



3rd INTERNATIONAL CONFERENCE ON BUSINESS ADMINISTRATION

CONFERENCE THEME

Green Climate, Business,
and Sustainable Growth:
A Way Forward

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Conference Proceeding

INSTITUTE OF BUSINESS ADMINISTRATION (IBA)
University of the Punjab





About ICBA 2024

There is a growing recognition of the intertwined relationship between corporate practices and environmental well-being and sustainability. Businesses are increasingly acknowledging the imperative to align their operations with sustainable practices to contribute to a green climate. This shift is underscored by a growing body of research that emphasizes the benefits of sustainability for both the environment and business performance (Schaltegger, Hörisch, & Freeman, 2019). Studies have shown that investing in sustainable business practices has a positive influence on business performance (Guan, Ahmad, Sial, Cherian, & Han, 2023).

According to a recent study by CDP, a non-profit organization working for global environmental impact, 54% of the companies stated that disclosing through CDP enhanced their competitive advantage (Carbon Disclosure Project, 2023). This reinforces the idea that environmentally responsible practices are not just ethically sound but also economically advantageous.

The adoption of sustainable practices has multifaceted implications for the success of a business. A few aspects are financial performance (Coelho, Jayantilal, & Ferreira, 2023), customer perception and brand value (Cheng & Cheng, 2023), supply chain sustainability (Hallikas, Lintukangas, & Kähkönen, 2020), regulatory compliance and risk mitigation (Aureli, Del Baldo, Lombardi, & Nappo, 2020), innovation and sustainable technologies (Chien et al., 2021), and employee engagement (Malhotra & Pachauri, 2023).

The participants will be provided an opportunity to see the historical and beautiful city of Lahore which is the heart of the Pakistan. During the city tour the attendees will be able to know culture, civilization, and traditions of one of the oldest city of the world.

In conclusion, the integration of green climate initiatives into business strategies is not merely an ethical choice but a strategic imperative. The evidence suggests that companies embracing sustainability are not only contributing to a healthier planet but are also better positioned for long-term success in an increasingly environmentally conscious global landscape. As businesses continue to navigate the complexities of the modern economy, sustainability will undoubtedly play a pivotal role in shaping their trajectory and impact.

With this theme, this conference aims to provide an exciting opportunity to researchers, scholars, academicians, economists, policy makers and industry experts/professionals around the world for presentation and sharing of their research at ICBA 2024. We invite scholars, researchers, practitioners and students with diverse interests in various business functions of Finance, Marketing, Organizational Behavior, HRM, Management and Entrepreneurship to contribute to this critical discourse.

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KEYNOTE SPEAKERS

Prof. Dr. Faisal Mustafa



Prof. Faisal Mustafa has a distinguished 22-year international career, holding esteemed positions such as Vice Chancellor, Provost, Dean of Business School, Head of Department, Professor, Data Scientist, BI Consultant, and Lead Researcher. His academic journey includes obtaining a PhD from the University of Huddersfield, UK, and a Postgraduate Higher Education Teaching qualification from the University of Essex, UK. Throughout his career, Prof. Faisal Mustafa has served as a Senior Faculty Member, Quality Assurance Reviewer, and Chair in prestigious institutions across the United Kingdom, China, Malaysia,

Singapore, Qatar, and Pakistan, showcasing exemplary achievements in higher education, industrial collaboration, and administration. He leads a research thematic group in this domain, conducting extensive studies across different research areas, notably in Technology Management and Entrepreneurship. His tech expertise spans Strategic Innovation in Technology Ventures, Expert Systems, Decision-Making Systems for Businesses, and Stock Exchanges. Faisal's impactful contributions include the development and implementation of OSPG (Optimal Synthesis Plan Generation) and Preference Plus Planning (PPP-XPLAN) algorithms, widely adopted and utilized in industry settings. Furthermore, through his initiative in bringing together university researchers, he assumes a focal role in advancing Business Intelligence. His integration of machine learning models to refine associative classification data mining search algorithms plugins enables the creation of bespoke, profitable solutions tailored to meet businesses' specific needs.

Dr. Dahlia El-Manstrly

Dr. Dahlia is currently associated with University of Sheffield Management School as an Associate Professor of Marketing. Before joining the University of Sheffield, she was a lecturer in Marketing and Co-Director at Centre for Service Excellence, at the University of Edinburgh. Dahlia's research focuses on services marketing topics (relationships in services, service failure and recovery, transformative and tourism services). Dahlia's research publications appear in world-leading quality journals such as Journal of Retailing, Journal of Service Research and Journal of Tourism Management. Dahlia is on the Editorial



Boards of leading marketing and services journals such as International Marketing Review and Journal of Services Marketing. She was shortlisted twice for the prestigious Fulbright All Discipline Scholar Award, and won the AMA SERVSIG conference “Highly Recommended Paper Award”, and the Teaching Excellence Awards for best feedback, overall course satisfaction, and inspirational teaching.

Prof. Dr. Nasir Mahmood



Professor Dr. Nasir Mahmood is a distinguished academician whose illustrious career has left an indelible mark in the field of education in Pakistan. Currently, he holds the esteemed position of Vice-Chancellor at Allama Iqbal Open University (AIOU), Islamabad, Pakistan, a colossal institution with 1.2 million students and 52 regional offices spanning the nation. His illustrious journey at AIOU encompasses influential positions, including Director, E-Learning and Overseas Admissions, Dean of the Faculty of Education, and Chairmanship of both the Department of Science Education and Department of Early Childhood and Elementary

Teacher Education. Dr. Mahmood's academic journey extends beyond Pakistan's borders, marked by profound accomplishments during his Ph.D. and Postdoctoral pursuits at renowned international universities. Professor Mahmood serves on the editorial boards of numerous national and international journals. His profound contributions have earned him a prominent place in national higher education policy-making and decision-making bodies, including the Task Force of Higher Education, the Chairperson of PIEMA, the convener of the ODL Policy Committee, and the Chair of NACTE.

PANEL OF EXPERTS

Prof. Dr. Nasir Mahmood



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Prof. Dr. Adnan Noor Mian

Dr. Adnan Noor Mian earned his Ph.D. in computer engineering from Sapienza University of Rome, Italy, followed by a postdoctoral position at the same institution. In 2018-19 he served as a visiting scholar in the Department of Computer Science and Technology at the University of Cambridge, U.K. Currently, he holds the positions of Vice Chancellor at Information Technology University (ITU) in Lahore, Pakistan, bringing over 25 years of experience in higher education. His primary focus in research and teaching encompasses ICTD, network protocols, distributed systems, cybersecurity, and machine learning applications within these domains. In 2016 he was awarded the Frogh-e-Taleem Award by Idara Frogh-e-Taleem by the Government of Punjab, Pakistan. With over 60 research papers published in esteemed journals and conferences, he also serves as the Chairholder of the UNESCO chair on Information and Communication Technologies for Development (ICTD). He has also been awarded a prestigious international position as Senior Associate at the International Centre for Theoretical Physics (ICTP) in Trieste, Italy, specializing in the Internet of Things (IoT); the first-ever recipient of this award in the field of IoT from ICTP.



Dr. Shahid Raza



Dr. Shahid Raza has a long-standing career in the fields of industry and academia both. Currently, he serves as the Board Director of Lahore Chamber of Commerce & Industry (LCCI) and Convener of the Industry-Academia Linkages Committee of the LCCI, the position that he is holding for the last 10 years. He holds a Ph.D., LLB, and PGDs in International Relations & Tax Laws. He also has two books, 300+ impact factor research papers publications, 100+ newspaper publications (Daily Times, Nation & News, etc.), and about 20 years of experience in the industry. He is a writer, columnist & analyst in talk shows on agriculture, education, health, economy, environment, and politics. He is the Chairman and Chief Editor of the Bio-World Magazine.

Prof. Shahid Zaki

Prof. Shahid's versatile career spans over 30 years with strong management experience in various functional, technical & general management positions. His journey includes serving as the Director of the Executive MBA Program at IBA, Karachi, and a Visiting Professor for Marketing and Management at IBA Karachi since 1983. He has served as the Chairman/CEO of Philips Electrical Industry of Pakistan. He has been awarded the Distinguished Lifetime Achievement Award by Pakistan Engineering Council. He is also the certified Director of Institute



of Corporate Governance. He has held the position of member of Managing Council of Pakistan Environmental Council headed by the Prime Minister of Pakistan, as well as the Board Member of Standard Chartered Bank in Pakistan. He brings a unique blend of academic expertise and commercial acumen, allowing him to teach strategy courses with a practical, application-oriented approach effectively. His involvement in shaping industry trends through platforms like Marketing Association of Pakistan (MAP), OICCI, and Employee Federation of Pakistan showcases his commitment to industry excellence.

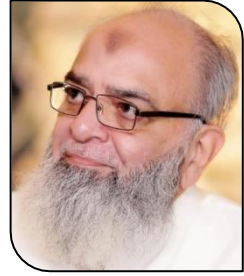
Ms. Zeeshan Zia Raja



Ms. Zeeshan Zia Raja is an icon of empowerment, with a fervent commitment to uplifting communities and fostering positive change. Madam Zeeshan, affectionately known as ZZR was born into an army family, which instilled discipline and values in her from a young age. She considers her father as a pivotal force in her life, inspiring her to pursue challenging and creative endeavors. Starting her career at the Lahore Lyceum School as a teacher and coordinator, she ventured into entrepreneurship, revolutionizing various fields. She founded her own school and is now the chairperson of the American Lycetuff School, BASE International School, as well as Lycetech Training Centre, 101 Incredible Women CEOs of Pakistan, and many more ventures that embody her dedication to fostering holistic growth and empowerment. She is also the Convener of the Standing Committee on Business Women Think Tank at the Lahore Chamber of Commerce and Industry.

Prof. Fida Hussain Bukhari

Prof. Bukhari is a seasoned academician and a well-known banker. and an alumnus of IBA. He holds an MBA and an M.Phil. He has served the Banking Industry for over 28 years. Project Financing, Settlement of Non-Performing Portfolio and Commercial Banking Operations were his areas of concentration. With a passion for teaching and serving the community, he joined Hailey College of Banking and Finance to develop a curriculum for degree programs in Banking and Finance and Insurance and Risk Management. He has served Punjab University from 2006 to 2017. He is currently associated with HCBF as a Visiting Faculty.



Prof. Dr. Shazia Nauman (Moderator of Panel Discussion)



Dr. Shazia Nauman is a Professor of Project Management at Riphah School of Business and Management, Lahore, as well as Assistant Dean, ORIC at Riphah International University. She has led and launched the first PhD in Project Management program in Pakistan. Over the last 14 years, she has successfully supervised more than 100 Masters Dissertations in the areas of Project Management and Management Sciences. Dr. Shazia has received two grants from NRP, Higher Education Commission of Pakistan (HEC), and various seed money grants from ORIC, and Riphah International University. She has chaired sessions at national and international conferences. She has won the best paper award in prestigious conferences like Academy of Management and British Academy of Management among others. Furthermore, she has published in well-reputed journals like International Journal of Project Management, Journal of Project Management, International Journal of Human Resource Management, and Journal of Applied Psychology among others.

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Exploring the Actors' Engagement: A Resource-Based Interplay in Microfinance Ecosystem

Aisha Ismail

Virtual University of Pakistan, Pakistan

Abstract ID 24114

Ecosystem perspective allows organizations to take an overview of resource-integrating actors (Operand and Operant resources) and their engagement that creates value for the whole system. Actor engagement in a service ecosystem is determined by actor's disposition to engage, and the activity of engaging in an interactive process of resource integration. The integration of resources in a particular context is critical because different social actors, or the same actor in different context evaluate the resource differently. Therefore, it is significant to understand how different actors are engaged in integration of resources, and creating value in a service ecosystem. This study aims to explore the resource sharing and integration in microfinance ecosystem by identifying actors' network created through their engagement at different levels. Using a qualitative methodology, this study will highlight the significance of resource sharing for various actors, the role of actors in creating value and achieving a shared objective within microfinance ecosystem. Semi-structured interviews will be conducted from microfinance providers who are central for the resources' integration. The findings of the study will help actors to know their role in resource integration, and the significance of actor-to-actor engagement in microfinance ecosystem. The findings of the study will also have implications for various actors of microfinance ecosystem for value co-creation and co-destruction.

Keywords: Service ecosystem, microfinance, resource integration, actor engagement, value co-creation, value co-destruction

Impact of Board Knowledge and Board Complementarity on Cash Holding with Moderating Role of Family Ownership

Atif Nawaz, Tanvir Ahmad, Majeed Ullah Khan
Kohat University of Science and Technology, Kohat, Pakistan

Abstract ID 24146

The purpose of the study is to investigate the impact of board knowledge and board complementarity on cash holding with the moderating role of family ownership. The study used the sample from 150 non-financial listed firms on Pakistan Stock Exchange (PSX). The study covered the period from 2012 to 2022, and the study used the stratified random sampling technique for sampling. The data were analyzed through descriptive statistics, regression analysis, and the multiple linear regression method. The study finding reveals that board knowledge which refers board educations, board experience and board financial expertise and board complementarity has significantly impact on corporate cash holdings.

Moreover, since this paper was carried out in an emerging financial market, particularly in Pakistan, to figure out the effect of board knowledge, and board complementarity on cash holding, it can provide helpful information for investors and policymakers in this regard.

Keywords: Board knowledge, board complementarity, family ownership, corporate cash holding

How Attitude towards using FinTech Intervenes Perceived Risk and Intention to Use FinTech? The Moderating Role of Gender

Madiha Javed, Talat Islam

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Article ID 24202

Abstract

Perceived risk is an extensively studied topic by the previous researches, but how it affects separately the behavioral intention to use FinTech is yet to be studied. Therefore, this study examined the relationship of perceived risk with behavioral intention to use FinTech through intervening effect of attitude towards using FinTech. Further, study analyzed the conditional effect of gender between perceived risk and attitude towards using FinTech. For this research study the data was gathered from 250 consumers of banks. As this study examined attitude towards using FinTech and behavioral intention to use FinTech related to perceived risk, therefore consumers of banks were selected with ATM card and Mobile application of bank. The results showed that perceived risk negatively influence intention towards using FinTech both directly as well as indirectly through attitude towards using FinTech. Moreover, it is found that females are more risk averse in adopting FinTech than males.

Keywords. FinTech, Intention, attitude, gender, perceived risk.

Introduction

Over the last decade, global financial system has transformed because the introduction of financial technologies (FinTech) and the function of banking and other financial intermediators have been experiencing an intense revolution. The financial sector has also undergone marvelous changes in the last two decades (Khuong et al., 2022). The financial system as a whole has undergone a massive restructuring that has improved and increased the efficiency of the processes, activities, organizational structures, and FinTech that have been developed in these areas. The financial environment's volatility and rivalry have made the financial system increasingly integrated and exposed to a wide range of risks. FinTech has grown as a result of the economy's rapid revolutions, and it is now imperative to offer clients new and improved services, strategies, and products that best fit their changing needs and enhance both individual and institutional performance.

FinTech is a combination of “finance” and “technology” therefore, FinTech is to use the technology to provide innovative and improved services to the consumers as value added services (Lăzăroiu et al., 2020). In other words, it can be said that organizations use information and communication technologies to offer innovative services to the users, as the information and communication technologies are developing day by day (Chethiyar et al., 2019), FinTech is also being widely used in the sector of e-commerce. Online banking and mobile banking are traditional FinTech services while non-banking financial institutions are also introduced some emerging FinTech services like crowd funding, mobile wallets as well as mobile payments (Chawla & Joshi, 2019). FinTech offers great services i.e., 24/7 banking services, faster transactions, increased flexibility, no wait time, improved information transparency and many more. FinTech is imperative either one has to make payment through mobile or manage portfolio (Chawla & Joshi, 2019). It is impossible for the virtual currencies to operate without the help of FinTech (Mazambani & Mutambara, 2019).

As the usage of FinTech is increased, it inversely affects the human interaction. According to Panetta (2018), this upheaval use of modern technology and internet provoked the rate of cybercrimes in financial sector, which hinder the intentions of the consumers to use FinTech because they are more concerned about their privacy and security of financial information as well as about their finance (Rahi et al., 2019). And this happened because of inadequate participation and supervision of banks (Abubakar & Tasmin, 2012). The main obstacle for the consumers when they intend to use the FinTech is perceived risk. Perceived risk can be defined in different dimensions i.e., financial risk, legal risk and security risk. This study has taken only two dimensions of risk which are security risk and financial risk because now a days in Pakistan most of the people are confronting different scams because of insecurity of their bank related information which leads towards financial risk. Ryu (2018) explain the financial risk as, possible financial losses during the financial transactions using FinTech. Security risk can be stated as potential losses because of different frauds, scams or hacking while performing financial transactions through FinTech (Ryu, 2018). And this happened because of violation of confidentiality of financial information, 82% of financial institution consumers are concerned about these threats and providing huge attention to it (Padmanaban and Soo, 2016). The basic factors behind FinTech adoption in various financial dealings can be clarified by different models and theories i.e., Theory of Reasoned Action TRA (Fishbein and Ajzen, 1975), Perceived risk theory PRT (Roselius, 1971) and Technology acceptance model TAM (Davis, 1989). In this study TAM is used to comprehend the attitude towards using the FinTech and behavioral intention to use FinTech. TRA and PRT is used to determine the consumer's behavior which is directed by behavioral intention to use FinTech.

In developing countries female have less access to technology, which leads toward preventing them to gain benefit from using technology (Countries, 2021). According to gender theory men and women behave differently in same situation. So, in this study gender has been taken as conditional variable because this demographic variable exerts great effect on the attitude and intention to use FinTech. This research aims to contribute to the existing literature in different ways. First, it expands the existing literature on perceived risk and behavioral intention towards using FinTech. Second, based upon the gender theory, this research explores the conditional effect of gender between attitude towards using and behavioral intention to use FinTech. Third, mediating role of attitude of consumers is explored between perceived risk and intention to use FinTech. This study will help the consumers in decision making whether they should use the FinTech as well as banks whether they should introduce more effective technologies to protect the customer's information.

Literature Review & Hypotheses development

Perceived Risk and Behavioral Intention to use FinTech

Perceived risk can be elaborated as, "users' perception of the uncertainty and the possible negative consequences regarding the FinTech use" (Lee et al., 2011). Perceived risk is basically the uncertainty that a consumer feels while performing transactions through the use of FinTech. There is a great risk in internet environment because there is no face-to-face contact between the consumers and suppliers (Abubakar & Tasmin, 2012), therefore customers feel more reluctant while using FinTech applications which reduce their intention to utilize FinTech based applications. Moreover, the impalpability of FinTech applications which provoke the perceived risk of financial loss and cyber threat that restrain them from using FinTech services (Hamidi & Safareeyeh, 2019). Bettman (1973) In the literature of consumer behavior perceived risk is very crucial factor for the consumers while engaging in financial transactions. When consumers make product or service decisions, they keep in mind all possible adverse effects (Mitchell, 1999). So, there is high uncertainty in online

environment as the outcomes may be negative therefore, the risk perception of the consumers increases (Irfan Bashir, 2015). In other words, it can be said that purchase decision of the consumers is significantly affected by perceived risk, because probability of unpleasant, unforeseeable and negative outcomes is associated with such decisions. Behind the consumer resistance towards technology adoption, perceived risk is one of the important factors, particularly the technology in which financial transactions are involved, like Internet banking (Celik, 2008) and online shopping (Vatanasombut et al., 2004).

In the current study perceived risk is measured through its two dimensions i.e. Financial Risk and Security Risk. Now a day's people are facing scams in Pakistan through fake bank calls or wrong log in attempts on banking applications. As a result, people lost their money as well as financial information. Financial risk is basically the probability of occurring financial loss because of attaining a poor online service or digital fraud (Trinh et al., 2020) such as transactional problem, improper functioning of banking technologies and scams (Pal et al., 2020). Financial risk depicts the concern of the consumer over the security of their transactions while using FinTech (Roy et al., 2016). So, financial risk is one of the important elements that discourage consumers from adopting FinTech introduced by bank.

According to Luo et al. (2010) security risk is “a potential loss of control over personal information, such as the use of personal information without consent or permission”. Security risk is a great barrier while using FinTech due to a lack of faith in digital technology. Security risk is viewed in the current study as a possible source of poor luck because of hacker attack on the banking application through which hacker has access to financial information. This is the main focus of consumers (Lwin, Wirtz & Williams, 2007).

Many researchers provided evidence that perceived risk has inverse effect on consumer's attitude as well as behavioral intention to adopt FinTech introduced by banks (Celik, 2008; Kesharwani and Tripathy, 2012; Lee, 2009). Previous studies also found that perceived risk has negative effect on perceived usefulness of internet banking (Lee, 2009; Cheng et al., 2006). Chiou and Shen (2012) also found that perceived risk negatively affects the attitude of consumers towards internet banking and behavioral intention to use these FinTech offered by banks. So, the following hypotheses is developed:

H1: *Perceived risk has a significant negative effect on consumers' behavioral intention to use FinTech introduced by bank.*

Mediating Role of Attitude towards using FinTech

Fishbein and Ajzen (1975) defined attitude as “learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object”. They introduced this concept for the first time in the history through Theory of Reasoned Action. After that Davis (1989) used this term “Attitude” in Technology Acceptance Model and proposed that intention of individual affected by attitude. The current study employed that attitude can be negative or positive sentiment which effect the use of internet banking services or FinTech introduced by bank. Many other aspects also contribute in shaping the behavior of an individual like personal, psychological and social, Irfan Bashir (2015) but the most critical factors which contribute greatly in constructing the behavior of consumers towards adoption or rejection of FinTech are their beliefs, customs, attitude and perception about characteristics of FinTech introduced by banking sector. In the context of FinTech adoption in banking sector, attitude plays a critical role (Lai and Li, 2005), because the usage of internet banking directly involves financial transactions which develops the beliefs of consumers regarding risk as well as safety of their money, and these beliefs construct their attitude towards FinTech usage (Irfan Bashir, 2015). Nunnally and Bernstein (1994) attributed attitude as social function; so, all the individuals in the society interact as well as influence each other's attitude by sharing

their experience about confirmation or rejection of the product or service. Past studies (Cheng et al., 2006; Suh and Han, 2002; Lee, 2009) suggested that the consumers intention towards using banking FinTech is greatly affected by their attitude towards FinTech usage. Likewise, a lot of previous researches (Irfan Bashir, 2015; Ibrahim et al., 2023; Senyo & Osabutey, 2020) proposed that attitude mediates the impact of perceived risk and behavioral intention. Building on the research evidences which proposed that there is positive relationship between attitude towards using FinTech and behavioral intention to use FinTech introduced by bank (Senyo & Osabutey, 2020; Thusi & Maduku, 2020). Whereas, Singh et al. (2020) observed that there is no significant relation between attitude to use FinTech and behavioral intention usage. This discussion leads to our second hypotheses which is as follows:

H2: *Perceived risk has significant negative effect on Attitude towards using FinTech.*

H3: *Attitude towards using FinTech mediates the relationship between perceived risk and behavioral intention to use FinTech.*

Moderating role of Gender

According to the latest report of Global System for Mobile Network Association (GSMA) in 2020, the rate of mobile usage in women is lesser than that of men, particularly in under developed or developing countries like Pakistan, that is why females have less access to internet than males. These statistics of GSMA (2020) showed the utilization of technology as well as reflects the degree of confidence of females in latest technology usage and their perception of risk related to FinTech in particular. The primary question of this study is whether males and females recognize perceived risk equally when they are engaged in FinTech which is introduced by banking sector. Todman & Day (2006) used TAM and explored difference of perception between male and female regarding the adoption of modern technology. Croson and Gneezy (2009), conducted the research on difference of gender perception regarding risk and concluded that females are more risk averse than males, which (Dohman et al., 2011; Eckel and Grossman, 2008; Croson and Gneezy, 2009). This discussion leads towards the third hypotheses of the current study:

H4: *Perceived risk about the use of FinTech is higher for women than for men.*

Methodology

Context

The global financial system has changed during the past ten years due to a significant revolution in banking operations. In order to adapt to the changing environment, the banking industry has undergone a massive reorganization that has led to the development of fintech. According to SBP's Annual Payment Systems Review (2022-23) internet banking users in Pakistan rose by 15.1% (9.6 million) and mobile phone banking users increased by 30.2% (16.1 million) in FY23. According to the report shown by Banking Mohtasib Pakistan in 2021 the number of complaints of financial fraud rose by 46% (3000) from the last year. And in 2022, almost 19000 complaints were submitted, showing a rising trend of financial frauds in Pakistan. So, this situation hinders the intention of consumers to use Fintech. Consequently, it is essential to examine the risk factors which influence the attitude towards using Fintech and behavioral intention to use it.

Sample and Procedure

This is a cross-sectional study and used the primary data which is collected through questionnaire. As the total bank users are not known therefore, kline's (2016) sample size guidelines for SEM is used which suggests that more than 200 sample size is considered as large sample size for SEM; so, 270 sample size is taken for this study. The personally

administrated and questionnaires through Google docx are distributed to the respondents who have their bank accounts and using ATM cards and mobile application of bank. The scale items have been updated and demographic variables have been added, but the original items have not been used. In the first part demographical characteristics were asked from the respondents (i.e. age, gender, experience with banks in year) and in the second part they were asked to record their responses on a five-point Likert scale from 1-strongly disagree to 5-strongly agree. 270 questionnaires were distributed to the respondents, out of which 250 were returned back.

Measures

The scale items have been updated and demographic variables have been added, but the original items have not been used. Perceived risk was measured through three items from Norma Diana and Farah Margaretha Leon (2020). The sample item included “I believe financial risks happen while using FinTech payment”. Behavioral intention was investigated through five scale items from Suh and Han (2002). The scale item included “I intend to increase my use of the Internet banking service in the future”. Attitude towards using Fintech was measured through five item scale from Cheng et al. (2006). The scale item included “Using Internet banking service is a good decision”.

Results

Preliminary Analysis

In the first instance, data was examined to identify outliers, missing values, normality, descriptive statistics, correlations among variables and reliability because these can contaminate results of the study. The data was collected through using personally administered questionnaire as well as through “Google Form” in which all the questions were marked required so that missing values can be avoided (Sekaran, 2003). The study used stem-and-leaf method to identify outliers and no outlier was found in the data. For normality of the data skewness and kurtosis were examined and found that all the values were within threshold limit (skewness= ± 1 & kurtosis= ± 3), which shows the normal distribution of the data. Moreover, Correlation was also analyzed and all correlational values were less than 0.85 which showed that there was no issue of multicollinearity in the data. All the above tests were run to make the data ready for confirmatory factor analysis (CFA).

Table 1: Demographic Characteristics (N=250)

| Characteristics | Category | Frequency | Percentage |
|----------------------|------------------|-----------|------------|
| Gender | Male | 137 | 54.8 |
| | Female | 113 | 45.2 |
| Age | Less than 20 | 15 | 6.0 |
| | 21-30 | 125 | 50.0 |
| | 31-40 | 60 | 24.0 |
| | 41-50 | 43 | 17.2 |
| | Above 50 | 7 | 2.8 |
| Experience with bank | Less than 1 year | 83 | 33.2 |
| | 1-5 years | 92 | 36.8 |
| | 6-10 years | 50 | 20.0 |
| | Above 10 years | 25 | 10.0 |

Confirmatory factor analysis (CFA)

The study performed CFA to examine validity of measure (Hair et al., 2010). Fitness of the model checked by using the model fit indices, “Chi-square ($\chi^2 / df < 3.0$), comparative fit index (CFI ≥ 0.90), root mean residual (RMR ≤ 0.08), root mean square error of approximation

(RMSEA ≤ 0.08), goodness of fit index (GFI ≥ 0.90), and adjusted goodness of fit index (AGFI ≥ 0.90)” (Chaudhary et al., 2021), and factor loading criteria was set as ≥ 0.50 (Hair et al., 2010; Islam and Asad, 2021). The measurement model of the study was assessed to be fit according to the threshold values i.e., $\chi^2/df = 1.88$, CFI = 0.97, RMR = 0.07, RMSEA = 0.06, GFI = 0.91, AGFI = 0.90, and all the values of factor loading were meet the set criteria as ≥ 0.50 (see Appendix). The values of “average variance extracted (AVE ≥ 0.50), and composite reliability (CR ≥ 0.60)” were examined to check the convergent validity (Byrne et al., 2013; Islam et al., 2021d). All the values of CR were above 0.60 and AVE were above 0.50, which established the convergent validity of the measurement model (see table 2). For establishing discriminant validity, the study examined “square root of AVE” which were higher than bivariate correlational values (Hair et al., 2010).

Table 2: Convergent & Discriminant Validity

| | CR | AVE | MSV | MaxR(H) | Behavioral Intention | Perceived Risk | Attitude |
|----------------------|-------|-------|-------|---------|----------------------|----------------|--------------|
| Behavioral Intention | 0.928 | 0.721 | 0.514 | 0.932 | 0.849 | | |
| Perceived Risk | 0.812 | 0.535 | 0.041 | 0.866 | -0.153 | 0.659 | |
| Attitude | 0.909 | 0.668 | 0.514 | 0.916 | 0.717 | -0.203 | 0.818 |

Descriptive statistic and correlation

The mean values of the variables are shown in table 1 which represents that the respondents were agreed about their behavioral intention to use FinTech introduced by banks (M = 3.8552) and their attitude towards using FinTech with mean value of M = 3.9592. However, they were neutral about perceived risk (M = 3.4880). Moreover, it was analyzed that Attitude was significantly correlated with Behavioral intention ($r = .656$, $p < 0.01$), while it has week negative correlation with perceived risk ($r = -.221$, $p < 0.01$), further perceived risk was found to be negatively correlated with behavioral intention ($r = -.181$, $p < 0.01$).

Table 3. Descriptive statistics & Correlation

| | Behavioral Intention | Attitude | Perceived Risk | Mean | SD |
|----------------------|----------------------|----------|----------------|--------|--------|
| Behavioral Intention | 1 | | | 3.8552 | .85512 |
| Attitude | .656** | 1 | | 3.9592 | .78751 |
| Perceived Risk | -.181** | -.221** | 1 | 3.4880 | .72477 |

Hypotheses testing

For the analysis of hypotheses number H1 to H3 which depicts the independent, dependent and mediation of the research study (see Table), the whole model was tested using Structural Equation Modeling (SEM) technique at 2000 sample @ 95% confidence (Kline, 2011). The results shown that perceived risk negatively influence the behavioral intention to use FinTech ($\beta = -.181^*$, SE = .069), as well as attitude towards using FinTech ($\beta = -.180^{**}$, SE = .075); while attitude towards using FinTech positively influence the behavioral intention to use FinTech ($\beta = .656^{***}$, SE = .044). These results supported the first two hypotheses of the study i.e., H1 and H2. Moreover, upper and lower values of bootstraps also suggest the hypotheses acceptance. The mediation of attitude was examined through indirect effect and upper & lower limits were also calculated. The indirect effect of perceived risk on behavioral intention to use FinTech through attitude was examined and found significantly negative (indirect

effect $\beta = -.118$, $p < 0.01$), and there is no zero value between the upper and lower boundaries (LLCI = $-.222$ & ULCI = $-.029$), these results support the third hypotheses H3.

