higher correlation with the factors; integrate with other culture(0.862), to communicate with foreigner (0.670)and self-efficacy (0.599), the average correlation with career and economic enhancement (0.499), and lower correlation with desire to be global citizen (0.214), and self-satisfaction (0.137). Check table 4.3 and 4.4 in Annex I. Regression Analysis was performed to show the impact of motivational factors on learning of English language. The coefficient value was taken out that showed a positive impact of variables on each other4.5 and 4.6 (Annex I) The model is considered reliable as the F-value is 250.929 at significant value 0.000. R- Square value which is .862 or 86.2% as explained by the model and shows the variance of 86.2 % present in the dependent variable which is Learning English. That is to say that regression analysis indicates significant effect of motivational factors;desire for career and economic enhancement, desire to become a

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global citizen, desire to communicate and affiliate with foreigners, desire for self-satisfaction, self-efficacy, desire to be integrated with other cultures on English learning (Table 5, Anne I).

4. CONCLUSION

The research on the relation of motivational factors and english learning has been explored in very limited as khan & takkac (2021). This research was initiated to assess the motivational factors of undergraduate students of modern sciences behind learning english as second language, USMS, Bhitshah.For second language learning, it is important to understand that the motivational factors are central for learning (Othman et al., 2013; Waseem &Jabeen, 2013; Viju, 2015). Present study has verified the significant impact of motivational factors on english learning that verifies the previous studiesResults were generated through descriptive analysis, correlation of the variable and multiple regression on each variable. Each motivational factor had a positive impact on the English Learning. The significant beta value of all motivational factors on English learning was (20.015). For each motivational factor the significant beta value was such asdesire for career and economic enhancement (0.427), desire to become a global citizen (0.711), desire to communicate and affiliate with foreigners (0.513), desire for self-satisfaction (0.635), self-efficacy (0.079), desire to be integrated with other cultures (0.711) the significant value 0.000 which shows that results are significant.Further,for future this study prompts the research and implications in second language teaching and learning related to motivation area.

5. FUTURE IMPLICATIONS:

- *This study suggests the uniqueness of the group under study for the stakeholders.*
- *practitioners, and syllabus designers or the English language teachers could implement the generated results of present study to improve language learning environment.*
- *Teachers could bring innovation in future language classes by stimulating the student's motivation. They could create activities, tasks, and additional assistance, accordingly*
- *The research has brought the contextual addition for future research in motivation and language learning area.*
- *As the results are generated on small scale, the study could be expended on a broader context with large scale of the sample by adding more public and private schools, colleges, and universities future research. The research design could be further extended into mixed method/qualitative.*

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Annex I:

Table 4.2: Descriptive analysis of Motivational factors and English learning

	Descriptive Statistics					
		N	Minimum	Maximum	Mean	Std. Deviation
Motivational Factors	CEE	248	2.75	5.00	4.2455	.48788
	GC	248	2.38	5.00	3.9814	.63983
	CF	248	2.83	5.00	4.1008	.53228
	SS	248	2.50	5.00	3.8817	.54767
	CE	248	2.83	5.00	4.0040	.55306
	IC	248	2.33	5.00	3.7749	.72474
English Learning	LE	248	3.00	5.00	3.9371	.56932
	Valid N (list wise)	248				

Table 4.4: Correlation analysis of Motivational factor and learning of English

Correlations of all factors								
		CEE	GC	CF	SS	SE	IC	learning. English
CEE	Pearson Correlation	1	.351**	.446**	.191**	.325**	.517**	.499**
	Sig. (2-tailed)		.000	.000	.003	.000	.000	.000
	N	248	248	248	248	248	248	248
GC	Pearson Correlation	.351**	1	.482**	.644**	.591**	.132*	.214**
	Sig. (2-tailed)	.000		.000	.000	.000	.037	.001
	N	248	248	248	248	248	248	248

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CF	Pearson Correlation	.446**	.482**	1	.290**	.626**	.633**	.670**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	248	248	248	248	248	248	248
SS	Pearson Correlation	.191**	.644**	.290**	1	.559**	.061	.137*
	Sig. (2-tailed)	.003	.000	.000		.000	.341	.030
	N	248	248	248	248	248	248	248
SE	Pearson Correlation	.325**	.591**	.626**	.559**	1	.352**	.599**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	248	248	248	248	248	248	248
IC	Pearson Correlation	.517**	.132*	.633**	.061	.352**	1	.862**
	Sig. (2-tailed)	.000	.037	.000	.341	.000		.000
	N	248	248	248	248	248	248	248
learning. English	Pearson Correlation	.499**	.214**	.670**	.137*	.599**	.862**	1
	Sig. (2-tailed)	.000	.001	.000	.030	.000	.000	
	N	248	248	248	248	248	248	248

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

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Table4.5: Regression Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928[a]	.862	.859	.21410
a. Predictors: (Constant), Motivational. Factors, CEE, CF SS, SE, IC, GC				

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Hussain Khawaja[1], Muhammad Ahmed Tunio [2] Dr. Kamleshwer Lohana [3] Dr.Arifa Bano Talpur [4]

University of Sufism And Modern Sciences, Bhitshah [1]

Mehran University of Engineering & Technology, Jamshoro [2 3 4]

TO INVESTIGATE THE IMPACT OF IN-SERVICE TEACHER TRAINING OF GOVERNMENT SECONDARY SCHOOL TEACHERS ON THEIR PERFORMANCE IN SINDH

ABSTRACT

Teacher's subject knowledge, student's rote learning, lack of monitoring, shortage of physical and infrastructural facilities, lack of professional enthusiasm, absence of regular training are characteristics of Pakistani classrooms. Need for continuous professional development arises in sphere of in-service teacher teacher training with variety of training activities for curriculum and technological means to improve the quality of formal education. The aim of this study is to find out the impact of in□service training on teachers' professional development and performance in Government sector secondary schools. It is generally believed that with the help of various in-service training programmes the Teachers' Quality (Knowledge, Skills, Attitude), positive change in performance of teachers in classroom and Improvement in Student's Learning may Increases. A sample of 300 respondents was randomly selected from 32 government schools(boys/girls). Using close ended questionnaire, data was collected from the respective respondents and analyzed on Frequency Test and Regression Analysis. Findings of the study reveals that the in-service teacher trainings identify the academic potential for professional development of teachers, having positive impact in bringing in learner centered methodologies in classroom, government sector secondary school teachers are motivated by the given trainings they availed and these trainings helps them in developing their teaching plans, implementing the class room teaching methodologies and other curricular activities during academic year. Teachers are receiving appraisal from their colleges, and students in school due to trainings they availed, whereas in-service teacher trainings fostered the task-oriented teaching environment of school. It was also found that there is further need for improvement regarding the in-service training selection procedure of teachers as right person for the right job , teachers must be selected according to his field of specialization, development of teachers training curriculum/training, new module for the e-learning should be introduced for government sector secondary school teachers and need for adequate availability of technological tools arises as suggested by teachers within training centers for government secondary school teachers.

KEYWORDS

In-service Teacher Training, Teacher's Performance, Teacher's Quality, Students Learning

1. Introduction

Formal education takes place within the classroom of a school significantly and have association with the teachers and their students and significantly this interaction includes teaching, supervision and classroom administration. Therefore, to improve quality of education it is essential to enhance the teaching ability of teacher via imparting in□service teacher training and it is believed that through providing in-service training programs for teachers, their professional skills and expertise along with experience can be significantly enriched (Sattar et al., 2019).As due to change in nature of role and requirement related to economic, social, technological needs and whereas students' achievement is directly depended upon teacher's

performance. The teacher with knowledge of different teaching style have ability to impart education in better way as therefore improvement and professional competence can be achieved through in-service teacher training. The educational system may become dysfunctional if there is gap between performance and competence arises. The knowledge and skills of professionally equipped teacher can create conducive environment for research in educational sphere and innovative society (Ahmed et al., 2015). In today's highly competitive world, education is almost a requirement. It is nearly impossible to survive in countries like Pakistan without appropriate education. Education is about respect, dignity, and self-confidence, not just about acquiring a degree or a piece of paper. Throughout their lifetimes, an educated person will be presented with tremendous potential. Without a skilled and trained human resource, no development is conceivable. More skilled people can be produced through education, allowing the country to prosper. Quality education in classroom is directly linked with the knowledge and skills of teacher that to deliver the content knowledge with flexible teaching strategies. . Collaboration is the key to enhance the skills through professional meetings. Training activities within school increase communication between teachers and increases performance. (Copriady et al., 2021). On job training with teamwork model increase the efficiency, improves attitude, positive reinforcement in coping with various difficulties like classroom management, discipline issues,time division and task completion within stipulated duration and as result student's integration in classroom learning increases (Assadi et al., 2019).

2. Literature Review

As per ASER survey report 2019-20 from independence till date Pakistan didn't make an appropriate progress in the field of education, the literacy rate of country is only 60% out of which 40% is unable to read or write. As compare to public sector schools enrolled children, the private sector students are performing well in sense of quality of their learning and theireducational results but private sector is expensive (ASER Survey, 2018 & 2019).

For achievement of quality education and for efficacy of the equitable, inclusive education and to promote the lifelong learning opportunities for students as per sustainable development goal it is necessary to increase in number of qualified teachers in developing countries (UNDP SDG).

Pakistan is listed as country with second largest number of out of school children in world with approximate population of nearly 22 million children aged 5-16, nearly 44 percent in this age group not attending any sort of formal education (UNICEF). Article 25-A with provision of free and compulsory education for children with age group 5 to 16 years in country. Sindh is the second largest province of Pakistan as per population but the indicators in the field of education are low as compare to Punjab and KPK (Abdul Rehman et al., 2016). Uplift9ing the teaching faculty's standard is considered as higher priority in any nation, especially in developed countries. Since the teaching profession is considered as critical and challenging and leads to nation's rising and progress in different domains. Teaching requires constant learning, patience, and dedication. In teachers' willingness to teach and likeness toward the job, the teachers' willingness is driven force toward their profession and success in their career. In any profession, the behavior of the individual and his attitude are the key factors that determines view of professionalism by the person and his competency and sense of achievement. Teaching is perceived as a respectable and honorable profession by any society.

Training and Development of employees improves communication in an organization, encourages the teamwork, boosts the morale of workforce and leads to the on job satisfaction. Training programs helps in the reduction of hazards at workplace and brings the decline in resources disintegration. The continuous struggle of each day for empowerment of teachers for development of their competencies and skills is increasing as required for transformation of teaching and learning in classroom.The continuous struggle of each day for empowerment of teachers for development of their competencies and skills is increasing as required for transformation of teaching and learning in classroom. Absence of opportunities for teachers regarding professional growth, empowerment, and absence of reward and recognition is a major concern in public sector education system. While their demands for making decisions is also increasing.Extensive and continuous training of

employees is essential in the modern era for the employees' development and enhancement in their performance. Adoption of appropriate training program for employees is achieved through utilizing the training need analysis. Human resource development is always interlinked with the organizational development and outcomes. Training need analysis is the initial stage that identifies the gaps in strength and knowledge as well as weaknesses which hinder the result oriented training program (Hartoyo et al., 2017).

3. Research Methodology

This study is about investigating the impact of in-service teacher training on government secondary school teachers. In this research it is attempted to discover the relationship among variables, in-service teacher training, teacher's quality, teacher performance, students learning. In this research study quantitative approach is used in this investigation and data was collected from primary sources from Hyderabad and Sukkur districts. This study primarily focuses on Government Sector Secondary School Teachers. Male and Female secondary school teachers in Hyderabad and Sukkur districts. It is a convenient approach to collect data as the government continuous professional development centers are well established at both Hyderabad and Sukkur divisions in Sindh. The information was gathered from both trained male and female professionals of government schools in Hyderabad and Sukkur districts. The questionnaire contained the items for assessment of perception of trained teachers regarding independent and dependent variables by using the Likert scale. Primary data source is being used in this study for interpretation of findings of this research analysis. 350 questionnaires were distributed to respondents and collected 300 from targeted population The collected data was evaluated and tested through SPSS to investigate the impact of in-service training of government secondary school teachers on their performance.

This study explores the following research question:

**To identify the need for in-service training of government sector secondary school teachers for their professional development.*

**To measure the relationship of imparted in-service training on professional development and performance in government sector secondary school teachers.*

4. Results and Findings

Total 27 items for this research questionnaire being drafted. The value of Cronbach's Alpha is 0.818 or 81.8%, greater than the 0.7 or 70% signifies that the instrument is reliable for the collection and analysis of collected data. Findings of the First objectives includes that the in-service teacher trainings identifies the academic potential for professional development of teachers, having positive impact in bringing in learner centered methodologies in classroom, government sector secondary school teachers are motivated by the given trainings they availed and these trainings helps them in developing their teaching plans, implanting the class room teaching methodologies and other curricular activities during academic year.

Findings of second objective implies that teachers are receiving appraisal from their colleges, and students in school due to trainings they availed, whereas in-service teacher trainings fostered the task-oriented teaching environment of school, and helps in providing individual attention to students with special needs, as a result students participation in classroom increased, students are grasping new concepts without much difficulty. The result of this study has been supported by various past researches(Westbrook, 2009) (Aadika & Mungala, 2018).

5. Conclusion and Recommendation

In this research the in-service teacher trainings impact on teacher's quality, teacher's performance and students learning is studied in perspective of educational standard of Sindh Province.In-service teacher training influences the government sector secondary school teacher's quality. The trained teacher has more knowledge of pedagogical skills that to use those skills and teaching methodologies in class room teaching and learning process. In-service teacher training has positive impact on the government sector secondary school teacher's professional development and their performance. From results significant changes are observed in the teacher's performance and students learning due to the imparted in-service teacher training.

It is concluded that the impact of in-service teacher training was positive in

relationship with three dependent variables (Teachers Quality, Teachers performance and Students Learning). Although some of the shortcomings were found that: Absence of teacher trainings modules for proficiency of teachers regarding classroom management skills. The need for updated science curriculum trainings was identified as result of this research. Whereas teachers argued that the in-service teacher training should be given with frequent schedules as it brings transfer of knowledge in classroom to students as per required need of modern technological era. Results shows that there is further need for improvement regarding the in-service training selection procedure of teachers as right person for the right job. Teachers must be selected according to his/her field of specialization, development of teachers training curriculum/training. New module for the e-learning should be introduced for government sector secondary school teachers. Need for adequate availability of technological tools arises as suggested by teachers within training centers for government secondary school teachers.

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Perah Memon[1] , Dr.Iffat Batool Naqvi [2]

Mehran University of Engineering And Technology, Jamshoro [1 2]

TRADEOFF BETWEEN HEALTH HAZARDS AND HEALTH EXPENDITURES IN BANGLE INDUSTRY: A CASE STUDY OF HYDERABAD DISTRICT

ABSTRACT

The Rapidly growing volume of electronic/electrical-waste (e-waste) has become an emergent issue globally. To avoid increased expenses on harmless dumping and recycling, huge amounts of e-waste is being exported from Asian countries to Pakistan, which has both positive and negative impacts. The aim of this study is to provide baseline for the existing situation of e-waste in Pakistan with the emphasis on mapping the imported e-waste chain; defining the collection groups of imported e-waste in Pakistan and identifying the importers and exporters from Asian countries. The data was based on primary data and in-depth interviews were taken from the stakeholders. In data collection, it has been observed that there are several companies/traders who export e-waste to Pakistan and then importers in Pakistan distribute the e-waste all over Pakistan. Our findings reveal the amount of e-waste arrived through these stakeholders and it also highlights that there are five main collection groups which are located in the major cities of Pakistan, where e-waste was received from Asian countries. Therefore, there is a critical need to control the import of e-waste which plays major part in generation of e-waste in Pakistan, and policy needs to be devised for mitigating the e-waste.

KEYWORDS

WEEE, imported e-waste, stakeholders mapping, e-waste generation, e-waste management, e-waste in Pakistan

1 INTRODUCTION

The electrical and electronic equipment (EEE) and their separated parts which have been thrown away as a waste by a user purposely without any intentions to use it in future is known as e-waste. Further electronic waste is defined as e□scrap in various parts of the world and under various conditions, known as WEEE (waste of electrical and electronic equipment). Nearly any home appliance or equipment that have power or battery-operated circuits or electrical parts falls under this category (Forti et al., 2020). According to estimates, approximately 80% of electronic waste generated in the nations which are technologically advanced, exports and deliver to populous countries particularly Pakistan, India and China to undergo the process of refurbishing and recycling which is carried informally by using basic technologies (Lundgren, 2012). In addition, Iqbal et al., (2015) claimed that rigorous legislations and rules are being imposed to the nations which are in the region, particularly China and India, and that as a result of non-implementation of environmental legislation, more electronic waste is predicted to get access in Pakistan. Since there has been a rise in global awareness of its implications. However, in developing countries, laws on e-waste are still quite restricted (Chung and Zhang, 2011). Electronic waste (e-waste) has become the fastest growing waste stream in the world (Kumar et al., 2017). However as mentioned by Sepulveda et al., (2010), WEEE has different properties from other forms of commercial and local waste, and it contains two kind of precious metals such as copper and gold, along with dangerous substances like lead, mercury and arsenic, that necessitate proper handling and recycling practices in order to avoid pollution of the environment and possible adverse effects on living creatures. Since the EU enforced regulatory control

over E□waste, there has been a rise in global awareness of its implications. However, in developing countries, laws on e□waste are still quite restricted(ChungandZhang,2011).Based on the data gathered, Pakistan has positioned itself as a low-cost e-waste exporting destination and has a sizable marketplace for refurbished and usable goods. As a result, it collects the majority of electronic waste from Australia, US and Europe, which is frequently delivered to south Asian countries via Singapore and Hong Kong (Abbas, 2010). Unfortunately, there has been virtually little research on such a serious topic in Pakistan. Here is a dearth of pure knowledge about the quantity of e-waste transported to Pakistan, and there is a need of much more study on the environment and its implications of electronic waste, its legislative elements, and the surroundings of work in which e-waste process takes place (Imran et al., 2017). On the contrary, no scientific research has been carried out so far to examine the influence of electronic waste processing in Pakistan. (Iqbal et al., 2015).

e-waste in Pakistan has large attractive market for imports. It provides opportunities to the labor as it does not require any special skills. Whole families including child labor is involved in recycling or dismantling. It increases the business due its considerable economic value and benefits. e-waste mostly comes inform of funds but its recycling/dismantling provides an opportunity to earn pure profit range is double the rate. On the other hand e-waste requires special care and handling knowledge due to the presence of hazardous materials but it is not handled with safety gears. There are many hazardous chemicals present in the e-waste items which cause health issue and skin disease in children and women. The e-waste is causing more pollution in environment.

2. LITERATURE REVIEW

According to the statistics from Global E-waste Monitor, domestic waste stream is the world's most rapid e-waste from 2014-2019, volume of e-waste surged by 9.2 million tons of electronic and waste that is of no more in use to the user owing to consumption inside the region in a reporting year, before collection, reuse, treatment, or export and is expected to range up to 74.7 million tons in the next decade. Worldwide 53.6 million metric tons were produced in 2019 and solitary 17.4 percent of global electronic waste was gathered and formally used as secondhand under the environmental protection rules created expressly for electronic waste. Which include electronic waste that isgathered and then shipped to other countries, where it is processed according to national requirements. Approximately 82.6 percent of electronic waste generated is unknown, either it is burnt, disposed of on dumping ground, held in homes, or repurposed in informally. This suggests that recycling efforts aren't keeping up with the worldwide e-waste growth. (Forti V et al., 2020). Besides, Asia generated the largest source electronic waste in 2019, with 24.9 million tons and just 11.7 percent were formally collected and recycled, along America with 13.1 million tons, Europe with 12 million tons followed by Africans with 2.9 million tons and Oceania's with least 0.7 million tons, correspondingly. In Asia specifically Pakistan generated 433 kilo tons around 2.1 kilogram per capita and the total waste in market like all supplies of a commodity for delivery, consuming, or using in the market as part of a business operation, either paid or unpaid were 673 kilo tons around 3.3 per capita (Forti V et al., 2020). Despite this, there are no authorized information on the volume of input and output of electronic waste in Pakistan (M. Sajid et al., (2019). Even Pakistan has no National Legislation where it is controlled by national environmental protection laws precisely considered for e-waste, the matter becomes more complicated (Forti V et al., 2020). Regardless of the fact that disowned electronic products can occasionally be reconditioned and reused, they are typically shipped as used goods from high-income to low- and middle-income countries. Yet, a significant volume of e-waste is still illegally shipped or disguised as scrap metal under the pretense of being for reuse. It's safe to assume that transboundary flows of used EEE or e-waste account for 7-20% of total e-waste generated. The e-waste management infrastructure in middle- and low-income nations is not yet fully developed or, in some circumstances, completely lacking. (Forti V et al., 2020).

2.1 Waste Import:

These domestic waste stock and collective imports, might make a complicated picture for electronic waste disposal in Pakistan. In addition, Iqbal et al., (2015) unfolded that the WEEE which is imported adds a value to the domestically generated e-waste in order toignore the costs of formal discarded items. Although

the main cause for e-waste that is imported to Pakistan might be the low labor costs, which are not greater than $ 2.00 for reprocessing a unit device, as opposed towards $ 20.00 in technologically advanced nations (Chi et al., 2011). Acknowledged by M. Sajid et al., (2019), many organizations have heard that these equipment's are also shipped to Pakistan as aid or gift for foundations and institutes, sadly the import of WEEE in Pakistan is non-registered as there are no legislations, and the actual volume of imported e-waste could not be determined. As (Iqbal et al., 2015). No accurate data exist on the volume of secondhand electronic parts and the percentage of those that are recycled or discarded as scrap and due to rising population and spending power, Pakistan's electronic products industry is seeing increased demand, particularly for home utilizations such as air conditioners, TVs, washing machines, ovens, refrigerators; telecommunications, computers, information technology. All main parts in WEEE are imported or smuggled, and are solely collected/separated in Pakistan, implying that the whole electronics and electrical appliance business relies on imported parts. On the other side, the Federal Government of Pakistan's Import Policy Order (2016) never even described or mentioned the phrases "electrical and electronic, e-waste, scrap, and WEEE." Although this order prohibits all hazardous materials prohibited by the Basel Convention, it does not include the entire list of things associated with E-waste. As a result, regulating E-waste imports is not just tough, but in various situation impossible (M. Imran et al., 2017).

3. THEORETICAL/CONCEPTUAL FRAMEWORK

The framework shows the mapping that e-waste is sent from these countries through exporters which is received in all collection groups and from there all the importers collect e-waste.



figure:1 flow of e-waste of Asian countries to Pakistan

4.METHODOLOGY

4.1 study area and design:To conduct this study the data collection process was taken through semi-structured (open ended) in depth interviews, telephonic and face to face interviews were conducted by approaching to the government departments in two cities; karachi and hyderabad of sindh, Pakistan. Prior to collection of data and visits to government officials, an initial survey was conducted from scrap collectors and local dealer about the imported items/secondhand items to explore the e-waste generation and recycling areas in cities. Based on initial survey, it was identified that they are not much aware about the imports, all they know is to collect the e-waste and separate plastic from iron and/metals and send them to Rawalpindi, Islamabad or Lahore (cities of Punjab, Pakistan). In addition from field surveys it was observed that how without any safety gears the separation process was taking place which was a negative impact and causes massive environmental effects and health risks among workers and local residents

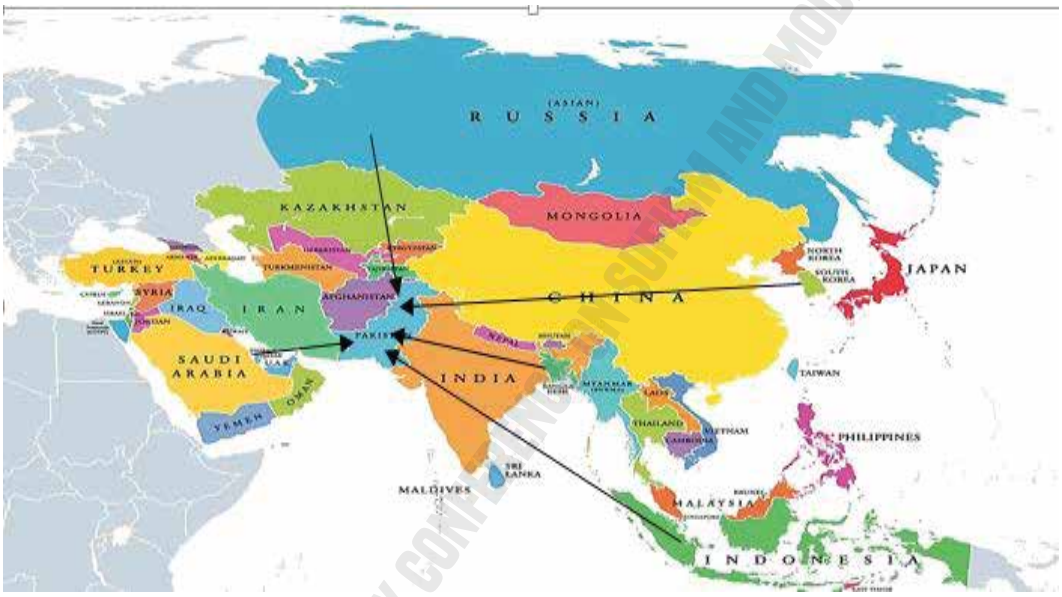
4.2 data collection:

For data collection visits to different organization, associations and official departments were also arranged and face to face interviews were conducted to get maximum information on imported e-waste and management. Questionnaires for Data Collection: to facilitate the e-waste assessment, two questionnaire were developed to collect in-depth information. First one for scrap collectors and local vendors and second for Government officials (FBR, Customs). The questionnaires were adopted from the e-waste assessment methodology manual of Swiss Federal Laboratories for Materials Science and Technology (EMPA, 2012) and were modified in accordingly. The questionnaires aimed to obtain the primary information about the imports of e-waste, who are the importers/ exporters and who are countries that send the e-waste to Pakistan and why?

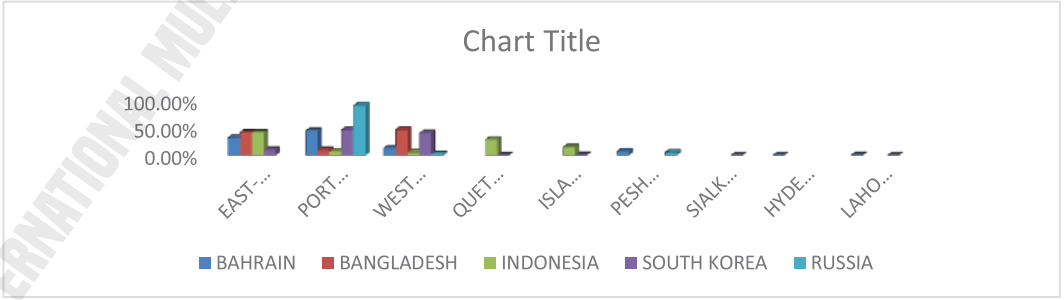
5. RESULTS AND DISCUSSIONS

Around 30 countries from all over the world imported e□waste to Pakistan in a year (2021-2022). The e-waste is bought into Pakistan through exporters (traders/companies) of the country, after being shipped and crossing several borders of the countries it is reached to Pakistan, where it is sent to the particular collection groups (customs deptt) which are situated in Karachi, Quetta, Peshawar, Islamabad, Lahore, Sialkot and

Hyderabad. Here in home country it is received by importer and they further distribute the waste all across the country. This study or case is about only those countries which are located in Asia continent, the cluster of five countries; one country from each region of Asia such that Bahrain (western Asia), Bangladesh (south Asia), Indonesia (Southeast Asia), South Korea (EastAsia) and Russia (central Asia). Data was collected from custom department Hyderabad and Karachi. Which was obtained in excel sheet with the file name 'webdoc like scrap' from custom department Karachi. The excel sheet included all the relevant data of the year (2021-2022) which identified the flow of e-waste such that which are the countries, who are the importers, what are the collection groups which receive e-waste and who are the importers which are involved.



5.1. The annual import in Pakistan:The percentage of e-waste items for a year (2021–2022) in collection groups of Pakistan country wise is shown in Table1. Which belong to Asian countries; Bangladesh, Bahrain, Indonesia, South Korea and Russia.



5.2 STAKEHOLDERS

There are several companies or traders who are involved in importing e-waste in Pakistan. They have signed contracts with international companies or traders from Asian countries who send e-waste and here the importers receive it and then distribute it all over Pakistan. In table:1 identifies the most popular importers/stakeholders. Among them most popular are listed below for receiving e-waste:or transporting e-waste from another country into the importer's home country

Table:1

The importer: are person/company/trader or entity buying

BAHRAIN	BANGLADESH	INDONESIA	SOUTH KOREA	RUSSIA
Ag steel furnace.	Pinnacle fiber (pvt.) Limited	Ayub general products (private) limited	A.m steel furnace & re-rolling mills	Agro steel industry
Al qaryan industries	Sino metal	Hobab washing material production co	Al qaryan industries (smc-pvt) ltd	Century paper and board mills ltd
Beco steel limited	S & z corporation	Home impex	Beco steel limited	Inam steel re-rolling mills
Dawood steel fabrication factory	S l c metal and refining (pvt) ltd	Manaco international	Hi-tech blending (private) limited	Sher steel furnace & re-rolling mills
Dhl pakistan (pvt) ltd		Mairaj & sons	Korea traders	
Ilyas steel re-rolling mills		Malik traders	Lucky diamond entereprises	
M.b.s industry		Nasir khan and brothers	Manaco international	
Nazir industry		Orient enterprises	M. M. Steel	
New shalimar steel industries (pvt) ltd		Syed abdul qadeer and co	Nazir industry	
S s steel furnace			S s steel furnace	
Yar steel mill			Talha enterprises	
Zamzam family steel (pvt) ltd			Tokyo old spare parts	

Table:3

The exporter, who is the person or entity sending or transporting the goods out of the country

BAHRAIN	BANGLADESH	INDONESIA	SOUTH KOREA	RUSSIA
Al noor shipping & logistics w.l.l	Adnan psf industries ltd	Lamsky indonesia	Al rahim international trading co.	European metal recycling ltd
Al ahmadi trading fze	Cristal trading	Vita bren Indonesia	Al saham al ahmar metal scrap tr.	Glen corp scrap and metal waste trading llc suit
Al saham al ahmar metals scrap	Raza enterprise,	Zahid agha motoparts	Bajwa trading corporation	Jarnmalmer ab
Dhl worldwide express	S m international		Esther trading co. Ltd	
Midas global limited	World marine services		Total recycling	

6. DISCUSSION

From to the entries it was observed that total 8928 items were imported from these five countries. Whereas the collection group; east Karachi imported 1715 items, port bin qasim 4131 items and west Karachi 2690 items. Karachi being the largest e□waste collector among Asian countries and yet Karachi is the least recycling/ dismantling hubs. As in initial interview it was observed that all items after dismantling or separation are sentto Rawalpindi, Islamabad. Whereas Sialkot and Hyderabad being the least collectors. The question arises here that if only 5 countries are receiving 8929 items then how much will 30 countries receive and how to control the import? Import Policy Order (2020), published by the Government of Pakistan, does not define the terms e-waste or WEEE, but it does mention the terms "waste and debris, waste/metal scrap. Although this decree prohibits all hazardous articles restricted by the Basel Convention, it does not yet cover in a comprehensive way the list of articles related to electronic waste. This study only contains or shows metal waste or waste listed in (2020 Import Policy Order). However, policies need to be improved and legislation specific to the importation of electronic waste needs to be passed.

7. CONCLUSION

By analyzing the primary data obtained from Pakistan custom, it can be concluded that controlling the import e-waste is becoming a huge problem. Policy makers in the area of e-waste should propose a law regarding e-waste and should also adopt the policy and legislative development as they have become a key destination for e-waste disposal. Inaddition a kind of database system should be proposed to function as a virtual knowledge hub for agencies, organizations, industries and stakeholders for the purpose of coming together, building and enhancing knowledge on e-wastewhich will eventually control the import and also bring the potential opportunity for green economy growth by supporting and offer a livelihood to thousands of people associated with e-waste.

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Saddam Hussain Shaikh[1], Dr. Qamar Abbas Mangi[2] ,Danish Riaz Shaikh[3]

University of Sufism and Modern Sciences Bhitshah[1,2,3]

STUDY ON DIFFERENCE OF EFFICIENCY BETWEEN CONVENTIONAL AND ISLAMIC BANKING IN PAKISTAN

*1.**Introduction:***

Banking is a booming industry in Pakistan. Its birth in Pakistan correlates to the nation's independence but its reincarnation was when the banking industry was de-nationalized in the early 2000s. The move to privatize banks was welcomed by the free-market supporters who saw investment in banking as a great business opportunity. Overstaffed by incompetent people and wrought by non-performing loans which were given out for political gains, the banking industry demanded a revolution. That revolution was brought when the doors of investment in the nationalized banking industry were opened to the private sector. Since then the growth trajectory has never looked back. Growing year by year, the book size of banks swell as the private sector started redressing the industry that was once in slump. Seeing gains in the business, more private investors decided to take a share of the pie. It was then that the foreign banks realized the potential that Pakistani market had to offer and the nation soon saw itself surrounded by fancy sounding foreign banks that offered superior services. The competition brought depth in the market and as the banks fought for a share in this lucrative banking business, the customers gained.

As the industry graduated from providing basic banking services, the suppressed banking needs of the population resurfaced and it was then that the need for Islamic banking arose. Although in practice elsewhere in the Muslim world, the concept was brought to Pakistan for the first time by Al Meezan Investment in the year 1997. During that period the industry was undergoing a major transformation so the concept of Islamic banking remained small. However, thanks to the State Bank of Pakistan (SBP), the country's central bank, the concept was soon brought under a spotlight when the first Islamic Commerical Bank opened its door for the public in the year 2002. It has been since then that this sub sector has seen exponential growth often outpacing the conventional banks.

The dynamics of banking have changed since then. Today the Pakistani banking industry comprises of 37 commercial banks, 05 of which are full fledge Islamic banks. However the importance of Islamic Banking can be gauged by the fact that almost all banks today have Islamic Banking windows to cater to faith sensitive customer base. Previously over 90% of the overall deposits were with the Big 5 banks (i.e. HBL, NBP, UBL, ABL & MCB). Today the percentage is less than 50%. The share of big five banks is gradually being eaten by the smaller commercial banks and more prominently by the Islamic banks who offer their customers products that are according to rules of borrowing and trade that are permissible by Islamic Faith.

Pakistan is a population of over 185 million people, over 98% of which are Muslims. Religion is a big part of the lives of many people in the country who consider taking interest as forbidden in Islam. Therefore many people see Islamic banking as a good alternative to conventional banking. Based on

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principles of Shariah, Islamic banking is based on modes such as trade and partnership that are allowed in Islam. However since they are competing against the commercial banks, their products and fee structure should be comparable to attract people to bank with them.

This situation presented above leads to two major questions which are: 1) how are conventional commercial banks remaining competitive against competition by Islamic bank? And 2) how are Islamic banks performing against the much older and well established conventional banking system? A bird's eye view of the Pakistani banking sector reveals that Islamic Banking has fast gained significant market share. Their share in total assets as of December 2014, as per data released by SBP, was 10.4%. This grew from 9.6% last year. But alternatively a comparison of profits show that conventional banks are much well rooted to earn higher profits compared to Islamic banks.

Therefore the comparison of efficiency and performance of conventional banks versus Islamic banks requires a deeper analysis, looking into factors like their cost of deposits, overheads, return on assets and return on investments etc.

This research study will attempt to gauge the efficiency of Islamic banks compared to commercial banks. In doing so, the authors of this report will conduct a thorough analysis of the factors that are leading to the growth, stagnation or downfall of each banking segment and will attempt to provide a comparative analysis of what constitutes efficiency of conventional banks in Pakistan versus Islamic Banks. 'Efficiency' in itself is a very broad area; however the authors of this study have tried to explain efficiency through the most important parameters which are explained in detail in later part of this report. The reader of this report will benefit from understanding the key factors behind the success and failure of conventional versus Islamic banking in Pakistan. Although beyond the scope of this study, this comparative analysis will open way for researchers and practitioners to devise strategies which can foster the elements that derive efficiency in these dichotomous banking models.

1.2. The Research Problem:

There is actually a richness of disclosing the literature the efficiency of conventional and Islamic banking and the efficiency difference of both also. Banks are those channels which enable the development of economy in any country as they have a high role in the economy. New kind of banks that offer services on different way to the earlier existing ones are due to development of knowledge and economics systems.

These development lead to confusion among people over these two kinds of banks. There lies a huge difference between the ways these two bank type operates. Thus, there is a big difference in the efficiency of both. Islamic banking is still evolving and developing, when in fact conventional banking is very well established and has a strong footing.

1.2.1. Problem Statement:

Based on the problem, the study aims to:

"To examine the efficiency between Islamic and Conventional Banking in Pakistan"

1.3. The Objectives:

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- *To know the determinants of profitability of Conventional and Islamic Banks.*
- *To study the difference of efficiency among Conventional and Islamic Banking.*
- *To know the impact of the determinants on the Profitability.*
- *To study the variance among the conventional and Islamic banking efficiency.*

1.4. Justification:

The study will strive to know the difference between Islamic and conventional banking systems. There are very few researches on this topic. Also, this will be a first of its kind of study conducted in Pakistan. Studies on similar topics have been conducted in different Muslim countries, but none in Pakistan.

1.5. Limitations:

- *This study will focus only on Pakistan.*
- *Secondary data will be used to carry on the study.*
- *There is a money and time constraint too.*

1.6. Scope

The banks will be compared based on their historical performance based on the return on asset, return on equity and operational efficiency (i.e. number of customers, average deposit size, every servicing fee and number of customers per branch)

1.7. Assumptions:

- *The economic and political conditions will remain stable.*
- *The information that we will gathered will be accurate, valid and reliable*

Literature Review

Rosnia Masruki (2011) discussed the proficiency of Islamic saving money has been one of the key issues in monetary business sector. It is difficult to troublesome their proficiency and intensity on the grounds that their items are of immaterial in nature. Numerous investigates have been done to quantify the effectiveness and profitability of Islamic saving money through expenses, yield, administration quality they are giving and execution. Bank's execution and rating gives direction to clients that it is possible that they ought to store their cash in banks or not speculators additionally take into record the money related execution of bank for venture viewpoint. Controllers additionally watch the execution of bank for administrative purposes. To check the execution of Islamic saving money framework, there were to two strategies which were utilized as a part of the examination for investigation portrays that the profitability of Banks which were claimed i.e analytical trends and ratio analysis.

Rehana and Irum (2012) utilized CAMEL strategy for assessment of execution and positioning. They lead their study on the example banks of Pure Islamic Banks, Islamic window of Conventional Banks and Conventional Banks .Their research uncover that there are huge contrasts in the CAMEL proportions of three bank sorts. The estimations of Islamic managing an account in Pakistan are distinguishing in examination to the outcomes drawn from the comparative studies done in different

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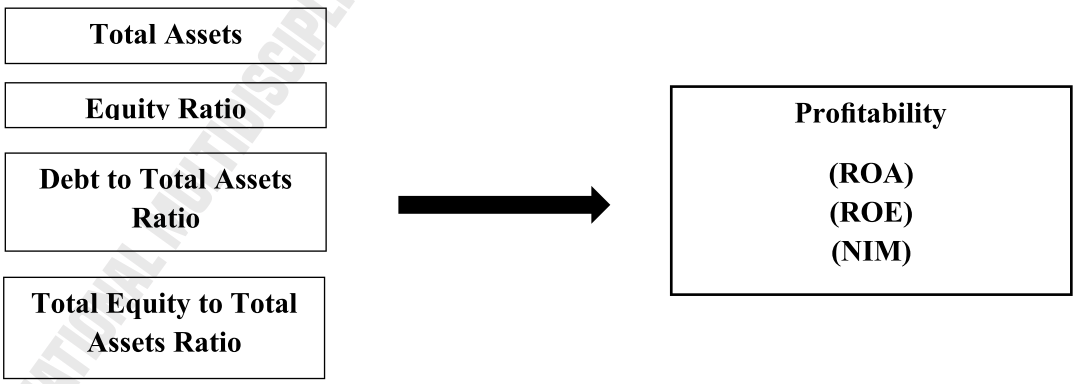
parts of the world. For instance it is contended that UAE Islamic banks are generally more beneficial, less fluid, not so much hazardous, but rather more productive when compared with the UAE ordinary banks. The distinction in results is to a great extent because of the way that Islamic managing an account has longer history in these nations when contrasted with Pakistan where undeniable Islamic saving money began simply couple of years back.

Muhammad Jaffar and Irfan(2011) did Performance correlation of Pakistan's Islamic and conventional banks in light of the chronicled information. The populace for the study is the all Islamic and Conventional banks that are operating in Pakistan. The specimen size is involved 5 Conventional and 5 Islamic accounts. The Islamic banks which were chose are Meezan, Albaraka, Dubai Islamic, Bank Islami Pakistan and Dawood Islamic Bank. The Conventional banks are Allied, MCB, Standard chartered, Habib bank and bank Alfalah. To gauge and think about the execution of Conventional and Islamic banks, CAMEL investigation is utilized a standard test for execution examination of budgetary establishments and the most recent procedure these days utilized CAMEL test comprises of Capital Adequacy Ratio, Asset quality, Management Quality, winning capacity and Liquidity. The monetary information of all Conventional and Islamic banks was removed from the SBP site for the period 2005-2009. For better correlation, every year the normal proportions for Islamic and Conventional banks were considered and afterward the mean of every proportion for every methods of managing an account was figured. As indicated by their discoveries: Islamic banks D/E proportion determined a more secure position by financing their benefits more through value than obligation contrasting with Conventional banks. The study infers that Islamic banks performed inadequately in winning on their advantages with records of 1.37% in 2005 and - 68.55% in 2006 and general profit for resource proportion of - 13.47% amid the period 2005 to 2009.

Study Model

2.1 Research Model Development



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Data is collected from secondary sources including the annual report of banks.

- *H1 There impact of Total Assets and Equity Ratio on ROA of the bank*
- *H01 There is no impact of Total Assets and Equity Ratio on ROA of the bank*
- *H2 There is impact of Total Assets and Equity Ratio on ROE of the bank*
- *H02 There is impact of Total Assets and Equity Ratio on ROE of the bank*
- *H3 There is impact of Total Assets and Equity Ratio on NIM of the bank*
- *H03 There is no impact of Total Assets and Equity Ratio on NIM of the bank*
- *H4 The Random Effect Model will be used.*
- *H04 The Fixed Effect Model Will be used.*
- *H5 Islamic Banks efficiency is greater than Conventional Banks*
- *H05 Conventional Banks efficiency is greater than Islamic Banks*

Research Methodology

This research in nature is quantitative and is conducted through the causal type of research; Secondary data is collected from the annual reports of the banks, along with this previous researches have been taken in concentration to know about the tests and models that could be used in this research.

Population

There are 37 banks that are operational in Pakistan out of which 5 are government owned scheduled banks, 2 are specialized banks 16 are commercial banks, 1 is development finance institution 4 are foreign banks, 5 are Islamic banks and 4 are micro finance banks.

Research Sample

As the aim of the research is to compare the efficiency results between conventional and Islamic banks we have only five Islamic banks in Pakistan for comparison we have selected the five conventional banks that are somehow started in the same period.

Data Instrument

Analysis and results

Pft	2.1426	0.7293248	1	4.15
ER	8.006667	2.106228	5	14
Dter	41.53993	24.85861	14.88	130.74
Tetar	1.006	0.897286	-0.68	6.32

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		Correlation Analysis			
	Pft	Er	Dter	tatar	
Pft	1				
ER	0.1716	1			
Dter	0.0009	0.1727	1		
Tetar	-0.0781	0.7284	0.2216	1	

Correlation Analysis

Correlation analysis shows the direction and relationship strength among variables. Above , we can view the correlation table, which shows the relationship among variables. In this study, ER and Dter , are highly correlated with Pft because the results are above "0.7". So we need to conduct a variance inflation factor (VIF) test to find out multicollinearity among variables, and based on VIF test results, we will decide to eliminate any of the variables from this study.

Multicollinearity test

The multicollinearity test helps us to find out those variables that are strongly correlated with each other. Table 4 shows the VIF test results, and if any of the values of the variable is less than 10, then we eliminated that variable from this study due to the multicollinearity issue. So its shows that all variables' values are less than 10 (even less than 5), so we may conclude that no issue of multicollinearity exists in our study. Table 4: VIF Test Multicollinearity Analysis

Variable	VIF	1/VIF
Pft	4.81	0.207808
Er	4.75	0.210389
Dter	3.25	0.307665
Tetar	2.96	0.337421
Mean VIF	2.8	

Regression Analysis

Table 5 indicates the results of the regression of our specified model given in eq (3) under fixed effect model estimation and Generalized least square – GLS random effect estimation, respectively

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Table 5: Fixed effect and Random Effect Regression Results

Variable	Fixed Effects	Random Effects
Er	-1.372 (0.138)	-0.452 (0.462)
dtar	0.146 (0.439)	0.125 (0.249)
Debt	-0.054*** (0.005)	-0.055*** (0.000)
tetar	0.777** (.010)	0.640*** (0.009)
Pft	-0.321 (0.540)	-0.621 (0.106)*
Constant	5.354 (0.123)	1.522 (0.160)
Observations	150	150
No of Countries	6	6
R-Squared:		
Within	0.242	0.218
Between	0.113	0.966
Overall	0.076	0.320
F-test	0.000	0.000
*** Depicts significance at 1% ** signjificant at 5% and * significant at 10%.		