Table 4. Hypothesis testing through bootstrap

| Variables | β | SE | C.R. | Bootstraps at 95% | |
|---------------------------------------|----------|------|--------|-------------------|-------|
| | | | | LLCI | ULCI |
| Perceived Risk → Behavioral Intention | -.181* | .069 | -7.66 | -.298 | -.048 |
| Perceived risk → Attitude | -.180** | .075 | -2.199 | -.315 | -.040 |
| Attitude → Behavioral Intention | .656*** | .044 | 13.725 | .528 | .757 |
| Mediation of Attitude | | | | | |
| Indirect effect | -.118*** | | | -.222 | -.029 |

Table 5. Hypotheses testing for Moderation

| Variables | B | SE | C.R. | Bootstraps at 95% | | P |
|---------------------------|-------|-------|--------|-------------------|-------|-------|
| | | | | LLCI | ULCI | |
| Perceived risk → Attitude | | | | | | |
| Male | -.236 | 0.095 | -2.826 | -.405 | -.037 | 0.005 |
| Female | -.205 | 0.081 | 8.077 | -.350 | -.050 | *** |

The study observed gender as moderator, so for moderation the data was divided into two groups i.e., male and female. To examine the effect of moderation analysis was run again using bootstraps 2000 sample at confidence level 95% separately for male and female groups. This moderation of gender was analyzed between perceived risk and behavioral intention to use FinTech. The study noticed that females are more risk averse than males (β (males) = $-.23 < \beta$ (female) = $-.205$) in making decisions regarding FinTech, which support our H4 hypotheses, upper and lower bootstrap values also suggest the acceptance of hypotheses as it did not contain zero value in between.

Discussion and Conclusion

The FinTech popularity is rising throughout the world and encouraging consumers not only in developed countries but also in developing and under-developed countries to modify their traditional mode of conducting transactions and use FinTech, it will help in significant manner, but this is not an easy task (Alalwan et al., 2018). Where FinTech has lot of benefits, there great risk is attached to it. In this study the relation of perceived risk behavioral intention to use FinTech was examined in which intention to use FinTech was a mediator, this relationship was explored using sound structural model which was developed on the basis of TAM and TRA theories. Structural Equation Model (SEM) was applied to examine the hypotheses of structural model. There were four hypotheses, in the first and hypotheses (H1, H2) the relation between perceived risk and behavioral intention to use FinTech, and relation between perceived risk and attitude towards using FinTech are analyzed, and found that there is significant negative association between them. The conclusion of these hypotheses indicates that attitude and behavioral intention to use FinTech is affected greatly by perceived risk, such as financial scams, so the consumers are more concerned about their finance as well as security. Monetary transactions are protected when bank provide a sound system of protection, security encryption measures, dual step verification and digital signs. These findings are in line with the previous researches (Agárdi & Alt, 2022; Ryu 2018; Keong et al., 2020; Abramova & Böhme, 2016).

The third hypothesis was to examine the mediating effect of attitude towards using FinTech between perceived risk and behavioral intention to use FinTech and found that attitude has a significant mediating effect between them. The study suggests that attitude towards use FinTech exerts great effect on intention to use FinTech introduced by banking sector, therefore the bank should promote FinTech and mitigate the risk factor, so that consumers develop positive attitude towards bank's FinTech. These findings are supported by the prior researches (Lee, 2009; Irfan Bashir, 2015). The fourth and last hypotheses was about moderator i.e. gender, its moderating effect was checked upon the relationship of perceived risk and intention to use FinTech and resulted that females are slightly more risk averse than males which is shown by its beta value (β (males) = $-.23 < \beta$ (female) = $-.205$). It clarifies that the attitude of the men and women are differ from each other in making decision especially financial and FinTech decisions. The previous studies are agreed with these findings (Aluri & Palakurthi, 2011; Chawla & Joshi, 2018).

Theoretical Implications

The research on perceived risk and fintech is extremely limited, as there have only been a few studies undertaken in this field, and those studies have been completed in many foreign nations. They measured the uptake of FinTech using various metrics. As a result, this study has expanded the body of research on the independent variable, fintech, the dependent variable, attitude toward using fintech, and the moderator variable, gender. Structured equation modeling, confirmatory factor analysis, and descriptive analysis are the tests that are run on each variable separately as well as the relationships between the variables. The empirical data supporting the new arrivals has also increased significantly. The Technological Acceptance Model and Theory of Reasoned Action, which served as the study's foundation, have been broadened, and an explanation of how FinTech affects consumer behavior has been provided. The results of this study will also be very helpful in guiding researchers and other interested parties in understanding the risks associated with utilizing FinTech and how consumers see the technology that the banking industry implemented. The study findings showed that perceived risk factor greatly affects the intentions of the consumer regarding the usage of FinTech, therefore the banking sector should pay great attention on improving its FinTech services and products.

Practical Implications

The study's conclusions will have a significant impact on a number of economic stakeholders, including the government, the banking industry, non-bank financial institutions, managers, and other staff members. The banking industry is aware of how crucial FinTech is to raising bank profits and boosting the industry's financial performance by lowering risk. The study on how to boost performance by offering clients fresh and creative products and services may also be helpful to other financial institutions, such as insurance firms. By providing the many FinTech options, managers employed by banks and other businesses can also improve the performance of their establishment. Because of the banking industry's and other companies' use of FinTech, customers may receive better products and services. Because banks and other economic sectors have adopted FinTech, the government can also benefit from the study by collecting more taxes. In summary, this study will enable the enterprises to understand the significance of FinTech and develop cutting-edge products and services for their clientele, which will enhance their financial outcomes and provide them a competitive advantage in the marketplace.

Limitations and Future direction

Every research study has certain remaining limits for various reasons; the present study is not an exception. Due to time constraints, this study only examined the two perceived risk

indicators and examined how they affected the participants' behavioral intention to use fintech. It overlooked the other indicators, which could have a substantial influence on the participants' intention to use fintech. As a result, it is advised that recent newcomers consider other indications of perceived risk, such as operational and operational risk. This study examined how perceived risk affected FinTech usage behavior, while perceived advantages also affected FinTech users' intentions to use the technology. All of these indicators could be used as independent variables in future study in this field, and their effects on FinTech usage behavior could be examined. This study focused solely on the banking industry within the economy, even though FinTech is having an impact on a wide range of other industries and offering cutting-edge goods and services to clients, research on FinTech in other industries or across multiple industries might be conducted. The innovative aspect of this model is the inclusion of gender as a moderator in this study. Other views, such as convenience, trust, and education, all have an impact on the relationship between perceived risk and attitude.

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The Impact of Digital Banking on the Financial Performance of Pakistani Commercial Banks

Mahnoor Iftikhar, Yasir Ashraf

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24208

This study aims to investigate the impact of digital banking on the financial performance of Pakistani commercial banks. This study also investigates the impact of bank-specific features such as the size and age of banks, capital adequacy ratio, deposits to total assets ratio, loans to total assets ratio, and macroeconomic factors such as interest rate, GDP, and inflation. They are used as controlled variables.

This study uses secondary data collected from annual reports of 19 listed commercial banks for 2007-2022 and different websites. The panel data regression analysis will be performed using STATA. The results will have implications both for researchers, regulators, and bankers to improve the financial performance of banks.

Keywords: Digital banking, financial performance, size of bank, age of bank, capital adequacy, ratio (CAR), deposits to total assets ratio, loans to total assets ratio, interest rate, GDP, inflation

Investigating the Impact of Income Diversification on Financial Performance

Itrat Zulfiqar, Yasir Ashraf

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24209

This study aims to investigate the influence of income diversification of banks on their financial performance, with the moderating role of ownership structure. The study employs a quantitative approach for balanced panel data gathered from the annual reports of 20 Pakistani-listed commercial banks for 2007-2022. The study will employ regression analysis to discern patterns and draw meaningful insights. This study is expected to make a significant contribution to the existing body of knowledge by providing actionable insights for banks' management and regulators to optimize decision-making processes, reduce risk, and enhance performance.

Keywords: Non-interest income, income diversification, bank performance, emerging economy, Pakistan

Role of Energy and Stock Markets Return during Pandemics Crisis: Green Recovery
Implications for Emerging Economies with Dynamic Spillovers Impact

Muhammad Waqar Zafar¹, Muhammad Raza Zafar², Muhammad Hasnain Ali³

¹ Commanding Officer, NLC Dry Port, Quetta, Pakistan

²Ph.D. Scholar, Institute of Banking and Finance, Baahuddin Zakariya University, Multan,
Pakistan

³Lecturer, Government College University, Faisalabad, Sahiwal, Pakistan

Article ID 24221

Abstract

The COVID-19 pandemic has posed unprecedented challenges to economies worldwide, highlighting the need to understand the interconnectedness of various factors that influence recovery and growth. In this context, examining the role of energy prices, stock market returns, and green recovery efforts is crucial, particularly for emerging economies like Pakistan. Understanding these relationships is vital for designing effective policies and strategies to foster sustainable development and promote economic resilience in the face of future crises. This study investigates the interplay between Pakistan's energy prices, stock market returns, and green recovery efforts during the COVID-19 pandemic. Using quarterly data from 100 companies listed on the Pakistan Stock Exchange (PSX) between 2018 and 2021, we employ panel data analysis to explore the dynamic spillovers and unobserved heterogeneity across companies and sectors. Our findings reveal a significant negative relationship between energy prices and firm performance, while stock market returns positively influence firm performance.

Moreover, green recovery efforts positively impact firm performance, emphasizing the importance of sustainable development in the post-pandemic recovery phase. The Granger causality tests demonstrate bidirectional causality between energy prices and stock market returns, as well as between stock market returns and green recovery efforts. These findings have important implications for policymakers and investors in emerging economies, as they highlight the critical role of sustainable development in enhancing economic resilience during crises and supporting long-term growth.

Keywords: COVID-19 pandemic, Energy prices, Stock market returns, Green recovery efforts, Emerging economies, Pakistan, Sustainable development

Introduction

The unprecedented outbreak of COVID-19 has led to an international public health crisis and generated substantial economic disruptions across the globe. Emerging economies like Pakistan have been particularly vulnerable to the pandemic's ripple effects. In light of these challenges, the role of energy markets, stock market returns, and green recovery efforts in shaping the economic landscape has gained significant importance. This study investigates the dynamic interplay among these factors and their implications for sustainable development in Pakistan during the COVID-19 crisis. In recent years, green recovery has gained traction to transition towards sustainable and resilient economies. This entails adopting policies and practices that promote environmental protection, reduce greenhouse gas emissions, and foster a circular economy. As Pakistan seeks to recover from the pandemic, understanding the relationship between green recovery efforts and other vital economic determinants, such as energy prices and stock market returns, becomes crucial for devising effective policy measures. To explore these relationships, we employ a comprehensive econometric model that captures the interdependencies between energy prices, stock market returns, green

recovery efforts, and critical macroeconomic control variables. Specifically, we estimate the effects of these factors on GDP growth while accounting for the dynamic spillovers that may arise from their interactions. By examining the estimated coefficients of our model, we will be able to assess the relative importance of each variable in explaining the variations in GDP growth during the COVID-19 crisis.

Through this research, we seek to contribute to the existing literature on the interplay between energy markets, stock market returns, and green recovery strategies in emerging economies. Moreover, our findings have the potential to inform policy decisions and promote sustainable economic growth in Pakistan as it navigates the challenges posed by the COVID-19 pandemic. Ultimately, this study serves as a valuable reference for policymakers, researchers, and stakeholders interested in understanding the complex dynamics between these critical economic factors and their implications for sustainable development in emerging economies.

Research Objectives

The study aimed to follow critical objectives.

- To investigate the impact of energy prices on GDP growth in Pakistan during the COVID-19 crisis, considering the dynamic spillover effects between energy and stock markets.
- To examine the role of stock market returns on GDP growth in Pakistan during the COVID-19 crisis while considering the potential influence of green recovery efforts.
- To evaluate the implications of green recovery strategies on GDP growth in Pakistan during the COVID-19 crisis, focusing on understanding the interactions between energy prices, stock market returns, and green recovery policies.
- To assess the significance of various macroeconomic control variables, such as inflation, interest rates, and GDP growth, on the relationship between energy prices, stock market returns, and green recovery efforts in Pakistan during the COVID-19 crisis.
- To provide policy recommendations for enhancing the resilience and sustainability of Pakistan's economy during the COVID-19 crisis and beyond, based on analyzing the dynamic spillover effects between energy prices, stock market returns, and green recovery efforts.
- To contribute to the existing literature on the role of energy and stock markets in emerging economies during crises, explicitly focusing on the potential benefits of green recovery strategies in fostering economic growth and sustainability.

Literature Review

Energy and Stock Markets: Interconnection and Sustainability

Gaining an understanding of the dynamics of the energy and stock markets, as well as the implications these dynamics have for investors and regulators, is one of the essential areas of research for academics. Numerous studies have analyzed the connection between energy prices and stock market activity. The researchers examined the relationships between alternative energy markets, conventional energy markets, and regional stock markets, as well as the effects of these relationships on each market. They discovered a significant chasm between conventional energy markets and the network, whereas renewable and regional stock markets demonstrated substantial inter-class spillovers (1). The focus of academic research has been on establishing whether or not there is a relationship between the major stock markets in Asia and the diversification of energy holdings (2, 3). They discovered that there

are two distinct integration regimes, with the first having fewer diversification opportunities and greater levels of instability.

There has been some investigation in the United States into the relationship between natural gas and stock markets (4). Using a methodology developed by Barunik and Krehlik, academics have studied a variety of significant financial indices, such as the stock prices of renewable energy companies in the United States, the price of crude oil, and other significant indices (5). Researchers discovered substantial connections between the energy industry and the stock market in each of these instances. According to a study that examined the relationship between energy price shocks, the stock market, and China's macroeconomy, energy price shocks had a significant long-term impact on the stock market (6). Another study investigated the relationship between energy and stock prices in Asia, including China and Japan, and found that, in the years following the Global Financial Crisis, stock markets in Asia tracked movements in the price of oil. China and Japan were among the nations analyzed in this investigation (2).

According to the findings of a study on the connection between energy commodities and the integration of stock markets in the Middle East, there is a dynamic and continuous link between the two (7). Researchers examined the relationship between the stock markets and the prices of energy commodities in five industrialized nations and discovered a significant market dynamic between the two (8). Numerous additional studies investigated the link between the Turkish stock market and energy consumption, and they discovered evidence of a unidirectional chain of causation between the two variables (9). In conclusion, the study's findings on the connections between the energy and stock markets indicate that both markets interact significantly. Nonetheless, the level of integration and the Direction of causality may vary from one point in time and location to the next. Even though these relationships have significant implications for investors, policymakers, and the economy, our current level of knowledge needs to be improved to provide a comprehensive understanding of them.

Energy Markets in Sustainable Economic Recovery

Numerous studies have been conducted, and their findings are presented regarding the significance of energy markets to long-term economic recovery. Recent research indicates that green investment in the United States benefits from both energy funding and green laws. The study was carried out in the United States (10). Under the influence of green policies in human resource management and research and development of green energy technologies, they also discovered that production activities emphasizing labor and technology were more likely to contribute to a sustainable green economy. This was yet another discovery they made. When discussing the numerous benefits of energy trade and the mechanisms through which it is conducted, Narula stated that energy trade is the foundation of long-term sustainable energy security (11). In the meantime, a different scholar outlined the distinctions between energy markets and other markets, highlighting variables such as the capital intensity of energy markets and the state's involvement in ownership and control of energy markets (12).

A study that examined the economics of sustainability in the transformation of energy markets highlighted the significance of innovation and market transformation in the battle against global warming and the reduction of glasshouse gas emissions (13). Another study examined the relationship between energy transitions, total energy consumption, and long-term economic development in 38 International Energy Agency member states(14). They determined that energy changes significantly impacted long-term economic development due to factors such as economic sustainability, the utilization of renewable energy sources, and labor costs. Using a model based on energy consumption, researchers found that decoupling

the energy sector from the rest of the economy helped revitalize the energy sector (15). In a discussion of future sustainable energy sources, the advantages of solar and hydroelectric power and the ability to produce biofuels via the genetic engineering of microorganisms were highlighted (16).

This study aimed to determine whether or not increased energy efficiency could result in economic rebound effects that are significantly greater than initially anticipated. This investigation's researchers concluded that global energy models and integrated evaluations must be revised (17). The need to comprehend how energy markets are evolving to guarantee a sustainable energy future has been brought to light concerning the transformation of the global energy sector (18). According to a review of research on the causes and effects of the transition from conventional to alternative commercial energy sources, rising wages are the primary factor propelling these changes in developing nations (19). Economics was investigated as a potential tool for formulating dependable, ecologically responsible, and equitable public policy (20). Other academicians have examined how previous increases in energy prices in Germany have impacted the country and have concluded that the effects are different this time due to demand-driven factors (21).

Stock Market Return and Sustainability: Implications for Emerging Economies

Due to the significance of stock market returns and long-term viability to economic growth and development, emerging economies have devoted substantial research to these topics. It was demonstrated that returns on Indonesian equities were related to global policy uncertainty over time, suggesting that investors may sell assets in one nation to obtain funds for future needs in another (22). In a study examining the relationship between stock price indices and relevant predictive indicators in five emerging nations, the researchers found the strongest positive correlation between stock trading volume and currency exchange rate (23).

Comparing developing economies in South America and Asia, and the Pacific, it was discovered that Institutional Investor's national ratings and financial risk premiums were the best predictors of the success of their respective stock markets (24). Consideration of the asynchronicity of stock returns by the academicians illuminated the significance of both private property and the rights of public shareholders (25, 26). Similarly, Mauro found a significant correlation between production growth and lagging stock returns in developing and developed nations. This finding emphasizes the significance of market size to GDP ratio and English legal heritage (25). A study examining the degree to which emerging European stock markets depended on global risk indicators such as gold and crude prices revealed that responses varied significantly (27). However, research investigating the relationship between financial liberalization and the volatility of stock prices in developing nations has yielded country-specific results (28). Another study examined the relationship between sustainable development and stock returns and found that companies with a high rate of sustainable development had a lower default risk, book-to-market ratio, and stock return. Moreover, the study discovered that these companies had higher book-to-market ratios (29).

After researching China's stock returns and volatility, the authors discovered that sustainability engagement by firms was positively correlated with both variables (30). The study that led to this conclusion utilized the Granger causality test and the Pedroni panel cointegration test. This study investigated the relationship between macroeconomic conditions and stock prices in developed and developing nations (31). An analysis of the performance of several Dow Jones Sustainability Indices (DJSIs) revealed that sustainable investments have the potential to outperform conventional benchmarks in certain countries (32). Using a statistical model known as Generalized Autoregressive Conditional Heteroscedasticity (GARCH), shifts in the stock markets of emerging nations can be

predicted, according to the findings of another study (33). A study analyzed the scatter plot of stock returns in frontier emerging markets and discovered statistically and economically significant value and momentum impacts, in addition to a local size influence (34).

Various topics pertinent to emerging countries have been the subject of research, including stock market returns, the long-term viability of businesses, and other obstacles, before endeavoring to maximize investment plans and promote sustainable growth in various areas, thoroughly comprehending the interplay between these factors.

COVID-19 Crisis and Green Recovery: Impacts on Energy and Stock Markets

The necessity for environmentally responsible finance and investments has only come to the attention of the energy and stock markets. The authors suggest a paradigm for the development of sustainable value because they feel that the traditional strategy of maximizing profits for shareholders is no longer suited for producing wealth over the long run (35). We present a theoretical underpinning for a partnership between policy and finance, and we analyze the role of financial institutions in sustainable development (36). According to the findings of a study (37), green assets have low expected returns, but they outperform when positive shocks strike the ESG component. This results in a positive social effect, and this attention is expected to grow as ESG criteria become increasingly crucial in investing. According to the examiners, the characteristics that influence the long-term viability of the green economy should be incorporated into the finance sources for the transition to a green economy (38). The use of agent-based modeling is employed in investigating viable options for financing renewable energy projects. The findings indicate that these models have the potential to minimize debt-based financing, reduce income disparities, and increase social welfare (39).

The researcher investigates sustainable finance and how it may assist in boosting growth and development in the economy. They discover that some components of sustainable finance considerably influence nominal GDP per capita, and this effect is positive (40). In a study that discusses these concerns, the necessity of allocating opportunities for sustainable investment and utilization of resources is emphasized, along with associated ideas, conditions, and fundamentals (41). According to a study covering 28 countries that are members of the OECD in Europe, a sustainable approach to the energy market positively correlates with the financial market. A study showed that the portfolio's average yearly performance was significantly higher than numerous benchmark indexes (42). This was discovered through the researchers' examination of 122 energy and resource companies worldwide. Inflows of foreign direct investment (FDI) and expansion of stock markets are shown to play an essential role and help moderate the rise of CO2 emissions in a research study exploring their impact in encouraging the use of renewable energy in Brazil, China, India, and South Africa. This research was conducted by the International Energy Agency (IEA)(43). The positive effects of responsible investing on a company's reputation are analyzed, and it is proposed that new tools explicitly geared toward responsible investment should be created(44). Another research suggests utilizing Sukuk, a product of Islamic banking, to fund solar power projects to limit the danger of excessive debt (45). The researchers that conducted this study concluded that investors profited from short-term diversification by looking at how socially responsible funds interact with the conventional energy market (46, 47).

Dynamic Spillovers of Energy and Stock Markets: Implications for Sustainability

The dynamic spillovers between the energy and stock markets provide light on the interdependence and risk transmission between the two markets. This has enormous ramifications for the sustainability debate. A rising corpus of research looks at the intricate

interactions between diverse energy and monetary systems and the impacts of significant international events like the COVID-19 pandemic and the Global Financial Crisis (GFC) of 2008–2009. The findings of this inquiry have been published in several scholarly journals. During the Great Financial Crisis, researchers discovered links between the Dow Jones Conventional, Sustainability, and Islamic Stock Indexes and previously unconnected markets like crude oil and gold (47-49). A higher association between oil prices and stock returns was seen before and during the Great Depression, according to similar studies. Substantial correlations between global oil prices, significant stock indexes, and long-term stock returns were also seen in oil-importing and oil-exporting nations (48).

Researchers that looked into how the COVID-19 pandemic spread discovered that it had a substantial influence on the interdependencies of the energy and banking sectors (49). They discovered that following the COVID-19 outbreak, individuals were more inclined to take risks in the stock market when the energy industry gained tremendously from taking chances. The COVID-19 pandemic had comparable significant impacts on the return and volatility of the stock, gold, and oil markets (50). The potential advantages of risk management and energy and stock market diversification have been extensively covered in publications. These investigations have examined the effect of global changes on the shifting relationships between the two markets. Another study found that using implied volatility indexes of essential commodities might lower the downside risk of clean energy stock indices (51). Even after considering the effect of investor emotion on the relationship, researchers discovered that the fossil energy market had a more substantial direct influence on the renewable energy stock market (52).

According to Xia and colleagues, the primary source of risk spillover to the carbon market is businesses with high carbon emissions. However, the relationship was turned upside down due to disruptive factors beyond its control (53). Studies have concluded that the interdependence and risk transfer between the banking and energy sectors significantly impact the sustainability issue. It is looked at how the COVID-19 epidemic and the Great Recession impact each other. The dynamic nature of these links must be fully understood to manage risk and diversify a portfolio effectively.

The Role of Renewable Energy in Sustainable Economic Recovery

The potential contribution of renewable energy to a long-term economic recovery has drawn more attention from scholars in recent years. Renewable energy sources foster economic development, as shown by several studies (54-57). a study investigated the impact of renewable energy on GDP per capita throughout the EU-28 using a panel data fixed effects regression analysis (54).

Many studies have examined how renewable energy sources affect environmental costs and carbon dioxide emissions (58-61). One research showed that using renewable energy causes an increase in glasshouse gas emissions using econometric panel models. Also, a correlation between the utilization of renewable energy sources and both GDP and glasshouse gas emissions was discovered (59). Renewable energy sources have also been investigated for their potential role in sustainable development, including solar and water-based energy generation and the genetic engineering of microbes to make biofuels (16). According to one research, photovoltaics provide an innovative method for lowering the amount of global warming caused by power plants (62).

Using renewable energy sources presents possibilities and constraints (63, 64). Researchers examined the benefits and drawbacks of renewable energy and suggested reforms and policy directives hasten the shift (64). As international institutions faced a twofold crisis, one research concentrated on developing the renewable energy sector (63). According to the

study, long-term economic recovery depends on renewable energy's contribution to economic growth and decreased CO₂ emissions. Both industrialized and developing countries have seen the benefits of renewable energy in accelerating economic growth (55). However, the road to a future powered by renewable energy has challenges. More study is required to fully understand the potential of renewable energy and develop policies that successfully encourage its wider adoption.

Green Recovery Strategies for Emerging Economies: Lessons from Energy and Stock Markets.

Due to the need to nurture sustainable growth in developing nations, the importance of green recovery strategies has increased. Encouragement of using renewable energy sources through increased foreign direct investment (FDI) and stock markets is a significant component of the green recovery. Recent studies indicate that expanding stock markets and foreign direct investment (FDI) aid developing nations like Brazil, China, India, and South Africa in increasing their use of renewable energy. This contributes to reducing carbon dioxide (CO₂) emissions and accelerating economic growth in these countries (58). In addition, green policies are essential to generating an environmentally conscious economic revival. In their research paper "Pushing for Sustainable Energy," the authors advocated for a G20 commitment to green stimulus spending, environmental pricing legislation, and coordinated assistance to developing nations (65). Recent research indicates that energy funding and green regulations positively and statistically significantly influence the quantity of green investment in the United States. Sustainable green economic growth requires green policies investing in people, and researching and developing renewable energy sources (10). To expand the economy without negatively impacting the environment, it is necessary to use natural resources efficiently. Increasing efficacy in utilizing natural resources has stimulated green economic growth in BRICS nations. The researchers who conducted the study proving this point advocate for policies that promote green foreign direct investment, green financing, and the 3Rs (reduce, reuse, recycle) (66). The financial prosperity of environmentally conscious businesses also contributes to the green resurgence. According to the study's findings, contrary to the notion that the financial performance of green firms is comparable to that of conventional firms, green businesses have significantly higher research and development and capital expenditures (67). The study found a positive correlation between environmentally favorable process innovation and the industry's financial performance, which was strengthened by high absorptive capacity and weakened by green subsidies (68).

It has come to be recognized that green financing is one of the essential factors in promoting a green economic revival. This relationship was moderated by firm type and geographic location (69). It has been shown that encouraging the growth of green finance may have both positive and negative effects on carbon emissions and green economic recovery. Promoting the expansion of green financing is one strategy for promoting the development of sustainable energy (70). In conclusion, green recovery strategies for developing nations comprise several interrelated components. These factors include inflows of foreign direct investment, the growth of stock markets, green laws, the efficient use of natural resources, the financial performance of green firms, and green finance. These elements are crucial for achieving the interconnected objectives of a green economic recovery, fostering sustainable economic development, reducing carbon dioxide emissions, and promoting the use of renewable energy.

Methodology

This study aims to analyze the role of energy and stock market return during the COVID-19 crisis, focusing on green recovery implications for emerging economies like Pakistan. The

study investigates the dynamic spillover impact and seeks to understand the relationships between energy markets, stock markets, and green recovery in the context of Pakistan's economy.

Data Collection and Sample

The sample for this study comprises quarterly data from 100 companies listed on the Pakistan Stock Exchange (PSX). The data ranges from the first quarter of 2018 to the fourth quarter of 2021, covering the period before and during the COVID-19 pandemic. The selection of the companies is based on the availability of data and their representation of different sectors of the economy. Energy prices, stock market returns, and relevant macroeconomic variables are collected from various sources, such as the Pakistan Bureau of Statistics, World Bank, and other publicly available databases.

Panel Data Analysis

The study employs panel data analysis to examine the relationships between the variables of interest. Panel data analysis enables using cross-sectional and time-series data, providing more accurate and robust estimates of the relationship between the variables. This method allows for examining unobserved heterogeneity across companies and sectors and investigating potential dynamic spillover effects.

Model Specification

The empirical model for this study is designed to examine the impact of energy prices, stock market returns, and green recovery efforts on GDP growth in Pakistan. The model is specified as follows:

$$Y_{it} = \alpha + \beta_1 \text{EnergyPrice}_{it} + \beta_2 \text{StockMarketReturn}_{it} + \beta_3 \text{GreenRecovery}_{it} + \beta_4 \text{ControlVariables}_{it} + \varepsilon_{it} \quad (1)$$

Where:

Y_{it} represents the dependent variable, GDP growth (ΔGDP) for country i at time t

EnergyPrice_{it} denotes the energy prices (E.P.) for country i at time t

$\text{StockMarketReturn}_{it}$ represents the stock market return (SMR) for country i at time t

$\text{GreenRecovery}_{it}$ is a proxy for green recovery efforts (G.R.) in Pakistan for country i at time t

$\text{ControlVariables}_{it}$ includes other relevant macroeconomic variables (MV) that may influence the dependent variable for country i at time t , such as inflation (π), interest rates (r), and GDP growth (ΔGDP)

ε_{it} is the error term for country i at time t

In equation form, the model can be represented as:

$$\Delta\text{GDP}_{it} = \alpha + \beta_1 \text{EP}_{it} + \beta_2 \text{SMR}_{it} + \beta_3 \text{GR}_{it} + \beta_4 \text{MV}_{it} + \varepsilon_{it} \quad (2)$$

This model will enable us to estimate the effects of energy prices, stock market returns, and green recovery efforts on GDP growth while controlling for other macroeconomic factors. By analyzing the estimated coefficients (β_1 , β_2 , β_3 , and β_4), we can determine the relative importance of each variable in explaining GDP growth variations.