Values in parenthesis indicate the p-values of the t-statistics.

Conclusion

After the research was done, The Results stated that there is an impact of Size of Total Assets and Equity Ratio on the profitability of the bank, the more will is the Size of the Total Assets and Equity Ratio the more will be the profitability of the banks, the profitability ratios show that conventional banks are comparatively more profitable than Islamic banks.Results that are combined through the analysis of the ratios, they state that profitability of the conventional banks is greater than the Islamic banks as their profitability ratios were greater, somehow in all the years, in some years they were lower but comparatively they were higher than the Islamic banks

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Danish Riaz[1], Muhammad Adnan Arain[2],Farah Shaikh[3]
University of Sufism and Modern Sciences, Bhitshah [1,] SZABIST Hyderabad [2]
Mehran University of Engineeing and Technology [3]

THE EFFECT OF THE COVID-19 PANDEMIC ON THE PERFORMANCE AND STABILITY OF ISLAMIC BANKS IN PAKISTAN

Abstract
The COVID-19 pandemic has affected almost every sector of developing as well as developed countries of the world. Among those, the banking sector plays a vital role in any country's financial system and economic development. This study intends to study the effects of the COVID-19 pandemic on the performance and stability of Islamic banks in Pakistan, as the banks are subject to high risk because of increasing business default rates due to prolong lockdowns. Islamic Banking (IB) has different principles of doing business than interest-based or Conventional Banking (CB). IB is growing ata faster pace in Muslim as well as non-Muslim Countries. The popularity of IB among western countries is because of the innovative products of the Islamic Banking system which are Shariah-based and avoid usage of interest (Riba) and are mainly asset-backed which share both profit and loss. This study only undertakes the full fledge Islamic Banks of Pakistan and to investigate the effects of COVID-19 on the Islamic banking systems the secondary data spanning from Q#1 of 2020 to Q#1 of 2022 would be taken. For analysis of fixed effect and random effect, models are used. Furthermore, a dummy variable is used to account for variability in performance and stability caused by covid-19. It is of utmost importance to study the effects on the performance and the stability of the banking systems financially cope-up with such natural disasters in the future.

Keywords: COVID-19, Islamic Banks, Bank Performance, Bank Stability, Pakistan.

Introduction

The novel coronavirus (Covid-19) has affected the global economy since the start of the year 2020 due to the sudden "de-globalization" of the world. Because ofthe unprecedented nature of the outbreak that has created widespread economic difficulties all over the world, the economy of most countries was paralyzed due to prolong lockdowns. The health crisis converted into an economic crisis as the closure of businesses due to social distancing became the reason forthe financial crisis, ultimately leading to decreasing global economic growth. The IMF lowered its growth projection for GDP to 3.2% in 2020 as the outbreak threw its earlier projection into serious doubt (Ozili and Arun, 2020)

After the financial crisis of 2007-09, the COVID-19 pandemic has worst effects on the global economy. The International Air Transportation Association (IATA) has forecasted that the air travel industry alone will suffer US$113 billion if Covid-19 continued to grow at the same pace (Appleton, 2020). In the last week of February 2020 global stock markets lost about US$6 Trillion whereas the US S&P 500 Index lost over $5Trillion in the same week and its largest 10 companies suffered a loss of $1.4 Trillion (Randewich, 2020). The national lockdowns already affected the tourism industry causing a huge loss of US$1.2 Trillion with an expected 78% decrease in international tourist arrivals (Sigala, 2020). The retail and commercial real estate markets also experiences losses as their worldwide sales decreased by 60% and 50% y/y respectively.

In Pakistan, the novel virus was detected in the last week of February 2020 and thereafter spread rapidly. The spread in Pakistan initially started from travelers coming from Iran and some other countries of the world (Shoaib & Abdullah, 2021). Pakistan being a resource-limited country prepared a national action plan and reinforced the national public health capabilities laboratory networks and trained human capital. Pakistan's economy was already under attack from affluent international agencies like FATF and IMF before the COVID-19 disease stepped in. The statistics from 2020 report the major drops in tanned leather goods -27.1%, carpets, and rugs, -19.2%, sports goods -14.9%, and -8.44% in surgical instruments. Large-Scale Manufacturing accounts for 10% of national outputs and 8% of the country's total production but in 2020 only a significant decrease of 24.8% was reported in LSM as most of the export-sharing partners were affected by COVID which ultimately decreased the tax as well as non-tax government revenues (Meo et al., 2021).

There are many studies conducted on the effects of the global financial crisis of 2008-09 on Islamic and conventional banking.The literature suggests that due to profit-loss sharing products and asset-backed financing the IBs were less affected by the global financial crisis of 2008-09 compared to the conventional banks which were highly affected and the highest credit bubble was created in history. The GFC 2008-09 was a turning point for the financial institutes after which not only capitalist economies revised their strategies but Islamic banking was also boosted due to its nature of products. The GFC 2008-09 crisis was mainly due to endogenous risk where crises emerge out of the actions of the market players whereas the Covid-19 pandemic is due to exogenous factors where those factors hit the economy directly. In this study, the impact of the more recent Covid-19 Pandemic on the performance and stability of Islamic and Conventional banks will be analyzed regarding how both banking systems have responded.

Research Problem

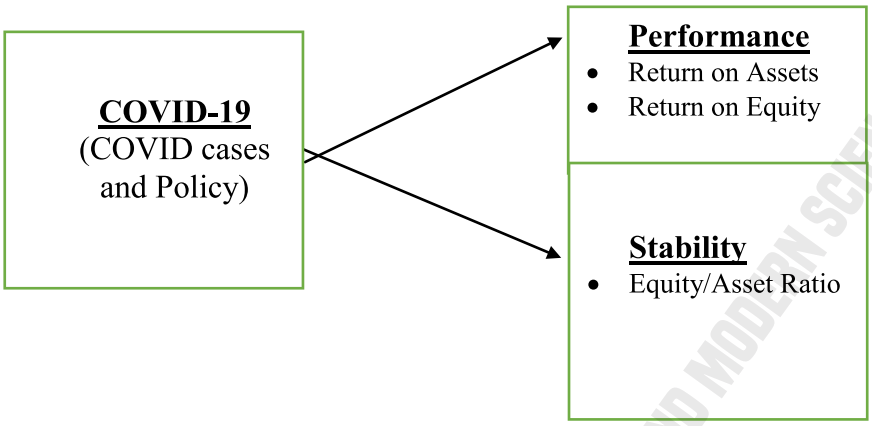
All economic and financial sectors are experiencing an unprecedented crisis as a result of the coronavirus's widespread global propagation (Carnevale and Hatak, 2020, Donthu and Gustafsson, 2020 Kirk and Rifkin, 2020, Pantano et al., 2020, Sharma et al., 2020). Financial institutions such as banks have been subjected to an external shock requiring them to be prepared for a wide range of future issues.As a result of the recent Covid-19 pandemic, practically all countries have been touched in some way, either directly or indirectly as discussed in the introduction. Similarly, Pakistan's banking system has been affected in several ways. It is crucial to understand how Covid-19 has impacted banks' performance and stability. To cope-up with any future issues a developing country like Pakistan requires the issues to be addressed immediately to avoid long-term effects.

Research Question

What are the effects of the COVID-19 pandemic on the performance of Islamic banks in Pakistan?
What are the effects of the COVID-19 pandemic on the stability of Islamic banks in Pakistan?

Objectives

To examine the effects of the COVID-19 pandemic on the performance of Islamic banks in Pakistan.
To examine the effects of the COVID-19 pandemic on the stability of Islamic banks in Pakistan.
Conceptual Framework
Islamic Banks (IB)



Research Methods

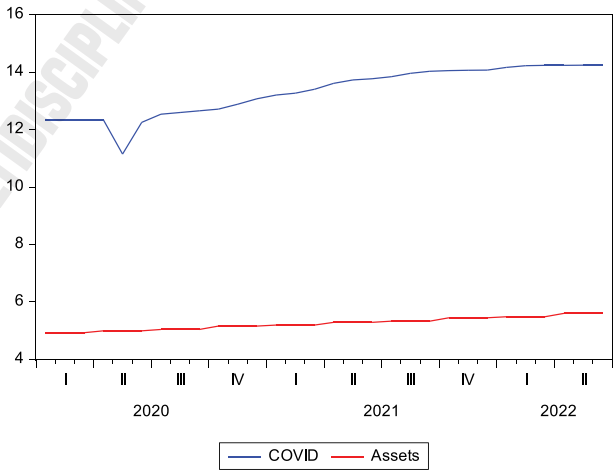
Data Collection

The data would be collected from audited financial statements of Islamic banks and the website of (SBP) the State Bank of Pakistan. The Quarter-wise data ranging from Q#1 of 2020 to Q#1 2022 will be analyzed to study the performance and stability of both banking systems in the COVID-19 lockdown period. The data testing would requirea prior check of the normality of the data, homoscedasticity, linearity, and multi-colinearity issue. These normality tests are of paramount importance to check the reliability of the data before defining any relationship among the variables through statistical tests. Cross-sectional regression will be used to analyze the relationship between the COVID-19 Pandemic and the dual banking systems of Pakistan.

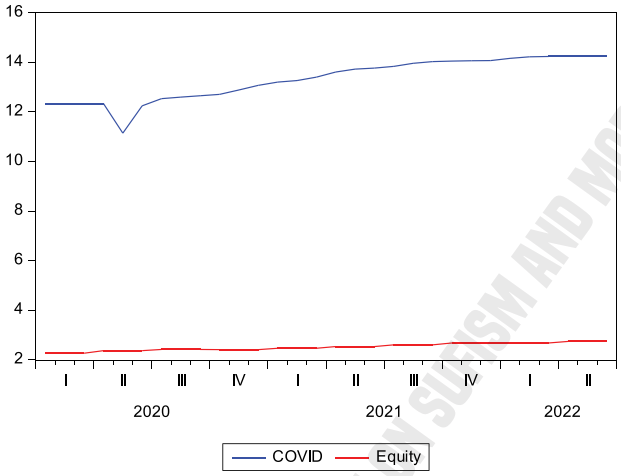
Variables used in this research are Assets, Equity, Net income, ROA, ROE, Equity to asset ratio, and covid cases.

Results and analysis:

COVID has affected a wide range of industries in the last 2 years and banking is also one of the affected industries in this pandemic. This study attempts to analyze the potential effect of covid-19 on Islamic banking businesses. A graphical representation of the average assets and increasing COVID cases have been presented in below given graph. The values are log-transformed. It can be

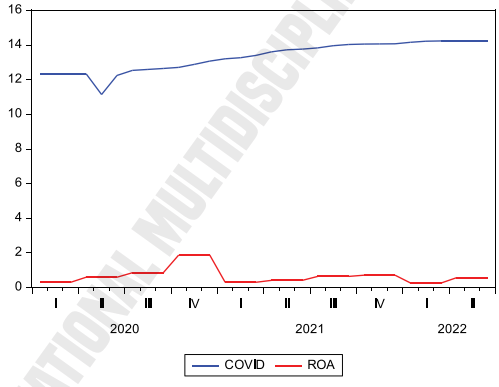


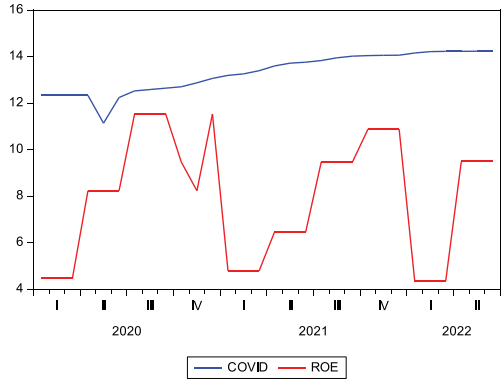
A similar pattern can be observed in the second graph in which equity and covid-19 data are presented. The level of equity also shows a progressive pattern during the covid-19 era. The stable and gradual growth suggests no strong effect of covid-19 on equity investment during covid-19. Equity was low at the start of the pandemic and shows a gradual upward movement



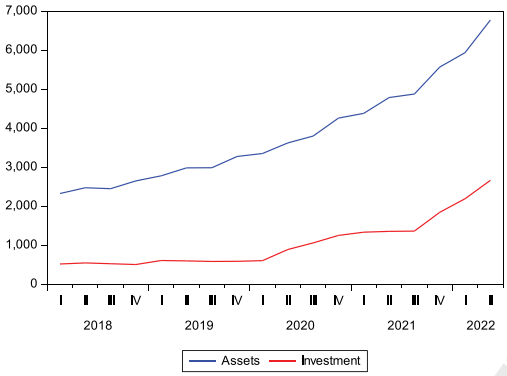
To evaluate the performance of Islamic banking we used two variables as proxies for performance that are ROA and ROE. The following graph represents that there is variation in the timeseries. The performance according to ROA seems to be varying over the period of covid-19 time. Apart from the variation is there still a bit of an upward trend in ROA.

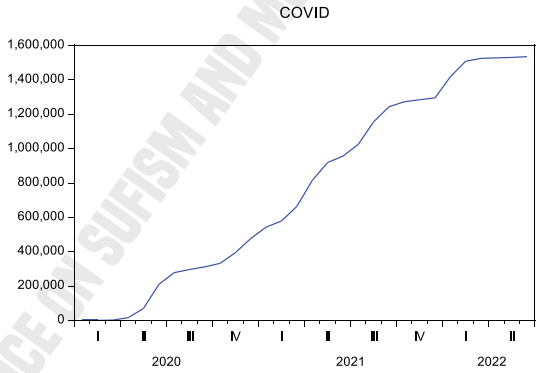
The same can be observed in the ROE as it has higher fluctuations as compared to ROA which shows the earning power of equity was trembling during the covid-1. Although it remains high for most of the quarters sharp rise and decline in ROE suggest that there is a certain amount of effect caused by Covid-19.





Furthermore, along with the banking industry, this study has also used macroeconomic data for Islamic finance. The following graph shows the overall assets and investments in Islamic financial institutions in Pakistan. The following graph shows the variation in the assets and investment from 1st quarter of 2018 to the second quarter of 2022. The interesting thing to monitor here is that the assets and investments show gradual growth from the first quarter of 2018 to thethird quarter of 2019. As the last quarter of 2019 approaches, there is a rapid increase in both assets and investments of Islamic finance in the economy. The environment for Islamic finance and Islam remains viable for investment options as covid-19 surging condition seemingly has no significant predictive power.





To check for the normality and behavior of the data we have calculated various measures of descriptive statistics for all variables used in this study. The first column reports the mean of average assets of Islamic banks. The average value of assets is 258.77 billion rupees, and the minimum value is reported as 16.4 billion. The assets of Islam have grown to a maximum value of 2418.46 billion. The table also reports the mean, median, minimum, and maximum value for overall Islamic financial institutions' assets at an average of 38570611 billion and minimum value of 2334b ad a maximum value of 6781b in total. Similarly, the investment in Islamic funds is also reported in the second last column with an average value of 1066.61b and an all-time high value of 2672b.

Table:01 Descriptive Statistics

	ASSETS	ROE	ROA	NI	EA	EQUITY	T Assets	Inv	Covid
Mean	258.7758	9.080792	0.621588	1.360561	6.974493	15.1463	3857.611	1066.611	772810.7
Median	142.1477	6.335893	0.412886	0.618271	6.662985	10.70508	3496.5	758	739455.5
Maximum	2418.486	168.1195	13.05259	11.76284	17.13826	93.6456	6781	2672	1535144
Minimum	16.44837	0.021645	0.001402	0.002445	3.716457	1.592651	2334	515	2
Observations	215	215	215	215	215	215	18	18	30

ROE in the second column reports the average value of ROE. As shown in the above graph the ROE has relatively very high fluctuation in the data therefore the maximum value of ROE is 168.1% as compared to the 9.08% average value. The statistics for ROA are also reported in the next column with an average value of 0.62, the low value of ROA suggests that the banks have a relatively very high level of liabilities as expected to be for banking business. The means and other measures are also reported for net income and equity in table one. Furthermore, the last column shows the average value of covid-19 which is 772810. affected individuals on average over two years.

Table 2. reports the regression result for this study. We have run regression on 5 different variables. In the first model, the dependent variable is ROA and the independent variable is the covid-19 cases. The ROA is a measure of performance, and the results show a negative sign but no significant impact of covid-19 on Islamic banking performance as for ROA is concerned. The coefficient is -0.106 which is insignificant as the t-value of -1.351. showing the negative but insignificant impact of covid-19 on Islamic Banking performance.

Next, we have regressed the covid-19 against the ROE and the results are quite like the ROA. Negative and insignificant impact with a beta coefficient of -0.984. so, the results suggest that there is no significant impact of covid-19 on Islamic banks' performance. As the banking business remains unaffected by the covid-19.

The third model reports the impact of covid-19 on banks' stability. We have used the equity-asset ratio for gauging the stability of Islamic banks. The results for accessing the stability of the Islamic banks are negative and strongly significant. This shows conclusive evidence that covid-19 has affected the stability in Islamic banks. the coefficient of Equity to asset is -0.505 with a t-value of -6.72. R-square for this model is 0.11.

The last two models are used to check the macroeconomic effect of covid-19 on Islamic financial institutions' assets and investments. The last two models show similar results both negative and one of them (investment) is slightly significant. Hence, no significant impact can be observed on the assets, but the investment is negatively and significantly affected by the covid-19.

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Table: 02: Regression Analysis

Model 1 (DV: ROA)					
Variables	Coefficients	Std. Error	T-Value	P-Value	R-Square
Covid	-0.106	0.079	-1.351	0.177	0.11
C	2.079	1.056	1.968	0.049	
Model 2 (DV: ROE)					
Variables	Coefficients	Std. Error	T-Value	P-Value	R-Square
Covid	-0.984	1.027	-0.958	0.338	0.152
C	22.737	13.709	1.658	0.098	
Model 3 (DV: EA)					
Variables	Coefficients	Std. Error	T-Value	P-Value	R-Square
Covid	-0.505	0.074	-6.742	0.000	0.11
C	13.341	1.000	13.339	0.000	
Model 4 (DV: Assets)					
Variables	Coefficients	Std. Error	T-Value	P-Value	R-Square
Covid	-0.595	1.003	-0.598	0.553	0.42
C	2.052	0.821	2.499	0.012	
Model 5 (DV: Inv)					
Variables	Coefficients	Std. Error	T-Value	P-Value	R-Square
Covid	-1.731	0.054	-1.953	0.041	0.73
C	0.837	0.396	2.113	0.035	

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Conclusion:

This study aims to analyze the impact of covid-19 on the performance and stability of Islamic banks in Pakistan. We have used quarterly data from 12 Islamic banks from the period 2018 to 2022. We also used macroeconomic data on overall assets and investments of Islamic financial institutions in Pakistan for the same period.

For covid-19 we have used covid cases arising on monthly basis from 2020 to 2022. For analyzing the results, we have used cross-sectional regression. The result of this study shows that there is no significant impact of covid-19 on Islamic banks' performance as covid fails to affect the banking business. Further, as for the stability is concerned the results have shown some significant and negative impacts of covid-19 on Islamic banks' stability. We also run a regression to check the impact of covid at the macroeconomic level and we found that there is no significant impact of covid on assets and investments of Islamic finance. As the assets and investments in Islamic finance kept on rising ata rapid rate and were unaffected by covid-19.

This research impliesthe government and investors of Islamic finance. As government may use these findings to understand and implement more Islamic banking related policies that will help Islamic banks to stay unaffected by covid or any similar pandemic if it occurs. As for the investors are concerned the ability to stay unaffected by covid may provide investors more secure source of investment in Islamic funds.

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Safia [1] Akhtiar Ali [2]

Bahria University Karachi, Pakistan.[1]
University of Sufism and Modern Sciences, Bhitshah[2]

THE MEDIATING ROLE OF BANK STABILITY BETWEEN ITS DETERMINANTS AND BANK PROFITABILITY IN PAKISTAN

ABSTRACT

The paper is divided into two themes first is to investigate the determinants of bank stability of commercial banks operating in Pakistan. Second, it examines the impact of stability on profitability and analyzes whether bank stability mediates the impact between financial inclusion, operational efficiency, income diversification, competition, and profitability. This is quantitative research based on secondary data. Eighteen local commercial banks are considered for analysis covering the period of 2009-to 2019. For data analysis, the structured equation modeling (SEM) technique is used in STATA software on balanced panel data. Banks' profitability is measured through two different ratios: return on asset (ROA) and net interest margin (NIM). The empirical result indicates that financial inclusion, income diversification, and operational efficiency are determinants of bank stability. The results further indicate that stability significantly and positively impacts banks' profitability, and they both are essential indicators for the overall performance of banks. Moreover, the results also implicate that bank stability mediates the relationship between operational efficiency, income diversification, financial inclusion, and profitability. But on the other hand, stability does not mediate between competition and profitability. The results of this study provide new insights on the profitability and stability of banks operating in Pakistan for enhanced performance of banks, which is a vital sector for the country.

CCS CONCEPTS

• Applied computing →Law, social and behavioral science→ Economics

KEYWORDS

Bank stability, Insolvency risk, Profitability, Financial inclusion, Efficiency, Diversification, Competition

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IMCSMW Reference format: Safia, Akhtiar Ali.2022. The Mediating Role of Bank Stability between Its Determinants and Bank Profitability in Pakistan.

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1. Introduction

A stable and profitable banking structure is essential for economic development since it connects different economic units. The financial crisis of 2008 emanated exposure to risk and inefficiency for many banks. Therefore, financial stability has gained preference for regulators and has become a precondition for attaining continuity in development programs [1]. Bank stability, also known as insolvency risk, is a critical factor in estimating the profitability of banks [2]. Hence, profitability of banks and stability are jointly linked with enhanced performance of countries [3]. The presence of extreme risk in the banking sector makes it different from other sectors [4]. A long list of studies has addressed the relationship between bank stability and profitability; some have exhibited a positive relationship [5]. Whereas, [6] findings bolster that lower stability of banks increases profitability for banks. Moreover, [3] concluded that expansion in profits of banks that don't correspond with soundness might be destructive to economic advancement; therefore, this study claims that a simultaneous increase in profits and stability of banks would benefit economic progression.

Pakistan has faced unsteady interest rates and competition among commercial banks in recent years [7]. Technological advancement in recent years has introduced new services for bank customers that have lead to financial inclusion; income diversification activities are increased in banks and increased competition has lead banks to compete for market share. Many researchers have studied the impact of competition, income diversification, financial inclusion and efficiency on bank stability [8], [9], [10] but initiative to examine these factors in one model has been overlooked. Both positive and negative impact of these factors has been discovered by researchers on bank stability and profitability.

The existing literature on bank stability provides a theoretical linkage with banks' profitability. The rationale for constructing mediation association among variables is that the independent variable affects the mediator and the mediator sequentially impacts the outcome variable [11]. Therefore, this study inspects the mediating role of bank stability between income diversification, financial inclusion, operational efficiency, competition, and profitability. Policymakers and management has highly debated the stability and profitability of the banking sector in the financial framework [12]. Therefore, this study also inspects whether the stability of banks contributes to profitability. Finally, this study employs the latest years' data to give a refreshed analysis of bank stability and profitability that can help investors, researchers, and policymakers. Following conceptual framework and hypotheses table is constructed after extensive research:

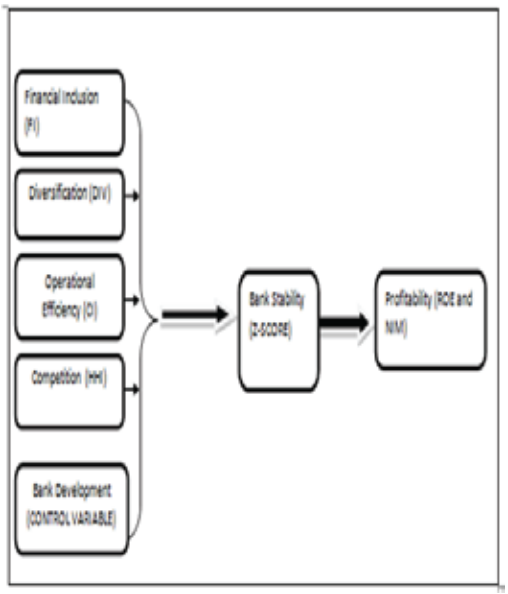

Figure 1: Conceptual Framework

Hypothesis matrix
H1: Income diversification has a significant impact on bank stability of Pakistan.
H2: Efficiency has substantial impact on bank stability of Pakistan.
H3: Financial inclusion has substantial impact on bank stability of Pakistan.
H4: Competition has substantial impact on bank stability of Pakistan.
H5: Stability has substantial impact on bank profitability of Pakistan.
H6: Bank stability mediates between diversification and profitability of banks in Pakistan.
H7: Bank stability mediates between financial inclusion and profitability of banks in Pakistan.
H8: Bank stability mediates between competition and profitability of banks in Pakistan.
H9: Bank stability mediates between operational efficiency and profitability of banks in Pakistan.

Table 1: Hypotheses Matrix

2. Methodology

Only local commercial banks are elected as a sample from banks working in Pakistan to avoid any bias caused by the difference in operational activities between banks. Secondary data for the years 2009-2019 is used to gauge diversification, financial inclusion, competition, operational efficiency, stability, bank development, and profitability measures. The data is taken from published reports of the State Bank of Pakistan (SBP), the Ministry of Finance Pakistan, and annual financial statements of banks. After cleaning the data to address the issue of outliers and missing values, the sample consisted of 18 banks. All the variables of this study are explained in table 2

Variable	Symbol	Description
Bank stability	ZROE	$\frac{(ROE+\frac{E}{TA})}{\sigma(ROE)}$
Bank development	BANKDEV	Total assets of overall banks / GDP
Financial Inclusion	FI	Number of bank branches
Competition	COMP	The sum of squared market share / Bank assets
Income diversification	DIV	Ratio of noninterest income / Total operating income
Operating efficiency	EF	Noninterest expense / Noninterest income
Profitability	ROA	Net profit after tax / Total assets
Profitability	NIM	Total interest income-Total interest expense / Total assets

Table 2: Variable description

2.1 Model specification

Based on the past literature, the following model is constructed for hypothesis testing. In STATA software, structural equation model (SEM) formulated figure 2 and figure 3 to test the equations below, consisting of two models. Model-1 is without a control variable, and model-2 includes bank development as the control variable.

$$ZROEit = \alpha + \beta 1FIit + \beta 2COMPit + \beta 3DIVit + \beta 4EFit + \varepsilon it$$

$$Profitit = \alpha + \beta 1FIit + \beta 2COMPit + \beta 3DIVit + \beta 4EFit + \beta 5ZROEit + \varepsilon it$$

$$ZROEit = \alpha + \beta 1FIit + \beta 2COMPit + \beta 3DIVit + \beta 4EFit + \beta 5BANKDEVt + \varepsilon it$$

$$Profitit = \alpha + \beta 1FIit + \beta 2COMPit + \beta 3DIVit + \beta 4EFit + \beta 5ZROEit + \beta 6BANKDEVt + \varepsilon it$$

Where, α is the intercept, βn are the coefficients and εit is the residual term. PROFIT, represents bank profitability (ROA and NIM), FI is bank wise financial inclusion, COMP is competition, DIV is income divergence, EF is operational efficiency, and ZROE is the stability.

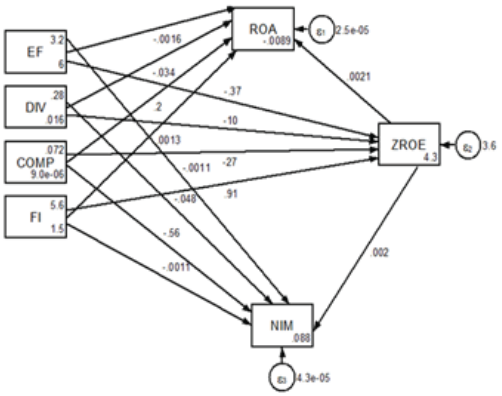

Figure 2: Model-1

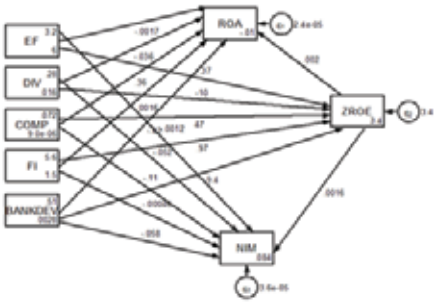

Figure 3: Model-2

3. Results and discussion

3.1 Determinants of bank stability:

Table 3 exhibits a direct effect of SEM for analyzing bank stability determinants. The path diagram is illustrated in Figure 2 and 3

		Direct effects		
	Structural model	Coefficient	z	P>|z|
Model-1	ZROE			
	<- EF	-0.369	-4.05	0.000*
	DIV	-10.355	-8.82	0.000*
	COMP	-26.718	-0.57	0.566
	FI	0.9121	6.67	0.000*
Model-2	ZROE			
	<- EF	-0.374	-4.86	0.000*
	DIV	-10.471	-8.21	0.000*
	COMP	47.133	0.96	0.383
	FI	0.9712	7.24	0.000*
	BANKDEV	-9.372	-3.35	0.001*

*** p<0.01, ** p<0.05, * p<0.1

Table 3: SEM results direct path ZROE

Cost to income ratio negatively and significantly impacts bank stability (i.e., bank insolvency risk). This finding is consistent with [13]. The result indicates that decreasing the cost to income ratio will enhance operational efficiency and bank stability. It also exhibits that efficient Pakistani banks are good at regulating their insolvency risk, leading to a stable banking sector. Income diversification is negative and significant in concordance with [14]. This adverse impact is defined as the more banks are engaged in the diversification of revenues, the lesser benefits they can achieve, due to enhanced exposure to risk, thus increasing the instability of banks. The coefficient for the competition is insignificant. This result is in agreement with [15]. Financial inclusion indicates a positive and significant impact on bank stability that is consistent with [16]. This favorable relation can be attributed to enhancing the retail base by banks, including lower segments of the population, contributing to bank stability.

After introducing the control variable in the model, coefficients of independent variables remained significant, leading to accept the hypothesis (H1, H2, and H3), and the results do not support the hypothesis (H4). Therefore, it is concluded that operational efficiency, income diversification, and financial inclusion are significant determinants of bank stability for Pakistani banks. The bank development variable is negatively related to bank stability [2].

3.2 Profitability and Mediation analysis

Table 4 depicts the direct, indirect, and total effects of SEM for analyzing bank profitability and mediation of bank stability between its determinants and profitability. The path diagram is illustrated in Figure 2 (model-1) and 3 (model-2).

		Direct effects		Indirect effect(mediated effect)		Total effects	
	Structural model	Coefficient	P>|z|	Coefficient	P>|z|	Coefficient	P>|z|
Model-1	ROA						
	<-ZROE	0.0021	0.000	0	-	0.0021	0.000
	EF	-0.0016	0.000	-0.00078	0.000	-0.0023	0.000
	DIV	-0.0343	0.000	-0.022	0.000	-0.056	0.000
	COMP	0.2027	0.042	-0.056	0.566	0.1464	0.316
	FI	0.0013	0.003	0.002	0.000	0.0032	0.000
Model-1	NIM						
	<-ZROE	0.0019	0.000	0	-	0.0019	0.000
	EF	-0.0010	0.006	-0.0007	0.000	-0.0017	0.000
	DIV	-0.048	0.000	-0.0202	0.000	-0.0677	0.000
	COMP	-0.56	0.001	-.052	0.565	-0.6110	0.002
	FI	-0.0011	0.074	0.0018	0.000	0.0006	0.294
Model-2	ROA						
	<-ZROE	0.00199	0.000	0	-	0.00199	0.000
	EF	-0.0017	0.000	-0.00074	0.000	-0.00242	0.000
	DIV	-0.036	0.000	-0.02086	0.000	-0.0568	0.000
	COMP	0.357	0.002	0.0899	0.382	0.4510	0.010
	FI	0.0018	0.001	0.0019	0.000	0.0035	0.000
	BANKDEV	-0.02	0.001	-0.0187	0.001	-0.0386	0.000
Model-2	NIM						
	<-ZROE	0.0016	0.000	0	-	0.0016	0.000
	EF	-0.0012	0.004	-0.00060	0.000	-0.0018	0.000
	DIV	-0.0317	0.000	-0.0189	0.000	-0.05006	0.000
	COMP	-0.109	0.497	0.07483	0.389	-0.0321	0.866
	FI	-0.00048	0.445	0.01572	0.000	0.0011	0.058
	BANKDEV	-0.0582	0.000	-0.01518	0.003	-0.0734	0.000

Table 4: SEM results for Profitability and Stability

Table 4 indicates bank stability has a positive and significant impact on profitability, which conforms to [12], indicating that the more sound banks are, the more they can garner higher profits. The banking industry depends on credit and the risk associated with credit, and insolvency becomes crucial for determining profitability.

The table 4 indicates that the indirect effect of bank stability determinants on profitability (ROA& NIM) is significant. The mediation analyses result in table 4 model-2, with the bank development variable, is consistent with mediation that does not have a bank development variable as control variable (table 4; model-1), with a slight variation in coefficients. The combined results indicate that bank stability contributes substantially to banks' profitability; hence we accept hypothesis (H5). Table 4 results favor the hypothesis (H6, H7, and H9). It is concluded that bank stability mediates the relationship between its determinants and bank profitability in Pakistan. Bank stability does not mediate the relationship between competition and profitability, and the results do not favor the hypothesis (H8). These findings contrast [17], who discovered that the relationship between competition and profitability is mediated by bank stability in Chinese banks. For robustness SEM model is run with robust standard errors to reduce the impact of heteroscedasticity. For further accuracy of results bootstrapping is used for analysis. Moreover, in this study, a control variable is also employed that provides the same results and increases the model's explanatory power.

Equation-level goodness of fit (without control variable)					Wald tests for equations		
Equation No	Fitted variance	Predicted variance	Residual	R^2	χ^2	df	p
1.	7.17	3.56	3.57	.501687	178.86	4	0.00
2.	0.000124	0.000099	0.000025	.799687	521.41	5	0.00
3.	0.0001186	0.000075	0.000043	.634870	223.32	5	0.00
Overall R^2				.598884			
	Equation-level goodness of fit (with control variable)				Wald tests for equations		
Equation No	Fitted variance	Predicted variance	Residual	R^2	χ^2	df	p
1.	7.168	3.787	3.38	.52837	197.09	5	0.00
2.	0.000124	0.0001	0.000024	.80650	595.21	6	0.00
3.	0.000118	0.00008	0.000036	.69359	277.99	6	0.00
Overall R^2				.84319			

Table 5: Equation level fitness

4. CONCLUSION

This research aims to inspect operational efficiency, income diversification, competition, and financial inclusion as determinants of bank stability in Pakistan. It is further hypothesized that one of the mechanisms by which financial inclusion, operational efficiency, and income diversification affect profitability is by increasing stability. Mainly, research studies have been conducted on stability and profitability separately, and literature on the mediating role of bank stability between its determinants and banks' profitability is scarce. Hence, this study attempts to fill this gap and claim that profitability and stability are substantial for the banking industry and should not be considered in isolation.

This research indicates that operational efficiency, income diversification, and financial inclusion are significant determinants of bank stability in Pakistan. This result is consistent with [13], [14], [16]. In contrast, the competition proved to be insignificant to the stability of banks. The results indicate that bank stability significantly impacts both profitability measures. There is a statistically significant mediation effect of bank stability between its determinants and bank profitability, but bank

stability does not mediate between the competition and profitability of banks.
It implies that investors and depositors who desire to assess the bank's profit position should also consider that what insolvency risk position of that bank is. Moreover, these results also indicate that banks striving to increase their profits should consider that reducing risks is also an essential component of overall performance enhancement. Therefore, we suggest that bank stability and profitability go together and recommend that researchers re-visit the relationship between the stability and profitability of banks.

4.1 Practical Implications:

The results illustrate that sustainable banking stability has crucial implications for bank profitability. The overdependence on diversification activities is associated with increased risk, and diversification is the leading cause of high returns volatility. These results generate different policy issues for the management of banks and SBP. Policymakers should encourage banks to focus on conventional advancing; that can be done with efficient monitoring and appraisal of borrowers to reduce defaults of loans and enhance the stability and profitability of banks. Banks should reduce operating costs by appointing efficient personnel to improve the banking system's stability. Moreover, the ambiguity of the impact of competition on banks' profitability requires a regularity body to create a balance betwixt cost curtailing (through mergers) and a competitive banking system. Financial inclusion plays a positive role in the stability and profitability of banks. Policymakers should encourage efforts to include all segments of the population in formal banking networks.

4.2 Future research direction:

Although the current study has covered a few of the essential variables that impact the stability and profitability of banks in Pakistan, the following areas are suggested for future work: The accounting base ratios are utilized to estimate the study variables, whereas; market base ratios can be used to compare the results for robustness. Second, one measure of financial inclusion is used due to the limitation of time and unavailability of data; future researchers can employ multiple financial inclusion measures for detailed investigation.

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Sakina Jumani[1] ,Zohran Jumani[2] , Sufi Amin[3]

University of Sufism and Modern Sciences, Bhitshah Sindh[1]
Iqra University Karachi [2]
International Islamic University, Islamabad [3]

PERCEPTIONS OF SECONDARY SCHOOL TEACHERS REGARDING THE INTEGRATION OF ICT IN TEACHING LEARNING PROCESS AT SECONDARY SCHOOL LEVEL IN HYDERABAD DISTRICT

Abstract
The purpose of the study was to investigate the Perceptions of Secondary School Teachers regarding the Integration of ICT in Teaching Learning Process at Secondary School Level in Hyderabad District. The objective of the study was to determine the attitude of teachers influences the integration of ICT in teaching and learning process at Secondary School Level in Hyderabad District. It was quantitative study. The research design of the study was descriptive and survey type. The population of the study was comprised of secondary school teachers in Hyderabad District Sindh. Simple random sampling technique was used in the selection of sample. Questionnaire was used as research tool. Tool was proper validated from experts in the field of education. Inferential statistic was used in data analysis. All the data were presented in the form of tables.
Keywords: ICT, Teaching, Learning, Secondary School Level, Attitudes of Teachers

Introduction
Information and communication technology (ICT) plays a crucial role in contemporary civilizations, which cannot be overstated. The use, integration, and diffusion of information technology has revolutionised many cultures throughout the world (Shiboko 2015). According to research carried out in various nations, computer technology have altered not only the political and social dynamics of indigenous values but have also improved the politico-economic performance of modern economies (Buabeng-Andoh 2012). The amount to which ICT may benefit education in general and teaching in specifically cannot be overestimated, given its tremendous impact.According to Koc and Bakir (2010), one of the most major beneficiaries of ICT is the educational sector. Over time, there has been an increasing demand for teachers to fully utilise ICT to improve teaching and learning processes, which would help students performed better academically (Koc&Bakir 2010).
Existing educational structures and classroom facilities are being examined, curricula are really being altered, and budget allocations are being adjusted to provide place for ICT integration in order to fully realise the impact of ICT. The advantages of desegregation in schools on performance and contribution cannot be overstated.For example, Papaioannon and Charalambous (2011) found that integrating ICT in classrooms excites learners, increases their interests, and promotes their self-esteem and confidence, among other things. ICT provides for more interaction between faculty and students, improves critical thinking skills, and implementing new' understanding of what they

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have learned in class. Many nations are rapidly adopting ICT integration in their educational systems as a result of the benefits of ICT integration in mature societies (Bell 2011). Past research in nations such as Pakistan and Afghanistan has found a link between the use of ICT in the classroom and an increase in students' overall academic performance (Shiboko 2015).When appropriate strategies for ICT integration in education are implemented, the demonstrated favourable relationship between ICT integration and academic performance can be accomplished. In Pakistan, the scenario is similar. ICT is becoming more widespread in practically every aspect of the academic scene. ICT integration inside this classroom has been shown to increase educational outcomes in studies. The usage of ICT in classrooms has made teaching - learning process much easier. According to a study by Amedeker (2020), the use of ICT in the classroom has cultivated students who are motivated to and capable of taking an active role in their own studying, learners who develop innovative thoughts by communicating with students from around the world.

According to several experts, the effective use of ICT depends on the instructors' own perspectives, objectives, and methods for teaching with technology (Ozden 2007). Technology adoption and integration into the teaching profession are significantly impacted by how teachers interact with it. The use of ICT in teaching and learning activities is not in any way guaranteed by the provision of ICT infrastructure in schools (Ahiatrogah& Barfi 2016). Where these tools are employed in these classes depends primarily on the instructor, regardless of the quality or quantity of technology there (Kadel 2005). A common belief holds that behaviour is determined by how information about the results of an activity is processed, including how optimistic or pessimistic the performance is based on careful assessment (Ajzen and Fishbein 2000).

Numerous researchers have discovered significant correlation and relationships between teachers' attitudes and their usage of ICT in the classroom. In the majority of all these research, teachers' positive perceptions regarding the use of ICT were found to be correlated to their level of computer experience. This means that the attitude and behaviour of instructors can be used to explain their confidence in ICT (Lee 2013).Teacher' actions have a significant impact on students attitude and attitude toward ICT because they serve as important role models for their children (Ajzen&Fishbein 2000). Other research has found that integrating technology into teacher education can improve teachers' attitudes toward technology abilities (Bhasin 2012).

Previous findings show a strong relationship between teachers' computer phobia and their use of computers in classroom instruction (Beauchamp 2012). This indicated that teachers' attitudes are a significant predictor of their usage of ICT in the classroom. Teachers who have a positive mind-set and seem to be enthused about interacting teaching aids as well as technologies for teaching seem to be more inclined to hire ICT for classroom instruction, according to research (Gyamfi 2017).Teachers, on the other hand, must be proficient in use of the ICT as well as be responsible for assessing the varied and relevant ways for using ICT in various curriculum areas.

In a study to re-evaluate frameworks for integrating technology into teacher education, Davis and Tearless (2008) discovered that many nations across the world were utilising a variety of viewpoints to ensure that their educational systems were examined to allow for equitable access and to ensure that crucial ICT skills were generated in educational establishments to be employed by their teaching staff.The researchers also state and it was becoming evident that instructors needed to be trained in ICT skills and employ suitable pedagogical approaches in order to integrate Technology into instruction. Instructors' attitudes and views regarding ICT and related technologies have already been found to be one of the elements influencing successful ICT integration in the classroom (Hew and Brush 2007). The adoption and acceptance of ICT into secondary school teaching and learning activities can therefore be easily gleaned from instructors' favourable perspectives on the

usage of educational technology.

Teachers' ICT skills and opportunities for career development are crucial for integrating ICT into classroom teaching. According to Hennessy (2010), when administrators see ICT programmes as addressing their or their learners' needs, they are so much more likely to include them into their teaching. As a result, requirements assessments are critical for determining the ICT skills and knowledge that instructors require in their classrooms. Teachers' perceptions of ICT and perspectives toward ICT integration should be understood by planners of university education programmes for teachers, who should provide the essential provisions for ICT integration in the curriculum (Gebremedhin &Fenta, 2015).

Osborne and Hennessy (2003) assert that ineffective teacher training would lead to low self-esteem in educators who wanted to include ICT into their lessons. As these computer technologies provide the foundation for assisting students in achieving their educational goals, teachers can make effective use of ways to recognise and incorporate them into the learning process with the right ICT implementation training. For ICT to be successfully integrated into teaching and learning, professionals' readiness to use technology in classrooms is essential (Wernet et al. 2000).

Instructors are the cornerstone of curriculum implementation, thus they should be prepared to include advanced technologies to aid teaching - learning process. Furthermore, affected by economic obstacles, most poor countries' teacher training on ICT adoption has been inadequate (Makhanu 2010). It has been discovered that most training courses have been centered toward teaching the inner workings of ICT integration despite ignoring the organisational and social aspects. According to Schlebusch (2012), teacher program should focus on ICT pedagogical challenges rather than merely ICT abilities.Therefore, before using ICT tools to instruct students, university management should provide professors the chance to practise with them. Becta (2004) asserts that a dearth of pre-service instruction in the fundamentals of ICT use appears to have been a barrier to professionals incorporating technology into their teaching. Since there is little ICT training, Sherry claims that teachers won't be able to use ICT resources for integrative goals (2011).Likewise, Hajara and Bukari (2017) argue that teachers who do not believe yourself to be ICT professionals are hesitant in using this in front of a class of pupils who may understand more than they do.The quality of training and equipment teaching and learning materials will have a significant influence on the performance of integration. Several obstacles in classrooms have included a shortage of enough funding to assist teachers achieve supplying the required technical knowledge for incorporating ICT into the classroom (Lee 2013).

Purpose of the Study

The purpose of the study was to determine the attitude of teachers influences the integration of ICT in teaching and learning process at Secondary School Level in Hyderabad District Sindh.

Methodology of the Study

It was quantitative study. The research design of the study was descriptive and survey type. The population of the study was comprised of secondary school teachers in Hyderabad District Sindh. Simple random sampling technique was used in the selection of sample. Questionnaire was used as research tool. Tool was proper validated from experts in the field of education. Inferential statistic was used in data analysis. All the data were presented in the form of tables.