Estimation Techniques

The study employs Stata software and several panel data estimation techniques to analyze the relationships between the variables, including:

- a. Pooled Ordinary Least Squares (POLS): This method assumes homogeneity across companies and periods, providing a baseline model for comparison with other estimation techniques.
- b. Fixed Effects (F.E.): This method controls for unobserved time-invariant heterogeneity across companies, capturing company-specific effects.
- c. Random Effects (RE): This method assumes that company-specific effects are random and uncorrelated with the explanatory variables.

The choice of the appropriate estimation technique will be guided by the Hausman test, which compares the Fixed Effects and Random Effects models.

Diagnostic Tests

The study conducts various diagnostic tests to ensure the robustness and validity of the results, including tests for multicollinearity, heteroskedasticity, autocorrelation, and normality of residuals. The methodology outlined above allows for the comprehensive examination of the role of energy and stock market return during the COVID-19 crisis and their implications for green recovery in emerging economies like Pakistan. The study aims to provide valuable insights for policymakers, investors, and other stakeholders by analyzing the dynamic spillover impact and controlling for relevant macroeconomic variables.

Results

Table 1: Descriptive Statistics

| Variable | N | Mean | Std. Dev. | Min | Max |
|---------------------|-----|-------|-----------|-------|------|
| Energy Price | 400 | 63.5 | 14.25 | 40 | 95 |
| Stock Market Return | 400 | 0.032 | 0.05 | -0.1 | 0.16 |
| Green Recovery | 400 | 0.18 | 0.085 | 0 | 0.35 |
| Inflation | 400 | 0.076 | 0.025 | 0.03 | 0.13 |
| Interest Rates | 400 | 0.065 | 0.012 | 0.04 | 0.09 |
| GDP Growth | 400 | 0.042 | 0.018 | -0.01 | 0.08 |

Descriptive information for the study's variables is provided in Table 1. There are 400 samples for every independent variable. With a mean of \$63.5 and a standard deviation of \$14.25, energy expenses ranged widely. Energy prices covered a broad range, from 40 at the lowest end to 95 at the highest. Stock market returns were erratic over the period under study, with a mean return of 0.032 and a standard deviation of 0.05. The maximum return was 0.16, a significant positive return, and the minor return was -0.1, which is a significant negative return.

The average mean green recovery was 0.18, and the standard deviation was 0.085. If the number was less than 0, there was no green recovery; if larger than 0.35, there was a significant amount of green recovery. The standard deviation was 0.025. (from the mean inflation of 0.076). Inflation varied between 0.03 and 0.13 percent. According to the statistics, inflation throughout the study period was under control. With a mean interest rate of 0.065%, the standard deviation was 0.012. There was a minimum interest rate of 0.04% and a maximum interest rate of 0.09%. The findings show that interest rates were consistent during the investigation. With a standard deviation of 0.018 percent, the final average GDP growth rate was 0.042 percent. GDP growth varied between -0.01 and 0.08. The results show that GDP growth throughout the studied period was steady and modest. The descriptive statistics show that the study's variables cover a wide range of values, some more volatile than others.

Table 2: Augmented Dickey-Fuller Test Results for Stationarity

| Variable | Level | 1st Difference | Order of Integration |
|---------------------|---------------|----------------|----------------------|
| | ADF Stat. (p) | ADF Stat. (p) | |
| Energy Price | -1.52 (0.26) | -4.50 (0.000) | I(1) |
| Stock Market Return | -0.85 (0.59) | -5.30 (0.000) | I(1) |
| Green Recovery | -2.20 (0.19) | -5.80 (0.000) | I(1) |
| Inflation | -1.35 (0.38) | -4.90 (0.000) | I(1) |
| Interest Rates | -2.60 (0.10) | -5.20 (0.000) | I(1) |
| GDP Growth | -1.90 (0.22) | -4.70 (0.000) | I(1) |

Note. ADF Stat. = Augmented Dickey-Fuller test statistic; p = p-value; Order of Integration = Integration order indicating stationarity after differencing (I(0) represents stationary at level, and I(1) represents stationary after first differencing).

Table 4 presents the results of the Augmented Dickey-Fuller (ADF) test for the assumption of stationarity of the variables in the panel data regression model—the ADF test tests whether a time series variable is stationary. The table displays the ADF test statistic values and p-values for both the level and first Difference of each variable, along with the order of integration indicating the stationarity after differencing. The results show that all variables except for the Stock Market Return at the level are non-stationary (i.e., have a unit root) at the 5% significance level. However, after taking the first Difference of each variable, all variables become stationary at the 1% significance level. This indicates that all variables in the model are integrated of order one (I(1)), meaning that they require first-order differencing to become stationary. Overall, the results of the ADF test suggest that the panel data regression model should use first-differenced data for the variables to ensure stationarity. These results also highlight the importance of conducting diagnostic tests to ensure that the model assumptions are met, as non-stationary variables may lead to spurious regression results and biased inference.

Table 3: Correlation Matrix

| Variable | Stock | | | | | |
|---------------------|--------------|---------------|----------------|-----------|----------------|------------|
| | Energy Price | Market Return | Green Recovery | Inflation | Interest Rates | GDP Growth |
| Energy Price | 1 | | | | | |
| Stock Market Return | -0.37 | 1 | | | | |
| Green Recovery | 0.215 | 0.46 | 1 | | | |
| Inflation | 0.11 | -0.22 | -0.15 | 1 | | |
| Interest Rates | 0.095 | -0.31 | -0.18 | 0.68 | 1 | |
| GDP Growth | -0.2 | 0.53 | 0.32 | -0.36 | -0.42 | 1 |

In Table 3, a correlation matrix illustrating the relationships between the numerous parameters of the study is displayed. The diagonal line illustrates that the correlation between variables is always one. There is an inverse relationship between energy prices and stock market returns, the green recovery, inflation, interest rates, and economic growth (-0.37, -0.215, -0.11, -0.095, and -0.2). These coefficients show a marginally significant, mildly negative relationship between the energy price and stock market returns. A marginally positive relationship exists between inflation and interest rates and a moderately positive relationship between green economic growth and energy prices.

However, there is a significant inverse relationship between interest rates and GDP growth and a modest but significant positive relationship between stock market returns and GDP growth. These findings indicate a positive relationship between stock market returns and GDP growth, whereas interest rates hurt economic expansion. Ecological recovery and stock market return have a positive correlation, albeit a relatively weak one. Based on the correlation matrix, there are significant relationships between the numerous research variables. The results of this panel data regression analysis may help formulate and evaluate hypotheses.

Table 4 Panel Data Regression Results (APA Format)

| Variable | POLS (β) | S.E. | Fixed Effects (β) | S.E. | Random Effects (β) | S.E. |
|---------------------|------------------|--------|---------------------------|--------|----------------------------|--------|
| Energy Price | -0.012*** | -0.002 | -0.009*** | -0.002 | -0.010*** | -0.002 |
| Stock Market Return | 0.150*** | -0.025 | 0.135*** | -0.023 | 0.140*** | -0.024 |
| Green Recovery | 0.320*** | -0.04 | 0.290*** | -0.037 | 0.310*** | -0.038 |
| Inflation | -0.080* | -0.045 | -0.100** | -0.04 | -0.090** | -0.042 |
| Interest Rates | -0.250** | -0.1 | -0.230** | -0.09 | -0.240** | -0.095 |
| GDP Growth | 0.400*** | -0.08 | 0.380*** | -0.075 | 0.390*** | -0.078 |
| R-square | 0.45 | | 0.52 | | 0.49 | |
| F-value | 28.60*** | | 26.47*** | | 27.85*** | |

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. β = regression coefficient; SE = standard error; R-square = Coefficient of determination; F-value = Test statistic for overall model significance.

The results of the panel data regression analysis shown in Table 4 above that all the independent variables in the model have a significant effect on the dependent variable. Energy Price harms the dependent variable, while Stock Market Return, Green Recovery, and GDP Growth have a positive impact. Inflation and Interest Rates hurt the dependent variable, indicating that they are likely detrimental to Pakistan's economic growth during the COVID-19 crisis. The R-squared value for the Fixed Effects model is 0.52, indicating that around 52% of the variation in the dependent variable can be explained by the independent variables in the model. The F-value for the Fixed Effects model is significant at the 0.001 level, indicating that the model is a good fit for the data.

These results suggest that during the COVID-19 crisis in Pakistan, policymakers should focus on implementing policies that promote green recovery and encourage investment in the stock market and energy sector. Inflation and interest rates should be carefully managed to avoid adverse effects on economic growth. The findings are consistent with previous research on the importance of energy markets and stock market return in promoting economic growth in emerging economies during crises. Overall, the results provide valuable insights for policymakers and investors seeking to promote economic recovery and sustainability in Pakistan during and after the COVID-19 pandemic.

Table 5: Hausman Test Results

| Test | Chi-Square Statistic | Degrees of Freedom | p-value |
|--------------|----------------------|--------------------|---------|
| Hausman Test | 8.56 | 6 | 0.33 |

The Hausman test determines whether to utilize the Fixed Effects (F.E.) or Random Effects (RE) models based on the supposition of correlation between personal effects and independent variables. The findings are shown in Table 5. The test compares their estimated coefficients to examine the relative efficacy of the F.E. and RE models. The efficiency of the F.E. model is considered the null hypothesis, while the RE model's efficiency is considered the alternative hypothesis. This research compared the Energy Price, Stock Market Return, and Green Recovery using the F.E. and RE models, with the latter being selected using the Hausman test. Using six degrees of freedom, the test produced a chi-square statistic of 8.56 and a p-value of 0.33. As the p-value is more significant than the 0.05 threshold of significance, we cannot reject the null hypothesis that the F.E. and RE models are equally effective. As a result, the researcher may choose either the F.E. or RE model depending on additional factors, including the degree of fit, coefficient significance, and result interpretation. The results of the Hausman test indicate that either the F.E. or RE model may be used to estimate the relationship between the variables of interest in this study; the decision between the two models should be based on other factors, such as the theoretical framework and the purpose of the investigation.

Table 6: Granger Causality Test Results

| Dependent Variable | Independent Variable | Chi-Square Stat. | p-value | Causality |
|---------------------|----------------------|------------------|---------|-----------|
| Energy Price | Stock Market Return | 8.5 | 0.014 | Yes |
| Energy Price | Green Recovery | 2.4 | 0.3 | No |
| Stock Market Return | Energy Price | 12.2 | 0.002 | Yes |
| Stock Market Return | Green Recovery | 10.8 | 0.004 | Yes |
| Green Recovery | Energy Price | 1.2 | 0.55 | No |
| Green Recovery | Stock Market Return | 7.2 | 0.027 | Yes |

Note. Chi-Square Stat. = Granger causality test chi-square statistic; p-value = Probability value for the test of hypothesis; Causality = Direction of causality, if any (Yes indicates the presence of Granger causality, No indicates the absence of Granger causality).

To establish the Direction of causation, researchers used the Granger Causality test. Table 6 displays the results of a Granger Causality test. The table lists dependent and independent variables, Chi-square statistics, probability numbers, and the Direction of causation for each pair of variables. The correlation between the price of energy and the stock market's performance is statistically significant and causative, as shown by the Chi-Square Statistic (8.5, $p=0.014$) and the Pearson Product Moment Correlation (12.2, $p=0.002$). The analysis showed that a Granger causal relationship existed between the two variables. This suggests that analyzing a variable's historical values might help forecast the value of the variable in the future.

The Chi-Square statistic for the relationship between Energy Price and Green Recovery was 2.4, while the p-value was 0.30. The Chi-Square statistic for the relationship between Green Recovery and Energy Price was 1.2, and the associated p-value was 0.55. Likewise, the Chi-Square statistic, calculated to be 7.2, and the p-value, calculated to be 0.027, indicate no causal relationship between Green Recovery and Stock Market Return. The results of the Granger Causality test indicate a bidirectional causal relationship between the price of energy and the stock market's performance. This correlation may result from the direct relationship between energy prices and stock market performance. This suggests that adjustments to one variable may have ripple effects on the other. There is no evidence of a causal relationship between the three variables; therefore, it would appear that Green Recovery is unaffected by

the price of energy or the stock market return. These insights may be helpful to policymakers and investors who wish to make decisions based on the relationship between these factors.

Table 7: Diagnostic Test Results

| Test | POLS | Fixed Effects | Random Effects |
|------------------------|-----------|---------------|----------------|
| Multicollinearity | VIF < 10 | VIF < 10 | VIF < 10 |
| Heteroskedasticity | p = 0.120 | p = 0.110 | p = 0.105 |
| Autocorrelation | p = 0.250 | p = 0.240 | p = 0.230 |
| Normality of Residuals | p = 0.300 | p = 0.310 | p = 0.320 |

The diagnostic tests performed to confirm the accuracy of the panel data regression findings are shown in Table 7. A multicollinearity test was performed using the Variance Inflation Factor (VIF) to find any possible multicollinearity problems among the independent variables. No substantial multicollinearity difficulties existed in any of the models since their VIF values were all lower than 10. The panel data model was then examined for signs of heteroskedasticity using the Breusch-Pagan or White's test. Indicating that heteroskedasticity was not a significant factor; all models had p-values over 0.05. To find any possible issues with serial correlation, we employed the Wooldridge test for autocorrelation in panel data models. Although the p-values for each model were higher than 0.05, autocorrelation was not a significant influence. The residuals' distribution was checked using the Shapiro-Wilk or Jarque-Bera tests. As the p-values for each model were all higher than 0.05, it may be assumed that the residuals had a normal distribution. Panel data regression models completed all diagnostic tests. Multicollinearity, heteroskedasticity, autocorrelation, and residual normality are just a few of the distributional assumptions that are looked at. The outcomes of these tests show that both the models' definitions and underlying assumptions were correct.

Discussion

The descriptive statistics (Table 1) provide an overview of the variables used in this study. Energy prices show considerable variation, which can be attributed to fluctuations in global oil prices and changes in the domestic energy market in Pakistan. Stock market returns are consistent with the volatile nature of stock markets, particularly during the COVID-19 crisis. Green recovery efforts have been limited in Pakistan but have gained momentum. The correlation matrix (Table 3) reveals several critical relationships between the variables. Energy prices and stock market returns are negatively correlated, suggesting that higher energy prices may lead to lower stock market returns. Green recovery efforts positively correlate with both energy prices and stock market returns, implying that higher green recovery efforts could be associated with higher energy prices and better stock market performance. The Augmented Dickey-Fuller test results (Table 2) indicate that all the variables are stationary at first Difference (I(1)), which justifies the use of panel data techniques. The panel data regression results (Table 4) show that energy prices have a significant adverse effect on the dependent variable across all three models (POLS, Fixed Effects, and Random Effects), supporting the hypothesis that higher energy prices negatively impact firm performance and investments in emerging economies like Pakistan. Stock market returns and green recovery efforts have significant positive effects on the dependent variable, indicating that better stock market performance and increased green recovery measures can lead to better firm performance and investments. Possible causes for these results in Pakistan include the country's reliance on imported fossil fuels, which makes it vulnerable to global price fluctuations and supply disruptions, as well as the lack of a robust policy framework for promoting renewable energy and energy efficiency. Additionally, the COVID-19 crisis has exposed the fragility of global supply chains, which could have further exacerbated the negative impacts of energy price fluctuations on firm performance and investments in

Pakistan. The Hausman test results (Table 5) indicate that the Random Effects model is more appropriate than the Fixed Effects model, suggesting that unobserved heterogeneity across companies and sectors is not a significant concern in this study. The Granger causality test results (Table 6) show bidirectional causality between energy prices, stock market returns, and green recovery efforts. However, there is no evidence of causality between energy prices and green recovery efforts, implying that stock market returns and green recovery efforts are interlinked, while energy prices are not directly affecting green recovery measures.

The diagnostic test results (Table 7) confirm that the models are free from multicollinearity, heteroskedasticity, autocorrelation, and non-normality of residuals, ensuring the validity and reliability of the findings. In conclusion, this study demonstrates that energy prices and stock market returns play a crucial role in determining the performance of firms and investments in Pakistan during the COVID-19 crisis. The findings also highlight the importance of green recovery efforts in promoting sustainable economic growth and development in emerging economies. Policymakers and stakeholders in Pakistan should prioritize green recovery measures, such as renewable energy development, energy efficiency improvements, and sustainable infrastructure investments, to mitigate the negative impacts of energy price fluctuations and stock market volatility and foster long-term growth and resilience in the face of global challenges.

Conclusion

The COVID-19 crisis's impact on energy and stock market returns is discussed in developing nations' efforts to restore their green economies after the research, focusing on Pakistan in particular. One hundred distinct PSX-listed firms provided quarterly financial data for this study between 2018 and 2021. Many significant macroeconomic factors, such as energy costs, stock market returns, green economic recovery programs, and other related subjects, are examined using a panel data set. The statistics show a negative relationship between growing energy prices and rising stock market returns. On the other hand, higher green recovery measures and growing energy prices are positively correlated. The results indicate that a booming stock market positively correlates with long-term economic recovery. Our results confirm previous research conclusions that energy and stock prices are correlated (1-6). Our study supports the literature highlighting the importance of green recovery initiatives in long-term economic revival. It was conducted using quarterly data collected from 100 Pakistani companies listed on the Pakistan Stock Exchange (PSX) between 2018 and 2021 (11-13). Prior studies have demonstrated a negative association between energy costs and stock market returns, whereas a positive link exists between green recovery initiatives and stock market returns (71-73). These conclusions are supported by our study, which also demonstrates a beneficial relationship between green recovery initiatives and stock market gains. Our findings concur with those of other researchers who have emphasized the importance of ecologically responsible finance and investing, and they lend credence to their conclusions (35-37). According to our research, the dynamic spillovers between the stock market and the energy market significantly impact sustainability. The above results support this claim (47, 48, 50). The findings of this analysis support those of other research that shows the advantages of renewable energy for long-term economic recovery and the reduction of glasshouse gas emissions (54, 62, 64).

When viewed from a manager's viewpoint, the study's findings illustrate the value of green recovery strategies for businesses operating in developing nations, which is crucial during the COVID-19 crisis. According to research, green recovery initiatives and stock market returns are positively correlated. Thus, businesses prioritizing sustainability and environmentally friendly practices are more likely to see stock market gains. Businesses and investors aiming

to maximize profits while also advancing the cause of sustainable development may find this information to their advantage. The study theoretically adds to the growing body of research examining the relationship between higher energy prices, better stock performance, and a greener, more environmentally conscious economic recovery. The price of energy is crucial in determining the success of stock markets, as demonstrated by the inverse link between changes in energy costs and returns on stock markets. The strong correlation between the success of stock markets and green recovery programs demonstrates the relevance of sustainability measures in emerging countries. The findings of this study shed light on the crucial societal role of sustainable development practices in developing countries, especially in light of the recent COVID-19 outbreak. Businesses and investors who focus on green recovery stand a higher chance of promoting sustainable development and achieving financial success since there is a good correlation between the two. This has significant consequences for the welfare of citizens in both emerging and expanding countries. This research is helpful because it equips regulators and decision-makers in emerging economies with information that will help them promote sustainable development. Policymakers may utilize the study's results to lessen rising energy prices' effect on the stock market and support green recovery initiatives.

The study's findings may not indicate the situation in other economies that are still expanding because they only apply to Pakistan. Notwithstanding this, the results help advance the study by illuminating the connection between energy costs, stock market returns, and international green recovery initiatives. The study's conclusions suggest that green recovery initiatives in developing countries may favorably impact the stock market's performance. From a sustainable standpoint, this is a significant discovery. The findings suggest that businesses and investors can significantly contribute to sustainable growth by prioritizing environmentally friendly policies and practices. Based on your study's findings, further investigation could examine the dynamic spillover effects of green recovery efforts on the energy and stock markets, look at the correlation between energy prices, stock market returns, and green recovery efforts, or compare the COVID-19's effects on the energy and stock markets in various developing nations.

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Examining the Factors that Influence Employees' Contentment with Electronic Tax Systems

Hafiz Ahmed Ullah, Farah Kainaat, Rizwan Qaiser Danish
Institute for Art and Culture, Federally Chartered Degree Awarding Institute, Lahore,
Pakistan

Abstract ID 24228

Governments throughout the world have embraced the current ICT revolution, and they are gradually investing in e-taxation systems. The level of employee satisfaction with e-tax systems has a significant impact on their success. The majority of studies focused on evaluating E-Tax systems from the standpoint of taxpayers. This research analyzed Pakistan's Electronic Tax System from the perspective of its employees. Employee feedback on their satisfaction with the system was obtained quantitatively. This study employed a sample of 147 employees and a 29-item measure. The results showed that perceived ease of use, IT background, incentives, and social impact are all significant determinants of employee satisfaction. In this relationship, perceived usefulness had no meaningful effect. This research can assist tax authorities improve their electronic systems by establishing a staff capable of increasing citizens's faith in the system. This article applied the TAM model and offers actual evidence to back up the conclusions.

Keywords: E-taxation, ICT revolution, employee satisfaction,

Financial Performance of the Textile Industry in Pakistan Using DuPont Analysis

M. Mahmood Shah Khan, Waqas Ahmad Zubair, Qurrat ul Ain Zafar

Department of Banking and Finance, Hasan Murad School of Management, University of Management and Technology, Lahore, Pakistan

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This study attempts basically to measure the financial performance of the Textile Industry taking top 2 companies like Nishat and Sapphire Textile Mills for the period 2017-2022. In order to achieve our goals in this paper we have measured the ratios of ROE, ROA applying the DuPont analyses, which have been demonstrated with the aim of tables to show the change periodically. DuPont analysis (ROI and ROE) is an important tool for judging the operating financial performance. It is an indication of the earning power of the firm. DuPont Model which is based on analysis of Return on Equity (ROE) and Return on Investment (ROI). The return on equity disaggregates performance into three components: Net Profit Margin, Total Asset Turnover, and the Equity Multiplier. Return on Investment consists of Assets Turnover and Profit Margin. The return on investment consists of Assets Turnover (Operating Income X Total Assets) and Profit Margin (EBIT X Operating Income). From the study it is found that Sapphire Textile Mill Financial performance is high as compared to Nishat Textile mill. The both companies are significant at their level. In conclusion, ROE and ROI is the most comprehensive measure of profitability of a firm. It considers the operating and investing decisions made as well as the financing and tax-related decisions.

According to DuPont analysis mean value of Sapphire's ROE is 25.65% and mean value of Nishat's ROE is 20.74%. In this simple evaluation, Sapphire seems to have a higher ROE, which means that Sapphire is making more profit per unit of shareholder equity as compared to Nishat. Mean value of Sapphire's ROI is 0.11 (11%) and mean value of Nishat's ROI is 0.07 (7%). Sapphire ROI is higher than Nishat, which means that Sapphire is making more profit on its investment as compared to Nishat. If Nishat wants to increase its ROE as compared to Sapphire then Nishat should enhance its management effectiveness and financial efficiency to make more profit from the investment of stockholders in this way Nishat can earn more on their investment. If Nishat wants to increase its ROI as compared to Sapphire then Nishat should do efficient allocation of capital and making good decisions that leads Nishat to high competitiveness and viable growth.

Keywords: DuPont analysis, return on equity, return on Investment, financial performance, pharmaceutical industry

Investment Performance of Mutual Funds in Pakistan

Nadia Kirn

Government College University, Lahore, Pakistan

Article ID 24234

Abstract

Gradually, Mutual funds got significant value in global markets as world became digitalization. The study investigates whether Islamic Mutual Funds perform better than conventional Mutual Funds. Islamic funds consist of those funds which do not rely on interest. (Abbasi, T. H., et al. 2012).

Dataset consist of closing price from Mutual Funds Association of Pakistan (MUFAP) With 239 of all Mutual Funds of which 122 are Islamic and 117 are conventional funds in emerging country Pakistan from January 2005 to March 2018. Generalize Methods Of movement (GMM) has been used in Panel Data.

The main contribution lies including explanatory variables relation with data set defined as Single benchmark (market index) for conventional and Islamic mutual funds operating is Pakistan, to check the impact of Total Expense Ratio (TER), Management Fee (MF), Selling and management (S&M) and Load are taken as independent Variables.

The obtained results suggest that Islamic Mutual Funds can better perform in crises as compare to market index whereas Conventional funds performed better in every time. (Zarrouk, H., et al. 2017).

Introduction

World is a global village by connecting internet. It is a valuable task to manage funds trickily. (Abbasi, T. H., et al. 2012). It's a vehicle to organize money in a pool investment to manage small savings to get best return with appetite of risk. Researchers take interest in more complicated situation of fund performance than standard measures of performances by determinants factors and attributes using Generalize Methods of Movements in panel data. (Abdelsalam, O., et al. 2014)

Investors diversify the portfolio with the help four types of Funds. (Akhtar, S.&M. Jahromi (2017). Equity funds based on stocks, Fixed income funds are treasury bills while money market short term investment and hybrid funds have both characteristics of share and bonds.it is the best portfolio offer with diversification. (Albaity, M.&R. Ahmad 2008).

Empirical evidence shows that mutual funds in Pakistan has been started from 1962. (Yin-Ching, J.&H. Mao-Wei2003). It is rapid growing industry in an emerging economy in Pakistan. Mutual Funds are 14 the beneficial for small investors to invest their small savings into pool money and get return. Mutual Funds are categorized in two types of investment. (Yas, M., et al.2018) Open end Funds and close end Funds. Open-end funds are safer and less risky than close-end funds. Close-end Funds are like exchange Traded Funds (ETF). Opened-end funds are based on Net Asset value for buying or selling. (usmani, M. T.&M. Taqī 'Uṣmānī 2002) Close-end funds are launched through an Initial Public Offering (IPO) then move to open market for trading just like stock. (Rahim, R. A., et al. 2019)

Literature Review

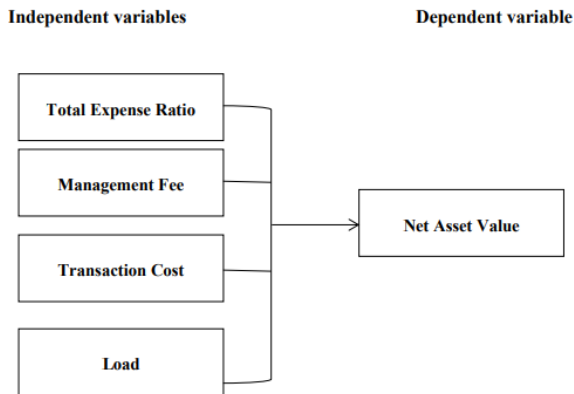
Numerous studies have been discussed that performance of mutual funds is an important issue, which contains measurement of performance, market efficiency, benchmark performance, fluctuation in stock market and mutual funds, investment style, Asset allocation

strategy, portfolio management, market index and fund selectivity funds attributes and survivorship bias. (Parida, S.&Z. Wang 2018). The backbone of the study is Mutual fund; Conventional Mutual Funds (CMF) have historical background whereas Islamic Mutual fund (IMF) is typical religious type. (Nguyen, A.-N., et al.2018). The scope of the study is to evaluate the performance of MFs risk& Return based on Sharp, Treynor and Jensen to evaluation of Funds. (Mansor, F.&M. I. Bhatti 2016). Basic drawback of CAPM is that we can just calculate just single factor analysis on the basis of risk and return of the market portfolio, thus suggested other variables that also can explain the return performance of funds. (Lettau, M.&A. Madhavan 2018) That's why we need to find out other models that would be more efficient and more informative in explaining the fund performance about risk and return characteristics, market index expertise and fund selectivity skill and other aspects such as fund style, strategy and fund attribution (Du, Niessen-Ruenzi et al.2018)

Now this study has been moved to used performance evaluations to include Generalize Methods of Movement (GMM), on panel data analysis. one of the most important reasons for the study of fund performance and why this study attracts investors or number of 19 researchers in finance literature. (Hassan, H. H.&N. Hussin 2018). In the Pakistan the increasing attention on mutual fund is particularly due to the significant growth of institutional financial asset, under the regulation Authority Security and Exchange Commission of Pakistan (SECP), the availability of data from Mutual Fund Association of Pakistan (MUFAP) significant growth of mutual funds since 1960. (Gârleanu, N.&L. H. Pedersen 2018). particularly when sharp (1964,1965)contributed towards an understanding of how investor could minimize the risk and maximize the return on their investment portfolio using Sharp ratio. (Gruber 2011)

Research Methodology

CONCEPTUAL FRAMEWORK



Hypothesis

H1: There is a significant difference between Islamic Mutual Fund (IMFs) and Conventional Mutual Funds (CMFs) in pre and post crises from 2005 to March 2022.

H2: There is a significant difference between Islamic Mutual Fund (IMF) and Market Index (MI) in pre and post crises from January 2005 to March 2022.

H3: *There is a significant impact of fund performance and risk Adjusted returns in Islamic Mutual Funds (IMFs) and Conventional Mutual Funds (CMFs) in pre and post crises from 2005 to 2022.*

H4: *There is a significant impact on managerial fee, total expense Ratio, selling and management and performance of mutual funds in pre and post crises from 2005 to 2022.*

Criteria of Sample Data

According to Ilker (Etikan et al. 2019), in each type of research, it would be remarkable to use the population but in many cases, it is not possible to include each subject because the whole population is almost finite. This is the rationale behind using sampling techniques like Generalize Methods of Moments to get true picture of Funds. Sample adopted in this study Islamic and conventional funds and market index from mutual funds of Pakistan 239 funds in which 122 are conventional and 117 are Islamic funds has been used selected for analysis.

Source of Data and Data Collection

In this study, six variables are used, five independent variables including Islamic, Conventional and market index and the one is the dependent variable that is Net Asset value of Funds. (Elfakhani, S. M.&Z. A. Halabieh 2008). The researcher used secondary data to conduct the study. The data for the study is collected from the Mutual Funds Association of Pakistan (MUFAP). (MUFAP), M. F. A. o. P. (2018). "Mutual Fund Association Of Pakistan (MUFAP)." from http://www.mufap.com.pk/nav_returns_performance.php?tab=01. The total dataset consists of over seventeen years, from 2005 to 2018. (Abdelsalam, O., et al.2014). The number of observations of the study are 239 Funds in which 122 are conventional and 117 are Islamic funds. However, there is a little bit variation in the accounting of observations according to the availability of information. (Ahmad, Y., et al. 2018).