Conceptual Framework of the Study

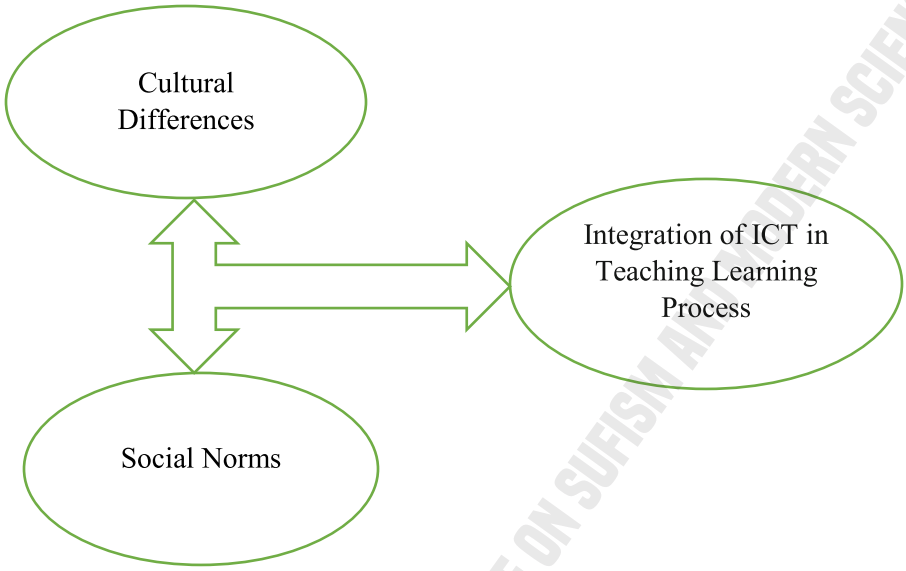

Figure 1: Conceptual Framework

Results

Table 1 Integration of ICT in Teaching and Learning Process

Statements	N	Mean	SD
ICT use in Classroom Presentation	23	3.12	.763
Delivery of teaching materials through ICT	23	3.18	.324
Practice of ICT tools in classroom with students	23	3.87	.542
ICT used in classroom to deliver information during lecture	23	3.62	.653
Keeping records of students'scores	23	3.28	.784
Making and conveying lesson plan	23	3.67	.253
Communicating with other teachers	23	3.65	.974
Creation demonstration	23	3.89	.569
Storing of vigorous information or data	23	3.09	.574

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Table shows the Integration of ICT in Teaching and Learning Process. The mean score and standard deviation (M=3.12, SD=.673) regarding statement ICT use in Classroom Presentation. The mean score and standard deviation (M=3.18, SD=.324) regarding statement delivery of teaching materials through ICT. The mean score and standard deviation (M=3.87, SD=.542) regarding statement Practice of ICT tools in classroom with students. The mean score and standard deviation (M=3.62, SD=.653) regarding statement ICT used in classroom to deliver information during lecture. The mean score and standard deviation (M=3.28, SD=.784) regarding statement keeping records of students'scores. The mean score and standard deviation (M=3.67, SD=.253) regarding statement making and conveying lesson plan. The mean score and standard deviation (M=3.65, SD=.974) regarding statement communicating with other teachers. The mean score and standard deviation (M=3.89, SD=.569) regarding statement creation demonstration. The mean score and standard deviation (M=3.09, SD=.574) regarding statement storing of vigorous information or data.

Conclusions and Recommendations

The study looked into how ICT was integrated into secondary school instruction. The study concentrated on secondary schools in the Hyderabad District of Sindh. A survey design was used in conjunction with statistical and numerical processes. The study found that a positive association existed between teacher attitudes as well as ICT integration. The consequence is that now the attitude of instructors played a significant role in the success of ICT integration in senior secondary schools. According to the study, positive attitudes promote high levels of ICT integration in teaching, while negative stereotypes promote low levels of ICT integration in lesson plans.

According to the findings, there is no substantial difference in gender integration of ICT in education. The gender of the teacher seems to have little influence on the efficacy of ICT integration. Aimed primarily at supporting the success of ICT integration implementation should not place a high value on the gender of teachers. According to the findings, teachers should be given the chance to grow passionate about utilising ICT in teaching and learning. Additionally, instructors need training to increase their effort and excitement for using technology in the classroom.

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Shahid Soomro [1]
University of Sufism and Modern Sciences,
Bhitshah Sindh

APPLICATION OF DECOMPOSED ALGORITHM IN HARMONIC MEAN FOR SOLVING NONLINEAR EQUATIONS

Abstract:
Most of the mathematical models are non-linear in nature and find their solution has always been a interest for researchers, in this paper this paper a new algorithm is derived for finding the solution of the non-linear equations, an existing algorithm that decomposes the interval into subinterval is further applied to harmonic mean of the values which fasten the rate of convergence of the process and also better accuracy and precision is achieved.

I. INTRODUCTION

Equations have always been a part of mathematical models of different problems of various fields and mostly their nature is nonlinear which means their graph will have a shape like a curve, finding the solution of these type of equations has always been point of interest for researcher and experts of different field to optimize the need of the study but the nonlinear are equations are not always possible to solve analytically so for that purpose different mathematicians have given number of numerical algorithms for improving the results, there are two type of methods for solving these equations closed and open method, closed method require validity of intermediate value theorem while open method does not need validity of intermediate value theorem. In 2013 developed a algorithm of modified bisection method for obtaining roots of nonlinear equations in which he initially decomposed the interval by bisection method and further used that in equation of straight line ,[parida ,2006] developed a improved regulafalsi method for enclosing simple zeros of nonlinear equation by creating regula-falsi newton like algorithm , [shaw, 2015] developed an improved regulafalsi method in which he decomposed interval by regulafalsi and used it in proposed algorithm ,[suhadolnik, 2012] proposed a bisection-parabolic method , [sangah , 2016] developed a modified bracketing method in which he used sub-intervals for solving nonlinear equations,[Xinyuan, 2003] created improved regulafalsi method of quadratic convergence [E.Soomro , 2016] developed a multistep derivative free bracketing method by truncating taylor's series , [A.A.Siyal , 2016] developeda hybrid closed algorithm by combining bisection and regulafalsi method [A.A.Siyal , 2017] developed a modified algorithm in which he decomposed interval by finding harmonic mean and used it in regulafalsi method, [umair,2018] developed a second order bracketing method for solving nonlinear equations, [Soomro , 2019] developed an algorithm which decomposes the interval into subinterval and these subintervals are used in the existing algorithms. In this paper the same algorithm used by [soomro, 2019] is used in the harmonic mean.

II METHODOLOGY OF PROPOSED ALGORITHM

Given an equation f(x) = 0 and an interval [a,b] which holds the condition f (a) ·f (b) < 0
Step: 01 Find a sub-interval [XL, XU] using the algorithm [Soomro, 2019]
Step: 02 Use sub-interval in harmonic mean i.e. 2XLXU / (XL+XU)

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III RESULTS AND CONCLUSIONS

To justify the modified algorithm few examples are tested using bisection method and regulafalsi method and compared with harmonic mean through sub-interval, it has been observed that sub-interval gives better results in terms of accuracy, error and also reduces no of iterations.

Function	Interval	Method	Iterations	x	|f(x)|
$2x - \log(x) - 7 = 0$	[1,10]	B.M	54	4.219906483780380	1.77e-15
		R.F.M	12	4.219906483780380	1.77e-15
		M.A	04	4.219906483780381	8.88e-016
$x^2 - \sin^2 x - 1 = 0$	[-1,2]	B.M	52	1.404491648215340	2.89e-15
		R.F.M	33	1.404491648215340	1.89e-15
		M.A	09	1.404491648215341	1.40e-16
$x^4 - x^3 - x^2 + x - 1 = 0$	[1,2]	B.M	50	1.512876396864093	9.32e-15
		R.F.M	53	1.512876396864094	2.88e-16
		M.A	07	1.512876396864095	1.88e-16
$x\sin x - \cos x = 0$	[0,1]	B.M	50	0.86033358901938	4.45e-16
		R.F.M	12	0.860333589019379	1.11e-16
		M.A	07	0.860863684357008	1.10e-16

B.M = Bisection Method
R.F.M = Regula falsi Method
M.A = Modified Algorithm

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Shahroz [1],Ghazala Tunio[2], Qazi Mohammad Moinuddin[3]

Mehran University Institute of Science & technology & Development, MUET Jamshoro Pakistan [1 2 3]

THE IMPACT OF LIQUIDITY ON PROFITABILITY: A CASE OF SUGAR SECTOR OF PAKISTAN

ABSTRACT

The ultimate aim of businesses is to increase shareholder wealth. Profitability and liquidity are essential and significant factors in achieving that goal. The management of a firm's liquidity, in particular, has a significant impact on how profitable and successful it is to grow. Since excess liquidity can disrupt business operations and insufficient liquidity can harm the firm's ability to run smoothly, managing liquidity has become extremely crucial. For that reason, the current study aims to look into the relationship between liquidity and profitability. The research is based on 15 sugar firms that have been listed on the Pakistan Stock Exchange over the period of 11 years, from 2009 to 2019. Correlation and regression analysis as well as the descriptive statistics were applied in the analysis and the results shows that Among Pakistan's listed manufacturing enterprises, liquidity ratios (current ratio) is positively and significantly correlated with firm profitability. Overall, the findings of this study can be used to make a recommendation to the sugar industry: pay closer attention to the liquidity ratios, since they have a substantial impact on the profitability of the companies. Furthermore, given that their quick ratio figures indicate improper management of liquidity assets, they aim to develop new ways for managing liquidity effectively.

KEYWORDS

Liquidity, Profitability, Sugar sector, Pakistan

1 Introduction

Financial problems affect the economic standing of most nations. Quite a few economies, both emerging and developed, may be experiencing this problem (Owolabi, Sunday Ajao, and Solomon Small Obida, 2012). As a direct consequence of the financial crisis, the majority of countries throughout the world now owe money to other nations and international organizations like the IMF and the World Bank. Businesses are in the same boat as consumers during the current financial crisis. The main factors contributing to this are raising prices and poor exchange rates(Owolabi, Sunday Ajao, and Solomon Small Obida, 2012).Keeping cash on hand means paying the opportunity cost of missing out on profits (Niresh, J. Aloy, 2012).

The management of the company's liquidity might be thought of as its skeleton. The ability to foresee the future is essential for managers, but they will be unable to do so unless they maintain a healthy level of liquidity. If a corporation is losing money, then it is considered unhealthy. But if it can't make ends meet, the firm will fail and finally perish. Even Nevertheless, a corporation can't survive without access to sufficient cash flow (Niresh, J.

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Aloy, 2012).

Due to the aforementioned causes, investors put a premium on a company's liquidity and profitability, elevating liquidity management to the forefront of management concerns. Several parties have an interest in the company's financial performance so that they may make more informed judgments.

The following groups have serious concerns about the company's liquidity and profitability for the reasons given.

Shareholders are the owners of companies that trade publicly on the stock market. They invested in equities to increase the profit potential. As a result, they place a premium on the company's liquidity condition due to its consequential impact on the company's bottom line (Saleem, Qasim, and Ramiz Ur Rehman, 2011).

Only in the sugar business has it been determined that proper management of a company's cash flow has a significant effect on the bottom line. Specifically, "Liquidity management greatly influences the profitability of the enterprises in the sugar industries of Pakistan," as stated by (Hussain, Sarfraz, Abdul Quddus, Phat Tien Pham, Muhammad Rafiq, and Drahomíra Pavelková., 2020). This is because the cash conversion cycle is inversely proportional to the number of days of accounts receivable, whereas the number of days of accounts payable is positively proportional to profits. As a result, liquidity issues pose several challenges to the sugar industry's bottom line.

In addition to short-term investors, long-term creditors worry about the safety of their loan principal and the interest they will earn on it. After thinking about the things described above, it's easy to see that liquidity is an important factor to consider. Simply put, knowing how much cash a firm has on hand helps everyone involved make smarter choices. A company has to have an adequate amount of cash on hand because of the close connection between liquidity and profits. Thus, a change in one variable results in a reduction in the other. (Roman, Angela, and Alina Camelia Sargu, 2015)

1.1.1 Research Problem

As argued by Eljelly Liquidity management is vital when companies are doing well, but it is especially vital when they are having problems. Illiquidity refers to a company's inability to meet its obligations. Liquidity management is critical for all firms in any circumstance (Eljelly, Abuzar MA., 2004).

Sugar industry is a major contributor in GDP and second largest sector of Pakistan. Only a few studies have been undertaken in Pakistan to examine the relationship between liquidity and profitability, considering the above factors, this study attempts to close the gap by doing research on Pakistan's sugar Sector.

1.1.2 Research Question.

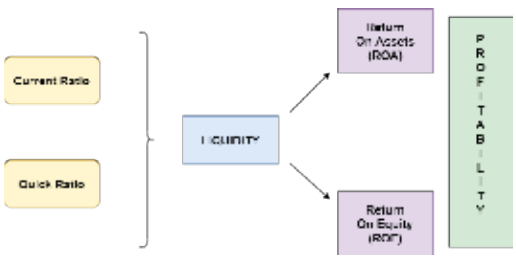
1. How does Liquidity Ratios Impacts on Profitability of Sugar Industry of Pakistan?

1.1.3 Research Objectives

1) To Measure the impact of liquidity ratios on profitability of sugar sector of Pakistan.

2) To Measure the significant relationship between liquidity ratios & profitability of sugar sector of Pakistan.

1.1.4 Conceptual Framework



1.1.5 Hypotheses

Based on the conceptualization model, four hypotheses which were developed in order to determine the relationship & Impact between liquidity ratios and profitability? The following hypotheses are formulated for the study.

H1: There is a profound influence of liquidity ratio (current ratio) on profitability (ROA).
H2: There is a significant impact of liquidity ratio (current ratio) on profitability (ROE).
H3: There is a profound influence of liquidity ratio (quick ratio) on profitability (ROA).
H4: There is a significant impact of liquidity ratio (quick ratio) on profitability (ROE).

2 Methodology

This research is done on the Sugar sector in Pakistan and it uses a quantitative method secondary data is gathered from chosen firms' yearly financial reports over some time. 2009-2019, which are registered at the Pakistan stock exchange.

Two liquidity ratios has been used to assess the situation's liquidity. Liquidity ratios such as the current ratio and quick ratio are utilized. The profitability ratios employed in this study were Return on Assets and Return on Equity. The profitability ratios serve as independent factors, whereas liquidity ratios serve as dependent variables.

3 Sampling Design

From more than 30 sugar mills are included in this study'spopulation of sugar mills in Pakistan (Pakistan Stock Exchange, 2022). Therefore, the top 15 sugar mills are chosen from them. We have information on 15 sugar mills' cash on hand, inventory, accounts receivable, and net profit. The random sampling method is adapted for this research.

4 Methods of Data Analysis

The research approach is a crucial element. The analysis method will be a summary of the impact of liquidity ratios on profitability. To get valid results, data must be assessed and interpreted using the appropriate analysis procedures. To assist with data analysis, SPSS software is employed. Measures of central tendency and dispersion are used in Impact of Liquidity on Profitability: A Case of Sugar Sector of Pakistan
conjunction with descriptive statistics to further explain the dataset. Metrics of dispersion include standard deviation and variance, while measures of central tendency include mean,median, and mode.

4.1.1 Regression Analysis

Regression analysis is a statistical method for examining how one variable affects another. In most cases, the researcher aims to determine the relationship between one variable and another. Since there is only one independent variable in this study, the conclusion is drawn using normal regression analysis rather than multiple regression analysis. The method entails creating a mathematical equation that explains how one variable affects another. Regression analysis, in general, refers to the mathematical equation that"best fists" the recorded value for the two variables.

In this study, regression analysis is used to test the hypothesis. By starting with a collection of data values and selecting the "best fit" equation for the company, simple regression is used to evaluate the link between liquidity ratios and profitability.

$Y = a + bx$

Where, Y – Dependent
Variable a – Y intercept of the equation
b – Slope of the equation
x – Independent Variable
In this study regression models could be created as follows;

$ROA = a0 + a1\ CR + b2\ QR$…….. *Model 01*
$ROE = b0 + b1\ CR + b2QR$……..*Model 02*

Where, ROA indicates Return on Assets, ROE indicates Return on Equity, CR indicates

Current assets and QR indicates Quick ratio. a0 and b0 indicate the constant terms a1, a2, b1, b2 are regression coefficients.

4.1.2 Correlation Analysis

In correlation analysis, the strength and type of the relationship between the two variables are statistically measured. The method is used to determine how closely related the variables are to each other and how powerful they are. A single value, known as the coefficient, serves as a description of the relationship between these two variables. The level of association between two different variables is indicated by the correlation coefficient, or "r," which is a number.

In this study, the correlation co-efficient analysis is under taken to

find out the relationship between the following two variables;

- *Independent variable – Liquidity ratios (Current Ratio, Quick ratio).*
- *Dependent variable – Profitability (Return On Assets, Return on Equity).*

4.1.3 Descriptive Analysis

The results of the study, which contain descriptive data, are the subject of the current section. The mean and standard deviation of each variable are calculated and analyzed for the descriptive statistics shown in Table 1. The data for Profitability and liquidity ratio is gathered from annual reports from 2009 to 2019. Below is a summary of the descriptive statistics for these variables.

Table 1. Descriptive statistics for variable

	Minimum	Maximum	Mean	Std. Deviation
ROA	-252.63	238.74	4.2008	48.59469
ROE	-30.54	40.87	4.0061	10.83533
Current Ratio	.09	7.93	1.4027	1.43368
Quick Ratio	.00	4.46	.4824	.84645

This table presents the descriptive statistics for the liquidity ratios (independent variable) and profitability (Dependent variable). As in the table above the number of observations included in the regression analysis is 165 observations with two dependent variables; Return on Assets and Return on Equity and two independent variables; CR and QR.

The minimum value is the lowest value with relate to the variables and maximum is the highest value of mentioned variables. The mean value is the measurement of central tendency where it represents the average value of the above variables. The descriptive statistics show that over the period under study, the criteria used for measuring profitability including Return on Equity, return on Assets averaged 4.2008, 4.0061 respectively. Furthermore, the mean value of the Current ratio was 1.40 and Quick ratio was the 0.482 value.

4.1.4 Regression Analysis

The influence of the independent and dependent variables utilized in the study is analyzed using regression; a standard regression analysis was carried out to determine the effect of the liquidity ratios on profitability as conceived in the models

TABLE 2. Model summary (Dependent variable- ROA, and ROE.

Model	R	R2	Adjust R Square	Std. Error of the Estimate
ROA	.197[a]	.039	.027	47.93120
ROE	.571[a]	.326	.318	8.94822

This table show the model summary. Co-efficient of determination is a measure of a portion of total variance in the Y variable. That is explained or accounted for by the introduction of the X variable. Here for Model

01 R2 = 0.039 Adjusted R2 = 0.027

In this model R2 indicates that 3.9% of ROE can be explained by the differences in the Independent variable (liquidity ratios), the remainder 96.1% of the ROE is attributed to other factors.
Whereas, here for Model 02 R2 = 0.326 Adjusted R2 = 0.318
In this model R2 indicates that 32.6% of ROA can be explained by the differences in the Independent variable (liquidity ratios), the remainder 67.4% of the ROA is attributed to other factors.

Table 3. Result of regression analysis (Dependent variable = ROE)

Independent Variable	B	Str. Error	T	Sig
Constant	-5.911	5.458	-1.083	.280
Current Ratio	9.016	4.615	1.954	.050
Quick Ratio	-5.254	7.817	-.672	.502

Table 4. Result of regression analysis (Dependent variable = ROA)

Independent Variable	B	Str. Error	T	Sig
Constant	-2.456	1.019	-2.411	.017
Current Ratio	5.532	.862	6.421	.000
Quick Ratio	-2.689	1.459	-1.842	.067

Thus, the regression Model one and two have obtained could be partially accepted and it explains Independent variable (Current ratio) has significant impact on ROA and ROE.

Whereas, independent variable (Quick ratio) does not have a significant impact on ROA and ROE. The impact of Current ratio on ROE is significant (t=1.954 and p=0.050) at the 5 percent level and the impact of Current ratio on ROA is significant (t=6.421 and p=0.000) at the 1 percent level. However, the other variable (quick ratio) in that equation is not statistically significant.

4.1.5 Correlation Coefficient Analysis

	Current	Quick	ROA	ROE
Current Ratio	1	.825**	.559**	.191*
Sig.(2tailed)		.000	.000	.014
Quick Ratio	.825**	1	.394**	.128
Sig.(2tailed)	.000		.000	.102
ROA	.559**	.394**	1	.508**
Sig.(2tailed)	.000	.000		.000
ROE	.191*	.128	.508**	1
*** Correlation is significant at the 0.01 level				
**Correlation is significant at the 0.05 level				

Correlation analysis shows there is a significant relationship between the Independent variable (Current ratios) which is one of the variables measuring the Liquidity ratios and the Dependent variable (profitability). Results further indicate that correlation between Current ratio and ROA is 0.559. It clearly described the positive relationship between Current ratio and ROA which is at the significance level of 1% (p value-0.0000). Meanwhile correlation between Current ratio and ROE which is used as the independent variable in this study is 0.191 which is also denoted the positive relationship at significance level 1% (pvalue-0.014). Whereas correlation between quick ratio and ROA is 0.394 which also described the positive relationship between quick ratio and ROA which is at the significance level of 1% (p value-0.0000). Correlation between the quick ratio and ROE shows insignificant relationship according to the p values.

5 Hypotheses Testing

Here the correlation analysis and regression analysis are used to test the hypothesis.

Those are,

H1: There is a significant impact of liquidity ratio (current ratio) on profitability (ROA).

The Current Ratio, similarly, contributes favorably to ROA. This means that when the current ratio rises, the ROA will rise as well, and vice versa. If the firm has a high Current Ratio, it means it can easily cover its short-term obligations. Furthermore, From the above regression analysis, independent variable (Current ratio) has significant impact on ROA which is at (t=6.421 and p=0.000) at the 1 percent level. whereas correlation analysis between Current ratio and ROA is 0.559. It clearly described the positive relationship between Current ratio and ROA which is at the significance level of 1% (p value-0.0000) According to the significant value H1 is accepted.

H2) There is a significant impact of liquidity ratio (current ratio) on
profitability (ROE).

Like the Return On Assets, the Current Ratio improves when things are going well. This means that when the current ratio rises, the return on assets will rise as well, and vice versa. If a corporation has a high Current Ratio, it means it can easily cover its short-term obligations. Furthermore, From the above regression analysis, independent variable (Current ratio) has significant impact on ROE which is at (t=1.954 and p=0.050) at the 5 percent level. whereas correlation analysis between Current ratio and ROE is 0.191. It clearly described the positive relationship between Current ratio and ROE which is at the significance level of 5% (pvalue-0.014) According to the significant value H2 is accepted.