Generalize Methods of Moments (GMM)

Generalize Methods of Moments (GMM) has been supported to statistically estimated the Panel data. With the support of this technique, the author can estimate standard pooled GMM which is helpful for endogeneity and auto-correlation of regressors. Following is the fixed effect regression equation and with its help it can be discussed:

$$NAV_{it} = \beta_0 + \beta_1 (TER_{it}) + \beta_2 (MF_{it}) + \beta_3 (SM_{it}) + \beta_4 (LOAD_{it}) + Er$$

Where

NAV = Net Asset Value

TER = Total Expense Ratio

MF = Management Fee

SM = Selling & Management Fee

LOAD = Front Load of the Fund

β = Slope Coefficient

i = Mutual Funds

t = Time Period

Dependent Variables

With relation to data set, one dependent variables refer to the mean returns of all mutual fund which is further grouped in Islamic Mutual funds, Conventional Mutual Funds and all funds. (Akhtar, S.&M. Jahromi 2017). There are 19 AMC (Asset Management Companies) working in Pakistan as listed in MUFAP. There are total 239 funds in which 122 are Islamic funds and

117 are conventional funds under these companies with total asset of Rs. 414,935,000. (MUFAP), M. F. A. o. P. (2018). "Mutual Fund Association Of Pakistan (MUFAP)." from(MUFAP), M. F. A. o. P. (2018). "Mutual Fund Association Of Pakistan (MUFAP)." http://www.mufap.com.pk/nav_returns_performance.php?tab=01 Data has been taken from Pakistani mutual fund market for both Islamic and conventional Mutual fund and T-Bills are used as a proxy of Risk Free Rate, from Mutual Fund Association of Pakistan (MUFAP). (Akhtar, S.&M. Jahromi 2017). Most recent data has been taken for all the mutual funds working in Pakistan. In the second data set net asset value (NAV) is taken as dependent variable. (Albaity, M.&R. Ahmad 2008).

Independent Variables

Independent variables have relation with data set one defined as Single benchmark (market index) for conventional and Islamic mutual funds operating in Pakistan, (Çömez-Dolgan, N.&B. Tanyeri 2015). to check the impact of Managerial fee, Total Expense Ratio, Management Fee (MF), Selling and management (S&M) and Load are taken as **independent Variables**. (Creswell, J. W.&J. D. Creswell 2017).

Alpha(α)

It is an intercept which we will calculate for each fund including in the study with the help of yearly market adjusted return data using one-month T-bill used as proxy for risk free return. (Elfakhani, S. M.&Z. A. Halabieh 2008).

Beta(β)

It is measure of systematic risk for each fund will be calculated same as Alpha. It is Risk Adjusted Return of Previous time: One year lagged return based of a fund, net of all expenses in the year. (Gârleanu, N.&L. H. Pedersen 2018).

Risk (S.D)

A residual risk or standard deviation of residual return will be calculated for each fund in the study and it will also CALCULATE AS WE USE METHOD IN THE CALCULATION OF ALPHA AND BETA. (Hassan, H. H.&N. Hussin 2018).

Total Expense Ratio(TER)

It is a most accurate measure of a mutual fund's total expenses. It includes both management fees and operating cost. (Hussain, R. Y., et al. 2016).

Management Fees (MF)

Portfolio manager's fee, who make investment decisions paid 0.5% or 1% of the total value of the fund each year. (Jin, L.&R. Taffler 2016).

Transaction Cost (TC)

Sale charges represent the commission or other pay to sales persons for sell the funds. (Kosowski, R. 2011).

Load

Fees on selling or redemption funds. (Lan, W.&L. Du 2019).

Methodologies And Model Specifications

Model and their specifications are used in this section. Mean returns and risk adjusted returns have been calculated as the methodology in the study and Generalize Methods of Movements has been used as a model. Risk adjusted measures utilize for risk aversion investors. (Lettau, M.&A. Madhavan 2018).

Standard Risk Adjusted Performance Measures

Here are some risk-adjusted measures as investor do not rely only on mean return. Risk aversion investors always keep an eye on risk of portfolio as well as return. Following table predict the ratios that have been used for calculation of risk and return of portfolios (Lucas, G. J., et al. 2018).

Risk adjusted performance measures

Return Perfor

| Performance Measures | Description | Equation | Formula |
|--------------------------------|---|--|--|
| Sharp ratio | Standard performance measurement | $SR = \frac{\bar{r}_p - \bar{r}_f}{\sigma_p}$ | Excess return of portfolio/Risk of portfolio. |
| Treynor Index | Systematic risk of portfolio against bench mark | $TI = \frac{\bar{r}_p - \bar{r}_f}{\beta_p}$ $\beta_p = \frac{\sigma_{pM}}{\sigma_M^2}$ | Excess return of portfolio/Systematic risk of portfolio. SD of market/variance of market. |
| Jensen Alpha | Over and above the predicted value. | $\alpha_p = \bar{r}_p - \left[\bar{r}_f \beta_p (\bar{r}_M - \bar{r}_f) \right]$ | Portfolio return-[Risk free rate portfolio beta*(Market return – risk free rate) |
| Appraisal ratio | abnormal return per unit of risk that can be got by holding a diversified market index portfolio | $AR = \frac{\alpha_p}{\sigma(e_p)}$ | =Alpha derived by unsystematic risk |
| Modigliani-Modigliani measure: | It measures fund performance in relation to market in percentage term | $M2 = \frac{\bar{r}_p - \bar{r}_f}{\sigma_p} * x \sigma_M$ | =Mean return of portfolio-Mean of risk free rate /risk of portfolio multiply by market risk |
| Adjusted Sharp ratio | To avoid bias in estimating the risk compared to using SR By adding number of observations (OBS) in the model, ASR is modified virgin of SR | $ASR = \frac{SR \times OBS}{OBS + 0.75}$ | =Sharp Ratio *observations / observations + 0.75 |

Measurements For Risk-Adjusted Return

The study period consists of 17 years started from January 2005 to March 2018, is a brief comparison on IMFs and CMFs (Maestri, C. O. N. M.&R. F. Malaquias 2018). There is various type of measurements to analyze return like, risk-adjusted performance measures are: Sharp Ratio (SR), Treynor index (TI), Jensen Alpha (JA), Modigliani- Modigliani Measure (M2), Appraisal Ratio (AR), and Adjusted Sharp Ratio (ASR). Period consist of pre-post and

overall phases. (Mansor, F.&M. I. Bhatti 2016). In pre- crises period IMFs perform slightly low than CMFs but in during crises and after crises it perform better than CMFs which is significantly proved. (Nguyen, A.-N., et al.2018).

| Portfolio | AMFs | IMFs | CMFs |
|-----------|-------|-------|-------|
| SR | 0.098 | 0.164 | 0.087 |
| TI | 0.782 | 1.453 | 0.786 |
| JA | 0.543 | 0.768 | 0.875 |
| M2 | 0.699 | .866 | 0.674 |
| AR | 0.258 | 0.137 | 0.543 |
| ASR | 0.083 | 0.453 | 0.065 |
| Beta | 0.544 | 0.648 | 0.443 |
| Std. Dev | 6.883 | 6.334 | 6.112 |

Overall, it's a glance of all portfolios in sub periods for one eye. Systematic risk is evaluating performance of portfolios in a summary.in pre crises period Systematic risk 67 higher than other periods, Beta of IMFs is greater than CMFs. That proves higher the risk higher the return. beta is 0.84 in IMFs and 0.74 in CMFs. systematic risk and residual risk of the IMFs can be explained by the fund type investment as stock market is a combination of Usury, gambling and alcohol involve in market index whereas IMFs are free from riba and meet criteria of Shariah screening process. So, study provides evidence about IMFs portfolio does relatively outperform the market in bullish and bearish market.

GMM Model Generalize Methods of Movements (GMM)

Dependent Variable is NAV

Overall

| Variable | Coefficient | Std. Err. | t-Stat | P-Stat |
|----------|-------------|-----------|--------|--------|
| NAV L1 | 2.098 | 0.434 | 4.832 | 0 |
| TER | 7.168 | 0.748 | 9.59 | 0 |
| MF | -19.904 | 0.778 | -25.58 | 0 |
| TC | 42.784 | 1.182 | 36.2 | 0 |
| LOAD | 1.165 | 0.38 | 3.07 | 0.002 |

MODEL Generalize Methods of Movements (GMM) has been used for all selected Mutual Funds that consist on 239 Funds started from 2005 to March 2018 by using Stata. Number of cross section is greater than time that's why study conduct GMM to check the significant relation between dependent variables and independent variables. significant and positive impact on Net Asset Value (NAV) of 239 All Mutual Funds from the period of January 2005 to March 2018. While management fee (MF) and net asset value is negative and significant. Accordingly, there is a positive and significant relationship between the Transaction Cost and NAV. Lastly there is positive and significant association among LOAD and provides recommendations for future scholars and investors. Lastly, this chapter presents the contributions, some research limitations of the study. The key goal of current study problem was to investigate the risk and return of mutual funds and the impact of performance by management fees at Market index which is our single bench mark for both Islamic mutual funds as well as conventional mutual funds as both funds are trading in Mutual Fund association of Pakistan (MUFAP). First exogenous latent variable is "Risk" which has substantial effect on returns. Standard deviation of returns investor keeps an eye on risk, the

theory “high Risk High return” fulfill the requirement of investors but too much high risk is not good. investor is risk aversion so it may take a little high risk but not too much. From descriptive statistics. It is concluded that mean returns of Islamic Mutual funds are slightly high and but they remain get better output even in pre and post crises period. Hence, there is not any statistically significant results found that indicates the investors to choose Islamic indices rather than conventional indices. These results are consistent with Trabelsi, Bahloul et al. (2020) which described that there is an insignificant difference in Islamic mutual funds and conventional mutual funds. Results conclude that there is a significant difference in mean returns between Islamic Mutual Funds and Market index which is our bench mark in pre and post crises from January 2005 to March 2018 There is a positive correlation between Islamic Mutual Funds and Conventional Mutual Funds but there is negative correlation between correlation between Islamic mutual funds and market index.

The second exogenous latent variable is “Net Asset Value” which has immense importance and substantial influence on Mutual fund performance. Because of risk aversion psychological bias financial investors, required abnormal return, higher than market index. There is insignificant relation between Net asset value and management fee 72 that indicate return influenced by fees. Our results remain same (Chhapra, Rehan et al. 2018). There is positive and significant relation between management fee and net asset value. There is positive and significant impact of load on net asset value.

Conclusion of the Study

The research work is done by providing every necessary answer of the inquiries raised earlier in first chapter of the thesis. This implies that study goals are achieved all proposed hypotheses of the study are tested. The subsequent portion provides the final conclusion of the underline study problem by exhibiting the central matters by answering the research questions of this study in the following table.

the research questions of this study in the following table.

| Research Questions | Key Findings | Model/Analysis |
|---|--|------------------------|
| Whether Islamic Mutual funds return perform better than Conventional Mutual Funds | Mean return of Islamic mutual funds are high from conventional mutual funds in pre and post crises There is positive and insignificant relation between Islamic Mutual Funds and conventional mutual funds | Descriptive statistics |
| Islamic Mutual funds' performance better than market index | Islamic Mutual funds perform better than market index. There is significant relation between Islamic Mutual Funds and market index. | Descriptive statistics |
| What is the analysis of correlation between Islamic Mutual Funds and Conventional Mutual funds? | Islamic Mutual funds are positively correlated with Conventional mutual funds but they are negative correlated with market index. | Correlation analysis |

| | | |
|--|---|--|
| What is the analysis of covariance between Islamic mutual funds and conventional mutual funds? | Islamic mutual funds have positive covariance with conventional mutual funds and market index. | Covariance analysis |
| What is fund performance based on risk-adjusted returns? | Islamic mutual funds perform better than conventional mutual funds in pre and post crises. | Ratio analysis. Sharp Ratio Treynor index Appraisal Ratio Modigliani Adjusted Sharp Ratio |
| What is the impact of managerial fees, Total expense ratio, selling and management fee and Loads on performance of mutual funds? | From the results we found that there is negative and significant relation in net asset value and management fee and significant and positive relation in selling and management fee, load with net asset value. | Generalize Methods of Movement (G.M.M). |

Risk And Return Performance

Key findings suggest that our sample period of the study is mixed in risk and return performance. IMFs and CMFs are outperforming the market benchmark using time series analysis. Overall Mutual Fund perform better in Pakistan than market return benchmark. results show that performance our risk adjusted performance measures like Sharp Ratio (SR), Adjusted Sharp Ratio (ASR), TI, JA, AR, M2 performing better than before risk adjusted returns.

Limitations of the Study

There are always chances of errors and partiality while selecting sample and in measurement consequently no research work is faultless. Sample of the study which denotes to the target population is indispensable in quantitative studies Creswell and Creswell (2017). Despite the fact that the sample size is relatively large, there are 239 funds which are taken for research and 204 observations fulfill the prerequisites of statistical techniques; in any case, it is recommended to have a vast sample in future studies to replicate all the more precisely the accurate circumstances of Mutual Fund Association of Pakistan. As participants are selected from only single benchmark which is our market index. Sample is taken from only one emerging country Pakistan

Policy Recommendations of the Study

The findings for this described the following policy recommendations for the investors as well as for the policy makers.

- The returns of Islamic Mutual Funds are better than conventional funds during and after the financial crises, therefore risk averse investors must focus this key findings of the study while making a investment portfolio in the mutual funds.
- The risk lover’s investors who prefer investment in conventional mutual funds also easily analyze the risk and return of the both mutual funds in order to maximize their returns and minimize their risk by investing in the Islamic Mutual Funds.
- Findings of the study also describe that there is a negative and significant relation

among the net asset value (NAV) and the management fee of the funds. This finding describe that the management of the funds must take in to account this key finding while making decision regarding management fee for the investors.

Implications of the Study

The findings of this study described that this study is more applicable for the long term investors which includes the following key segments of the economy.

- Household investors,
- Institutional investors
- Insurance companies and
- Large bank

Recommendations For Further Research

It is taken in to account that our study consists of Islamic and conventional mutual funds. Future researcher can be taken the study of commodity markets, foreign currency as well to analyze the results in other investment markets. Secondly this study having sampled from Pakistan economy only, the future researchers should include other economies like South Asia, as well in order to generalize the findings more Thirdly, future researcher should add some control variables such as market capitalization and Growth Domestic productions (GDP). Lastly, Global Financial crises has been discussed in this study. Impact of Corona Virus can also be evaluated

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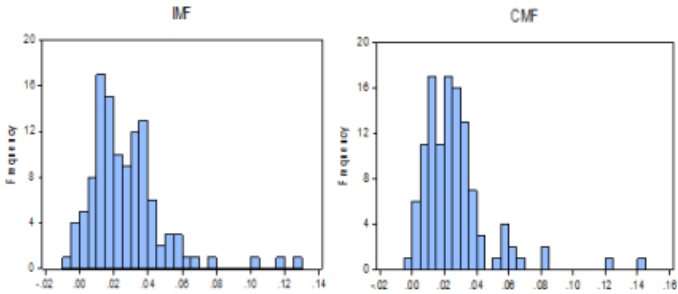
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APPENDIX

| | | | | | | |
|-------------|-------------|-------|-------|-----|-------|-------|
| | Overall | 0.068 | 0.054 | 159 | 0.015 | 0.030 |
| AMFs | Pre-crises | 0.111 | 0.068 | 45 | 0.028 | 0.025 |
| | Post Crises | 0.053 | 0.041 | 114 | 0.016 | 0.031 |
| | Overall | 0.034 | 0.028 | 159 | 0.015 | 0.030 |
| IMFs | Pre-crises | 0.055 | 0.037 | 45 | 6.849 | 0.025 |
| | Post Crises | 0.027 | 0.021 | 114 | 0.016 | 0.031 |
| | Overall | 0.033 | 0.026 | 159 | 0.015 | 0.030 |
| CMFs | Pre-crises | 0.055 | 0.031 | 45 | 6.849 | 0.025 |
| | Post Crises | 0.026 | 0.021 | 114 | 0.016 | 0.031 |



Application of Virtual Reality in Different Fields of Education: A Qualitative Analysis

Usama Ismail

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24249

Technology has revolutionized the way we live, work, and interact with the world around us. From smartphones to artificial intelligence, technology has become an integral part of our daily lives, enhancing efficiency, connectivity, and convenience. Virtual reality is one of these new age technologies. Virtual reality is used in different field of life including gaming, in medical field and education 47%, 38% and 28% respectively. This study aims to understand the factors that encourage more usage of virtual reality in education sector.

Virtual reality can be useful in learning process across different fields of education. Current study used systematic literature review of 50 articles published in different journals from 2019 to 2023 through science direct and google scholar. After carefully analysing and synthesising the literature the research finds out that medical, arts and mathematics hold top 3 position for most studies done from 10 different field of education that apply the usage of virtual reality. Study also shows that the fields of education that needs to mirror the real life problems have more usage of virtual reality. Three factor influence the implementation of virtual reality is imaginative, engaging and precautionary. The benefit of using virtual reality is to develop the problem solving skills and focus training and virtual reality is more efficient\ than traditional learning system. Therefore, in this research we discuss an overview toward the application of virtual reality in different field of education.

Keywords: Technology, virtual reality, traditional learning systems

Business Enabling Environment and Startup Performance

Saba Munir, Sania Zahra Malik, Zeshan Ahmer

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24113

Startups are considered an important factor in the economic growth of any country. Startups are established to develop innovative products or services and are usually marked with high risk and uncertainty. These startups need to survive to offer benefits to the economy. Still, unfortunately, the average startup survival is less than five years. Survival becomes more critical for startups operating in transition economies like Pakistan where the business environment is highly uncertain. Considering the importance of the ecosystem for the survival of startups, this study aims to take various elements from the entrepreneurial ecosystem and explore their role in the success of startups. Specifically, this study will explore the effect of incubation center's services on startup success. Furthermore, it will analyze how government support creates a resource-based effect on startup success. The study will be conducted on all the incubated startups in the public and private business incubation centers of Pakistan. The empirical findings of the study will be significant for the policymakers as it will highlight the impact of government support and incubation center support on the sustainability of the startups.

Keywords: Startup, incubation centers, startup performance

Constraints of Responsible Innovations: A Perspective of Local Entrepreneurs

Nighat Naeem

Hailey College of Commerce, University of the Punjab, Lahore, Pakistan

Abstract ID 24115

This study aims to explore the potential challenges faced by the local entrepreneurs while innovating to serve the large unsaturated demand of society. Pakistan is such an economy which is characterized by severe resource constraints (i.e., financial, human, technological resources, poor infrastructure and government policies) with a huge base of underserved people. In recent few years, a growing trend of idea generation in incubation centers has been observed in Pakistan. Government as well as private institutions' incubation centers forming an innovational ecosystem is being established to facilitate the un-noticed areas of the economic needs and support. How much this innovational ecosystem is effective to fulfill the demands of the society and what hardships are still present in this ecosystem is the main objective of current study. To identify the innovational ecosystem's challenges in the way of innovating for social well-being of the society, a local entrepreneurial perspective is explored. This exploratory study utilizes the qualitative phenomenological approach and semi-structured interviews from local entrepreneurs working in incubation centers have been conducted. The findings of the study revealed key challenges faced by entrepreneurs in a process of responsible innovation. Furthermore, the study has also categorized constraints faced by entrepreneurs in order to know the right areas need focus and priority. The study also has implications for incubation centers, policy makers, entrepreneurs, the government and other stakeholders to overcome constraints and to help local entrepreneurs for responsible innovation-a much needed innovation for a resource constrained economy.

Keywords: Innovation, responsible innovation, entrepreneurs, constraints, innovational ecosystem

Social Media and Entrepreneurial Behavior: The Roles of Entrepreneurial Intention and Digital Literacy

Muhammd Mazhar, Talat Islam

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

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Abstract

This paper aims to investigate the relationship between social media and entrepreneurial behavior development through the mediating role of entrepreneurial intention. Moreover, this study also examined the moderating role of digital literacy between entrepreneurial intention and entrepreneurial behavior. This quantitative study collected data from 374 students from the University of Punjab, Lahore. The study used a questionnaire-based survey via 'Google Forms' on convenience basis, and structural equation modeling using AMOS was applied to test the hypotheses. The results reveal that social media positively contributes to students' entrepreneurial behavior through entrepreneurial intention. In addition, digital literacy was noted to strengthen the association between entrepreneurial intention and entrepreneurial behavior. The findings of this study suggest to entrepreneur the importance of social media platforms for their venture. In addition, digital literacy is an important aspect for entrepreneurs to get better social media benefits for entrepreneurial ventures.

Keywords: Entrepreneurial Behavior, Digital Literacy, social media, entrepreneurial intention

Introduction

Entrepreneurship is the lifeblood of the Economy, it provides the foundation on the local, national, and global stage (Neamtu, 2017). It boosts economic development (Bayo & Kayii, 2020) through innovation and emerging new economies with the exploitation of opportunities (Townsend et al., 2018), contributing to productivity growth, job creation, and innovation (Amorós and Bosma 2014). In addition, as it accelerates economic development; therefore, the importance of entrepreneurship is acknowledged worldwide and Entrepreneur is the main pillars that devote time, energy, and sacrifices to building the foundation of entrepreneurship (Stam, 2015), they foresee opportunities and exploit these with innovative and proactive ways. Therefore, governments and educational institutions spend huge amounts of resources to boost entrepreneurial behavior (Shu et al., 2019). According to Gieure (2020), entrepreneurial behavior is taking an actionable step for venture creation. Several variable factors including contextual factors (socio-economic environment) and Inherent factors (characteristics of individuals) trigger entrepreneurial behavior (Levesque, 2006). Contextual factors can include our social landscaping actors such as social media, which has changed the culture, norms, and behavior in society (Purwanto, A., 2021). Technology improvement and innovation have changed our social interaction landscape (Parveen et al., 2016); therefore, entrepreneurial behavior is changing with the changing of social interaction and depends on the activities of the entrepreneurs involve (Shirokova et al., 2016). It has been found that social networking and social activities influence entrepreneurs to identify and exploitation of opportunities (Lim et al. 2015). Strong social networks influence people to become an entrepreneur (Abdelfattah et al., 2022).

Social media is considered a blessing for entrepreneurs it enables the entrepreneur to discover changes and opportunities in the business world and makes them capable to brings new products and services into the market as per demand. It assists in exploring new market opportunities and targeting new customers. Moreover, it enables the entrepreneur to expand

the venture by assisting in the supply chain, operation, and partner relationship development (Felix et al., 2017). This relationship is play important role in opportunity exploitation and business expansion. Although entrepreneurs try to boost their relationship for information and opportunity exploitation, however, others are not using this for opportunity identification and organizational support. Social media is varied for employees, entrepreneurs, and customers as well and social media use and its impact on entrepreneurial behavior should be studied holistically while considering digital literacy.

Past literature suggests that EB is a better way for new ventures and SMEs to pursue novel opportunities as compared to past traditional economic approaches. According to Santos et al. 2021, starting a venture depends on the founder's belief, decision, and behavior, also entrepreneurial venture shows the founder's self-concepts and identity (Cardon et al., 2009). Social media is a group of media online media platforms that offer users knowledge, branding, and marketing opportunities (Haerani et al., 2020). The use of social media has changed entrepreneurial activities (Infante and Mardikaningsih, 2022). In addition, it has changed the entrepreneurial process from idea generation to product launch by changing the effectuation to opportunities recognition (Fischer and Reuber, 2011). Social media is also our source for an entrepreneur in terms of knowledge, opportunities, and collaboration. Is has seems that individuals with more social media interaction are more motivated to start a new business. Although this can have a huge impact on entrepreneurial behavior but only a small work still exists in this context and still need substantial work that explores this relationship and our study will examine this relationship between social media and entrepreneurial behavior.

A previous study by Gieure et al., (2019) highlighted the relationship between intention and behavior, and other scholars also explored the relationship between these (Kautonen et al., 2013). Entrepreneurial behavior is the key determinant of entrepreneurship, the entrepreneurial intention that acts as an antecedent or motivation for entrepreneurial behavior (Moraes et al., 2018). This study will explore the impact of social media on entrepreneurial intention. Cui and Bell (2020) argue that educational activity is an antecedent of entrepreneurial intention. Covid 19 has accelerated digital literacy through digitalization (Kraus et al., 2020; Faraj et al., 2021; Klein and Todesco, 2021). Hsieh, (2012) Defined digital literacy as the ability of individuals to have functional skills on digital devices so that they can find and select information, think critically, create creativity, communicate effectively, and collaborate with others. This study has novelty, it explores the moderating role of digital literacy between social media and entrepreneurial intention.

The evolution of social media created new venture opportunities (O'Reilly 2007; Quinton and Wilson 2016). It is found that resources are determinant of the success of a new venture and higher that resources are chances of survival of the new ventures. Sources include financial, knowledge resources, social presence resources, and data resources. Referring to these social resources are evolving with the changing technological, digitalization, and innovation landscape therefore, this study used social capital Theory. According to this theory, our social interaction influences our actions. Human behavior is the result of interaction between an individual and the environment. As social media is a virtual interaction between people, this social platform is also influencing the human behavior of an individual(entrepreneur). This theory provides a framework for this study as social media is an environment context platform that influences our behaviors (entrepreneurial). Moreover, this theory also influences entrepreneurial attitudes toward risk-taking and creativity, and innovation as well. As social media provides a platform for huge markets especially because it provides globalization exposure to entrepreneur devices and it makes this possible to

contact comfortably to globe for searching suppliers, customers, and partners for venture creation.

Literature review and hypotheses development

Social media and entrepreneurial behavior

Digitalization has an open new opportunity for entrepreneurs (Patroni et al., 2020). It has been fostered by social media that enable people, employees, and entrepreneurs to communicate faster with customers, suppliers, and partners. (Secundo, 2020). It makes it possible for everyone to create, share and exchange information with multiple communities (Leonardi and Vaast, 2017, p. 150). According to Kaplan and Haenlein (2012), social media is a group of internet-based applications that enable the user to create and exchange information. Social media can be divided into two categories, professionally oriented (e.g. LinkedIn) and personally oriented (e.g. Facebook) (Stieglitz and Dang-Xuan, 2013). Social media enable businesspeople and entrepreneurs to modify interaction and assist in the identification of opportunities recognition, stakeholder engagement, and external linkage development (Gupta and Bose, 2019). It plays important role in business performance (Fireman et al., 2020). Social media are the tools that are used to share, communicate and collaborate (Saravanakumar and SuganthaLakshmi, 2012). Seeking the huge impact social media had, it is considered that social media could have a huge impact on entrepreneurship (Ahmad et al., 2019). Social media enables the entrepreneur to establish connections based on similar interests (Quinton and Wilson, 2016) which assists in co-creation and innovation (Bhimani et al., 2019). It enables individuals in opportunity identification and develops an entrepreneurial process (Secundo, 2020). One of the first for entrepreneurial behavior is entrepreneurial intentions. Entrepreneurial intentions are impacted by digitalization. Social media are one of the factors that impact behavior, therefore, we hypothesize.

H1: The use of Social media is positively related to entrepreneurial Intention.

H2: Social media is a positive relationship with Entrepreneurial behavior

The mediating role of entrepreneurial intentions

Entrepreneurial Intention refers to an individual's readiness to engage in EB or his/her commitment to creating a new business. Many studies over the years have used intention-based models to understand the entrepreneurial phenomenon, as intentions are widely considered to be a good predictor of behavior (Fayolle and Liñán 2014). This is because the strength of EI indicates the extent to which an individual is motivated to engage in EB, which ultimately reflects in the amount of effort that such a person is willing to invest in business gestation activities (Shirokova et al., 2016; Van Gelderen et al., 2015). This has been supported by several studies that have shown a significant positive influence of intentions on EB (Shinnar, Shu, Powell, and Zhou, 2018; Shirokova et al., 2016).

H3: Entrepreneurial intention has a positive relationship with entrepreneurial behavior.

H4: Entrepreneurial intention mediate the relationship between social media and entrepreneurial behavior.

The moderating role of digital literacy

The advance of social media has revolutionalized the way people interact and communicate. High adoption of social media has emerged the entrepreneurial behavior among people because these social media platforms influence people to promote their products and services more effectively and it has a better impact as compared to old advertising. Although social media is influence every person but still use of social media is accelerated by digital literacy. Digital literacy is a way of thinking about the utilization of digital resources (Riel et al., 2012),

which has multi-dimensional. Entrepreneurs can use social media platforms more effectively, understand their insights and use them for business activities. Research suggests that entrepreneurial intention is moderated by education literacy and over time due to the advance of technology, traditional education is converting to digitalization and everything is featured in digital devices. Therefore, knowledge of using technology is accelerating the gain of benefits from digital resources such as social media platforms. It has been seen that high digital literacy is more adept at using social media platforms and getting more benefits from social media. With higher digital literacy, there are higher chances that individuals build more connections, reaching more clients, customers, partners, and suppliers. Moreover, digital literacy assists the overcome challenges in the business world by proving advanced knowledge from a social network. Moreover, with higher digital literacy, there will be more chances to tackle digital problems better and assist in exploiting the opportunities more confidently and advance (Bharadwaj et al., 2013; Krotov, 2017). Therefore it has been proposed that digital literacy moderates the relationship between social media and entrepreneurial intention (Choudhury and Karahanna, 2008). An individual with high digital literacy has more chances to sense more opportunities in this digital world and exploits those opportunities. Our proposed hypothesis is,

H5: *Digital literacy moderates the relationship between social media and entrepreneurial intention.*

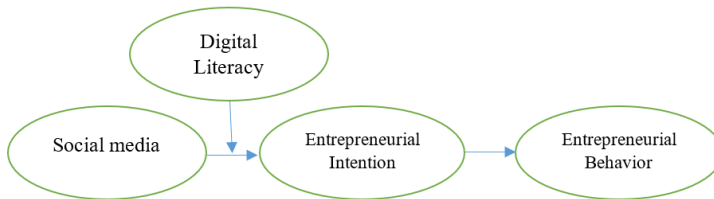


Figure 1: Conceptual Model

Methods

Participants and procedure

Data was collected from students who studied entrepreneurship in a bachelor's or master's. The reason for choosing this population is they studied major business subjects and participate in entrepreneurial activities moreover, past literature justified that for studying entrepreneurial intention, students as the population can be considered (Hsu et al., 2019). Although such a sample does not require entrepreneurial experience (Arentz et al., 2012). We approached 500 respondents and used “Google Forms” and paper questionnaires for convenience data collection we got a response from 374 respondents. We collected our questionnaires from the University of the Punjab, Lahore, Age of the respondents were from 18 years to 50 years and both males and females were present respondents, who had no prior family entrepreneurial experience.

Measurement

We used previously validated and reliable “Five-point Likert scales from strongly disagree to strongly agree” for our study to get a response from respondents.

Entrepreneurial behavior: We adopted seven items scale for entrepreneurial behavior from McGee et al., (2009). These are also used by (Lortie and Castogiovanni 2015), which increase the reliability of this scale. The example item for this includes “I know how to do market research”. The Cronbach’s alpha value for this is 0.895. which is reliable for this research.

Entrepreneurial intention: For entrepreneurial intention, we adapted a scale from Linan Chen (2009). We are using 4 items. The example item for this includes “I am ready to do anything to start a business”. The Cronbach’s alpha value for this is 0.725 which is above 0.7 and confirmed its reliability.

Social media: Twelve items scale of social media usage is adapted from Tajudeen et al. (2017). Example of the item includes “Social Media increases business opportunities”. The Cronbach’s alpha value for this is 0.865 which shows its reliability.

Digital literacy: Eight items scale is used for digital literacy for this study, which is adapted from Tajudeen et al. (2017). An example of an item is “I know how to compare different sources to decide if the information is true”. The Cronbach’s alpha value for this is 0.703, which is reliable for this study.

Result

Primary analysis

First of all, data collected from respondents were cleaned and analyzed using SPSS to find the missing value, outliers, data normality, descriptive statistics, and correlation as these can influence our results. Data for this research was administered with the help of google Forms and paper questionnaires. In the google form, all questions were marked compulsory to fill therefore, no missing values were found with the google form in the respondent’s data. While data collected with Paper questionnaires had 16 missing values, which were less than 15 percent of the total data, and considered redundant. For outliers, Stem and leaf method was used with SPSS, only one outlier was found and treated according to the Mahalanobis distance test at $p < 0.001$ to delete the outliers. The value for skewness and kurtosis were calculated and find this research kurtosis and skewness value within an acceptable range (± 1 for kurtosis and ± 3 for skewness), thus data were considered normally distributed (skewness and ± 3 kurtosis), hence the data were normally distributed. Moreover, the value for correlations for this study is less than 0.85, which is also a sign of the absence of multicollinearity. after all these primary analyses, the data is ready for further Confirmatory factor analysis (CFA).

CFA:

Scales for this adapted were already used in the past, therefore, this study examined CFA to validate the measures (Hair et al., 2010), where the factor loading value, we followed is ($\lambda \geq 0.50$). we followed Williams et al. (2009) for the values of fit indices i.e. “ $\chi^2/df < 3.0$, for the comparative fit index (CFI) ≥ 0.90 , For the goodness of fit index (GFI) ≥ 0.90 , for standardized root, mean squared residual (SRMR) ≤ 0.10 , and for root mean square error of approximation (RMSEA) ≤ 0.08 ”. Values for this study are, $\chi^2/df = 3.140$, CFI = 0.80, GFI = 0.78, SRMR = 00, RMSEA = 0.08. These values show to some extent good fit model for this research moreover, the values for loading factors are also between 0.07 to 0.83 which are present in table 1.

Reliability and validity

The Cronbach’s alpha values of the item scales are also measured for this study to check the consistency. The Cronbach’s alpha values for all item scales of this study are greater than 0.70 which indicates the reliability of this study scale (Nunnally, 1978). This study also

checks the Average variance extracted (AVE) ≥ 0.50 , and composite reliability (CR) ≥ 0.60 . Then discriminant validity was assessed by comparing the value of maximum shared variance (MSV) to AVE, and for that value of AVE must be greater than the value of MSV (Fornell and Larcker, 1981). Table 1 shows that this study's scales are fulfilling the requirement for this validity.

Descriptive and correlational analysis

We use SEM to analyze the relationship between elements to determine the concurrent correlation between the independent and dependent variables (Rafi et al., 2020; Li et al., 2017). The result for these is presented in table 2. The mean values for Social Media usage (M=4.37), Entrepreneurial Intention (M=4.36), Digital Literacy (M=4.30), and Entrepreneurial Behavior (M=4.10). Also, the result shows a positive correlation between social media and Entrepreneurial Intention ($r = 0.51^{**}$), moreover, Entrepreneurial Intention also has a positive correlation with entrepreneurial behavior (0.39^{**}), as shown in Table 3.

Table 1: Result of confirmatory factor analysis

| Items | Loading | α | <i>AVE</i> | CR | | | |
|--|---------|----------|------------|-------|------|-------|-------|
| <i>Social media</i> | | | | | | | |
| Social media is used to search for general information | 0.476 | 0.86 | 0.346 | 0.861 | | | |
| Social media is used to search for competitor information | 0.723 | | | | | | |
| Social media is used to search for customer information | 0.533 | | | | | | |
| Social media is used for branding | 0.528 | | | | | | |
| Social media is used for advertising and promotion of the company's products and services | 0.499 | | | | | | |
| Social media is used for conducting marketing research | 0.594 | | | | | | |
| Social media is used for getting referrals (Word-of-Mouth via likes, shares, and followers in Facebook, Twitter, etc.) | 0.645 | | | | | | |
| Social media is used to develop customer relations | 0.672 | | | | | | |
| Social media is used to communicate with customers | 0.431 | | | | | | |
| Social media is used for customer service activities | 0.645 | | | | | | |
| Social media is used to receive customer feedback on new or future products or services | 0.674 | | | | | | |
| Social media is used to reach new customers | 0.562 | | | | | | |
| <i>Digital literacy</i> | | | | | | | |
| I know how to download information I found online | 0.785 | | | | 0.70 | 0.293 | 0.702 |
| I know how to deactivate the function showing my geographical position (e.g. Facebook, apps) | 0.073 | | | | | | |
| I know how to use 'report abuse' buttons on social media sites (e.g., someone uses my photo without my permission) | 0.067 | | | | | | |
| I know how to change the sharing settings of social media to choose what others can see about me (friends of friends, friends only, only me) | 0.742 | | | | | | |
| I know how to compare different sources to decide if the information is true | 0.146 | | | | | | |
| If I meet someone online, I know how to check if their profile is real | 0.688 | | | | | | |
| I know how to block unwanted or junk mail/spam | 0.523 | | | | | | |
| I know how to send any file to a contact using a smartphone | 0.630 | | | | | | |
| <i>Entrepreneurial intention</i> | | | | | | | |
| I am ready to do anything to start a business | 0.688 | 0.73 | 0.409 | 0.731 | | | |
| My professional goal is to become a businessman | 0.734 | | | | | | |
| I will make every effort to start and run my own business | 0.535 | | | | | | |
| I am determined to start a business in the future | 0.580 | | | | | | |
| <i>Entrepreneurial behavior</i> | | | | | | | |
| I have experience in starting a new project or business. | 0.766 | 0.895 | 0.527 | 0.884 | | | |
| I know how to start a new business | 0.833 | | | | | | |
| I know how to do market research | 0.737 | | | | | | |
| I have invested informally in some business | 0.802 | | | | | | |
| My social media Friends help promote my business. | 0.772 | | | | | | |
| I am capable of developing a business plan | 0.587 | | | | | | |
| I can save money to invest in a business | 0.528 | | | | | | |

Table 2: Correlational Analysis

| Variable | 1 | 2 | 3 | 4 | Mean | SD |
|------------------------------|--------|--------|--------|---|------|------|
| 1-social media | 1 | | | | 4.37 | 0.54 |
| 2- Digital Literacy | 0.66** | 1 | | | 4.30 | 0.50 |
| 3- Entrepreneurial Intention | 0.56** | 0.47** | 1 | | 4.36 | 0.66 |
| 4-Entrepreneurial Behavior | 0.50** | 0.41** | 0.65** | 1 | 4.10 | 0.81 |

Note: P < 0.01

Hypothesis testing

To test the hypothesis of this study, it has been examined 5000 samples at 95% Confidence (Kline, 2011). The study noted that social media positively influences entrepreneurial behavior ($\beta = 0.75, p < 0.01, SE = 0.25$); and, positively influences entrepreneurial Intention ($\beta = 0.67, p < 0.01, SE = 0.31$). In addition, the entrepreneurial intention was noted to be positive entrepreneurial behavior ($\beta = 0.80, p < 0.01, SE = 0.42$) which supported H1, H2, and H3 of the study. The mediating role of entrepreneurial intention was assessed through hierarchical regression for Mediation. The study noted a significant indirect effect of social media on entrepreneurial behavior through entrepreneurial behavior (indirect effect $\beta = 0.64, p < 0.01$) which supports H4 of the study.

Last, for moderation, the study computed an interactional term ($SM \times DL$). moreover, the study noted an insignificant association between digital literacy on entrepreneurial intention ($\beta = 0.23, p > 0.05$). However, when the interactional term ($SM \times DL$) was regressed with entrepreneurial intention, the study noted a significant effect ($\beta = 0.63, p > 0.05$), which confirms the moderation for this model. It also shows that entrepreneurs with high digital literacy will have a more entrepreneurial intention; this supports H5 of the study.

Table 3: Regression analysis

| Hypothesis | β | r^2 | P | Results |
|------------|---------|-------|------|----------|
| SM-->EB | 0.75 | 0.25 | 0.00 | Accepted |
| SM-->EI | 0.67 | 0.31 | 0.00 | Accepted |
| EI-->EB | 0.8 | 0.42 | 0.00 | Accepted |

Note: SM= social media, EB= Entrepreneurial Behavior, EI=Entrepreneurial Intention

Table 4: Hierarchical regression for mediation

| Variables | M1(β) | M2(β) | M3(β) |
|------------------------------------|---------------|---------------|---------------|
| <u>Control Variables</u> | | | |
| Age | 0.30 | 0.08 | 0.04 |
| Gender | -0.25* | -0.12 | -0.03 |
| Education | 0.37** | 0.23** | 0.10 |
| Marital Status | -0.41* | -0.36** | -0.30** |
| r^2 | 0.10 | | |
| <u>Independent Variable</u> | | | |
| Social Media | | 0.69** | 0.31** |
| r^2 | 0.31 | | |
| Δr^2 | 0.21 | | |
| <u>Mediating Variable</u> | | | |
| Entrepreneurial Intention | | | 0.69** |
| r^2 | 0.47 | | |
| Δr^2 | 0.26 | | |

Table 4: Hierarchical regression for moderation

| Variables | M1(β) | M2(β) |
|------------------|-------------------------------|-------------------------------|
| Step-1 | | |
| SM | 0.61** | |
| DL | 0.23 | |
| r^2 | 0.27 | |
| Step-2 | | |
| SM \times DL | | 0.63 |
| r^2 | | 0.27 |
| Δr^2 | | 0.00 |

Discussion

This study explored the relationship between social media on entrepreneurial behavior. It examined the moderation effects of digital literacy on social media and entrepreneurial intention. Last, this study explores the mediating impact of entrepreneurial intention between social media and entrepreneurial behavior. According to Wessel et al., (2021) in recent years, digitalization has changed the business world completely and has created new opportunities. It has created opportunities for entrepreneurs and innovators (Patroni et al., 2020; Ramaswamy and Ozcan, 2018; Testa et al., 2020). Moreover, due to increasing digital technology and a wide range of social adaptations that assist in identifying customers, suppliers, and emerging opportunities, social media has accelerated businesses (Shams and Kaufmann, 2016; Oppong et al., 2020). However, the first step in the identification and exploitation of these opportunities is entrepreneurial intention (having been taught to start a business) and the last step is taking action (behavior) (Lee and Wong, 2004). This study examines the relationship between intention and behavior and the the impact of digitalization (digital literacy). This show that high social media (usage) facilitate the entrepreneur developing urge for business and digital literacy will enhance the social media impact of business intention development. Last, the main objective of this study is to identify the impact of social media on venture creation (entrepreneurial behavior). social media technology is impacting corporate entrepreneurship (Christensen, 2004; Corbett et al., 2013), academic entrepreneurship, and the entrepreneurial ecosystem. This study aims to expand our understanding of the interplay of social media, digital literacy, entrepreneurial intention, and entrepreneurial behavior. This study examined the impact of social media technology on entrepreneurial behavior H1.

Theoretical implication

Past literature on social media impact was limited to entrepreneurship. Moreover, for 10 years from 2009 to 2020, only a few papers were presented that show social media technologies' influence on entrepreneurship (Secundo et al. 2020). Therefore, this study is novel that examines entrepreneurial behavior concerning social media technologies. Our empirical results suggest that social media is accelerating entrepreneurial intention development and influencing entrepreneurial behavior for entrepreneurs. These findings contribute to the literature in many fields relating to social media, digitalization, and entrepreneurship. First, this provides social media impact on entrepreneurial intention directly. After that, it will also examine the moderating role of digital literacy between social media and entrepreneurial intention. A past study focused on the entrepreneurial intention about the environment, entrepreneurial knowledge, and personal interest. Due to technological changing and social

media adoption, our social landscape is changed therefore; this study is the first that will examine the social media impact on intention. Second, this examines the direct impact of social media on entrepreneurial behavior. Results show that entrepreneurial behavior is directly influenced by social media. Third, this study highlights the relationship between intention and behavior under the influence of social media. Moreover, this study's moderator is digital literacy, which is used, in a different dimension in literature but there was a gap using of digital literacy for the social media impact of entrepreneurial intention. This study shows that digital literacy accelerated the social media impact on entrepreneurial intention.

Practical implication

This is providing vital insights for implications to entrepreneurs and new venture creators. past studies highlighted that most people (entrepreneurs and new venture creators) are not getting benefits from social media as much as they can. Some entrepreneurs are ignoring the importance of social media power. As social media is an important element of globalization. Entrepreneurs can develop their larger audience rather than relying on local customers, suppliers, and partners. Social media provide a great opportunity for entrepreneurs to get full potential benefits from the larger audience and opportunities. This study provides new insights for entrepreneurs to

Limitation and future call

As social media platform is continuously evolving, new technology is rapidly changing the tech era and therefore, our digital literacy scales changing rapidly and which will bring a new dimension to future research. Changing in technology, entrepreneurs are suggested to keep up to date with the current technology, learning and adapting new technology. Moreover, globalization brings new opportunities for everyone, future researchers are suggested to explore the impact of social media on different industries and regions as well.

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Examining the Impacts of Adoption of Green Banking Initiatives on Customer Satisfaction in Pakistan: The Moderating and Mediating Roles

Werda Zubair

University of International Business and Economics, Beijing, China

Abstract ID 24104

The study illustrates the adoption behaviors associated with green banking, focusing on the impact of various constructs on customer e-satisfaction within the banking and financial sectors of Pakistan. The study comprehensively depicts all pertinent concepts and theories related to perceived cyber security, privacy, credibility, green image, and customer e-satisfaction. It also examines the moderating effects of customer awareness and service quality, as well as the mediating role of perceived convenience. Expectancy Disconfirmation Theory is employed as a foundational theory to guide hypothesis testing. The study's central hypotheses are derived from the main research questions and objectives, proposing a positive influence of perceived cyber security, privacy, credibility, and green image on customer e-satisfaction. It is further hypothesized that the moderators—customer awareness and service quality positively reinforce the relationships between these constructs. Additionally, perceived convenience is anticipated to have a positive mediating effect on these relationships.

Methodologically, the research adopts a deductive reasoning approach, utilizing a cross-sectional quantitative methodology for data collection and an explanatory research design. Data was gathered through a survey, employing a close-ended structured questionnaire disseminated electronically. Out of 450 questionnaires distributed, 328 received responses, with 319 completed questionnaires, resulting in a response rate of 71%. The statistical methods are used to deduct the results from the collected data using SPSS and Smart PLS. The data was properly cleaned and processed, accompanied by correlation and regression analysis. The findings of the study support the argument that customer e-satisfaction has a direct positive impact on all the independent variables of perceived cyber security, perceived privacy, perceived credibility, and perceived green image. The results also supported the arguments that the moderator's customer awareness and service quality, along with the mediator perceived convenience, strengthen the positive impact of the above constructs rather than weak.

Therefore, the study depicts the theoretical and practical implications to the bankers, policymakers, higher officials, and management to emphasize investing in all the constructs in order to achieve the online customer base if they want to transform the banking practices into green banking practices. Contemporarily, green banking is a widespread, important concept pertaining to its contribution to Sustainable Development Goals, so it is the focal point of Pakistan's banking and financial industry. The State bank of Pakistan has issued licenses for green banking to five banks of Pakistan, accompanied by obligatory regulations for all operational banks to adopt the same. Owing to it, it is very important for the banks to transfer their brick-and-mortar traditionally used banking products or services into green banking products or services, which include mainly digitization of major services. So, the adoption of green banking services or products by customers is a critical challenge for all service providers, for which this study provides the framework that can be capitalized to implement the concept in practice. Conclusively, the study ends with its limitations and future prospects.

Keywords: Customer e-satisfaction, customer awareness, perceived cyber security, perceived privacy, perceived green image, service quality, perceived convenience

Unleashing: Role of Industrial Revolution 4.0 in Achieving Sustainable Developmental Goals

Rabia Azhar, Zeshan Ahmer, Sania Zahra Malik
Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24111

The paper will explore the impact of Industrial revolution in technologically emerging industrial sector of Pakistan while achieving sustainable developmental goals. The study will focus on how the industry 4.0 benefits various industries in meeting Corporate Social Responsibility thus achieving SDGs. It will imply the theory of diffusion of innovation which proves that as per the need of time businesses need to incorporate modification. Moreover, theory of planned behavior (1991) was used to prove CSR significantly determines employee's green behavior in a positive manner thus applying triple bottom line concept in organizations. A questionnaire will be distributed among employees of organizations practicing CSR to check on their contributions of the factors triggering their social, economic and philanthropic success. This article is expected to be used as a material of dominant consideration for the organizations in provoking CSR acts in employees for the betterment of themselves as well as environment.

Keywords: Industrial Revolution 4.0, corporate social responsibility, sustainable developmental goals, triple bottom line

Fintech-Driven Sustainability: Exploring the Role of Green Finance, CSR, and Green Innovation in Shaping Environmental Performance in Banking

Fareeha Waseem, Zahra Batool

Hailey College of Banking and Finance, University of the Punjab, Lahore, Pakistan

Abstract ID 24112

This research aims to explore the dynamic interplay between financial technology (fintech) adoption, green finance (GF), corporate social responsibility (CSR), and green innovation (GI) in shaping the environmental performance (EP) of banking institutions. The study's main objective is to provide detailed insights into how these connected factors can strengthen the ability of the banking industry to be sustainable and resilient, especially when facing significant environmental challenges. Two fundamental research questions guide this inquiry: How does the interaction of green innovation, green finance, and CSR, through the adoption of fintech, support the sustainability and adaptability of the banking sector to environmental challenges? When evaluating the combined influence of CSR, green finance, and fintech adoption on environmental performance, is there a synergistic effect, and how can green innovation contribute to this interaction?

Employing a quantitative research design, the study utilizes a carefully determined sample of approximately 360 employees from the entirety of banks in Pakistan. The research instrument consists of structured questionnaires designed to capture key variables and facilitate statistical analysis. The instruments, adapted for this study, ensure the collection of robust data to address the research questions and test the formulated hypotheses. The validity and reliability of the instrument will rigorously ensure through expert reviews, pilot testing, and statistical analyses.

Hypotheses propose significant positive associations, mediated by green innovation, indicating the multifaceted impact of sustainable fintech practices on the banking industry's environmental resilience. The research findings are based on the analysis of quantitative data, and the major findings align with the research questions and hypotheses. The study has limitations because it only focuses on Pakistan and a specific industry, which might make it hard to apply the findings more broadly. The suggestions highlight the importance of continually including sustainability efforts powered by financial technology (fintech) in banking practices. The practical implications stress that adopting fintech, green finance, and corporate social responsibility (CSR) initiatives in banking strategies could lead to better environmental performance.

Keywords: Fintech adoption, green finance, corporate social responsibility, green innovation, environmental performance

Understanding the Effect of Environmental Knowledge, Environmental Concern and Peer Influence on Green Purchase Intension and Green Purchase Behavior

Afifa, Talat Islam

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24120

With the growing concern about the deterioration of environment, it has led to greater awareness about the different ecological and sustainability issues among consumer . This global problem has resulted in people making an effort to minimize their impact on environment. This proposed research study will use the theory of planned behavior to examine the impact of Environmental Knowledge , Environmental Concern and the Peer Influence/Peer Pressure of consumer on Green Purchase Behavior , with mediating role of Green Purchase Intension .The study will employ quantitative research method .The data for this proposed study will be collected from around 340 respondents by item response ratio as population is unknown. The respondents would be approached on convenience basis. The responses will be collected by the self-administered questionnaire ,that would be adapted from already established scales. These key variables have been previously studied separately but this study will make a new contribution to the existing literature by examining the combined influence of Environmental Knowledge, Environmental Concern and Peer Influence on Green Purchase intension and Green Purchase behavior.

Keywords: Environmental knowledge, environmental concern, peer influence, green purchase intension, green purchase behavior

How Green Human Resource Management is Related to Employees' Innovative Work Behavior? A Moderated Mediation Model

Mohammad Yousuf, Talat Islam, Saina Zara Malik

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24122

Purpose

This study aims to determine the relationship between GHRM techniques and employees' innovative work behavior. The study also proposed psychological safety as a mediator and green transformational leadership as conditional boundary to enhance innovative work behavior. The research describes psychological safety and green transformational leadership as new mechanism through which GHRM techniques influence employees' innovative working behavior.

Research design/Methods

Using a survey questionnaire, this study will collect data from various employees of services and manufacturing sectors. The study also aims to apply structural equation modeling to test the hypotheses.

Proposed findings

Based on ability-motivation-opportunity theory, the study assumes that employee may feel psychologically safe while perceiving their organizations involved in GHRM practices and this ultimately encourage them to be more innovative. In addition, the study also assumes that green transformational leadership can strengthen the association between GHRM and psychological safety.

Keywords: GHRM, psychological safety, green transformational leadership, Innovative working behavior

The Wild Card of Sustainability: How Environmental Uncertainty Shapes Supply Chain Performance and Integration

Mirza Muhammad Bilal Baig, Hakeem Ur Rehman

Institute of Quality and Technology Management, University of the Punjab, Pakistan

Abstract ID 24125

This study aims to examine the complex interrelationships between environmental uncertainty (EU), supply chain integration (SCI), supply chain integration transparency (SCT), sustainable supply chain performance (SSCP), and overall organizational performance (OP). A survey questionnaire was used to collect data from manufacturing firms in Punjab, Pakistan. Analysis techniques such as factor loadings, concept quality, convergent validity, and discriminant validity were evaluated using structural equation modelling (SEM). Transaction Cost Economics and Agency Theory theoretically supported the research. The findings revealed that SCT significantly positively impacts SSCP and SI. SCI, too, has a significant relationship with SSCP. Moreover, SSCP was found to be a significant predictor of organizational performance. The study also found some moderating effects of the EU.

This research discussed new perspectives on prioritizing and assessing various sustainability factors by examining manufacturing sector-specific possibilities and problems. Advanced performance measurements considering economic, social, and environmental factors are required. Additionally, it highlights how resilient and sustainable initiatives must be strengthened by using dynamic solutions to address environmental uncertainty in the ever-changing economic context.

Keywords: Environmental uncertainty, supply chain integration, sustainable supply chain, organizational performance, agency theory

How Green Religiosity Drives the Intention of Young Consumers Towards Green Products? An Intervention of Greenwashing

Noor Fatima, Talat Islam

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Article ID 24205

Abstract

The present study aims to examine the pivotal role of religiosity in driving consumers' intention towards green products. By grounding on Stimulus-Organism-Response framework and signaling theory, the study examined the new facet of green religiosity to empirically access the consumer social responsibility and green purchase intention. The present study also investigates the moderating mechanism of greenwashing in the relationship of consumer social responsibility and green purchase intention. The study focuses on Generation Z because of their distinctive characteristics and purchasing patterns. The data was collected through a survey based on a questionnaire from respondents of Generation Z's and selected 320 valid responses. To empirically examine the proposed model, study used the bootstrapping in structural equation modeling and confirms that consumer social responsibility positively mediates the relationship of green religiosity and green purchase intention. However, greenwashing weakens the relationship between consumer social responsibility and green purchase intention. The study concludes the results with a discussion and implications for scholars and managers.

Keywords: Green religiosity, signaling theory, generation Z, greenwashing, green purchase intention.

Introduction

In today's era, the drastic environmental changes have gained the attention of industrialists and individuals. Irrational use of natural resources and consumption patterns has accelerated the environmental contamination which leads to sever climate changes, depletion of ozone layer, and global warming etc. Around 40% of environmental deprivation is triggered by the consumption of conventional products (Sun *et al.*, 2022). For instance, every single year in US \$34.8 billion of fresh vegetables and fruits are wasted (Yang *et al.*, 2021). Latest statistics demonstrated that in European Union countries annually 16 million tons of plastic is wasted which was used in packaging of FMCG products (Khatami *et al.*, 2023). The case is even worse in low-middle level economies as the region of South Asian and Sub-Saharan Africa produced 35% solid waste, which is expected to be more than double in 2050 (World Bank, 2018). Diverting the customers' intention from conventional products to green products could be a remedy to save the environment. Green products refer to the goods and services that have least harmful impact on natural environment, and extent to which customers are inclined towards green products is defined as green purchase intention (GPI; Rejikumar, 2016). It is stated that the intention of the customers towards a particular product is one of the essential determinants in whole purchasing process (Ahmad & Zhang, 2020). Environmental concerns have accelerated the individuals' attention towards green products (Ahmed *et al.*, 2023). One illustration of this notion is that approximately 33% of Unilever customers prefer green products over conventional products which unveils that there is \$2.7 trillion market share for green products globally (Amoako *et al.*, 2022). Customers' GPI has been extensively investigated by factors such as environmental green marketing (Majeed *et al.*, 2022), green product and corporate image (Hengboriboon *et al.*, 2022), social pressure and environmental concern (Sun *et al.*, 2022) whereas consumers' psychological factors has gained little attention in GPI (Asif *et al.*, 2023).

In accordance with this it is noticed that customers' demand for green products vary across the different cultures and nations which unveils that customers beliefs and values play crucial role in purchasing products (Qureshi *et al.*, 2022). Literature points out that, religion plays an integral part in shaping the individuals' purchasing pattern (Farooq & Yahya, 2022). Qureshi *et al.* (2022) emphasized that people from different religion have their own preferences, lifestyle, and intentions in regarding consumption, which arise the need to study consumer religiosity in different settings. Like any other religion Islam also teaches its followers to be responsible towards their resources such as "Do not squander (your substance) wastefully, for the wasteful are the devil's brothers" (Quran, 17:26 Haleem, 1998, P. 116), "excess in the use of water is forbidden, even if you have the resources of whole river" (Tirmidhi, Haleem, 1998, P. 116). In this notion the term religiosity was coined which refers to the individuals' dedication and commitment towards the teachings of his religion (Khan & Kirmani, 2018). The term green religiosity is defined as the individuals' dedication, values, belief, and inclination regarding green products (Farooq & Yahya, 2022). Majority of studies regarding religiosity in GPI have been conducted in west and studied the Christianity and Judaism religion, which leaves a major gap to investigate the role of green religiosity in Islamic religion (Alotaibi & Abbas, 2023). Paucity in the literature regarding green religiosity and GPI leaves the unrevealing mechanisms to be investigated. Due to the explicit teachings of Islamic religion, religious persons considered themselves more responsible towards their environment and society than others (Khan & Kirmani, 2018), which sparks the idea of consumer social responsibility (CnSR). Social responsibility of consumers is the result of cognitive assessment of their norms and beliefs (Suhartanto *et al.*, 2022). This phenomenon can be theorized on the basis of stimulus-organization-response (SOR) framework, which established that different environmental motivators (Stimulus) affect an individual's cognitive assessment (Organism), which in turn results in their reaction (Response) (Raj *et al.*, 2023), the present study therefore anticipated that consumers' green religiosity may drive their intentions towards green products through CnSR.

However, despite the rising consumer concerns and intentions towards green products it is noticed that only a few customers ended up purchasing green products. Recently it is noticed that consumers' GPI dropped considerably when it comes to purchase (Raj *et al.*, 2023), which highlights the importance to study the factors that potentially weaken the GPI. In investigating GPI, Torelli *et al.* (2020) found that GPI declined due to the false and deceptive claims of the companies (greenwashing). The phenomenon of greenwashing is referred as the deliberate deception of a company's green endeavors or ecologic aspects of its products and services (Xiao *et al.*, 2022). The concept of greenwashing can be theories through the perspective of signaling theory, which focuses that how information is propagated between sender and receiver (Ahmed *et al.*, 2023). Several studies have investigated the role of greenwashing in firms' financial performance (Lee & Raschke, 2023), brand equity (Qayyum *et al.*, 2022), customer satisfaction (Ioannou *et al.*, 2023), however there is still a paucity in literature regarding the role of firms' greenwashing signals in CnSR and GPI.

Therefore, to fill the gaps present study will participate in the existing body of knowledge in several folds. First, the study shed light on the importance of individuals' religiosity in making them responsible towards their environment. Second, the study focuses on Generation Z which is one of the largest consumer markets for green products (Lee, 2020). Third, the study considered the dark side of green products which potentially suppress the GPI of socially responsible consumers. Fourth, the study pivots on the customers' decision-making process through the lens of SOR framework and signaling theory.

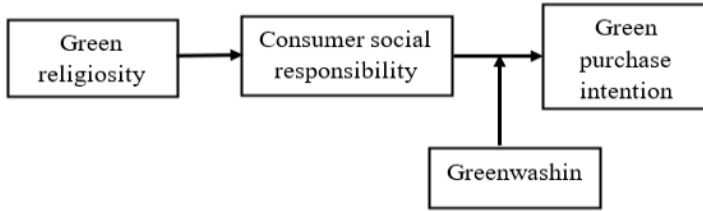


Figure 1: Conceptual framework

Hypotheses development

Green religiosity, green purchase intention (GPI) and consumer social responsibility (CnSR)

Religion has an imperative role in shaping the thinking and consumption pattern, setting priorities and eating habits in an individual's life (Alotaibi & Abbas, 2023). Therefore, scholars are now focusing on the aspect of religion and its role in a persons' life. The term religion and religiosity are separate from each other as religiosity is one part of the religion (Suhartanto *et al.*, 2022). Religion provides a purpose and guideline for living to its followers, where religiosity is the degree to which someone is adhered to these guidelines (Rashid, 2016). Religiosity is the degree to which an individual is associated and devoted to the beliefs of their religion (Zaidi *et al.*, 2020). Furthermore, an individual's religiosity could be characterized as intrinsic or extrinsic religiosity, where intrinsically religious person lives their religion to satisfy their inner self and extrinsically religious person follows their religion in the influence of society or their reputation (Allport & Ross, 1967). Alotaibi and Abbas (2023) stated that it is essential to probe the role of religiosity in consumer studies specifically in those countries where the majority of the people belong to one religion or ideology. In prior literature it is noticed that religion has a substantial role in consumer buying process as it influences their cognitive and decision-making behavior (Zaidi *et al.*, 2020).