H3) There is a significant impact of liquidity ratio (quick ratio) on profitability (ROA).

the above regression analysis, independent variable (Quick ratio) has insignificant impact on ROA which is at (t=-1.842 and Impact of LiquidityonProfitability: A Case of Sugar Sector of Pakistan
p=0.067). whereas correlation analysis between quick ratio and ROA is 0.394. It clearly described the positive relationship between Quick ratio and ROA which is at the significance level of 1% (p value-0.0000). According to the significant value H3 is partially accepted.

H4) There is a significant impact of liquidity ratio (quick ratio) on profitability (ROE).

A company's capacity to meet its short-term financial commitments from its readily available cash is measured by the quick ratio. If a company's quick ratio is high, it means it has plenty of cash on hand. If a company's quick ratio is 1, then it has more than enough liquid assets to service its obligations. Furthermore, the above regression analysis, independent variable (Quick ratio) has insignificant impact on ROE which is at (t=-0.672 and p=0.502). whereas correlation analysis between quick ratio and ROE is also has insignificant impact. According to the insignificant value, H4 is not accepted.

6 Recommendations and Suggestion for Future ResearchOverall, this study may offer a suggestion to Pakistani sugar companies, pay closer attention to your firm's liquidity ratios because they have a big impact on your profitability. Focus in particular on the current ratio since it has a favorable and significant relationship with the firm's profitability. Furthermore, given that their quick ratio figures indicate improper management of liquidity assets, they aim to develop new ways for managing liquidity effectively. In particular, they can apply methods for managing receivables and embrace new management practicesandcuttingedgetechnologiesforsucces

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sful Management, which will increase business profitability. Future research could take a considerable amount of time to determine the true impact and relationship, and this study only covers the 15 listed sugar companies; expanding the sample or including more firms in Pakistan will yield more accurate results. This study only takes into account the eleven years of data collection.

7 Findings and Conclusion

By examining the Pakistani sugar industry, this article examines the relationship between liquidity and profitability ratios from 2009 to 2019. The findings indicate that the current ratio has a favorable correlation with both ROA and ROE whereas the quick ratio has insignificant relation with return on equity. In summary, the liquidity ratio is particularly useful in identifying a company's profitability because it reveals the current assets and current liabilities of the company. According to the study's findings, if a company's liquidity ratio is high, it is in a stable position since it has a lot of cash on hand and can deal with any cash flow problems without difficulty.

The study's finding that there is a correlation between a firm's liquidity and profitability will aid investors in analyzing a firm's financial situation in order to cover ongoing operating costs. Due to data availability restrictions, the current analysis is also restricted to the sugar sector in Pakistan over a period of eleven years; however, in the future, big sample data can be used to assess other factors and sectors.

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1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

Waqar Ahmed [1] , Dr.Iffat Batool Naqvi [2] , Dr.Wahid Bux Mangrio[3]

MUISTD MUET, Jamshoro [1 2 3]

AN ASSESSMENT OF SOLAR FIRMS TECHNOLOGICAL CAPABILITIES TO ENTER IN THE GLOBAL VALUE CHAIN: A CASE OF SINDH, PAKISTAN

ABSTRACT

This paper assesses the existing technological capabilities of the solar firms in Sindh, Pakistan for their entry in the Global Value Chain (GVC) of the solar sector. Furthermore, this research achieves two objectives: firstly, this research examines the evolution of the solar sector in Sindh, Pakistan through an investigation of institutional development and secondly, this research evaluates the technological capabilities of solar firms located in the province of Sindh through using the technological capabilities audit tool (Rush, Bessant, & Hobday, 2007). Additionally, the audit tool divides firms into four types and contains nine stages of technological capabilities. For the 1st objective, the data has been collected from the reports and policies, and for the 2nd objective, a questionnaire survey was utilized for 50 firms working in Sindh. According to the data analysis, Pakistan Council of Renewable Energy Technologies (PCRET), Alternative Energy Development Board (AEDB), and National Electric Power Regulatory Authority (NEPRA) have played an enormous role in the evolution of solar sector. Moreover, the data reveals that 90 percent of the solar firms are Type C, and remaining 10 percent are Type B. However, there was absence of Type A and Type D solar firms. The results of this study depict that amelioration in technological capabilities is required, and the firms in Sindh, Pakistan especially lag behind in linking to the external sources. Therefore, the solar firms in Sindh, Pakistan can enter in the GVC through devising policies and discrete plans to develop external link for this sector to grow.

KEYWORDS

Technological Capabilities, Solar Sector, Global Value Chain, Pakistan, Firms.

1 Introduction

Pakistan has been bestowed with mammoth natural resources and one of them is having a large potential for growth in solar sector (Ali et al., 2021). Unfortunately, Pakistan has not been able to utilize its potential. Due to the global warming and rise in the average temperature, there has been repercussion and its impact has led to opt for producing energy through renewable resources. There have been various factors in 21st century that had led to the rise of solar sector worldwide and countries like China, Taiwan and Germany have rightly recognized the growing sector and have been the fast followers (Chen & Chen, 2015). Nelson (1995) emphasizes that industry dynamics are changing with time and those countries which are able to recognize the dynamics are far ahead from the ones which are neglecting the trends. Moreover, the international regulations have forced the progress of this sector. Though on the domestic front the firms in Sindh, Pakistan are

showing significant progress, on the international front they are unable to make a mark. Despite the sector is growing, Pakistan has been left behind on this front too. Other nations have exploited the potential of this nation. Rather than diffusion of local manufactured items, Pakistan has a solar market engulfed with imported items; regardless of having adequate technological capabilities. It needs to be explored whether the firms in Sindh, Pakistan are having sufficient potential to make their way in the Global Value Chain (GVC), and possess the required Technological Capabilities to enter in GVC.There have been various definitions of the term technological capabilities, and researchers have diversified set of opinions to present it. Morrison, Pietrobelli & Rabellotti (2008) definetechnological capabilities as the skills of all kinds which are an undeniable necessity to utilize the technology available and acquire it according to requirements.. Futhermore, Romijn and Albaladejo, 2002 defined technological capabilities as the type of skills and knowledge significant for the acquisition, adaptation, and utilization of the technology. The concept which portrays the difference between the technological capability and production capacity is important here. Bell & Pavitt (1993) were able to differentiate between them, terming former as the skills and knowledge, and latter related to the machinery needed for production.Rush, Bessant, and Hobday (2007) have

classified firms in their Technological Capability Audit Tool into four types on the basis of technological capabilities: unaware, reactive, strategic, and creative. Type A firms are said to be unaware and have very weak technological capabilities. It lacks in every major area, and do not possess ability to compete on the international front. Type B firms are reactive and said to possess average technological capabilities requiring build up in the major areas. Additionally, Type C firms are strategic and though they have sufficient capabilities, they need to ameliorate theircapabilities to penetrate in the global arena. Lastly, Type D firms are well positioned and possess the competitive advantage in the globalized market.

There are numerous examples of countries in the world which through acquiring technological capabilities and employing right set of strategies have entered into the global value chain such as Taiwan. It has set an example for the world that how it has over the time set foot in the growing industries (Jia, Sun and Koh, 2016). The strategies utilized by Taiwan to acquire the technology is itself an embodiment that how to move up the value chain. Nelson (1995) stated as a basic premise that catching up requires gaining access to and mastery of the technologies used by the leading countries of an era. Thus it sets an example for the developing countries to pursue. The success of China shocked the market, as its fast follower strategy led it to make a mark in the PV industry (Hansen & Lema, 2019). It is an embodiment for developing countries to follow.

The research discloses that people of Pakistan are inclined to adopt solar power production (Jan, Ullah, & Ashfaq, 2020). There is increase in the social acceptability and people tend to adopt greener methods of energy production. Furthermore, there have been certain factors enlisted by (Qureshi, Ullah, & Arentsen 2017) for this positive change. The recent emphasis of people have fallen on the usage of environment friendly and cost efficient products. They tend to avoid the rising tariff of electricity. However, some studies such as (Khan & Pervaiz, 2013) reveal that social unacceptability is one of the causes behind ill growth of solar sector in Pakistan. So, there is diversification in opinions of various researchers which is a definite gap to be filled.

Lastly, the barriers in the growth of solar sector have been identified by (Irfan, Ahmed, Zhao and Mukeshimana, 2019)which are classified as:

Economical, Policy, Technological. Social and Information and Human resource barriers. As impediments in the solar sector have been marked by researchers, this just implores for the way to mitigate and eradicate these barriers.

This research has all potential to give Pakistan a roadmap to tap the hidden potential of solar sector. It has been probed through the literature that technological capabilities of solar firms in Sindh, Pakistan have not been assessed yet and through this paper a colossal contribution will be put forward and this will also contribute in positioning the firms in Global value Chain. Pragmatically, this research will not only help Pakistan in growing in the solar sector, but also ameliorate the economy through entering in the export market of it. This will also help firms in up gradation of their technological capability, and it will lead the firms into competition with global market.

1.1 Research Problem

The firms are unaware of their technological capabilities and their assessment has yet not been done. This is indispensable for growth of this sector that firms should evaluate their existing technological capabilities. Otherwise, this sector will be marked by stagnation. Also, to enter in the Global Value Chain (GVC) firms must possess sufficient capabilities. The literature depicts that no research has been conducted to look into the technological capabilities of Solar Firms in Sindh, Pakistan, and this study endeavors to fill that gap.

1.2 Research Question

How solar firms of Sindh, Pakistan can enter in Global Value Chain with existing technological capabilities?

1.3 Research Objectives

There are two objectives of this research:

I) To analyze the evolution of Solar sector in Sindh, Pakistan.

II) To assess the technological capabilities of Solar firms of Sindh, Pakistan to enter in the GVC.

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2. Methodology

For this study, mixed methods were used. It is based on the qualitative as well as quantitative tools. The former was used for the achieving the 1st objective and latter was used for conclusion of the 2nd objective. The data collection techniques employed are: reports, articles, case studies, and survey. The tools like reports, articles and case studies were used to analyze the evolution of solar sector in Sindh Pakistan, and a survey was conducted from fifty firms by using Technological Capability Audit tool. 50 Firms were selected through systematic sampling from 150 solar firms registered in SECP. The firms were selected in order to represent entire Sindh. After the collection of data, it was put through analysis. The data of 1st objective was analyzed through an examination of institutional development (Malerba, 2002) , and the data of 2nd objective was put through Technological Capability Audit tool. The tool categorized firms according to the score achieved in the survey by the firms. This gave the results of the firms positioning according to their assessment.

Population	Sample	Sampling Method
202 Firms	50 firms	Stratified Sampling (Population has been partitioned into subpopulations)

Technological Capability Audit Tool	
Four Level of Firms	Nine Stages of Technological Capabilities
1) Unaware (Level 1)	1) Awareness
2) Reactive (Level 2)	2) Search
3) Strategic (Level 3)	3) Building Core Competencies
4) Creative (Level 4)	4) Technology Strategy
	5) Assessing and Selecting
	6) Acquiring technology
	7) Implementing
	8) Learning
	9) Linking to External Sources.

Figure 1 Adopted from Rush, Bessant, and Hobday (2007)

Capability Level (1-4)	Total Possible Score	Overall audit Result
Level 1: Unaware	24	Your company is weak and ill-prepared in all major areas of **technology acquisition, use, development, strategy** and so on; a major improvement program is urgently needed
Level 2: Reactive	25-48	Your company has poorly developed capabilities in most areas of **technology strategy, search, acquisition and capability building**. However, there are some strengths upon which to build
Level 3: Strategic	49-72	Your company has strong in-house capabilities and takes a strategic approach to technology. In some areas, the firm is behind the **international technology frontier** but has many important s upon which to build
Level 4: Creative	73-96	Your company has a **fully developed set of technological capabilities** and is able to help define the international technology frontier. In many areas it takes a creative and pro-active approach to exploiting technology for competitive advantage.

Figure 2 Capability Levels

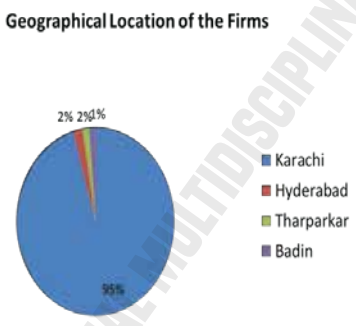

Figure 3 Geographical Location of Firms

3. Findings

Results of first objective were derived from exploring the institutional development of the solar sector. This sector in Pakistan has been marked by the creation of Pakistan Council of Renewable energy Technologies which took efforts in research and development in the renewable energy sector. Moreover,Alternative Energy Development Board in 2003 was created. This led to the focus of energy generation from renewable energy resources, and its main objective was set to devise policies for fostering this sector. After PCRET, and AEDB, international pressure also shifted towards energy generation from renewable energy resources, and to support the case Asian Development Bank (ADB) helped Pakistan in exploring viable and practical solar projects. Solar power capacity in Pakistan is immense, and WAPDA being the vigilant force was handed over the administrative control for AEDB. This promoted the growth of solar sector as now WAPDA itself was responsible to make policy changes for ignition of this sector. The cause was aggravated with the help of USAID which came forward in the revision of policies, and played a role of helping hand for the AEDB. Lastly, approval from NEPRA for allowing net metering to solar firms handed over the way to foster this sector. It gave crucial benefits to people, and ameliorated the benefits for the people preferring solar power. Figure 2 reveals the evolution of solar sector in Sindh, Paksitan



Figure 2: Evolution of Solar Sector In Sindh Pakistan

The second objective was dedicated to assessment of technological capabilities and for it the audit tool for the assessment of technological capabilities was used. The data from the fifty firms was collected and then analyzed through the tool. Figure 3 shows the number of firms that fall into Type A, B, C and D in terms of percentage. It discloses that only 10 percent of the firms fall into Type B category, and 90 percent of the firms are in the Type C category. None of them has been able be part of Type A or Type D category. The absence of firms in latter categories displays that firms do need to upgrade to mark at the international frontier.

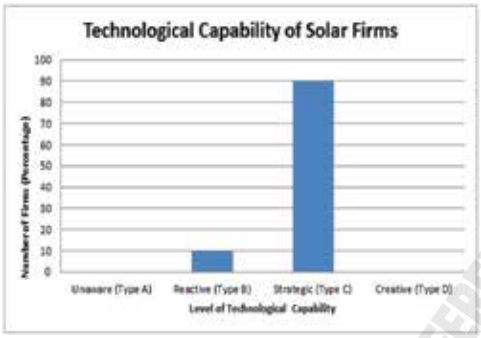

Figure 3: Technological Capability of Solar Firms

Additionally, the figure 4 and 5 reveal the bottom and top of firms score on the basis of stages of the technological capability audit tool. Ranging from Inverex Solar Energy PVT LTD to Sunforce Engineering PVT LTD, former at the top and latter at the bottom.

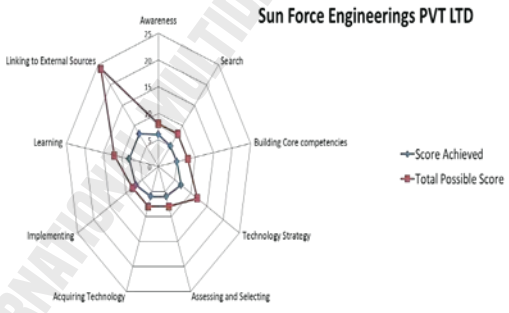

Figure 4

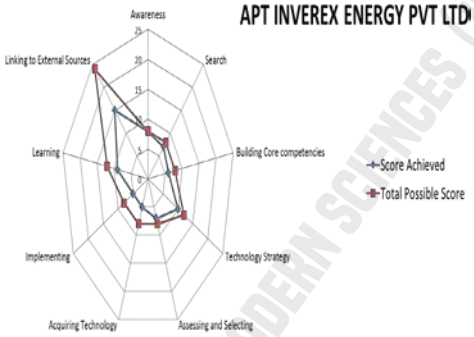

Figure 5

According to results, as 90 percent of the firms fall into the Type C firms which are named as strategic, and rest are the Type B firms which are reactive, the up gradation of the technological capabilities becomes indispensable to enter in the GVC. Firms should develop ability to link itself to external sources for the acquisition of the technology and utilize it to the sufficient level. Again, if firms are neglecting the importance of external sources, and do not learn from them, they will not be able to compete on the international frontier which is area of concern at this moment.

This research has put forth the evolution of solar sector in Sindh, Pakistan which of course enlists the institutions through which this sector gained momentum in this nation. Furthermore, it has assessed the technological capabilities of the solar firms in Sindh, Pakistan which will let the researchers know where our firms stand globally. It was very much unexpected of this research to portray that no firm falls in the category of, Type A and Type D, unaware and creative. These findings shed light that there is extreme need for the firms to accumulate better technology to become part of GVC.

Therefore, this study has the ability to show firms where they stand in the international market. It does not only show loopholes in technological capability of firms, but also aware firms of the process to upgrade them. Notably,

the government needs to devise a policy to enlighten the solar firms to upgrade and be able to foster in this competitive market.

6. Recommendations.

There are numerous recommendations deduced for the growth of the solar sector in Sindh, Pakistan:

1) Firms have dire need to upgrade their technological capabilities.

2) Solar sector is a growing market and Sindh, Pakistan has the potential of utilizing. For it, they need to acquire the modern machinery.

3) Government need to devise policies for strengthening the sector.

4) Firms can only make a mark on international front if they link to external sources and adapt new technology. For it, research and development in this sector should increase.

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Zafar Ali [1] ,Zohran Jumani [2] , Sufi Amin [3]

Pakistan Study Federal Urdu University,Karachi [1]
Iqra University Karachi [2]
International Islamic University, Islamabad [3]

ROLEOFGENDERINSUFISM:A COMPARATIVESTUDY 0F MENANDWOMENINSINDH,PAKISTAN

Abstract

Sindh is the land of Sufi Saints, Singer, Dervishes, Sufis, andShrine cultured people. The aim of this research is to investigatethe participation and role of gender at the Sufi shrines of Sindh,Pakistan. A comparative study of gender willbediscussedindetailabouttheroleofmale-femaleattheSufishrine.Roleofgenderwillbehighlyremarked.Accordingtothem,beingavisitorandbeingaSufi, being a Sufi singer, being a mystic saint, being a Sufi master(Sheikh), being a follower, are even by status as a poet or poetess,even lover or beloved, as Godly saints or seeker of divine love.Research will be conducted to analyze the difference of gendersrole at the Sufi shrines of Sindh, Pakistan. According to Islamicperspective, as well as the role of saint in Islam is significant.Besides,malesaints,manyfemalesaintshavedonetheservicesforthe promotion and advancement of the Islam but the role of manyis still hidden. Much research is carried on mostly about the malemysticsaintsbut stillthereisaneedofcomparativestudyofmale-female participation of Sufi shrines in Pakistan as well as Sindh.Although, main aim of this study is to highlight the gender andSufism particularly the role of gender in Sufi shrines of Sindh,Pakistan

INTRODUCTION:

Sufism,alsoknownasmysticism(Taswwuf),isabranchof Islam. Sufis propagate the message of Allah's oneness, with thebenefitofhumanityastheirprimarygoal.Sufishrinesarethecenterof social life for Muslims and non-Muslims alike (Nawaz, Danish,2013).Sufism is amysticalIslamic tradition.Sufismovedtodiverse places with Islam's universal message and formed Sufigroups and schools of thought. The SilsilahQadriya is consideredone of the early sufisilsila. It is named after one of the mostvenerated sufishaykhs in the Islamicate world , ShaykhAbdal-QadirJilani(d.1166),whomadeBaghdadacentreofhisactivitiesduring the twelfth century. In Islamicate South Asia, Chishti andSuhrawardisufiSilsilahswere introduced during the thirteenthcentury and had made their mark; QadiriSilsilah, however, couldnot gettheholdonIndianscenebeforefifteenthcentury. Althoughfew individual Qadirisufis came and settled in India but could notcontribute in the development of the Silsilahor establishing anystrong centre for the activities of their Silsilah. The QadiriSilsilahfoundedintwelfth century is consideredtobeoneoftheoldestandearliest sufisilsilahs. In India, however, it did not gain footingsuntil the fifteenth century. The

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QadiriSilsilahis named after therenownedsufiShaykhAbdal-QadirJilani(d.1166),popularlyknownasGhawthal-AzamlinBaghdad.HewasalsogiventhetitleofMuhiyal-Din(Thereviveroftherelig ion).ShaykhAbdal-Qadirwas born in Jilan, a village in the province of Semnan in presentday Iran. At the age of eighteen, he came to Baghdad where hecompleted his studies inhadith, fiqh(Islamic jurisprudence) andliterature. After completing his studies, he spent some twenty-fiveyears in prayers and meditations in solitude in the deserts of Iraq (Abdal-Haqq,Akhbaral-Akhyar,21).

There are many Sufi shrines in every major city, town andhistoric village of Sindh. These Sufi saints played important rolesin spreading themessageof peace,loveand tolerance amongdifferent communities. These values won the hearts of many non-Muslims who were impressed by the teachings of these Sufis andacceptedIslam.

QadriyaSufismhasbeenstudiedextensivelyinthesubcontinent,withcomparisonsmadeto other schools of Sufithinkingfromdifferenterasandplaces.Qadriyascholarshavealsostudiedthe Khanqahistructure indetail,butthespiritual/Sufiactivities in QadriyaDargahs and the social, political, theological,and economic roles of these Dargahs in current times have gottenlittleattentionfromresearchers.ThetwoQadriyaDargahsinPakistan'sLowersindharebeing investigatedfortheirSufiritualsaspartofthisstudy. AbdullahShahAshabiinThatta,andSufiShahInayatJhok Sharif, have been selected for this research because oftheir multifunctional significance in the area. Both the QadriyaKhanqahi and the Dargahi structures are compared side by sidesince they are interconnected.Dargahs and Khanqahs are alsoexamined in the research, which examines their multifunctionalnatureandexaminestheirroleinth eareaoftheIndo-Paksubcontinent.

Sindh, a Pakistani province, is known as the country of Sufis,saints, singers, and academics. Following the invasion of Sindh, alarge portionof the populace converted to Islam as their newreligion. They arrived with the message of Islamic mysticism. As aresult, the "Murshid," or holy man of exceptional personality andpiously, was surrounded by hundreds of disciples and followers.Murshids are generally referred to as "Pirs" in Sindh. Pirs arewidely acknowledged in Sindh. Throughout addition to live pirs,there are several tombs of notable pirs in Sindh, including MakliHills,Rohri, andothershrines

LimitationoftheStudy:

All shrine of Pakistan especially the Sufi shrines of Sindh areknown for their multi-religious and distinguish characteristics anddifferentstatusinviewofdevotees,especiallyfollowersandparticipants.Findingsofthestudywillbethebestwiththereference of Sufi Shrines of Sindh, Pakistan. The present researchworkwillbeconductedinanunbiasedbecauseoftherespectofthesectsandreligiousbelieves.

OBJECTIVE:

>Toinvestigatethevisitof Menandwomenattheshrines

> To find outtheshrineculture,rituals,andactivities

>To explore how and why Sama and sufi musicisperformedattheshrines

>Tocollectthedataabouttheursandrelatedactivitiesatshrines

>ofindoutthethedifferencesinshrinecultureascomaparetootherfamousshrineofSindh

SCOPE:

Sindh is the land of Sufi Saints and shrines. The culture of SufiShrines marks the special features of the Sindhi Culture so it hasgreat importance on the Sindhi society and culture being adoptedinthissocietyweshouldknowaboutthesai

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ntsandshrinesirrespective gender we shoud read about the role of gender inSufism and shrine culture of the Sindh. How people from all areasirrespectiveofcaste,coloureitherMuslimsor non-muslims,Pakistani or abroad have respect and showing staunch belief andlovewithSufi saintsandtheirshrines.

METHODOLOGY:

Qualitativeresearchmethodswillbeused.Intervie wswillbeconducted from women, men, dervishes. Muslim's as well as non-muslim's,Pakistaniaswellasforeignerspecia llyaboutSufiSaints,Shrines and culture or activities found there specially such as theparticipation of Men-women at the shrines. Data will be collectedby interviews so the research will be field work as well as librarywork.

RESEARCH QUESTIONS

•WhatisSufism?Howaremenandwomenparticipa tinginworldofSufismin Pakistan?

•Whatkindofrelationshipexistsbetweenmenandw omeninsufismpractice?

•Howgendercanbetheorizedorarticulatedthroug hcontemporarySufism inpracticeinPakistan?

•Whatisthecontextofcontemporary Sufisminpract iceinPakistan?

•WhysufimusicissungattheshrineofSufiShahInay atshaheedofJhookshareef?

•Whatissamma?Howissamapracticallyobserved attheshrineofsufiShahInayatshaheedofJhokesha reef?

•Whatisursanniversary?Whyitisbeingperforeme dannually?

•WhythereisGendergapattheSufiShrinesofSindh.

• Whataretheaimswomen participation attheSufiShrinesofSufi

•Howaremenandwomenparticipatingintheworld ofSufisminPakistan?

DISCUSSION:

There is a school of Islam known as Sufism, which is sometimesreferredtoasmysticism(Taswuf).Theim provementofhumanlifeis the fundamental focus of Sufi teachings, which emphasise theunityofAllahanditsproponents.Shrinesdedica tedtoSufismserveas the hub of social activity for people of all faiths, includingMuslims(Nawaz,Danish,2013).TheIsl a m i c p r a c t i s e o f m y s t i c i s m k n o w n asSufism.Sufistravelledtoavarietyoflocationstos preadIslam'soverarchingmessageandeventually establishedSuficommunities and schools of thought. It is generally agreed that theSilsilahQadriya was one of the first Sufi silsila. ShaykhAbd al-QadirJilani, whopassedawayin1166andmadeBaghdadacentr eofhisactivitythroughoutthetwelfthcentury,ishon ouredasoneofthemostreveredSufishaykhsintheIsl amicateworld.Thisneighbourhoodwas given its name in his honour. Chishti andSuhrawardisufiSilsilahswereimportedaroun dthethirteenthcentury and had left their imprint in Islamicate South Asia; QadiriSilsilah, on the other hand, did not establish a grip on the Indianscene until the fifteenth century. Although just a small number ofQadiri Sufis were able to make it to India and live there, they wereunable to make a significant contribution to the growth of theirsilsilah or build a powerful centre for the activities of their silsilah.ItisgenerallyagreedthattheQadiriSilsila h,whichwaseStablishedinthetwelfthcentury,ison eoftheoldestandearliestSufisilsilahs.On the other hand, it did not begin to establish itself in I n d i a untilthesixteenthcentury.ThereveredSufiShaykh Abdal-QadirJilani,whopassedawayin1166andw aswellknownasGhawthal-Azamin Baghdad, is honoured with the name of this school of thought.Inadditiontoit,thetitleofMuhiyal-Dinwa sbestowedtohim(Thereviver of the religion). ShaykhAbd al-Qadir was born in theIranianhamletofJilan,whichislocatedintheprovinceofSemnanin the modern day Iranian republic of Iran. He moved to Baghdadwhen he was eighteen years old and finished his

education there,specialisinginhadith,fiqh(Islamic law),and literature.Afterfinishing his education, he retired into seclusion in the deserts ofIraq for around twenty-five years to engage in private prayer andmeditation(Abdal-Haqq,Akhbaral-Akhyar,21).Thereareseveral Sufi shrines to be found in each of Sindh's main cities,towns, and ancient villages. These Sufi saints were instrumental inthe dissemination of the teachings of love, tolerance, and peaceamongavarietyofgroups aroundtheworld.TheteachingsoftheseSufis won over the hearts of a great number of non-Muslims, andas a result, these individuals eventually converted to Islam. On thesubcontinent, substantial research has been conducted on QadriyaSufism, and it has been compared to a variety of other schools ofSufi thought that date back to various ages and locations. Qadriyascholars have also conducted in-depth research on the Khanqahistructure; however, researchers have paid relatively little attentiontothespiritualandSufiactivitiesthattake placeinQadriyaDargahsas well as the social, political, theological, and economic roles thatthese Dargahs play in modern times.Within the scope of thisproject,an investigationoftheSufiritespractisedat the twoQadriyaDargahslocatedinLowerSindh,Pakistan,isbeingcarriedout.The multifaceted importanceof AbdullahShah Ashabi inThatta and Sufi Shah InayatJhok Sharif led to their selection asstudysubjectsfor this project. Bothoftheseindividualsarelocatedin Jhok Sharif. Since the QadriyaKhanqahi and Dargahi structuresare interrelated, they are compared next to one another using theside-by-sidemethod.Thestudyinvestigatesnot onlythemultifunctional character of dargahs and khanqahs, but also theirimportance in the region of the Indo-Pak peninsula where they arelocated. It is said that Sufis, saints, singers, and scholars all hailfrom the province of Sindh in Pakistan. Sindh is also a province inPakistan.Asadirectresultoftheinvasionthattook placeinSindh,a sizeable percentage of the local population embraced Islam astheirnewreligion.Theycame withamessageofIslamicmysticismwhen they arrived. As a direct consequence of this, the "Murshid,"also known as a holy man with an extraordinary personality andpiety, became encircled by hundreds of disciples and followers. InSindh, those who practisemurshid are often referred to as "Pirs."Pirs are held in high regard all over Sindh. In Sindh, at addition toliving pirs, there are many graves of renowned pirs spread aroundthe region. These tombs may be found in several shrines, such asMakliHillsandRohri.

In addition, Noor Bux Jawed wrote a book titled "Sufi women" inwhichhepresentedtheideathatthereisnodifferencebetweenmenand women in terms of their religious beliefs. Women continue toplay an important part in the Sufi path, spiritualism, and divinelove,demonstratingtheequalityofmenandwomeninthesefields.Throughtheuseofbiographies, tales,andanecdotesonthereputation of women in Sufism, his work shed light on the womenSufisthroughoutthecourseoftime,beginningintheearlydaysandcontinuing up to the present day. In addition to this, he details thefunction that female Sufis play. HazaratRabiaBasri (RA), a well-knownand revered female mystic,has earned a great dealofrenownandesteem. Sufi womenofthepast,shetraversedtheroadoflove,lovewithGod,andascendedtothepinnacleofspiritualismanddivineloveaftertraversingthevalleyofsorrowand adversity,

but she investigated the truth. According to Dr. Noor Bux Jawed,there aremany otherSufiwomenin theworld of mysticism;however, their role and contribution in Sufism is still unpopular,andtheyhaveremainedanonymous.As aresult,theresearchworkcan find out why these Sufi women are unpopular, despite the

factthattheyhavemadeasignificantcontributionto theSufiworld.Dr.Noor Bux has referenced Fariddin Attar's laudatory comments onHazaratRabiaBasri (RA) in his book "Conference of the Birds,Echoes," which are supported by Attar's statement that "No, Shewasn'ta single lady." But a hundred men over: clothed in theessence of their suffering, from food to face, engulfed in the lightofthetruth,obliteratedbythebrillianceofGod , andfreedfromtheburden of unnecessary luxuries (Noor Bux, 2004). Carl W Ernstconstrues"Sufismasamysticalwayoflifethat startswiththesoul'sconversion, or turning, toward God. This is the first step on thejourney. Thiswayleadstohumancompletenessviaunitywit hGodas its destination." The following is a translation of a Dhun-nunEgyptian proverb: "The Sufis are those people who have chosenGod to everything, so that God has preferred them to everything.""A Sufi is so unique in his life that neither he knows anybody, nordoes anyone know him," HussainIbn'Mansur al-Hilaj is quoted assaying.22'(itmaymeanthatbeingcompletelyen gulfedinthelove,he becomes indifferent to everybody, and nobody is able to judgehimsincehehasmergedintotheBeing.)Whot ranscendsallformsofperception).T.L. Wasvanidiscloses:"Inthemodernday, Sindhneedstorefreshtheirknowledgeabout ShahLatif.SamiandSachal, in addition to a number of other Sufi poets. They cleansethe heart and the emotions, in contrast to the way that our moderneducationmakesusintelligent,controversial,communal,andsectarian." Dr. JavedNoorbakhshelaborates as follows: "WhatevergreatSufishavestatedinexplanationofTasawwuf(Sufism),itwasa consequence of and suited to their unique circumstances andstates of being at the time they expressed it. Therefore, definitionsofSufismbasedonsuchexplanationsdo notrepresentgeneralisations of the religion. Instead, they are making referencetovariousaspectsoftheSufireligion."While quotinghead-nodding deciphers, Professor and Doctor R.A. Nichols said: "Theword "suf," which means "wool," is where the word "sufi" comesfrom.The term "sufi" was first used to refer to those Muslimascetics who,inimitationofChrist's hermits,clothedthemselvesincoarse woollen garb as a sign of penitence and renunciation ofworldly vanities. Prof. A. J. Arberry elaborates as follows: "Thename isof Arabic origin,being derivedfromthe word"Suf"meaning"woo111;theSufiswerediting uishablefromtheirfellows by wearing a habit of coarse woollen cloth, in times whensilks and brocades had becomethe fashion 0 the wealthy andmundane-minded,symbolicoftheirrenunciati onofworldlyvaluesandtheirabhorrenceforphysic alcomforts."TheSufiswerediStinguished from their fellow" Idries Shah brings attention to thefollowing:"Accordingtosomeauthors,andthey areinthemajority, Sufi is traceable to the Arabic word, pronounced,whichliterally means 'wool,' referring to the material from which thesimplerobesoftheearlyMuslim mystics,inimitationofthedressofChristiananchorites,weremade."InthewordsofProf.Dr.MotiLalJotwani:"Aswehaveseen,TasawuforSufismhasitsfoundationintheexperienceandteachingsof(P.B.U.H)himself."TabishKhair elucidates the following: "Because the Sufi origin istiedtothecompanionsoftheHolyProphetMuhammad(P.B.U.H.),the majority of Sufi Masters may directly trace their ancestry backto these people. Despite the fact that Sufism has many similarities with other religions across the globe, the philosophy and practiseofSufismaredistinctfromthoseofotherfaiths."TheIndo-PakistaniSubcontinent,andSindhin particular,isknownforproducing mystic poets who were also excellent humanitarians.Sindh was one of these regions. Each one of them had a deepappreciation for the beauty of nature, poetry, music, and song.There have been an infinite number of poets who have sung aboutthe divine, but Shah, Sachal, and Sami stand out as

particularlynotable and eminent. The pot of knowledge was brought to a boilby the ancient mystics· of Sindh (Dr. SakhiQabool Muhammadpage 184). Peter Pennke His work is titled "Saints, Singers, andSufiMusicintheIndusValley,"andhewritesabout these musicians. Onpage65,itissaidthat"Urs"istheanniversaryofthe Saint's death,andthattheword"wedding"isadirecttranslationofthe word "Urs." This is because his death is thought to be the finalunion of his soul with the holy blood. In spite of the fact that the Urs are religious festivals. Sufishrinesservebothareligious andasocialpurpose,andtheyworkasamagnet,pullingindividualsfroma wide variety of ethnic groups and religious backgrounds. (PeterPennke,2014) Dr. Mubarak Ali, in his book "Ulema, Sufis, andIntellectuals,"onpage201,discussesthesignificanceofyearlyurs,also known as weddings, at shrines and explains that these eventsserveasaplatformtopublicisethepironspecialoccasions.Numerous organisations, such as the Qawal, are able to improvetheir financial situation as a result of the bazaar. Additionally, thebazaarmaybeconsideredageneratorofeconomicactivity.Ontheoccasionofurs,significantcrowdscongregatetoagreatnumberoftheIndiansubcontinent'smanydargah,manyofwhichhaveahighnumberofvisitors. Itisimportant toconsidertheprocess bywhichthese dargahs have become centres of pilgrimage; the attraction isowing to themarvelsperformedby saints.According to him,dargah is a highly appealing location for Muslims to congregate(Dr. Mubarak Ali, 1996) In his book titled "Journey to God: Sufisand Dervishes in Islam," written by Jurgen, WaseemFrembgan,page 38 makes the following statement regarding the Ijtimas (urs):"urs is a particular occasion on which the devotees sometimesconductmasspilgrimagetosaintsshrine."Forcelebrationshonouring saints, the term "urs" is used in Indo-Pakistan; the word"Mausim"isusedintheMagrib;and"Mulid"isusedinEgypt.Theword "urs" refers to a mystic marriage ceremony and denotes theday a saint passed away and his union with God. (Jurgen, WaseemFrembgan,2008) The author, Muhammad AzamChaudhry, talksabout his work in the field at the shrine of Bari Imam. Accordingto his investigation, after asking a lady who was dancing at theshrine why she was doing so, he had an interview with her. Thewomanexplainedwhyshewasdancingattheurs.MuhammadAzam questioned her about why she was dancing in a public areadespitethefactthatIslamprohibitssuchbehaviour.Sherespondedthat she was not beget, but that after visiting the urs she was begetakid,andbecauseshehadnowrealisedherhusband'sgoal,shehadagreedtocontinueattendingtheursonanannual basis.

CONCLUSION

This study will help us to understand the comparative study ofgender (male-female) at the Sufi shrine of Pakistan especially inSindh.

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1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

Dr. Amber Fatima Abidi[1]
Shaheed Zulfiqar Ali Bhutto University of Law, Karachi.

ENLIGHTENMENT OF HUMAN ROLE AND SUFISM IN POETRY OF DISTINCT SUFI POETS.

ABSTRACT:

Sufism leads to the evolution of distinctive human association with the Divine. It is the conclusivesource of peace in an individual which brings positive revolution in the society. In fact, theadvancement and latest inventions have made human roles very materialistic and artificial in thisworld, so in this era, the upmost need of everyone is to search the closeness of Allah SWT, andcare for the suffering humanity without any discrimination. In this context, Sufi poets areregarded as the ambassadors of peace, love, compassion, harmony, endurance, tolerance,forgiveness and kindness among human beings. Sufi poetry emphasizes the lessons of equality ofhumans in every walk of life, uprising moral values, mercy and patience among all individuals.The main objectives behind the Sufi poets are always focused the strong bond between theCreator and His creation. Their lyrical words play a significant role in bringing people ofdivergent schools of thought close to each other. Sufis used their poetry as an effective tool for thedevelopment of ecumenical harmony in the world and make this society a tranqulized place. On theother hand, Sufi poets train human souls for the acceleration of positive vitality and bring serenityto human hearts through their poetry.

Key Words:
Sufism, Poetry, human role, peace, equality

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ڈاکٹر عنبر فاطمہ عابدی
لیکچرار اردو ،شہید ذوالفقار علی بھٹو یونیورسٹی آف لاء کراچی

مختلف صوفی شاعروں کے کلام میں صوفی ازم اور انسانی کردار

صوفی ازم انسانی رشتے کو خدا کے ساتھ مربوط کرنے اور استوار کرنے کا اہم ذریعہ ہے۔ تصوف کے ذریعے فرد واحد کا شعور کچھ اس انداز سے مثبتنطور پر پروان چڑھتا ہے کہ معاشرے میں امن و سلامتی کے رجحانات کیجانب ذہن سازی کی جاسکے۔

وابستہ روز بہ روز ترقی نے انسانی وجود کو مادہ پرستی کی جانب دھکیل دیا لہذا اس نفسانفسی کے دور میں جو دو عناصر سسکتی ہوئی انسانیت کا مداوا کر سکتے ہیں وہ خدا سے قرب اور اس کی مخلوق کی بلا تفریق قوم و مذہب تکالیف کا ازالہ ہے۔ اس تناظر میں جب صوفیاء کرام کی شاعری کا جائزہ لیا جائے تو اندازہ ہوتا ہے کہ ان کے کلام میں انسانوں کے لیے آپس میں اخوت مساوات، امن و سلامتی، اخلاص و محبت، صبر و تحمل کا وہ پیغام واضح ہے کہ جو نہ صرف خدا سے ہمارے رشتے کو مستحکم کرنے میں کلیدی کردار ادا کرتا ہے بلکہ اگر ہم ان تمام انسانی اقدار کا بہ نظر غائر مطالعہ کریں تو یہیصوفیاء کی شاعری کا سرمایہ بھی ہے تمام صوفی شعرا انسانی کردار کی بلندی کو مخلوق خدا کی خدمت میں اور خالق کو راضی کرنے کے لیے مخلوق کو راحت دینے میں گردانتے ہیں

Methodology:

In this paper extensive data was collected from physical libraries as well as from internet sources. In this regard, Qualitative research has been done.

اس ضمن میں اس تحقیقی مقالے میں بعض اہم صوفی شعرا کے کلام کا جائز ہپیش کیا گیا ہے کہ جس کے ذریعے یہ اندازہ لگایا جاسکے کہ اپنے اپنے زمانے میں وقت اور حالات کے تقاضوں کو مد نظر رکھتے ہوئے اپنے صوفیانہ کلام سے انسانوں کے درمیان ہم آہنگی اور یگانگت کی فضا کو قائم کرتے ہوئے خدا کے پیغام کو آگے بڑھایا

بابا فرید (1265-1173ء) کی شاعری کا مطالعہ یہ ظاہر کرتا ہے کہ آپ کے نزدیک انسانی کردار کے سنوارنے کے لیے ان اخلاقی اور روحانیاقدار کا ادراک ضروری ہے جو انسان کو روزمرہ زندگی میں ایک دوسرے کے ساتھ برتی جاتی ہیں۔

ان کے نزدیک شاعری راہ سے بھٹکے ہوئے لوگوں کو صراطِ مستقیم پر لانے کی ایک کاوش ہے۔(1)

بلھے شاہ (1757-1680ء) کے کلام کا مطالعہ یہ ظاہر کرتا ہے کہ انہوں نے اپنے کلام میں لوگوں کو انسان دوستی، وحدت انسانیت، خلق خدا سے محبت اور خدمت مخلوقات درس دیا ہے۔ ان کی صوفیانہ شاعری اعلیٰ انسانی اقدار مثلاً مساوات، عدل وانصاف اور اخوت، بھائی چارے کی علامت نظر آتی ہے۔2

شاہ عبداللطیف بھٹائی (1752-1689ء) وہ صوفی شاعر ہیں جن کے لیے شیخایاز نے "تصوف پرست" کے الفاظ استعمال کیے ہیں شاہ عبداللطیفؒ کی صوفیانہ شاعری انسان کو سعی مسلسل کے جذبے سے روشناس کراتے ہوئے عمل پیہم کی جانب راغب کرتی نظر آتی ہے۔

رحمان بابا (1706-1632ء) پشتون زبان کے وہ معروف صوفی شاعر ہیں جنکے کلام کو عوام محض 'شاعری' کی حد تک جانتے ہیں تاہم یہحقیقت ہے کہ پشتو زبان میں رحمان بابا کے جو صوفیانہ افکار اپنی شاعری میں پیش کیے ہیں انہیں دنیا بھر میں متعارف کرانے کی ضرورت ہے۔ ان کی صوفیانہ شاعریہ پیغام دینی نظر آتی ہے کہ اگر انسان بدی کا جواب نیکی سے کرے تو یقیناً یہ نہ صرف اس کی شخصیت میں استحکام عطا کرے گا بلکہ انسانیت کے وقار میں بھی اضافے کا باعث ہوگا۔ یہ حقیقت ہے کہ رحمان بابا ہمیشہ سے انسانیتکا شرف اونچا کرنے کے لیے کوشاں نظر آتے ہیں

معروف شاعر سچل سرمست (1827-1739ء ان صوفی شعرا میں شامل ہیں جنہوں نے اپنے کلام میں وحدت اور انسانیتعظمت کا درس دیا۔ انہوں نے انسان کو اپنی وقعت، اعلیٰ حیثیت اور حقیقت کیبیاد دلائی تاکہ وہ درست انداز سے اپنے آپ کو خالق کائنات کا خلیفہ ہونے کا اہل ثابت کر سکے بلوچی زبان کا مشہور شاعر مست توکلی (1892-1825ء کا کلام بھیتصوف کا آئینہ دار ہے. اپنی شاعری میں مست توکلی نے بلوچ قوم میں امید اور شعور بیدار کرنے کی کوشش کیا من و محبت، اور خدا سے قربت ان کے کلام کا خاص حسن ہے۔ خواجہ غلام فرید (1901-1845ء کا شمار ان صوفی شعرا میں ہوتا ہے جنہوں نے انتہائی آسان اور سادہ الفاظ میں انسان کو اپنے مرتبے اپنے اشعار سے کرائی ہے۔

CONCLUSION---/ملخص

مختلف صوفیاء کرام کی شاعری کا مطالعہ یہ ظاہر کرتا ہے کہ ان صوفیشعراء نے اپنے کلام کے ذریعے نہ صرف اطاعت الٰہی کا پیغام دیا۔ بلکہ اسکے ساتھ ساتھ لوگوں میں اتحاد و بھائی چارہ اور واخلاص کی فضا کو بھی پروان چڑھایا۔ انسانی کردار کی خامیوں کو کس طرح دور کیا جاسکتا ہے، اس دنیا میں اپنا آپ بہتر کرنے کے لیے کون سے اطوار اپنانے چاہئیں نیز اخلاق اور اقدار کی اعلیٰ مثالیں ہمیں ان صوفیاء کے کلام سے ملتی ہیں

RECOMMENDATIONS:

معروف صوفیاء کے کلام کا اردو اور انگریزی زبانوں میں ترجمہ ہو چکا ہے اور کچھ کے کلام کے تراجم زیر تکمیل ہیں۔ ضرورت اس امر کی ہے کہ ان صوفی شعرا کے کلام کو بطور مضمون ہر زبان و ادب کی تدریس میں شامل کیا جائے تاکہ طلباء زیادہ سے زیادہ مستفید ہو سکیں

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ڈاڪٽر غلام فاطمه ڀٻر
گورنمينٽ بوائز ڊگري ڪاليج پٽ شاهه

ڀارهين ڪلاس جي سنڌي نصاب ۾ شامل صوفي شاعري

ABSTRACT

In the syllabus of class 12 mystical poetry of Shah Abdul Karim Of Bulari Shah latif bhittai and khawaja Muhammad Zaman ofLawanri is discussed in their poetry the concept of divine love given in which the seekers search for love for god. In the poetry the concept of God almighty is presented clearly and deeply. This ideology is not only deep but interesting as well. The message in given that without the real divine love there is no purpose for living. The obstructions on the way not only given indication of destination but also provide solace.