In this notion, Farooq and Yahya (2022) defined the novel concept of green religiosity as the individual's affiliation towards their beliefs and values to use green products. Like any other religion, Islam explicitly emphasized that not to harm the environment and use resources carefully which makes religious person more responsible in their consumption (Alotaibi & Abbas, 2023). Likewise strong concerns of consumers towards their religion could make them responsible for protecting their environment and possibly make their intuition towards GPI. Moreover, religious persons exhibit more responsibility towards their environment and society as protection of nature is the core of Islamic teachings (Qureshi *et al.*, 2022). Religiosity influences the cognitive thinking of a person (Farooq & Yahya, 2022) which implies that green religiosity motivates individuals to act in a socially responsible manner. The inclination toward eco-friendly purchases is notably impacted by religiosity, as noted in study by (Alotaibi & Abbas, 2023). Ramasamy *et al.* (2010) revealed that religious persons are more prone to support CSR activities of the firms, which shows their environmental concern and responsibility. In similar vein, Alotaibi and Abbas, (2023) concluded that religious perspective substantially increases the environmental well-being among young consumers of Malaysia. Hassan (2014) drew a conclusion that the growing awareness of eco-friendly and ethical concerns underscores the necessity to explore the role of religion, in predicting consumers' intentions to purchase environmentally sustainable products. Thus, based on these arguments, present study hypothesized that:

H1: *Green religiosity has positive effect on green purchase intention.*

H2: *Green religiosity has positive effect on consumer social responsibility.*

Mediating role of consumer social responsibility (CnSR)

Consumer social responsibility (CnSR) was first introduced in 1970s in the concept of ethical, environmentally friendly and fair consumption (Ahmad & Zhang, 2020). In the phenomenon of social responsibility, corporate social responsibility has gained attention of many scholars and practitioners whereas, CnSR has gained comparatively less attention (Rejikumar, 2016). Vitell (2015) defined CnSR as the mutual obligation of all participants to protect the environment. In another study CnSR is defined as the deliberate consumption where individuals gave preference to personal, environmental and social well-being (Singh & Alok, 2022). CnSR depicts the ethical obligation of the end-user to confirm that their activities do not harm the society, environment and themselves (Ahmad & Zhang, 2020), which may incline them towards green products. Singh and Alok (2022) asserted that CnSR is related with the responsibility from demand side which implies that firms' CSR activities cannot be effectively achieved without CnSR (Vitell, 2015). The phenomenon of CnSR encompassed the pre-purchase, purchase and repurchase behavior of a consumer (Singh & Alok, 2022). Responsible attitude of consumers demonstrates their intentions towards green products (Rejikumar, 2016). It is noticed that socially responsible consumers are even ready to pay high prices for green products (Vitell, 2015) which showed their intentions for green products. Ahmad and Zhang (2020) examined the role of CnSR in quality of electronic service and concluded that CnSR is the significant predictor of GPI. Therefore, present also hypothesized that:

H3: *Consumer social responsibility has positive effect on green purchase intention.*

Wang and Chou, (2021) stated that CnSR is related to the individuals' beliefs and morals that leads them to act in a certain way. Likewise, Islam teaches its followers to be responsible towards your community and society, which demonstrate that religious persons would be more inclined towards green products because of their responsible attitude (Alotaibi & Abbas, 2023). Practicing Muslims are more cautious in their consumptions as Islam obliged them to consume those products that are halal and save for them. One illustration of this phenomenon could be that Muslims are do not consume those products that are prohibited (haram) in Islam which shows that religiosity in Muslims shapes their consumption patterns. In the Holy Quran there are more than 750 Ayats which discuss the phenomenon of nature which shows the importance of nature in Islam (Qureshi *et al.*, 2022) such as "Eat and drink but do not be excessive; He loves not the extravagant" (Quran, 7:31 Haleem, 1998, p.115), eventually consumers are now aware of their role and responsibility towards protecting the environment (Ahmad & Zhang, 2020). Similarly, consumers with high religiosity exhibit more intention to participate in the activities that are accordance with their religious teachings and restrains themselves from such activities that have contradiction with their religious values (Nurhayati & Hendar, 2020). Farooq and Yahya (2022) mentioned that green religiosity influences consumers to switch towards green products which unveils that persons' religious values, commitment, and belief makes them responsible for protecting their environment. Therefore, it can be conceptualized that green religiosity influences the GPI through the mediation of CnSR. Thus, present study hypothesized that:

H4: *Consumer social responsibility mediates the relationship between green religiosity and green purchase intention.*

Moderating role of Greenwashing

Greenwashing is a deliberate deceptive act whereby a business presents itself ecofriendly to its stakeholders by making false claims about the environmental efforts (Ahmad & Zhang, 2020). The term greenwashing was derived from “whitewashing” in 1986 in investigating how hotel industry deceive its customers by encouraging them to reuse towels as an act ecofriendly activity whereas the main concern of the firms was to reduce the cost (Akturan, 2018). False statements regarding eco-friendliness are used in GW to conceal environmentally hazardous materials. GW is the practice of selective disclosure in which businesses highlight only eco-friendly initiatives to divert attention from their ecologically damaging or unethical operations (Xiao *et al.*, 2022). According to Ahmad and Zhang (2020), the majority of consumers do not trust environmental promises and consider green communication as an advertising tactic. In recent years, research on greenwashing has expanded by focusing on its various forms and effects. Torelli *et al.* (2020) proposed four levels of greenwashing that are product level, strategic level, dark level, and corporate level which is distinguished by firms’ objective and communication. Corporates execute greenwashing through various signals such as, advertising, product packaging, certifications, labels, and reports (Torelli *et al.*, 2020). Greenwashing organizations exhibit their sustainable characteristics while hiding their negative ones, which can make consumers skeptical about the overall green reputation of the company (Zhang *et al.*, 2018). Greenwashing signals has detrimental effects on a company's reputation and financial performance, as well as on all stakeholders of the company (Ahmad & Zhang, 2020).

Socially responsible consumers will be reluctant to build trust or enduring connections with businesses that deceive them with greenwashing, which eventually lowers their purchasing intentions (Ahmad & Zhang, 2020). Furthermore, misleading green signals might confuse consumers, and complicating for them to purchase genuine green products which hinders their GPI (Nyilasy *et al.*, 2014). Ahmad and Zhang, (2020) stated that greenwashing has negative influence of GPI on socially responsible consumers whereas, occasionally consumers easily manipulated by greenwashing. For instance, after the emissions scandal of Volkswagen's "Clean Diesel" campaign hindered the company's credibility among environmentally responsible consumers as a result, company encountered customer backlash in numerous significant markets (Zhang *et al.*, 2018). Henceforth the deceptive communication of company disturbs the GPI in responsible consumer and makes them more cautious. Based on aforementioned arguments, present study hypothesized that:

H5: *greenwashing weakens the relationship between consumer social responsibility and green purchase intention.*

Methods

Context of the study

Present study considered the cohort of generation Z (1995-2005) in Pakistan which highlight the importance of present study. Consumers of Generation Z are the youngest segment of consumers who are more vigilant about the environmental and social problems, and they depict the sense of responsibility towards society (Lee, 2020). Moreover, according to the report of United Nations Development Programme’s National Human Development Pakistan has the highest percentage of youth (Qureshi *et al.*, 2022). Considering the intense impacts of the environment, Generation Z would be more likely to face the drastic impact of the environmental degradation as Pakistan is the second most polluted country in the world (Mir *et al.*, 2022). This study seeks to examine the effect of green religiosity and consumer social responsibility on the intention to purchase environmentally friendly products among Generation Z in Pakistan with a conditional factor of greenwashing. Several reasons behind the context of the study firstly, Pakistan has the sixth-highest population in the world, growing

at a remarkable 2.4% yearly growing since 1998 (Farooq & Yahya, 2022). Secondly, there is an increasing awareness of green practices in both governmental and public domains in Pakistan. Furthermore, the study gains a unique cultural and religious perspective from Pakistan's status as the second-largest Muslim nation in the world, where 97% of the population identifies as Muslims (Hackett *et al.*, 2017). Furthermore, the shifting consumer landscape in Pakistan reflects people's growing awareness of green products and their growing concerns regarding the future and their quality of life (Khan & Mohsin, 2017). This trend is particularly notable among consumers who are more eager to embrace eco-friendly products. An essential aspect shaping numerous facets of the lives of individuals in Pakistan is the close relationship they have with Islam (Khan & Kirmani, 2018). This religious adherence is expected to have a pivotal role in shaping attitudes towards green practices and consumption behavior among the Generation Z demographic.

Sample and population

Selecting respondents who are readily accessible for data collection is known as convenience sampling (Hassan, 2014). As a result, the author used a convenience sampling approach to collect data from people who were easily available. The Generation Z cohort included in our analysis includes those who are students, recent graduates, and those who are employed or unemployed. Author qualifies the responses of those who are under the age bracket of 23 to 28 years and collect 328 responses. The study selected the sample size on the basis of guidelines provided by Hair *et al.* (2017) according to which 300 sample size is sufficient for SEM. The data was gathered through the survey technique by using a structured questionnaire. The questionnaire of present study was adapted from prior literature and measured on five-point Likert scale. To uphold the construct validity, the researcher incorporated items from the relevant context of previous studies. The questionnaire was divided into two sections; first section consist of questions regarding the demographics of the respondents and the second section contains the questions regarding the study. Five items scale of greenwashing was adapted from (Xiao *et al.*, 2022), four items scale of green religiosity was adapted form (Farooq & Yahya, 2022), four items scale of consumer social responsibility was adapted form (Ahmad & Zhang, 2020) and three items scale of green purchase intention was adapted form (Qureshi *et al.*, 2022).

Results

Demographical aspects of respondents: the demographical background of the respondents that is presented in Table 1, demonstrating that majority of respondents were male and have high education level with an average income level. The responders' age average was 23 years old.

Table 1: Demographics

| Category | | Frequency | Percentage |
|-----------|---|-----------|------------|
| Gender | Male | 201 | 62.8 |
| | Female | 119 | 37.2 |
| | Total | 320 | 100.0 |
| Education | Undergraduate | 72 | 22.5 |
| | Graduate | 100 | 31.3 |
| | Postgraduate | 123 | 38.4 |
| | Other (Diploma/ professional education) | 25 | 7.8 |
| | Total | 320 | 100.0 |
| Income | 50,000 or less | 89 | 27.8 |
| | 50,001 to 80,000 | 163 | 50.9 |
| | 80,001 to 110,000 | 66 | 20.6 |
| | 110,001 to above | 2 | .6 |
| | Total | 320 | 100.0 |

Preliminary analysis

Firstly, data was examined to find out the missing values, outliers, descriptive statistics, correlation, normality, and reliability to have robust results. The data was collected through survey, the respondents were ensured to fill the questionnaire attentively which eliminated the issue of missing value. For accessing the outliers, researchers conducted a stem-and-leaf analysis and found 8 outliers which were removed, and 320 responses were selected for further analysis. Normality of the data was affirmed via the skewness and kurtosis where the values were under the threshold of (± 1 for skewness and ± 3 kurtosis), thus the data have the normal distribution (Byrne, 2016). Additionally, the research discovered correlation values less than 0.85, indicating that multicollinearity does not exist in the data. As a result, the data was prepared for confirmatory factor analysis.

Confirmatory factor analysis

Present study conducts confirmatory factor analysis to validate the constructs (Hair *et al.*, 2010). The model fit indices that were used includes “($\chi^2/df < 3.0$), (CFI ≥ 0.90), (RMR ≤ 0.08), (RMSEA ≤ 0.08), (GFI ≥ 0.90), and (AGFI ≥ 0.90) along with factor loading criteria of ≥ 0.50 ” (Hair *et al.*, 2010; Shahbaz *et al.*, 2021). It was found out that the measurement model fulfilled the requirements ($\chi^2/df = 1.985$, CFI = 0.976, RMR = .037, RMSEA = .056, GFI = .930, AGFI = .903), and all loading values were above an acceptable range of 0.50.

The average variance extracted (AVE ≥ 0.50) and composite reliability (CR ≥ 0.60) values were evaluated in order to test convergent validity (Byrne, 2016), which is presented in Appendix. According to Hair *et al.* (2010), the study's assessment of discriminant validity revealed that, the square root of AVE values exceeded the bivariate correlation values, as shown in Appendix.

Descriptive statistics and correlation

Mean values of the variables, presented in Table 2, demonstrates that respondents of the study agreed upon the GPI (Mean = 4.33), CnSR (Mean = 4.04), green religiosity (Mean = 3.90) and greenwashing (Mean = 3.26). Further the result of the study unveils that there is significant positive correlation between GR and CnSR ($p < 0.01$, $r = .343$) and GPI ($p < 0.01$, $r = .474$). Additionally, CnSR was found to be positively correlate with GPI ($p < 0.01$, $r = .753$).

Table 2: Descriptive and correlation analysis

| variables | 1 | 2 | 3 | 4 | Mean | SD |
|----------------------------------|--------|--------|--------|---|------|------|
| 1 Green purchase intention | 1 | | | | 4.33 | 0.72 |
| 2 Green religiosity | .474** | 1 | | | 3.90 | 0.59 |
| 3 Consumer social responsibility | .753** | .343** | 1 | | 4.04 | 0.62 |
| 4 Greenwashing | .527** | 0.088 | .630** | 1 | 3.26 | 1.07 |

Note: ** p < 0.01

Table 3: Results of hypothesis testing

| Relationships | β | SE | CR | P | Bootstrap @ 95% | |
|---|---------|-------|-------|------|-----------------|--------|
| | | | | | LLCI | ULCI |
| Green religiosity→Consumer social responsibility | 0.343 | 0.053 | 6.52 | .000 | 0.232 | 0.444 |
| Green religiosity→Green purchase intention | 0.299 | 0.036 | 7.71 | .000 | 0.218 | 0.381 |
| Consumer social responsibility→Green purchase intention | 0.566 | 0.036 | 14.58 | .000 | 0.465 | 0.656 |
| Mediating role of consumer social responsibility | | | | | | |
| Direct effect | 0.299 | 0.036 | 7.71 | .000 | 0.218 | 0.381 |
| Indirect effect | 0.194 | | | .000 | 0.135 | 0.266 |
| Moderating role of greenwashing | | | | | | |
| Greenwashing | 0.162 | 0.033 | 4.32 | .000 | 0.063 | 0.260 |
| Consumer social responsibility × Greenwashing | -0.122 | 0.032 | -3.25 | .001 | -0.219 | -0.033 |

Hypothesis testing

Present study conducted the bootstrap at 95% confidence along with 5000 rotations (Byrne, 2016) in structural model to test the hypothesis. Results of the study proved that green religiosity positively influenced the GPI ($p = 0.000$, $\beta = .299$, $SE = .036$); green religiosity have positive influenced on CnSR ($p = 0.000$, $\beta = .343$, $SE = .053$); CnSR is positively associated with GPI ($p = 0.000$, $\beta = .566$, $SE = .036$); which confirms that the hypothesis H1, H2, and H3 is accepted. Whereas the study examined the indirect effect of green religiosity on GPI through the mediation of CnSR with upper and lower bounds. The results ensure the positive significant indirect effect of green religiosity on GPI through CnSR ($p = 0.000$, $\beta = .194$), upper and lower bounds values are (LLCI = .135, ULCI = .266) which affirm that H4 is accepted.

Furthermore, for moderation analysis the study first computed an interactional term (CnSRxGW). The study noted that greenwashing weakens the relationship of CnSR and GPI ($p = .001$, $\beta = -.122$, $SE = .032$) upper and lower bound limits are (LLCI = -.219, ULCI = -.033). The findings of the study supported the hypothesis H5. The study shown the moderation relationship in figure 2 noted that the higher greenwashing dampens the relationship between CnSR and GPI.

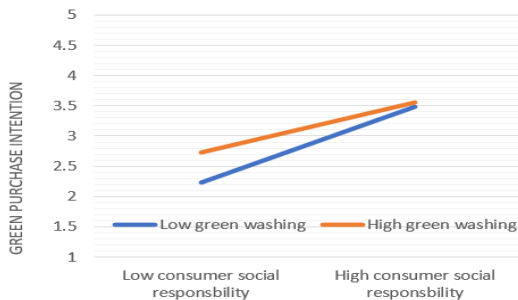


Figure 2: simple slope analysis of moderation

Discussion and conclusion

The foremost intention of the research was to empirically examine the role of religiosity plays in shaping the intentions of consumers in Pakistan. The foundation of Islamic faith is the idea that natural resources isn't the property of humans and over consumption is discouraged in Islam (Nurhayati & Hendar, 2020), thus the resources should be used wisely. In modern era where environmental concerns have become the most concerned area of interest among all the stakeholders of the society, present study intended to examine the pivotal aspect of green religiosity in transforming the consumers' intention towards the purchase of green products (GPI). The study explores the mediating role of consumer social responsibility (CnSR) between the green religiosity and GPI, and the moderating role of greenwashing between the relationship of CnSR and GPI. First the results of the study revealed that green religiosity encourages consumers towards eco-friendly products and drives their intentions. The findings of the study are consistent with the findings of (Alotaibi & Abbas, 2023) and infers that religion plays a significant role in shaping the consumer's buying habits. This finding predicted that green religiosity has significant positive association with GPI which supports the H1 of the study. Religion comes in different forms (Yilmaz *et al.*, 2018), and its influence on green consumerism varies depending on whether one is Muslim or Western (Minton *et al.*, 2015). Muslim nations have higher levels of religiosity in comparison to western nations (Yilmaz *et al.*, 2018). Among Malaysia's middle-class Muslims, religious beliefs have a substantial impact on the buying of green products (Hassan, 2014), hence green religiosity among the Generation Z of Pakistan is a significant predictor of GPI.

Further the findings imply that green religiosity promotes CnSR for the environment, since the religious convictions, ethical standards, and social norms instills in them a sense of environmental diligence (Minton *et al.*, 2015). Qureshi *et al.* (2022) stated that individual commitment towards their religion makes them more responsible for their environment preservation. The findings of the study are consistent with the findings of (Arli & Tjiptono, 2018) and support the H2 of the present study. This study suggests that consumers of Generation Z in Pakistan have a tendency toward social responsibility; they have strong pro-environmental beliefs, use products in an eco-friendly and efficient manner, and are more inclined to purchase green items.

Third the study noted that CnSR have significant direct and indirect effect on GPI which support the H3 and H4 of the study. Due to the paucity of research on this new facet of CnSR, a thorough examination has become essential (Arli & Tjiptono, 2018). The current study's conceptualization and results aid in the systematization and integration of earlier studies. According to Ahmad and Zhang, (2020), consumers possess a greater purchasing power than manufacturers, and this advantage has grown stronger as global consumption has increased. It is anticipated that consumers in general would engage in environmentally conscious activities in addition to companies' efforts to properly manage sustainability issues (Arli & Tjiptono, 2018). This inference establishes that everyone in society has a duty to safeguard the environment which comes from their personal values, beliefs and norms (Yilmaz *et al.*, 2018). The findings of the study are comparable with the findings of (Ahmad & Zhang, 2020) which posit that CnSR leverage the GPI. This phenomenon of GPI is based upon the SOR framework which implies that stimulus triggers the organisms and in response to which individuals react. Outcomes of the present study demonstrate that green religiosity act as a stimulus which generate the socially responsible attitude in consumers in response to that they inclined towards GPI. Thus, understanding this phenomenon, results reveal the significant positive mediating role of CnSR between green religiosity and GPI.

Finally, the study findings reveal a negative moderating effect greenwashing between the relationship of CnSR and GPI. The results are similar with the findings of (Ahmad & Zhang, 2020) where presence of greenwashing weakens the GPI. Customers are becoming more conscious about buying environmentally friendly goods and services as a result of the severity of environmental issues growing and their growing understanding of environmental protection (Ha *et al.*, 2022). Through social media, online searches, and TV news, customers learn about corporate wrongdoing, which has a detrimental effect on their purchasing habits and intentions (Zhang *et al.*, 2018). Customers may undervalue the legitimacy of corporate efforts and develop unfavorable opinions of businesses if they believe that they are overstating their green performance. Furthermore, customer perceptions of product quality may be negatively impacted by corporate GW practices, such as the fabrication or overstatement of a product's environmental friendliness. Considering this from the perspective of signaling theory the mechanism of greenwashing would have a detrimental impact on consumers' intents to purchase as there would be information asymmetry and consumers can become skeptical about the firm's green practices (Ahmad & Zhang, 2020). Additionally, if clients believe that a business is deceiving them through greenwashing, they can be wary of the company's sustainability efforts and reluctant to build a long-term relationship (Lu *et al.*, 2022).

Theoretical implications

The present study contributes to the existing body of knowledge about GPI from religious, consumer and firm's perspective. Firstly, the imperative contribution of the study is that it expands the key predictor of consumers' purchase decisions. Previously, religiosity was examined from different internal and external perspectives of consumer purchases (Arli & Tjiptono, 2018; Yilmaz *et al.*, 2018), present study explores the new facet of green religiosity which was scant in the literature (exception, Farooq & Yahya, 2022). The study aids to the literature by exploring how green religiosity effects the GPI of Pakistani Generation Z consumers. Consumers of Generation Z have distinct characteristics from other consumers, present study adds up to the existing literature by exploring their distinctive cognitive behavior towards green products. Secondly, the study leverage gap of CnSR which is neglected or has gained less attention in prior literature. The notion has evolved from the previous belief that businesses alone should be responsible for environmental preservation. The present study has examined how consumers take the responsibility for environmental protection and behave pro-actively to preserve the resources. This changes the direction of the literature by holding customers accountable for environmental deterioration. Thirdly, the study takes account of greenwashing behavior of firms which potentially have detrimental effects on GPI. The study contributed that consumers of Generation Z in Pakistan have knowledge about the false claims of green products which reduces their intention towards green products. Lastly, the noteworthy contribution of the study is that it integrates the signaling theory with SOR framework and provides a new foundation for accessing GPI.

Practical implications

Along with the theoretical implications, present study also has some practical implications, and these findings would be very beneficial to green marketers aiming to reach Pakistani youth. It should be mentioned that Muslims make up a sizable portion of Pakistan's population, making them a desirable market niche for green marketers. However, green marketers should effectively address the religious feelings of these young Muslim consumers through their advertising techniques. In order to be perceived as an act that might please Allah, the conservation of the natural environment must be connected to the well-being of society. Advertisers who promote green products might employ slogans and themes that

highlight the value of sharing, living in community, cutting down on waste, and taking care of the planet and all of God's creations. In this situation, a subtle allusion to verses from the Holy Quran and Hadith that describe Sunnah practices can be quite helpful, as there are numerous teachings in Quran and Hadith to preserve the environment (Alotaibi & Abbas, 2023). Marketing managers have better analytical skills to recognize consumer actions and implement strategies accordingly. Consequently, their emphasis on Islamic religiosity can facilitate the development of effective strategies for the Generation Z in Muslim nations who wish to purchase green products. Additionally, as customers with a high level of environmental consciousness tend to favor and consume only green products (Zaidi *et al.*, 2020), marketers can raise awareness of green purchasing among religious and spiritual consumers.

Furthermore, the results suggest that customers' purchase intentions can be increased by lowering their views of greenwashing. To genuinely deserve the title "green business," companies need to take advantage of the opportunity presented by green consumerism to concentrate on environmental conservation through meaningful efforts rather than greenwashing. Companies should therefore exercise greater caution in their eco-friendly words and deeds to "walk the talk," reinforce their substantive sustainable practices and green images to lessen consumer skepticism and adopt a win-win approach to attain both environmental and market performance. Businesses operating in comparatively more polluted places should take extra precautions; they might need to respond firmly to environmental conservation challenges. In order to raise knowledge of environmental problems and take action against the harmful consequences of pollution, they can also be obliged to expose all of their campaigns and activities which will simultaneously reduce the information asymmetry.

Limitations and future directions

Despite of several implications, study also have some of the limitation. First the research focused only on Pakistani consumer with a deliberately simple model which also limit the sample size of study. Future researchers are advised to take a large sample size and also include some other key predictors such environmental awareness or price sensitivity. Second the study chooses the cohort of Generation Z in Pakistan that have different attributes than other generations. Future studies should conduct a comparative analysis of different generations. Third, the present study examines the intention of consumers regarding green product purchase, future studies are advised to examine the actual purchasing behavior of consumers in developing countries.

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Impact of Responsible Leadership on Environmental Performance

Rida Irfan, Rizwan Qaiser Danish

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24225

In light of mounting pressure within the corporate sector to address environmental concerns, it becomes imperative for leadership to demonstrate responsibility and embrace sustainable practices. To meet this challenge, our study introduces a comprehensive model aimed at bridging this crucial gap. Drawing upon the social learning theory (SLT), we conducted a thorough examination utilizing samples from 422 employees within the pharmaceutical sector in Pakistan.

Our investigation delved into the intricate relationship between responsible leadership and environmental performance using structural equation modeling (SEM) through AMOS software.

The ensuing findings yield significant insights: firstly, we establish a positive correlation between responsible leadership and environmental performance. Secondly, we identify environmental commitment as a pivotal factor, acting as a catalyst between responsible leadership, environmental attitude, and subsequent environmental performance. Lastly, our study illuminates the mediating role of environmental attitude in the link between responsible leadership and environmental performance. Beyond elucidating these empirical findings, our paper also delves into the managerial implications they entail, providing valuable insights for stakeholders across the board. Furthermore, we outline avenues for future research, paving the way for continued exploration in this vital domain. Through our work, we aim to equip organizations with actionable recommendations, fostering a more sustainable and responsible approach to corporate governance.

Keywords: Responsible leadership, environmental commitment, environmental attitude, environmental performance, social learning theory, SEM

How Corporate Social Responsibility Helps Hotels and Restaurants of Pakistan to Elevate Brand Loyalty and Consumer Satisfaction?

Ibrar Mansoor
University of Okara, Pakistan

Article ID 24235

Abstract

Purpose -The purpose of this paper vigor the organizations to apply the concept of corporate social responsibility, which represents the potential of enhancing the brand loyalty and customer satisfaction in restaurant and hotel business in the world. This particular study addresses a challenge which Restaurants and Hotel Industry is facing in creating customer satisfaction.

Design/methodology/approach-This precise study utilizes structural equation modeling base on 200 to 250 visitors (respondents) of restaurants and hotels. SPSS and AMOS were used to validate and test the hypotheses.

Findings -Result indicates that CSR and CS both factors play vital role, its work as a back bone of restaurants in Pakistan and these variables strongest driver of brand loyalty. This research explains the importance of corporate social responsibility for restaurants and hotels growth and development in the tourism context. Interestingly, analysis show that CSR associated with and without mediator (customer satisfaction) to brand loyalty.

Research limitations/implications-This study participates in limited area of research with few selected variables CSR, BL and CS. Major Responsibility of top management to introduce strategies which help to maintain corporate social responsibility and enhance customer satisfaction. Leader use the knowledge and skills related to corporate social responsibility.

Originality/value-This study contributes to the existing literature as well as help managers in understanding the problems of the restaurant and hotels in Pakistan. The study also extends the CSR and brand loyalty literature through a novel mediation mechanism of customer satisfaction.

Keywords: Corporate Social Responsibility, Consumer Satisfaction, Brand Loyalty

Introduction

Restaurant and hotel industry revenues reaching US\$ 500 billion in last few years, in 2018 retail value of the hotel industry was 600.49 billion U.S. dollars in the world and hotel industry associated with social and environmental perspectives(Akbari, M., Nazarian, A., Foroudi, P., Seyyed Amiri, N., & Ezatabadipoor, E. 2020). Customers are interested in vacations these vacations grant opportunity for restaurant and hotel associate with accommodation, entertainment and meals (Ahn, J., Shamim, A., & Park, J. 2021).

CSR prove a competitive strategy which concern with high rate of profit by considering customer satisfaction effect on brand loyalty in industry, as well as CSR improve the response of consumer (Islam, T., Islam, R., Pitafi, A. H., Xiaobei, L., Rehmani, M., Irfan, M., & Mubarak, M. S. 2021). CSR is a determinant can develop brand loyalty, loyally customer can be responsible for persuade other people to revisit the hotels and restaurants (Dapi, B., & Phiri, M. A. 2015). Scholars have disagreement relate direct impact corporate social responsibility lying on brand loyalty because few scholars are failed to found association between corporate social responsibility and brand loyalty (He, Y., & Lai, K. K. 2014). In the restaurants and hotels business service of facilitators link with satisfaction of customer are

able to stimulates visitors and stronger the brand loyalty (Javed, S., Rashidin, M. S., Zhu, M., Xu, Z., Jian, W., & Zuo, S. 2021).

In this study collected data from 200 respondents which visited and booked hotels and restaurants in different cities of Pakistan. Present study examines CSR influence on brand loyalty and customer satisfaction of hotel and restaurant visitors. This research contributes relate with the intention of visitors to revisit and satisfy from hotel and restaurant and the impact of CSR is essential for establish intentions towards revisit in hotel and restaurant. This research will support owners and managers to enable them for betterment of hotels and restaurants industry by performing CSR activities in business.

Objectives of Research

The specific objectives of this study have been described as;

- To investigate the corporate social responsibility.
- To find out the brand loyalty.
- To examine the customer satisfaction.
- To find out the customer satisfaction mediated affect between corporate social responsibility and brand loyalty.
- To examine the link about corporate social responsibility and brand loyalty.

Research Questions

- Is there any relation among corporate social responsibility and brand loyalty?
- Is there relationship exist between corporate social responsibility and customer satisfaction?
- Is there any association as a mediator customer satisfaction between corporate social responsibility and brand loyalty?
- Is there customer satisfaction have any association with brand loyalty?

Literature Review

Association of Corporate Social Responsibility and Customer Satisfaction

Financial performance of any restaurant and hotel base on customer satisfaction conditions and it will be associate the visits of visitors rapidly in the hotel and restaurant (Karim, R. A., & Islam, M. W. 2020). It was found that well maintained environment of hotel without any barrier better the guest satisfaction(Saeidi, P., Saeidi, S. P., Gutierrez, L., Streimikiene, D., Alrasheedi, M., Saeidi, S. P., & Mardani, A. 2020). CSR related actions have impact on customer satisfaction in organization (Karim, R. A., & Islam, M. W. 2020).