Mystical poets consider at those place desolated where they cannot find Their beloved. They only search for place where they are guided and Where the darkness of their soul is removing . At that destination the meet their

beloved and find peace.

تعارف

هن مقالي ۾ سنڌ جي صوفي شاعرن شاهه عبدالڪريم بُلڙي وارو، شاهه عبدالطيف ڀٽائي رحه ۽ خواجه محمد زمان لنواريءَ واري جي شاعري انٽر ڪلاس جي سنڌي نصاب ۾ شامل آهي جنهن ۾ حقيقي عشق جو تصور ڏنو ويو آهي هڪ سالڪ انسان لاءِ الله جي عشق ۾ عاشق ٿيڻ جا جُز سمايل آهن. جنهن ۾ الله تعالي جي تصور کي وڌيڪ چٽو ۽ پُختو پيش ڪيل آهي. اهو فڪر گهرائِيءَ سان گڏ دلچسپ به آهي. رب کي حاصل ڪرڻ جو جُستجو جو پيغام آهي. حقيقي محبوب جي تصور کانسواءِ جيئڻ بي مقصد آهي. تصوف جي رستي ۾ آيل رڪاوٽون منزل جو ڏُسُ ڏسين ٿيون. اِهي رڪاوٽون تڪليفون هڪ سالڪ لاءِ سڪون جو سبب آهن. صوفي شاعر اهو ماڳ مڪان ڏي سُجو ٿا سمجهن جتي هنن جو محبوب نه هجي ان منزل جا ڳولائون آهن. جتي سندن رهبري ٿئي دل جي اونداهي دور ٿئي، طالب منزل ماڻي ڏي سڪون حاصل ڪن ٿا. سندن منزل محبوب سان ميلاپ آهي. حضرت ذوالنون مصري رحه جن جو ارشاد آهي ته "صوفي اهو آهي جنهن کي ڪنهن شيءَ جي طلب تنگ نه ٿي ڪري نه وري ڪنهن شيءَ جي ضرورت يا نايابي کيس پريشان ڪري ٿي. اڳتي فرمائين ٿا ته صوفي خدا کي هر شيءَ تي ترجيع ڏئي ٿو . هن جي قرباني جو هڪ ثبوت هي آهي ته هو پنهنجي ذاتي علم تي خدا جي علم کي ۽ پنهنجي ارادي تي خدا جي ارادي کي ترجيع ڏي ٿو. ***(1)***

مقصد

ڀارهين ڪلاس جي "سنڌي لازمي" نصاب ۾ شامل صوفي شاعريءَ جو تجزيو

اڳ ٿيل ڪم جو جائزو

ڄاڻايل موضوع تي هن کان اڳ ڪو ڏار تحقيقي ڪم ٿيل نه آهي. هن مقالي ۾ ڀارهين ڪلاس جي "سنڌي لازمي" نصاب ۾ شامل صوفي شاعرن جي شاعري جو تجزياتي جائزو پيش ڪيل آهي. جي ايم سيد فرمائي ٿو ته صوفي مذهبي جهاد يا خوني انقلاب جي خلاف آهي، هو نفس جي درست ڪرڻ واري جدوجهد کي جهاد اڪبر ڄاڻي ٿو صوفي خودي کي ڪائڻ جي فائدي م آهي پر ان لاءِ سندس مطلب طارڪ الدنيا، بيڪار، سست ۽ ڪاهل بنجڻ يا بنائن خاطر قرباني ڪرڻ جي تلقين ڪري ٿو." ***(2)*** هتي رڳو ڀارهين ڪلاس ۾ شامل صوفياڻي شاعريءَ جا ڪجهه نڪتا بحث هيٺ آڻجن ٿا.

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تحقيق جو طريقي ڪار

هن مقالي ۾ ڀارهين ڪلاس جي سنڌي نصاب ۾ ڏنل صوفي شاعرن جي شاعريءَ ۾ تصوف جو فڪر ڏنو ويو آهي. جنهن ۾ حقيقي محبوب جي ڳولا جي طلب سان گڏ ان جي وصل کي ٻڌايو ويو آهي. تصوف سان لاڳاپيل تحريري مواد مان حاصل ڪيل معلومات جو خاصيتي تجزيو ڪري نتيجا اخذ ڪيا ويا آهن.

تجزياتي حقيقتون

ڀارهنت ڪلاس جي سنڌي نصاب ۾ پهريون شاعر شاهه عبدالڪريم آهي سندس پهريو بيت آهي:

مورَک مُور نه ٻُجهٽا، هيڏانهن هوڏانهن ڪن،
ڪٽر جنين اکين ۾، سي ڪيئن پرين پسن *(3)*.

هن شرر ۾ مورَک ، ماٺهو جي فضول بحث کي سمجهايو ويو آهي ته "مُورَک" ڪنهن به ڳالهه کي مڃڻ لاءِ تيار نه آهن، بلڪ پنهنجي پاڻ کي ڪامل سمجهن ٿا، ڪٽر مان مراد ڪنو پاڻي يا خودي آهي، جيڪو انسان کي مشاهدي ماڻڻ کان روڪي ٿو، پر صوفين جي نقطي نگاهه کان مُورَک يعني آئون تائين محدود رهي ٿو. آئون کان اڳيان نڪري ته "حق" تائين پهچي. حقيقي محبوب جو ديدار ڪري. شاهه عبدالڪريم فرمائي ٿو ته:

مجازي موهي، ڪڏهن ويندِءِ نِڪري،
اڪڙيون توهي، مڃڻ وهين وِسهي *(4)*.

دنياوي ڏيک، جنهن جي موهه ۾ اي انسان ! انهن اکين تي ويساهه نه ڪري ويهه چو ته هڪ ڏينهن توکي مالڪ وٽ پيش پوڻو آهي، متان پوءِ اتي شرمسار ٿيڻو پوي، هِن دنيا ۾ اچڻ جو مقصد ماڻ نه ته پڇتائڻو پوندئي. شاهه لطيف فرمائي ٿو ته:

تون حبيب، تون طبيب، تنهم ڏڻن ڏيپ،
تون ڏيين تون لاهين، تنهم هادي رب،
آهم اِي ءُ عجب، جِن وارئو ويچ ويهارين. *(5)*.

حبيب ۾ ڪامل يقين جو پيغام آهي، هر تڪليف هر مرض ڏيندڙ ۽ لاهيندڙ مالڪ آهي. آئون ان ڳالهه ۾ حيران آهيان ته منهنجا مالڪ هر شيءِ تنهنجي وس ۾ آهي، پوءِ به هن دُنيا ۾ ڪيتراڻي طبيب خلقيا اٿئي. جيڪي روحاني ۽ جسماني مرضن جو علاج پيا ڪن. جڏهن ته هر مرض جو علاج منهنجا محبوب تو وٽ آهي. لطيف سرڪار اڳتي فرمائي ٿو:

تون حبيب، تون طبيب، تون دارون ڪي دردن،
تون ڏيين، تون لاهين، ڏاتر ڪي ڏڪندن،
تڏهن ڦڪيون فرق ڪن، جڏهن اَمر ڪر هو اُن ڪي *(6)*

حبيب تون ته طبيب به تو ئي آهين علاج ۾ شفا رکندڙ به تون ئي آهين، منهنجا محبوب علاج ڪي لا علاج ڪندڙ به تون ئي آهين. هر دنياوي شئي تنهنجي حڪم جي تابع آهي. ڇو ته خالق ۽ مالڪ تون ئي آهين:

چڙهئو چڪاسن چاءِ، آڳ برندي آئيا،
وهسن واڙيءَ ڦُل جنءَ، محبتي مچ لاءِ،
آٿي پاڻ اڙاءِ ڪٿي ڪوري وچ ۾ *(7)*.

حقيقي محبوب جي طلب ۾ ڪامل انسان لاءِ ايڏو سُرور آهي، جو اُن رستيءِ آيل رُڪاوٽون به گلستان آهن ، طالب جي طلب ڪوريءِ يعني آويءَ ۾ پڄرڻ ڪان به وڌيڪ پي قراري واري ڪيفيت آهي، اها پي قراري، "قرار" ۾ بدلجي ٿي جڏهن طالب حق جو ڳولائو آهي:

سيئي سهاڳيئون، سيني ڳچيءَ هارَ،
پَسڻ ڪارڻ پرينءَ جي، سهسين ڪن سينگارَ،
ڊول تنين جي ڊار، هيناهون هلن جي. *(8)*.

تڪبر ۽ وڏائي صرف مالڪ کي ُجڳائي، تصوف جي رستي ۾ ڪاميابي انهن طالبن کي پلئه پوي ٿي جن ۾ عاجزي انڪساري آهي. حقيقي محبوب انهن طالبن وٽ ٿو ملي، جن ۾ طلب جي تنوار سان گڏ عاجزي به اُتم درجي تي موجود آهي.خواجه محمد زمان لنواري وارو فرمائي ٿو:

عارف ۽ عشاق پسڻ گهرن پرينءِ جو،
جنت جا مشتاق، اجا اوراهان ٽيا *(9)*.

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عارف ۽ عاشق جن جي دل ۾ تڙپ صرف سچي معبود جي ميلاپ لاءِ آهي اُهي جنت جا شوقين نه آهن. جهنم کان ڊڄندڙ نه آهن، بل ڪِ سچي محبوب جاطلبيندڙ آهن. منزل اُنهن سچن، ڪامل انسانن کي نصيب ٿي آهي غلام محمد گرامي لکي ٿو ته: **"**صوفين کي نه صلي جي پرواهه، نه سزا آهي. ۽ جزا جو خوف بهشت انهن لاءِ حسن آهي ۽ دوزخ انهن لاءِ جلال آهي. ***(10)*** ۔

،اکر پڙهه عشق جو، ڪنز قدوري ڇڏ
.چڙهه تنين جي مڏ، جي ستي ڏين شراب جي
يا
،ستي ان شراب جي، جن سري سون ٿيا
سمهڻ تن ثواب، ڪتڻ تن کي ڪيميا. (11)۔

۾ طالب کي "ڪنز قدوري" ڇڏي ڪنهن ڪامل مرشد وٽان ونڊ وٺڻ جي تلقين ڪيل آهي آهي، جنهن طالب کي ان شراب خواجه محمد زمان جي شاعري ،جي سُتي ملي ويئي اهي طالب ڪامل جي درجي کي پهچي تي ويا، سمهڻ تن لاءِ ثواب ۽ ڪتڻ تن لاءِ ڪيميا يعني پارس آهي
.غلام محمد لکي ٿو ته: "علم ظاهريءَ ۽ ڪنز قدوريءَ تي شراب جي ستيءَ کي ترجيع ڏين ٿا
ان مان مطلب شراب معرفت آهي. (12)۔

لڳو واءُ وَصال، جنين ساعت هيڪري
تن سان لڌي لعل، جنهن لئه جڳ خلقيو. (13)۔

جن طالبن کي هڪ پل لاءِ محبوب جو جلو نصيب ٿيو، تن زندگيءِ جو اهو قيمتي هيرو هٿ ڪري ورتو جنهن جي ڪري سڄي دنيا جوري ويئي آهي، طالب :کي هن دنيا ۾ اچڻ جو قيمتي مقصد نصيب ٿيو. طالب جي ڪيفيت خواجه محمد زمان بيان ڪري ٿو

نڪي اوڏو اک کي، نڪي نظران ڏور
وڃان اِئين وهلور، جيئن ڏٺو ئي اَڻ ڏيٺ ۾. (14) ۔

جيڪي طالب محبوب جا طلبيندڙِ آهن، محبوب جي ذڪر ۾ انهن کي سڪون ملي ٿو، اهي هر وقت محبوب جي ياد م غرق آهن، اهي محبوب پسن به ٿا، تڙپن به ٿا ته ڄڻ محبوب اڻ ڏٺلن ۾ آهي، غلام محمد گرامي لکي ٿو ته : "عارف جي ظاهري اک بند ٿئي ٿي، پر هو باطن جي اکين سان شين جي حقيقت جو مشاهدو ڪري ٿو، ۽ ان سان هڪ لذت ۽ ڪيفيت جو مشاهدو ڪري ٿو اها ڪيفيت بيان ۾ اچي نه ٿي سگهي". (15)۔

،پريان جي پچار ۾، اچي جن آرام
دنيا تن کي دام، پڇن موسم موت جي. (16)۔

صوفين جي آخري منزل ميلاپ آهي، جنهن ۾ ڪامل انسانن کي هن دنيا قيد مثل لڳي ٿي جو هو هر وقت "موت" جي موسم جي طلب پيا ڪن ته کين حقيقي محبوب جو ميلاپ پلئه پوين. گرامي صاحب لکي ٿو ته: "اهل تصوف وٽ چند منزلون آهن: آرزو ۽ جستجو، ديدار ۽ وصل آخري منزل لاءِ چون ٿا ته ائين آهي، ڄڻ طالب ۽ مطلوب هڪ ٿي وڃن ٿا". (17)۔

نتيجو

سنڌ جي سڀني صوفين وٽ آخري منزل وصل جي منزل آهي .وصل جو رستو صرف موت آهي، جنهن طالب گذري مطلوب سان هڪ ٿين ٿا. تنهن ڪري سڀني .صوفين تي ميلا سندن موت واري ڏينهن تي ملهايا وڃن ٿا، جو اهو ڏينهن سندن وصل يعني محبوب سان ميلاپ جو ڏينهن آهي
سان سندس ذهن منور نوجوانن ۾ جديد علم سان گڏ تصوف جو ابتدائي درس ڏيئي انهن جي ذهنن ۾ امن ۽ سلامتي جي لاٽ ٻارڻ آهي. جنهن جي روشني ٿين. تصوف اهڙن نوجوانن جي رڳ رڳ ۾ سمائجي وڃي ته جئين اهي نوجوان هن دنيا ۾ اچڻ جو مقصد ماڻين، خاندان، معاشري ۽ ملڪ لاءِ ڪار آمد فرد اسان سنڌين جي رڳ رڳ ۾ خون جيان گردش ڪندو(Tasawwuf) جي حيثيت سان پنهجو ڪردار نڀائين. ڊاڪٽر جڳديش لڇاڻي 2009ع ۾ لکي ٿو ته: "تصوف رهي ٿو تصوف جو واسطو عالمي امن ۽ انساني محبت سان آهي ، تصوف رنگ ڀيد، مذهب فرقي ۽ جاتي جي تفاوت کان مٿي اُڀري انسانيت جو علم بردار بڻيو. (18)۔
شاگرد پنهنجي اندر ۾ لڪل خوبين تي غور و ويچار ڪن، دلين کي ڪيني ۽ نفاق کان پاڪ ڪن. مذهبي ڪٽڻپڻي کان پاڻ بچائي سگهن. سندس شخصيت ۾ .ٺهراءُ اچي امن ۽ سلامتي جا متلاشي ٿين
محسوس ٿئي ٿو اهو خال تصوف ڀري ٿو ۽ زندگيءَ کي تصوف اعليٰ مقصد عطا ڪري ٿو ٻارهين(Pause) ۾ هڪ خال انساني فطرت آهي ته ان کي زندگي .ڪلاس جي شاگردن کي تصوف سان روشناس ڪرائڻ سان نوجوانن کي زندگيءَ جي سفر ۾ رهبري ملي ٿي. اهي زندگيءَ جي مقصد ماڻڻ ۾ اڳيرا ٿين ٿا

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4 ساڳيو ص: 136

5 ساڳيو ص: 138

6 ساڳيو ص: 138

7 ساڳيو ص: 138

8 ساڳيو ص: 138

9 ساڳيو ص: 141

10 گرامي غلام محمد، "مشرقي شاعري جافني قدر ۽ رحجانات"، سنڌي ادبي بورڊ جامشورو/ حيدرآباد 1992ع سنڌ ص: 55

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بورڊ جامشورو/ حيدرآباد سنڌ 1992ع ص: 171

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بورڊ جامشورو آڪٽوبر 2021ع ص: 141

14 ساڳيو ص: 141

15 گرامي غلام محمد "مشرقي شاعريءَ جافني قدر ۽ رحجانات"، سنڌ ادبي بورڊ جام شورو/ حيدرآباد سنڌ 1992ع ص: 54

16 حضرت خواجه محمد زمان رحه، "سنڌي لازمي" سنڌ ٽيڪسٽ بورڊ جام شورو آڪٽوبر 2021ع ص: 142

17 گرامي، غلام محمد "مشرقي شاعريءَ جافني قدر ۽ رحجانات"، سنڌي ادبي بورڊ جامشورو
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18 ،لچاڻي، ڊاڪٽر جڳديش، "ڪينجهر"، سنڌ يونيورسٽي جام شورو سنڌ 12
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1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

REVIEWS ABOUT CONFERENCE

From the core of my heart I am very grateful and congratulate to the Administration of "University of Sufism and Modern Sciecnes, Bhitshah " particulartly the Honourable Vice Chancellor Madam Prof: Dr. Perveen Munshi and the energetic Registrar of University Prof: Dr. Syed Farman Ali Shah and his team and co-workers for managing 'Two Days International Conference, held on 22-23 November, 2022 on title " International Multidisciplinary Conference on Sufism and Modern Sciences (IMCSMS)".

It is fact that this newly established University with its limited resources has arranged this fantastic and fascinated programme which is a great achievement towards the dissemination of knowledge, real and bright face of 'SUFISM' showed in a right way in the light of various factual arguments given by the Speakers, Experts, Intellectuals and Educationists in their lectures during the general discussion to the participants as well as to all the human being. The Conference has also conveyed the message of "Peace" to the world.

Presenters and Speakers have brilliantly high-lightened the relationship, correlation and strong connection between 'Sufsim and Modern Sciences'. How can the Modern World be progressive in the light of Sufism with the message of peace and how the Modern Technology can be used for the betterment and welfare of the human being all over the world in the light of 'Sufism Philosophy'

In the last but not the least Worthy Vice Chancellor, Honourable Registrar and his team have showed their excellent performance in the arrangement of this ideal and knowledgeable conference with all aspects that is praise worthy.

May Almighty Allah shower blessing on all and increase the abilities of the host team.

DR.GHULAM QASIM BUGHIO
AUTHOR, PRESENTER & PARTICIPATOR

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

REVIEWS ABOUT CONFERENCE

The university has put in place the wonderful opportunity for researchers and academicians. The theme of conference is directed on important topic of Sufism and modern sciences linkages. The papers presented were from variety of domains and they met the basic research ingredients.
A few papers were of top notch in nature. They were focused upon local economic issues.

DR. AGHA AMMAD NABI
ASSOCIATE PROFESSOR
GCU HYDERABAD

I applaud the efforts of universities specially Vice Chancellor Prof. Dr. Parveen Munshi who with great devotion brought scholars from all around the Pakistan and international keynote speakers in a small town. This conference shall indeed help the young researchers . Research papers presented were up to the mark in terms of research quality. The conference proceedings shall serve as an important document for university research archives. I am thankful to organisers especially Dr. Akhtiar Ali for inviting me as session chair.]'

DR. MUBASHIR ALI KHAN
ASSOCIATE PROFESSOR AND HEAD OF DEPARTMENT
BAHRIA UNIVERSITY KARACHI CAMPUS

The credit goes to managing team and competent authority for bringing scholars in a small town. The university put in place all necessary resources to facilitate the researchers and others who participated in the conference.
As a session chair I found research papers presented up to the mark.
I am thankful to university for inviting me as a session chair

DR. FAYAZ TUNIO
ASSISTANT PROFESSOR
SZABUL KARACHI

1ST INTERNATIONAL MULTIDISCIPLINARY CONFERENCE ON SUFISM AND MODERN SCIENCES (IMCSMS)

REVIEWS ABOUT CONFERENCE

The worthy vice chancellor deserves the applaud for arranging conference in a small town. Moreover, the focus of conference was on looking modern science through Sufism lenses. This indeed was a new approach to see the truth. The presenters through their research opened new avenues for further research. The parallel sessions were well organised and overall environment was research oriented. Thanks to university for inviting me as a keynote speaker.

DR. KAZI MOINUDDIN ABRO
ASSOCIATE PROFESSOR
MUISTD, MEHRAN UNIVERSITY, JAMSHORO

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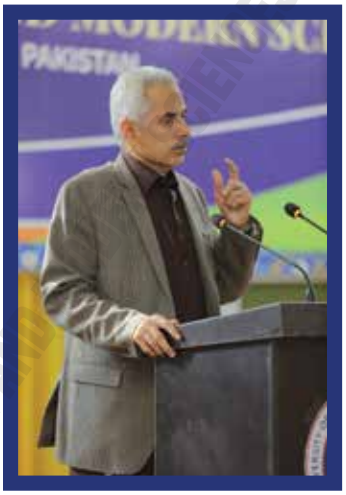
کانفرنس کی افتتاحی تقریب کی تصاویری جھلکیاں





قابلِ احترام مہمانِ خصوصی محمد مُرید راہیموں، سیکرٹری یونیورسٹیز اینڈ بورڈز اور قابلِ احترام محترمہ پروفیسر ڈاکٹر پروین منشی وائس چانسلر یونیورسٹی آف صوفی ازم اینڈ ماڈرن سائنسز کانفرنس سے متعلق اپنے قیمتی خیالات کا اظہار کرتے ہوئے۔











کانفرنس پوسٹر ڈزائن پریزنٹیشن





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پرائیل شیشن برائے صوفی ازم اینڈ ماڈرن سائنسز میں قابلِ احترام محترمہ پروفیسر ڈاکٹر پروین منشی وائس چانسلر
یونیورسٹی آف صوفی ازم اینڈ ماڈرن سائنس، مہمانانِ گرامی اور دیگر شرکاء کی شرکت۔











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قابلِ احترام محترمہ پروفیسر ڈاکٹر
پروین منشی وائس چانسلر
یونیورسٹی آف صوفی ازم اینڈ ماڈرن
سائنس، مہمان گرامی منور علی مہیسر
، ڈائریکٹر جرنل، شعبہ ثقافت،
گورنمنٹ آف سندھ کو کانفرس
شیلیڈ دیتے ہوئے۔