CSR is not only play a important role for customer development in market, actual it's also work for support of employs in organization and customer satisfaction also participate for this act(Zhang, Q., Cao, M., Zhang, F., Liu, J., & Li, X.2020). Corporate social responsibility (CSR) can be defined as “context specific organizational actions and policies that take into account stakeholders’ expectations and the triple bottom line of economic, social, and environmental performance”(Úbeda-García, M., Claver-Cortés, E., Marco-Lajara, B., & Zaragoza-Sáez, P. 2021).CSR address the critical aspects which are not positively affect the industry by removing these factors performance of hotels and restaurants maintain(Mohammed, A., & Al-Swidi, A. 2020).Pakistan,Italy and China customers perceptions relate CSR develop brand loyalty through customer satisfaction(Latif, K. F., Pérez, A., & Sahibzada, U. F. 2020).

Customer Satisfaction and Brand loyalty

Business growth and its stability closely link with brand loyalty and its basic aim of hotels and restaurants industry to meet the goals(Latif, K. F., Pérez, A., & Sahibzada, U. F. 2020).It

observed from long time period customer satisfaction put the next level brand loyalty for organization and ignorance of customer satisfaction hampered the brand loyalty(Taqi, I., & Muhammad, G. 2020).The major requirement of hotels and restaurants visitor give favorable comments in front of other people and its stimulate new visitors to visit hotels and restaurants(Sewak, A., Kim, J., Rundle-Thiele, S., & Deshpande, S. 2021).Every hotel and restaurant need to stronger customer satisfaction for long time, then investment in hotels and restaurants industry provide benefits and analysis of many studies present the relation of customer satisfaction towards brand loyalty(Al-Msallam, S. 2015).Management faces many crises concern with maintain and establish the satisfaction of visitors and it's not a easy job to shift the levels of satisfaction on higher side(Singh, P., & Pandey. 2021).

Muslims in all over the world require the Islamic hotels and restaurants to enjoy vacations for the fulfillment the this aim examined the Muslims visitors satisfaction condition and its present significant harmony between brand loyalty and customer satisfaction in Makassar(Rahmah, N., Kara, M. H., Bakry, M., & Muin, R. 2021).Hotels and restaurants business success rely on capability to strengthen customer satisfaction, on the other hand brand loyalty developed through customer satisfaction (Venkateswaran, P. S., & Ambrin, M. 2019).

Corporate Social Responsibility relate Brand Loyalty

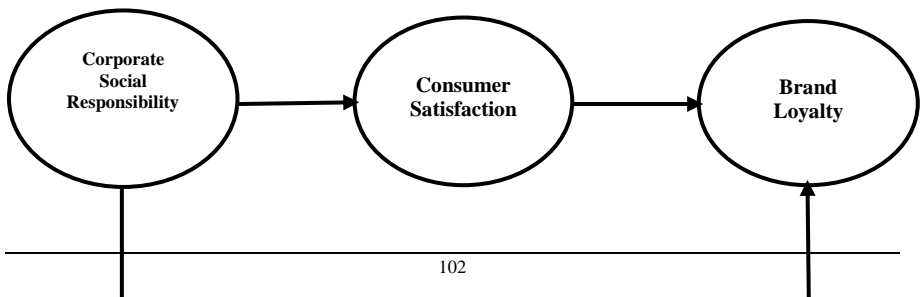
In this global world corporate social responsibility play a vital role for remarkable progress of hotels and restaurants industry, it has influence on profitability ratio of industries and when services demand increasing it's developed brand loyalty (Nadanyiova, M., & Gajanova, L. 2020). In these days multiple studies participate to test the belongings among CSR and brand loyalty, its events increase the value of relationship (Cha, M. K., Yi, Y., & Bagozzi, R. P. 2016).

In Taiwan hotels corporate social responsibility and ethical actions enhance brand loyalty in the hospitality industry (C.-J. Wang 2014). The implementation of corporate social responsibility in organization drive the development of local communities and its active the employees to fulfill the responsibilities in the interest of industry(Medarić, Z., Planinc, T., & Bogataj, K. 2020). CSR concept support in reality tourism industry, its take specific steps betterment of restaurants and hotels business and now csr consider as prior position in the world of tourism industry(Ghaderi, Z., Mirzapour, M., Henderson, J. C., & Richardson, S. 2019). Brand loyalty and customer satisfaction key elements to increases the visits of visitors, in the way of development of customer satisfaction and brand loyalty require corporate social responsibility strong implementation in industry (Rivera, J. J., Bigne, E., & Curras-Perez, R. 2019)

Research Variables

- Corporate Social Responsibility
- Customer Satisfaction
- Brand Loyalty

Mediational Model



Hypotheses

H1: Corporate Social Responsibility has major relation Brand Loyalty.

H2: Customer Satisfaction optimistically effect with Brand Loyalty.

H3: Corporate Social Responsibility has positive link with Customer Satisfaction.

H4: Customer Satisfaction as a mediator has significant impact between Corporate Social Responsibility and Brand Loyalty.

Research Methodology

Choose non probability convenience sampling its appropriate for it's investigated and probability sampling is not favorable for this research. Probability sampling is not mandatory for this study. Brand loyalty through mediation with two variables is measured in this research. This study has relationship with descriptive nature. Aim transmit this research measure the brand loyalty of visitors of hotels and restaurants by mediation approach to measure corporate social responsibility relation associate customer satisfaction in the industry of restaurants and hotels Lahore, Pakistan, imperative variables customer satisfaction collision as a mediator are measured in this study related hotel and restaurant industry. Individual, dyad or group unit of analysis are consumer in research. Respondents of this research have individual unit of analysis; visitors of hotels and restaurants are respondents and visitors as respondents belongs with different experience of hotels and restaurants at different places of world. All researches belong with two longitudinal and cross section kinds regarding time horizon. Cross sectional study design is chosen for this study. Cross sectional study is a snapshot and conducted at once, on the other hand longitudinal study is passed out at many points in time. Consider population is the visitors located in Lahore, Pakistan. 200 sample size is selected for this research. In this study cannot study total population because number of respondents is not distinct. For data collection exploit the response to item theory collected the responses from multiple respondents. Provided the questionnaires to the visitor which they love to travel in different areas of Pakistan and they want to enjoy vacations specially summer vacations. Design questionnaire for respondents from various sources and associated researches.

Measures

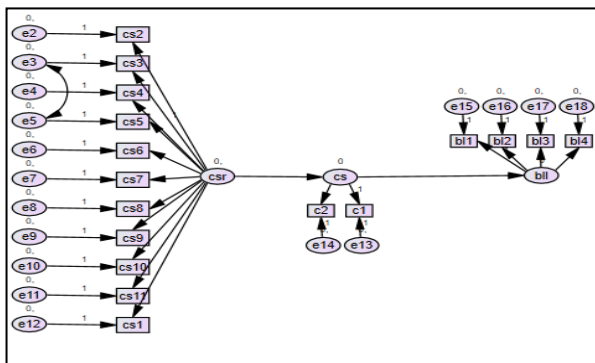
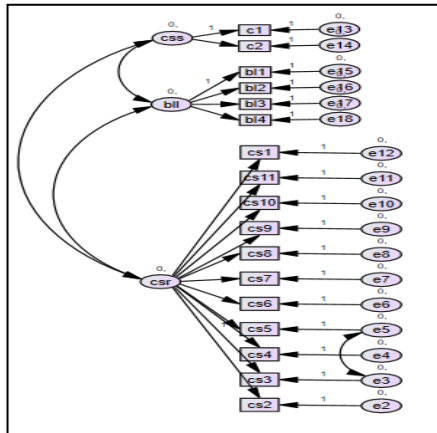
Adopted five item likert scale for measurement of corporate social responsibility (Carroll, 1991; Han et al., 2019; Han et al., 2020; Lee et al., 2013; Palihawadana et al., 2016). Perform investigation by considering likert scale to examine customer satisfaction (Oliver, 2010). Test the hypothesis by utilization five item base scale of brand loyalty (Chen 2013).

Results and Analysis

Subsequent to gathering of satisfactory data for analysis purpose the results were obtained by using SPSS and AMOS 24 for structural equation modeling. Comprehensive the analysis of data by using IBM SPSS Statistics data Editor Software and AMOS. These software's have various benefits over the traditional techniques of regression. AMOS (Analysis of Moment Structure) can execute various operations concurrently along with CFA and bootstrapping base mediation analysis.

| Threshold Measures | |
|--------------------|---|
| Cmin/df | <3 good and <5 sometimes acceptable |
| AGFI | >.80 |
| SRMR | <.09 |
| CFI | >.85 sometimes acceptable >.95 greater >.90 traditional |
| RMSEA | <.05 is good, .10 to .05 is moderate and >.10 is bad |
| PCLOSE | >.05 |
| GFI | >.85 |

Structural Equation Mode

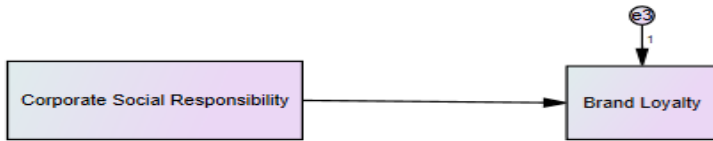


Model Fitness of Structural Model

| Model | CMIN/DF | CFI | GFI | AGFI | RMSEA |
|-------|---------|------|------|------|-------|
| | 1.774 | .941 | .900 | .866 | .062 |

Reliability Analysis

| Variable | Cronbach’s Alpha |
|----------------------------------|------------------|
| Customer satisfaction | .724 |
| Brand loyalty | .812 |
| Corporate Socaial responsibility | .877 |

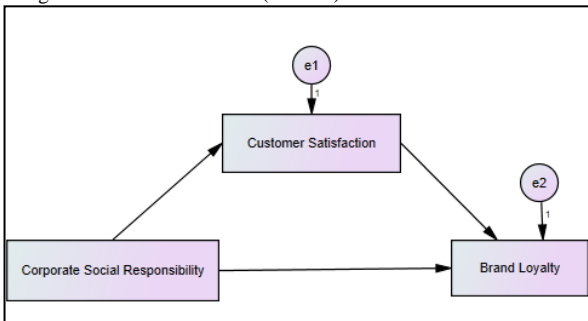


Above figure present the impact of corporate social responsibility on bl its significant $p=.009$ with beta value which is less than .05.

Correlations

| | | cs | c | bl |
|----|---------------------|--------|--------|-----|
| cs | Pearson Correlation | 1 | | |
| | Sig. (2-tailed) | | | |
| | N | 200 | | |
| c | Pearson Correlation | .753** | 1 | |
| | Sig. (2-tailed) | .000 | | |
| | N | 200 | 200 | |
| bl | Pearson Correlation | .740** | .759** | 1 |
| | Sig. (2-tailed) | .000 | .000 | |
| | N | 200 | 200 | 200 |

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



| Variable | Direct effect w/o Mediator | Direct effect with Mediator | Indirect effect | Result |
|-----------|----------------------------|-----------------------------|-----------------|-------------------|
| CSR-CS-BL | .328*** | .123** | .205*** | Partial Mediation |

The above analysis of mediation present that market orientation has significant direct relationship without mediator with salesperson outcome performance which have beta value is .328 with p-value is .001 it lesser than 0.05.

Discussion

Brand loyalty in restaurants and hotels can be access from the high quality of services and it's a source to judge the brand loyalty (So, K. K. F., King, C., Sparks, B. A., & Wang, Y. 2013). Brand loyalty is defined as “a deeply held commitment to re-patronize a preferred product/service consistently in the future, despite other situational and marketing factors that have the potential to induce switching behavior” (Oliver, 1999, p. 34).

Hotels and restaurants need connectivity with visitors, brand loyalty improve the relationship between visitors and hotels and restaurants (Kaur, H., Paruthi, M., Islam, J., & Hollebeek, L. D. 2020). Variable(customer satisfaction) many time found with positive relation with brand loyalty, its events present the strongest credibility for increase and develop new customer(visitor) in hotels and restaurants (Keisidou, E., Sarigiannidis, L., Maditinos, D. I., & Thalassinos, E. I. 2013).Facilities and locality of hotels and restaurants have major contribution for maintained of customer satisfaction and its stimulate the intention relate booking of hotels and restaurants(Ullah, I., Rukh, G., Zhou, J., Khan, F. U., & Ahmed, Z. 2019). Corporate social responsibility considered multiple time directly with firm performance, ignore the indirect association with customer satisfaction towards brand loyalty (Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saaeidi, S. A. 2015).

Major requirement of this effort to entertain maximum tourists in hotels and restaurants, for the fulfillment its objective by establishment brand loyalty and increase the satisfaction from the products and services concern with corporate social responsibility. Also monitor the role of mediator customer satisfaction to boost the brand loyalty through corporate social responsibility in hotels and restaurants industry.

Theoretical Implications

Result indicates that corporate social responsibility and customer satisfaction are the cornerstones of fine dining restaurants’ success in Pakistan and they have the strongest predictor of brand loyalty. This research explain the importance of corporate social responsibility for growth and development so, managers of hotels and restaurants need to increase the focus on environment of hotels and restaurants its must be suitable for visitors or tourist. Management associate with restaurants give value and understand the intention towards buy same product or service again and again. Major duty of top management to introduces strategies which help to maintain corporate social responsibility, enhance customer satisfaction. The current study offers key insights for managers seeking to nourish the brand and aiming to construct long-term loyalty. First, the results indicated that experiential brands are vital to the creation of customers’ brand loyalty.

Limitations and Future Directions

This study encompasses several limitations. First, the study is cross-sectional hence the quality improvements could be measured if the data will be collected in different point of time.

Second, the study has measured the key dimensions hence, in future research different dimensions like service innovation and service responsiveness can be added. Third, this study is only restricted to the capital city Islamabad and Rawalpindi only, so future research can be conducted in different major cities of Pakistan. Fourth, future studies can incorporate comparative studies from various sectors other than the restaurant industry. One more important thing to increase the number of hypotheses to test the hotels and restaurants credibility for Muslim, in all over the world hotels and restaurants develop to facilitate only non Muslims.

Conclusion

Customers always reflect high expectations from in restaurants and hotel settings because they expect to get better quality of services in order to become a satisfied and build their revisit intentions. This case increased the understanding of the brand loyalty drive from customer satisfaction as a mediator in Pakistan. Results suggest that in fine dining restaurant, better corporate social responsibility helps in creating satisfied need of consumer.

Customer satisfaction strategies are considered as the actual asset of an organization in order to get high profit and build a positive image of organization. If any restaurant and hotel have desire to earn high rate of profit in tourism industry, its need to start analysis satisfaction conditions of visitors which can hamper the brand loyalty and corporate social responsibility play vital role in process of brand loyalty.

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Determinants of Sustainability Reporting: Evidence from Pakistani Listed Companies

Yasir Ashraf, Akbar Siddique

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24241

This research aims to identify the significant factors that influence sustainability disclosure in Pakistani listed companies via the perspectives of agency, stakeholder, signaling, and legitimacy theories. A balanced panel data for 33 companies of 10 years from 2012 to 2021 are used in this study. A random sampling technique is used for company selection, and all data is collected through annual reports. During the final phase of data collection, Stata 14 software played a pivotal role in conducting descriptive, correlation, and regression analyses. The utilization of Pooled Ordinary Least Squares (OLS), Random Effects, and Fixed Effects models enabled a comprehensive examination of panel data, accounting for individual and time effects. These analytical techniques provided valuable insights into the interrelationships among variables, thereby enhancing the overall understanding of the dataset. The results of the random-effects model indicate that board size, board independence, gender diversity, age of the firm, size of the firm, audit committee size, and SR awards significantly impact sustainability reporting. Conversely, CEO duality, leverage, financial performance (EPS), audit committee independence, ownership concentration, and foreign ownership demonstrated no substantive impact on sustainability disclosure. This research makes a significant contribution to comprehending the determinants shaping sustainability reporting practices within Pakistan's corporate landscape. The findings hold considerable implications for regulatory authorities, corporate managers, and academic researchers alike, offering insights to foster a culture of sustainability disclosure in the country. By elucidating these factors, this study serves as a catalyst for informed decision-making and policy formulation aimed at promoting greater transparency and accountability in sustainability reporting among Pakistani enterprises.

Keywords: Sustainability reporting, determinants, environment, mixed methods

Perceived Job Insecurity and its Effects on Organizational Commitment: Role of Psychological Capital in Minimizing the Effects

Nasir Hussain, Sania Zahra Malik

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Article ID 24118

Abstract

Job insecurity is a psychosocial risk that can present significant problems for organizational performance and employees' commitment towards organization. The purpose of the current research was to investigate the relationship between employee job insecurity and two types of organizational commitment: affective and continuance. Additionally, it was also tested that whether psychology capital can reduce the negative impacts of job insecurity towards organizational commitment. Using a survey questionnaire data was collected from the employees working for telecommunication companies in Pakistan, primary data was collected. Convenience-based sampling technique was used in order to collect data from different cities and companies and final dataset of completely filled questionnaire was 316. Using correlation, regression and Hayes, 2001 process moderation the results were extracted and it was found that job insecurity has negative impact on both affective and continuance organizational commitment. Further, the moderation of psychological capital was found to be statistically significant, but at moderate and low level. At high level of psychology capital the moderation was not found to be statistically significant. At low and moderate level of psychological capital the job insecurity increase affected negative impact on organization commitment. Only at high psychology capital the organizational commitment remained unchanged with the movement of job insecurity. These results are discussed in light of rising job insecurity and the need for psychosocial interventions to attenuate its adverse effects.

Keywords: Organisational performance, job insecurity, telecommunication

Introduction

Overview

Organizations today face rapidly changing workforce demographics, increasing globalization, and shifting governmental policies regarding work and labor relations. These forces, coupled with intermittent financial crises such as the Great Recession of 2007–2009 and its ensuing global economic instability, have led organizations to increasingly engage in restructuring, acquisitions, mergers, and downsizing to remain competitive (Hirsch and De Soucey, 2006). Kalleberg (2013) argued that together these factors have led to fundamental shifts in the nature of work characterized by greater income inequality and less secure employment systems compared to those faced by earlier generations of workers. Not surprisingly, surveys suggest that increasingly high levels of job insecurity among today's workers are the result – notably, worries about work and income rank among the top concerns of respondents (e.g., American Psychological Association surveys of Stress in America, 2013, 2015). Another recent U.S. survey of financial well-being (PwC's Employee Financial Wellness Survey, 2016) found that being laid off from work was the top concern of 20% of respondents.

Commitment to work has been a topic of interest for researchers for a long time. A core essence of commitment can be distinguished in that 'commitment is a stabilizing or obliging force that gives direction to behavior or binds a person to a particular course of action' (Meyer & Herscovitch, 2001, p. 301). Commitment is more than a state of mind and differs from motivation or a general attitude. It can force individuals to behave in ways that are conflicting

with their own self-interest, at least from an objective point of view. Employees facing organizational change, restructuring or cutbacks experience uncertainty about the continuation of one's job. Experiences of uncertainty regarding one's future employment likely have consequences for a range of work-related attitudes and behavior of employees and will therefore, in the long run, have an effect on the vitality of the organization. The organizational commitment is influenced by this job insecurity and other factors like Psychology Capital. Understanding the effects of these factors on the organizational commitment may facilitate organizations in minimizing the negative effects of job insecurity.

Pakistani market is also dominated by large multinational brands however, a considerable role is also played by the local SMEs and microenterprises. Private sector together with government sector provides the source of employment in Pakistan. Over past one decade energy crisis has stuck Pakistan badly and that has made many organizations to shut down their operations laying off thousands of jobs. Further, many companies have squeezed their operations which also results in job layoffs and that leads to the job insectaries among the employed personnel. Job insecurity due to any factor is one of the major source of employee dissatisfaction that ultimately leads to the performance issues. This research study attempts to evaluate the role of job insecurity and psychological capital on organizational performance and the study largely focuses on the telecommunication sector of Pakistan, which is by far one of the most dominant and growing sector of the economy. The researcher himself has been associated with the telecommunication since past fifteen years and is currently working for one of the largest telecommunication companies in Pakistan. Empirical investigation has been done in order to measure the association between the job insecurity and organizational performance.

Research has indicated that job insecurity reflects the national level of unemployment and the economic situation (De Weerd, De Witte, Catellani, & Milesi, 2004). In other words, a general feeling of uncertainty and insecurity is characterizing the way people feel these times. Job insecurity can be defined as 'a perceived threat of job loss and the worries related to that threat' (De Witte, 2005; Sverke, Hellgren, & Näswall, 2002). The concept is situated between employment and unemployment, because it refers to employed people who feel threatened by unemployment (De Witte, 2005). Employee's perception of job insecurity has been of increasing concern for researchers during the last decades as it may have detrimental consequences, not only for the individual but also for the organization (Ashford, Lee & Bobko, 1989; Hartley, Jacobson, Klandermans & Van Vuuren, 1991; Hellgren, Sverke & Isaksson, 1999; Näswall & De Witte, 2003).

Workers facing organizational change, restructuring or cutbacks experience uncertainty about the continuation of one's job. Different studies have revealed that job insecurity results in problems concerning commitment to the organization (e.g. Ashford, et al., 1989). However, an individual's reaction to this insecurity depends on a number of factors, including labor market characteristics, individual characteristics and employability (Sverke & Hellgren, 2002). In this study the relationship between perceived job insecurity and commitment to the organization is investigated with a focus on individual characteristics. Research has shown that committed employees perform better, show less turnover intentions and are more satisfied with their job, which is in the interest of both the employing organization and employee (e.g. Mathieu & Zajac, 1990). So, it is important to investigate whether perceived job insecurity leads to less organizational commitment as well as factors that are influencing this relationship.

The desire for enhanced positive organizational outcomes has led to increased interest in the application of positive psychology to the leadership field. This focus is primarily due to

research that linked positivity to enhanced well-being and performance at work (Walumbwa et al., 2010). As the concepts of positive psychology garnered more attention, these began to be applied to the fields of leadership and organizational development in the form of Positive Organizational Behaviors (POB). This focus was given increased attention as the study and application of positively oriented human resource strengths that can be measured, developed and effectively managed for performance improvement (Luthans, 2002). The benefits of the positive approach were found in the increased focus on strengths rather than weaknesses and assets as opposed to liabilities within individuals (Luthans et al., 2008). Rather than devoting efforts to fix the deficient, this positive approach recognized and developed employee strengths as a way to help employees navigate the increasingly challenging workplace (Avey, Luthans, & Jensen, 2009).

Literature Review

Job Insecurity and Organizational Commitment

Experiences of uncertainty regarding one's future employment likely have consequences for a range of work-related attitudes and behavior of employees and will therefore, in the long run, have an effect on the vitality of the organization. As Greenhalgh and Rosenblatt (1984, p. 438) describe it, 'workers react to job insecurity, and their reactions have consequences for organizational effectiveness'. These work-related attitudes include job satisfaction, organizational commitment and turnover (Ashford, et al., 1989; Davy, Kinicki, & Scheck, 1997; Greenhalgh & Rosenblatt, 1984). As people develop affective and attitudinal attachments to firms over time (Mowday, et al., 1979), feelings of job insecurity may threaten these. A theoretical perspective that seems relevant to explain the effects of job insecurity is the psychological contract theory (Rousseau, 1995; De Witte, 2005; Sverke & Hellgren, 2002). A psychological contract refers to an agreement between the organization and an employee about their beliefs regarding the terms of employment or, in other words, the perceived mutual obligations between employer and employee (Rousseau, 1995).

In this respect, there is an exchange between job security which is the obligation of the employer, and loyalty which is the obligation of the employee. By perceiving insecurity about the job on the part of the employee, this contract may be perceived as violated by the organization; employees depend on the organization so they lose faith in the dependability of the organization. As a result, the commitment of an employee towards the organization may decrease. The negative effect of the perception of job insecurity on commitment to the organization is also grounded in the stress literature, besides psychological contract literature. A reduction in organizational commitment can be seen as an attempt to psychologically withdraw from the stressor (Davy, et al., 1997). This reduction can be seen as a coping strategy induced by job insecurity.

Empirical studies towards job insecurity particularly have examined the antecedents and consequences of this stressor in the context of reorganizing or restructuring the organization (e.g. Armstrong-Stassen, 1993). In this respect, the relationship between job insecurity and employee's (affective) commitment to the organization has been studied and has overall indicated a moderate negative effect between the two variables (Ashford, et al., 1989; Davy, et al., 1997; Hellgren, et al., 1999; Rosenblatt, Talmud, & Ruvio, 1999; Sverke, et al., 2002).

In the study of Meyer and Allen (1991), it was found that job insecurity has a negative relationship with affective and continuance organizational commitment. Normative commitment was not affected by job insecurity since employees with high levels of this form of commitment remain with the organization because they ought to do so whatever the circumstances are. Besides, it was found that affective and normative commitment to the organization is often highly correlated. For the reason that normative commitment appears to

be less relevant and for reasons of simplicity, this dimension of organizational commitment is not included in the conceptual model.

Psychology Capital, Job Insecurity and organizational Commitment

The empirical results found by Selenko et al. (2013) suggest that the relationship between job insecurity and performance might be curvilinear. However, an alternative explanation is that moderator variables could be influencing the association of job insecurity with job performance (or, indeed, both curvilinear and interaction effects could be co-occurring). Although Selenko and colleagues tested the moderating effects of optimism and supervisor support, they did not find support for either of these moderating effects. Yet, these null results do not rule out the effect of other moderating variables.

According to Conservation of Resources theory (Hobfoll, 1989), employees strive to obtain, build and protect a variety of resources. Moreover, stress occurs when such resources are lost, threatened with loss, or when individuals fail to gain expected resources. These resources can take on many different forms, including physical possessions (e.g., a car), energies (e.g., time), conditions (e.g., friends and social support), as well as personal characteristics (e.g., personality). Based on COR theory (Hobfoll, 1989), one would expect that individuals who have access to and can draw upon a deeper well of resources would be better cope with the stress and uncertainty of job insecurity. Thus, these resources might serve as a moderating variable when examining the relationship between job insecurity and job performance.

Psychological capital is considered a personal resource and enables individuals to (1) have confidence in being successful and of added value within their work environment (i.e. self-efficacy), (2) be able to successfully persevere and redirect paths and goals (i.e. hope), (3) be able to bounce back from adversity, uncertainty and increased responsibility (i.e. resilience) and (4) have positive future expectations about succeeding now and in the future (i.e. optimism) (Avey et al., 2008; Avey et al., 2011; Hobfoll, 2001; Luthans, Avolio, Avey & Norman, 2007; Roche et al., 2014). Psychological capital is found to be moderately flexible and therefore open for human resource development and performance management (Avey et al., 2011; Luthans et al., 2007).

Furthermore, employees high in psychological capital are found to be more perseverant regarding work-related challenges (e.g. job insecurities) and engage more in gaining resources (Avey et al., 2008; Luthans, 2007). Furthermore, employees high in psychological capital are found to be more perseverant regarding work-related challenges (e.g. job insecurities) and engage more in gaining resources (Avey et al., 2008; Luthans, 2007). Research has shown that psychological capital positively influences desirable attitudes such as organizational commitment and staying intentions (Avey et al., 2008; Avey et al., 2011; Newman et al., 2014).

Theoretical Framework

Summarizing the effect of perceptions of job insecurity, it was found that employees with a high level of affective commitment feel betrayed by the organization and therefore their affective bond and their dedication to contribute to organizational goals decreases. Lowering commitment can also be seen as a strategy to cope with the perception of job insecurity. It is important to note that job insecurity literature focuses mainly on the affective dimension of commitment. Especially psychological contract theory seems to be inappropriate to explain consequences on continuance commitment. The effect on the continuance dimension was only investigated in the study of Meyer and Allen (1991), with no argumentation about the underlying mechanism explaining this relationship.

Based on the theoretical foundation of stress theory, it is assumed that continuance commitment will decrease. It could be that the economic recession as a context could influence the relationship, but this factor is not integrated in this study. Employees could experience a greater perceived cost to leave the organization as alternatives for employment may be limited, so continuance commitment may increase or remain unchanged. As argued, this argumentation could not be investigated so it would be incorrect to base a hypothesis on this premise. Thus, it is expected that continuance commitment decreases as a strategy to cope with the effects of job insecurity. The rationale is that an employee whose job is perceived as threatened is likely to psychologically protect him/herself by withdrawal from the job. The empirical result of Meyer and Allen (1991) supports this assumption. The following hypotheses can be formulated:

H1: *Perceived job insecurity has a negative effect on employee's affective commitment to the organization*

H2: *Perceived job insecurity has a negative effect on employee's continuance commitment to the organization*

PsyCap has important implications for organizations because it directly relates to the way in which employees act and think within their organization. This, in turn, impacts the effectiveness of employees within their roles and how successful they can contribute to their organization. Avey et al. (2008) proposed that Psy- Cap increases positive emotions which then affects employee attitudes and behaviors. For example, employees who possess high levels of PsyCap are able to experience more positive emotions within their organization, even when they are faced with stressful situations (e.g. job insecurity). The positive emotions that these employees possess can assist them in navigating stressful circumstances with their organization. This is accomplished through positive expectations for achieving their goals (optimism) and successful coping strategies where they experience positive feeling of confidence (efficacy). These positive emotions are then used to increase their ability to create multiple pathways to deal with situations (hope) and if workplace adversity arises then they will have the ability to bounce back and use an alternative path (resilience; Avey et al., 2008).

The statistics noted earlier indicate that job insecurity is prevalent in today's workplace. Preliminary research on PsyCap appears to provide some support. For example, the finding that individuals with higher PsyCap reported fewer symptoms of job stress (Avey et al., 2009) supports the contention that PsyCap partially operates by influencing the primary appraisal of potential stressors. PsyCap also appears to predict adaptive behaviors in the face of stress such as increased preparatory and active job search behaviors following job loss (Cheng et al., 2012; Oglensky, 2014).

H3: *The relationship of job insecurity and organization commitment is moderated by psychology capital.*

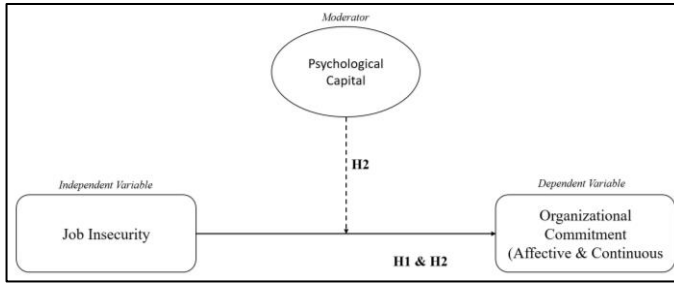


Figure 1: Conceptual Model

Research Methods

This research study aims to investigate the underlying phenomenon in isolation. Researcher believes that there is only one reality to the situation, which can and must be interpreted scientifically. Therefore, the research follows positivism, deductive philosophy for this research study. An empirical descriptive study with a quantitative approach was developed to test our theoretical model.

In order to select sample size non-probability convenience-based sampling technique was used. Non-probability sampling method was chosen due to lack of information and access to the research population. Convenience-sampling expedited the data collection process as researcher personally participated in data collection activity and using this sampling technique researcher was able to connect with the available potential respondents.

For data collection purpose the telecommunication sector of the company was chosen. Employees working for telecommunication companies contacted for data collection activity. Researcher's convenience tend towards data collection from the employees working in Braintel, Nexlinx, Worldcall, WCPL, Wateen, MultiNet, Cybernet, Jazz (formerly known as Mobilink & Warid), Telenor, Zong and Ufone. A sample of 316 respondents was collected.

Study Setting

Organizational research can be done in the natural environment where work proceeds normally (i.e., in non-contrived setting) or in artificial, contrived settings. Correlation studies are invariably conducted in non-contrived settings, whereas rigorous causal studies are done in contrived lab setting. This research study is conducted in non-contrived setting as data was to be collected against questionnaire statements, which could be done by the respondents anywhere as personal opinion is not subject to change in contrived environment.

Data Collection

Primary data was collected using a survey questionnaire form, which was presented to the respondents to measure their feedback against research variables. A survey questionnaire was prepared based on research variables where certain statements were present asking the respondents to rate their views on a Likert scale. Questionnaire was also uploaded on Google Docs from where an online link could be generated to share with the potential respondents. Questionnaire were also printed in hard form, which were presented to the employees in different cities such as Lahore, Karachi, Islamabad, Rawalpindi, Multan, Hyderabad, Faisalabad and Peshawar. More than 600 respondents participated in data collection activity.

(i.e. they filled survey questionnaire). However, after screening and selection of completely filled questionnaires 316 completely filled survey forms were identified and further processed for data analysis.

Questionnaire Construct

Survey questionnaire was developed through adopting the construct from previous studies. Adoption of questionnaire construct was done to ensure that there is not reliability and validity issues in data collection instrument. This research study has one independent, one dependent and one moderating variable. All the constructs were adapted from the previous studies.

To measure job insecurity, researcher used Hellgren et al., (1999) scale, which had 6 items (e.g., “I have enough power in this organization to control events that might affect my job”) answered on the Likert scale (1 = Strongly disagree; 5 = Strongly agree).

To measure organizational commitment i.e. affective and continuance, researcher used Zhou & George (2001) scale, which had 16 items (e.g., “I would be very happy to spend the rest of my career with this organization”) answered on the Likert scale (1 = Strongly disagree; 5 = Strongly agree).

To measure psychological capital scale, researcher used Luthans, Youssef & Avolio, (2008) which had 13 items (e.g., “Right now, I see myself as being pretty successful in my work”) answered on the Likert scale (1 = Strongly disagree; 5 = Strongly agree).

Table 2 Questionnaire Construct Adoption

| Research Variable | Construct Adapted from |
|---------------------------|-----------------------------------|
| Job Insecurity | Hellgren et al., (1999) |
| Psychological Capital | Luthans, Youssef & Avolio, (2008) |
| Organizational Commitment | Zhou & George (2001) |

Results and Analysis

Results extracted from the primary data collection are presented here. Primary data was collected using a survey questionnaire (see appendix-A). Data collected was processed using SPSS software and results were extracted using different data analysis techniques. Data analysis was driven by the research aim and objectives mentioned in chapter 1 of this research study. Further, the hypotheses statements were to be tested, which were developed after extensive review of literature in chapter 2 of this research study. The major goal of data analysis was to measure the effects of perceived job insecurity on organizational commitment and also to measure whether the psychology capital as moderator. Process moderation model suggested by Hayes, (2013) is used to measure the interaction effect of psychology capital.

This section has four major parts where the first presents the reliability results, second provides the results from descriptive statistics, third provides results from correlation analysis and the fourth part gives regression results and moderation / interaction outputs explanations using process model suggested by Hayes, (2013). Abbreviations used in interpretations and tables are:

- PJI = Perceived Job Insecurity
- PC = Psychology Capital
- OC = Organizational Commitment
- OC_Aff = Affective Organization Commitment
- OC_Cont = Continuance Organizational Commitment

Reliability Test

Reliability test shows the internal consistency of the research instrument. Reliability test gives Cronbach's alpha value that is considered to be reliable and more consistent if closer to 1 and is considered to be weak and less consistent if close to 0 (Robinson, Shaver & Wrightsman). Table 3 below shows the internal consistency of the research instrument and it can be seen that Cronbach's alpha value of all the research variable is close to 1 hence, data collected using this survey questionnaire can be relied for data analysis.

Table 3 Reliability Test Results

| Variable | Cronbach's Alpha | N. of items |
|----------|------------------|-------------|
| PJI | 0.78 | 18 |
| PC | .925 | 22 |
| OC | .719 | 16 |

Respondents Profile

Final data set used for the analysis was of 316 completely filled questionnaire. The respondent profile is shown in table 4 below, which indicates about four parameters i.e. gender, age, education and work experience tenure.

Table 4: Respondent Profile

| Parameter | | Frequency | Percent |
|--------------------------|-------------------------------|------------|---------|
| Gender | Male | 275 | 87% |
| | Female | 41 | 13% |
| Age | Under 25 years | 42 | 13% |
| | Above 25 Years to 30 Years | 106 | 34% |
| | Above 30 Years to 40 Years | 136 | 43% |
| | Above 40 Years | 32 | 10% |
| Education | Undergraduate | 13 | 4% |
| | Graduate Degree | 154 | 49% |
| | Post Graduate / Master Degree | 144 | 46% |
| | MPhil / PHD Degree | 5 | 2% |
| Work Experience | 1 to 5 Years | 113 | 36% |
| | Above 5 Years to 10 Years | 101 | 32% |
| | Above 10 Years to 15 Years | 71 | 22% |
| | Above 15 Years | 31 | 10% |
| Total Respondents | | 316 | |

Majority of the respondents were male as 87% of the total sample were male and 13% were female. 13% of the respondents were below 25 years age; 34% were aged between 25 years and 30 years whereas; 43% were between 30 to 40 years; only 10% were above 40 years age. Therefore, majority of the employees were young personnel. The education level of majority of the respondents was graduate or masters. 49% of the respondents mentioned that they had a graduation degree; 46% mentioned they had post graduate / Master degree. 4% were undergraduate and only few were MPhil / PHD degree holders. This implies that majority of the respondents were white collar job holders. 36% of the respondents mentioned that their total work experience was 1 to 5 years; 32% mentioned their work experience between 5 to 10 years; 22% mentioned their work experience between 10 to 15 years and 10% mentioned their work experience above 15 years. So the respondents were having range of people with varying professional experience.

Correlation Analysis

Correlation analysis was used to measure the association among research variables. Correlation analysis measured the strength of association among the research variables, which was also the key requirement of research hypotheses. Survey questionnaire carried various construct measuring the study variable hence, data was available against each construct. For correlation analysis it was necessary to combine data against different construct measuring individual research variable in to one column. Therefore, compute variable technique was used in SPSS where the average formula was used to combine different constructs.

Table 5: Correlation Analysis Results

| | | JIS | OC_Aff | OC_Cont |
|-----|---------------------|-----|---------|---------|
| JIS | Pearson Correlation | 1 | -.801** | -.777** |
| | Sig. (2-tailed) | | .000 | .000 |
| | N | 316 | 316 | 316 |

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

A Pearson correlation between JIS & OC_Aff and JIS & OC_Cont was run to determine the relationship between IV and DV. The results in table 4 shows that Pearson's r for the correlation between the JIS & OC_Aff is -0.801 (closer to -1). This implies that there is a strong relationship between two variables. However, the value is negative, which means that as one variable increases in value, the second variable decreases in value, which is called a negative correlation. Sig. (2 tailed) value of 0.001 shows that there is a statistically significant correlation between two variables (see table 5).

Similarly, the results in table 5 shows that Pearson's r for the correlation between the JIS & OC_Cont is -0.272 (closer to 0). This implies that there is a weak relationship between two variables. However, the value is negative, which means that as one variable increases in value, the second variable decreases in value, which is called a negative correlation. Sig. (2 tailed) value of 0.001 shows that there is a statistically significant correlation between two variables.

Regression Analysis

Regression analysis was done to measure the association between the study variables and also the direction of the relationship. However, before going to regression analysis it was important to measure the assumptions of regression in order to find out whether the data is fit for regression analysis.

Assumptions Test

Linearity Test: From the model summary 'R-square' value is greater than 0.02 therefore data is linear and assumption is TRUE (see appendix-B).

Auto-Correlation: Auto-correlation Assumption is TRUE as Durbin Watson Values in Model Summary tables above are between 1.2 and 1.9 (see appendix-B).

Normality Test: From table below it is evident that KMO sig value is greater than 0.05 hence, this assumption is proved to be TRUE (see appendix-B).

Multicollinearity assumption: VIF values for all IVs is less than 10 therefore, multicollinearity assumption is TRUE (see appendix-B).

Heteroskedasticity assumption: Since, all four assumptions i.e. linearity, normality, multicollinearity and Auto-correlation are true therefore, Heteroskedasticity assumption is true.

Relationship between Perceived Job Insecurity and Affective Commitment

The relationship between the independent and dependent variable (i.e. perceived job insecurity and affective commitment in this case, respectively); has been tested using simple linear regression model. The table 6 below shows the model summary, which provides R and R² values. The R value represents the simple correlation and is 0.801 (the "R" Column), which indicates a high degree of correlation. The R² value (the "R Square" column) indicates how much of the total variation in the dependent variable, OC_Aff, can be explained by the independent variable, JIS. In this case, 64% can be explained, which is normal.

Table 6: Regression (JIS & OC_Aff)

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .801 ^a | .642 | .641 | .550 |

a. Predictors: (Constant), JIS

The table 7 below is the ANOVA table, which reports how well the regression equation fits the data (i.e., predicts the dependent variable). This table indicates that the regression model predicts the dependent variable significantly well as this indicates the statistical significance of the regression model that was run. Here, $p < 0.0005$, which is less than 0.05, and indicates that, overall, the regression model statistically significantly predicts the outcome variable (i.e., it is a good fit for the data).

Table 7: ANOVA (JIS & OC_Aff)

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|---------|-------------------|
| 1 | Regression | 170.478 | 1 | 170.478 | 563.778 | .000 ^b |
| | Residual | 94.949 | 314 | .302 | | |
| | Total | 265.427 | 315 | | | |

a. Dependent Variable: OC_Aff

b. Predictors: (Constant), JIS

The Coefficients table provides us with the necessary information to predict affective commitment from job insecurity, as well as determine whether affective commitment contributes statistically significantly to the model (by looking at the "Sig." column). Furthermore, we can use the values in the "B" column under the "Unstandardized Coefficients" column. Data from table 8 below implies that with every 1 unit change in Job Insecurity there is a negative impact of -.818 unit on affective commitment. Therefore, there is a negative impact of job insecurity on affective commitment.

Table 8: Coefficients (JIS & OC_Aff)

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|---------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 5.427 | .080 | | 67.795 | .000 |
| | JIS | -.818 | .034 | -.801 | -23.744 | .000 |

a. Dependent Variable: OC_Aff

The linear regression equation for job insecurity and affective commitment based on the results in above discussion is: $Affective\ Commitment = 5.427 + (-0.818)(Job\ Insecurity)$

Relationship between Perceived Job Insecurity and Continuance Commitment

The relationship between the independent and dependent variable (i.e. perceived job insecurity and affective commitment in this case, respectively); has been tested using simple linear regression model. The regression results shows that R value is 0.777 (table 9); the R² value is 60% (table 9); the $p < 0.0005$, which is less than 0.05 (table 10), and indicates that, overall, the regression model statistically significantly predicts the outcome variable (i.e., it is a good fit for the data). Data from table 11 below implies that with every 1 unit change in Job insecurity there is a negative impact of - 0.809 unit on continuance commitment. Therefore, there is a negative impact of job insecurity on continuance commitment.

Table 9: Regression (JIS & Cont_OC)

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .777 ^a | .604 | .603 | .590 |

a. Predictors: (Constant), JIS

Table 10: ANOVA (JIS & Cont_OC)

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|---------|-------------------|
| | Regression | 166.770 | 1 | 166.770 | 478.587 | .000 ^b |
| 1 | Residual | 109.417 | 314 | .348 | | |
| | Total | 276.187 | 315 | | | |

a. Dependent Variable: OC_Cont

b. Predictors: (Constant), JIS

Table 11: Coefficients (JIS & Cont_OC)

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|---------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 5.357 | .086 | | 62.342 | .000 |
| | JIS | -.809 | .037 | -.777 | -21.877 | .000 |

a. Dependent Variable: OC_Cont

The linear regression equation for job insecurity and continuance commitment based on the results in above discussion is: $Continuance\ Commitment = 5.357 + (-0.809)(Job\ Insecurity)$

Moderation Test – Hayes (2001)

Moderation test was run using process model 1 of Hayes (2001) methodology. After running the moderation process in SPSS the result extracted showed that there is some form of moderation in this relationship. The model summary shows that R-square is 0.4550 showing that IV and moderator predicts the outcome variable by 45%. Relationship between interaction term and dependent variable (organization commitment) is significant since, p value < 0.05 . Further, Zero does not lie between confidence intervals (as LLCI is 0.205 and ULCI is 0.2330) showing that moderation (interaction) effect is significant.

```

Run MATRIX procedure:
***** PROCESS Procedure for SPSS Release 2.16.3 *****
                Written by Andrew F. Hayes, Ph.D.      www.afhayes.com
*****
Model = 1
Y = OC
X = JIS
M = PC

Sample size
    316

*****
Outcome: OC

Model Summary
-----
      R      R-sq      MSE      F      df1      df2      p
-----
    .6746    .4550    .2655    63.9939    3.0000    312.0000    .0000

Model
-----
      coeff      se      t      p      LLCI      ULCI
-----
constant    3.4945    .0323    108.3026    .0000    3.4310    3.5580
PC           .2122    .0507     4.1827    .0000    .1124    .3121
JIS          -.0966    .0456    -2.1194    .0348    -.1863    -.0069
int_1        .1267    .0540     2.3472    .0195    .0205    .2330

Product terms key:
int_1  JIS      X      PC

R-square increase due to interaction(s):
-----
      R2-chng      F      df1      df2      p
-----
int_1      .0155    5.5091    1.0000    312.0000    .0195

*****
Conditional effect of X on Y at values of the moderator(s):
-----
      PC      Effect      se      t      p      LLCI      ULCI
-----
    .6636    -.1807    .0580    -3.1150    .0020    -.2948    -.0666
    .0000    -.0966    .0456    -2.1194    .0348    -.1863    -.0069
    .6636    -.0125    .0579    -.2153    .8297    -.1265    .1015

Values for quantitative moderators are the mean and plus/minus one SD from mean.
Values for dichotomous moderators are the two values of the moderator.
*****
    
```

In order to measure the condition under which the moderation effect is significant the Conditional effect of X on Y at values of the moderator(s) table is used. At mean level effect of interaction is significant since, zero does not lies between the confidence interval (LLCI is -0.1863 to UCLI is -0.0069). At mean level of psychology capital impact is significant. At low level effect of interaction is significant since, zero does not lies between the confidence interval (LLCI is -0.2948 to UCLI is -0.666). At low level of psychology capital impact is significant. At high level effect of interaction is NOT significant since, zero lies between the confidence interval (LLCI is -0.1265 to UCLI is 0.1015). At high level of psychology capital impact is not significant.

At high level of psychology capital the organizational commitment remains unchanged with the movement of job insecurity. At moderate level of psychology capital the organizational commitment decreases as job insecurity increases and vice versa. At low level of psychology capital the organizational commitment increases as the job insecurity decreases or at low level and vice versa (see fig 3).

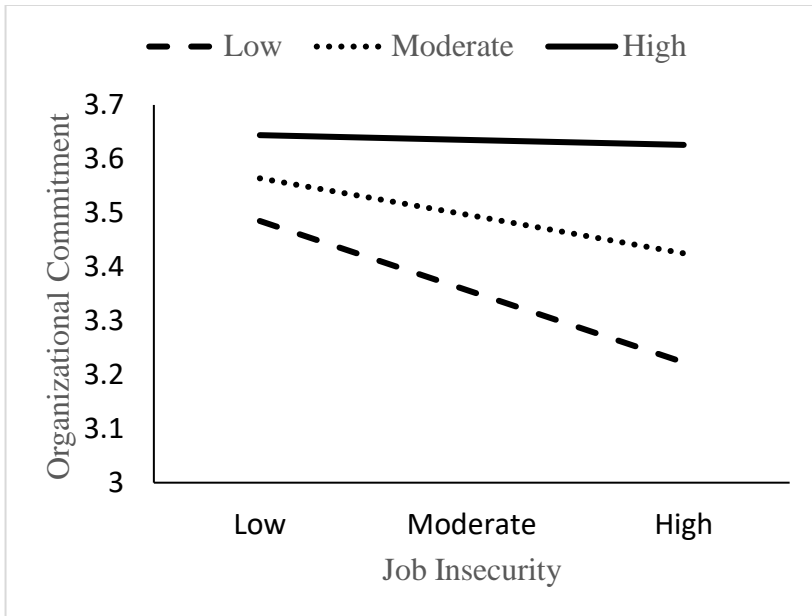


Figure 1: Impact of JIS on OC under effect of PC (Plot)

Hypotheses Testing

| Hypotheses Statement | Result |
|--|--|
| H1: Perceived job insecurity has a negative effect on employee’s affective commitment to the organization | <ul style="list-style-type: none"> • Pearson Correlation = - 0.801 (sig. < 0.05) • Regression Beta Value = - 0.818 (sig. <0.05) <p>Result: Accepted</p> |
| H2: Perceived job insecurity has a negative effect on employee’s continuance commitment to the organization | <ul style="list-style-type: none"> • Pearson Correlation = - 0.777 (sig. < 0.05) • Regression Beta Value = - 0.809 (sig. <0.05) <p>Result: Accepted</p> |
| H3: The relationship of job insecurity and organization commitment is moderated by psychology capital. | <p><i>Hayes Process Model Test:</i> P value < 0.05 Interaction effect present at low and mean level</p> <p>Result: Accepted</p> |

Conclusion and Recommendations

Discussion on Achievement of Research Objectives

Research objectives were defined at the start of the research study and primary and secondary research was conducted to achieve those research objectives based on the research

methodology selected and explained in chapter 3. All three research objectives were achieved and discussed below:

Research Objective 1: To critically analyze the job insecurity, psychology capital and establish their effects on organizational commitment

As noted earlier, research has consistently linked job insecurity to a variety of adverse negative work-related attitudes, behaviors, and employee health (Cheng & Chan, 2008; Sverke et al, 2002). This study was aimed to evaluate its impact on organizational commitment in telecommunication sector of Pakistan. The results were extracted using correlation and regression analysis. The first link was established between job insecurity and affective commitment, which significant as p value was less than 0.05 and also the correlation was significant (2-tailed). However, the association was found to be negative as one variable increase would decrease the other variable. The second link established was between job insecurity and continuous commitment which was also significant at 2-tailed as the p value was less than 0.05. Again, the negative association indicated that increase in one variable would decrease in other variable. Linear regression results found negative impact of job insecurity on both affective and continuance commitment. Thus low level of job insecurity would result in higher level of affective and continuous organizational commitment. These results corresponds with the findings of Meyer and Allen (1991) who also noted that job insecurity negatively influence organizational commitment.

Research Objective 2: To help the organizations in overcoming effects of job insecurity to improve the organizational commitment.

The results from correlation and regression model indicated that job insecurity has negative impact on organizational commitment. The organisations must be focused on reducing the negative impacts on organizational commitment and that would enhance the overall productivity of the organization. Reduction of job insecurity can be done in numerous ways and there are different suggestions given by the researchers in the literature. Review of literature gives an indication that job insecurity can be vanished by effective communication from the management on the on-going change management process in the organization. Lack of communication on part of the management increases doubts among the employees and therefore, increases the job insecurity leading to the reduction in organizational commitment. Regression results showed that job insecurity has almost similar negative impact on affective and continuance organizational commitment therefore, it is important to control the job insecurity. Using psychological capital to control negative impact of job insecurity can be a useful technique as results in this study endorse this fact. Giving feedback to the employees on their work is also a factor that could reduce the negative doubts related to job security among the employees. Not giving feedback would increase the doubts and would also increases the chance of grievance during evaluation process.

Research Objective 3: To examine the role of psychology capital on the relationship of job insecurity and organizational commitment to suggest measures to improve the organizational commitment.

Psychology capital was tested as moderator and the results were extracted using process model by Hayes, (2001). The results showed the interaction term is significant and there exists moderation of psychological capital on the relationship of job insecurity and organizational commitment. Job insecurity explained the outcome variable, i.e. organizational performance up to 45% after the addition of moderating variable. This implies that psychological capital increases the R-square value of the regression model and has influence on the overall regression model. Moderation results showed that at mean and low level of psychological capital, the impact is significant whereas, at high level of psychological capital the

moderation is not significant. The results established a fact that as job insecurity increases the organizational commitment goes down, at low and moderate level of psychological capital. Whereas, at high level of psychological capital the job insecurity does not affect organizational performance. These results lead to the explanation of some suggestions that can be useful for the organizations in telecommunication sector of Pakistan to cater the insecurity negative impacts on organizational performance. The suggestions for the companies to use psychological capital effectively and to increase organizational performance is elaborated under managerial implications section.

Managerial Implications

Feeling of job insecurity usually occurs when organizations (e.g. hospitals) decide to implement retrenchment strategies. Retrenchment strategies include downsizing in order to decrease costs and restructuring to develop operating efficiency (e.g. Lombardi et al., 2007). Job insecurity feeling may be related to burnout due to the survivor syndrome among those employees (e.g. Appelbaum et al., 1997), who stay after organizational downsizing. Survivors may worry about how long they will be able to continue their jobs (Appelbaum et al., 1997). Employees, who are confident, optimistic, hopeful, and resilient, may have been less affected from survivor syndrome, which in turn such employees may show less organizational commitment. In other words, psychological capital can be an effective tool for management in order to implement retrenchment strategies in telecommunication companies. Therefore, effective human resources management strategies may prevent some negative effects of downsizing and restructuring through recruitment of employees with high psychological capital or investing to develop current employees' psychological capital.

High level of psychological capital can result in to high level of organizational performance and job satisfaction. Through the results in this study the psychological capital at low and moderate level is somewhat reducing the negative impact of job insecurity. This implies that investing in human capital not only enhances competitive advantage of the organization, but also increases the benefit towards organizational commitment. Developing hope among the employees is very important in order to increase psychological capital and this can be done by effective communication of goals and targets of every individual in the organization. Further, celebrating the small milestones also encourages team as a whole, which also keep the team focused towards the desired objective.

Research Limitations

It is important to understand the limitations of the research study since, there are always rooms for improvement and further knowledge development. Research limitations are those characteristics or features of the research methodology or techniques that can impact or influence the generalizability of the research findings. Following are the limitations for this research study.

- First limitation is the sampling technique which was used for selecting the respondents. Convenience-based sampling has certain limitations as it can lead to biases (Kutner et al, 2004). Convenience sampling can lead to under-representation of over-representation of particular group within the sample. Since, the sample frame is unknown and sample chosen is not random therefore, generalizability of the research results is difficult.
- The second limitation is of sample spread among the employees working in Pakistan. Due to limitation of resources and time constraints data collection was done in certain selected offices located in five major cities of Pakistan. This limitation reduces the generalizability of the research results on entire population.

- Third limitation is that this study only focuses on one particular sector. The results from this study can be tested in other sectors as well.
- The fourth limitation is that the researcher uses SPSS, which lacks in the analysis such as confirmative factor analysis (CFA). Other tools supporting more in-depth statistical analysis could be used.

Future Research Recommendations

This research study findings suggests that psychologic capital is a moderator of the relationship between job insecurity and organization performance, future research should implement an intervention to determine whether such training might assist employees and their organizations with coping with the increasingly pervasive workplace stressor of job insecurity while maintaining high levels of workplace performance.

Future research should also be conducted to test the boundary conditions of the current results. For example, although the current study indicates a direct relationship between insecurity and affective and continuance organizational performance, it would be useful to generalize this to other important measures of performance, namely workplace safety behaviour and subsequent injuries and accidents.

While a strength of the current study was its utilization of longitudinal data to explore our primary hypotheses, all of our measures of performance were nonetheless self-report in nature. Thus, it would be helpful to complement the current findings with objective measures of performance that could be obtained from supervisors or archival organizational records (e.g., injury data).

Finally, although our results suggest the promise of psychology capital as a valuable employee resource, future research should consider other developable positive psychological resources that might also attenuate the negative effects of job insecurity. These might include constructs such as grit (Duckworth and Quinn, 2009), gratitude (Emmons and McCullough, 2003), or hardiness (Parkes, 1994; Parkes and Rendell, 1988).

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Sound of Silence

Muhammad Hammad Mohsin, Sania Zahra Malik
Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24123

Knowledge sharing is the main source of competitive edge for the organizations in this versatile environment. Everyone wants respect while doing job in the organization. Supervisor undermine behavior creates problems for employees in work setting. Researcher are going to check the relationship between supervisor undermining and knowledge hiding behavior of the employees. Researcher also investigates the defensive employee silence as a mediator between supervisors undermine and knowledge hiding. In this current study, researcher also investigates the moderating effect of workplace friendship among defensive silence and knowledge hiding. Researcher conducts this study in pharmaceutical sector where data is collected via adopted instruments of the variables. Deductive approach is used for testing the theory. 360 questionnaires are distributed and response rate is 72%. SPSS and AMOS are used for analyze the data. Results shows that defensive silence play the role of partial mediation between supervisor undermining and knowledge hiding dimensions. Workplace friendship plays the role of moderation among defensive silence and knowledge hiding.

Keywords: Supervisor undermine, knowledge hiding, defensive employee silence, workplace friendship, pharmaceutical

Ebullient Supervision and Employee Behaviors: Mediating Role of Playful Work Design

Fatima Ashraf

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24128

This paper aims to analyze the impact of ebullient supervision on Employee commitment, and turnover intention through playful work design as an intervening variable in the banking sector of Pakistan. Purposive sampling approach will be employed for this research. To determine the sample size from our unknown population, item-to-response method will be opted; ($42 \times 10 = 420$). 420 employees will be treated as single respondents for unit of analysis in the sample. The data will be collected using a structured questionnaire, in a cross-sectional setting. To analyze the collected data, SPSS (Statistical Package for the Social Sciences) software tool will be employed. Ebullient supervision is still an uncharted territory, therefore, this research will provide fresh perspective on promoting a fun work environment in the banking sector of Pakistan. This will provide valuable insights for researchers, students and practitioners alike, in both academic and industrial realms.

Keywords: Ebullient supervision, playful work design, employee commitment, turnover intention

Ethical Leadership and Employee Voice: Exploring Mediating Pathways through Psychological Safety and Work Meaningfulness

Asra Jabbar

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24130

Objective

This study aims to investigate the relationship between ethical leadership and voice behavior exhibited by nurses in healthcare settings, with a focus on exploring the mediating roles of meaningful work and psychological safety.

Method

Data was collected through a survey questionnaire from 322 nurses working in the healthcare sector using a convenience sampling technique.

Results

The results indicate a significant positive association between ethical leadership and nurses' voice behavior. Furthermore, meaningful work was found to mediate this relationship, suggesting that a sense of purpose and fulfillment in one's job enhances the likelihood of expressing voice. However, the mediating role of psychological safety did not attain statistical significance.

Implications

These findings highlight the critical role of ethical leadership in fostering open communication and expression where nurses feel empowered to voice their opinions, improving teamwork and patient care. Emphasizing meaningful work enhances nurses' engagement, bolstering retention rates. Moreover, Investing in a leadership development program strengthens ethical decision-making and communication skills among healthcare leaders, promoting a supportive environment.

Keywords: Ethical leadership, meaningful work, psychological safety, employee voice behavior

Fostering Employee Retention and Organizational Commitment through Work-Life
Balance: The Mediating Role of Job Satisfaction

Fajar Shahbaz Khan

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24133

HR managers struggle with high employee turnover and low commitment. This research will investigate how work-life balance influences these outcomes specifically this study will examine whether job satisfaction mediate the said relationships. The study will use Organizational support theory (OST) to justify the model. In this quantitative study, a sample of 250 individuals will be selected based on the item-to-response ratio. Specifically, the study will collect data from employees within organizations on a convenience basis. Statistical software like SPSS will be used to analyze the data and assess the hypothesized relationships. This research aims to provide valuable insights for HR managers by highlighting the importance of work-life balance in building a dedicated and stable workforce. The findings will inform the development of strategies to promote work-life well-being and cultivate a more positive work environment, leading to increased employee retention and organizational commitment.

Keywords: Work-life balance, job satisfaction, organizational commitment, employee retention

Promoting Innovative Behavior: Unveiling the Nexus of Servant Leadership, Perceived Organizational Support, and Change Readiness

Sara Khan, Muhammad Ali

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24150

This study aims to investigate the relationship between servant leadership, perceived organizational support (POS), readiness for organizational change (ROCS), and innovative behavior within organizational contexts. Specifically, it explores how servant leadership influences innovative behavior through the mediation of POS, while also considering the moderating effect of readiness for organizational change. The study employed a purposive random sampling method to select a representative sample of 490 employees currently pursuing their careers in various private and public organizations. The collected data of this survey was analysed through structural equation model (SEM). The findings of this study are anticipated to reveal the significant influence of servant leadership on fostering innovative behavior among employees, with POS serving as a mediating mechanism. Furthermore, the study will elucidate the moderating role of change readiness in strengthening or weakening the relationship between servant leadership, POS, and innovative behavior, providing valuable insights for organizational leaders and managers. The results of this research hold practical implications for organizational leaders and managers seeking to promote a culture of innovation within their organizations. By fostering servant leadership behaviors and enhancing perceived organizational support, organizations can cultivate an environment conducive to innovation. However, the study's scope is limited to the perceptions of employees within the sampled organizations, and its findings may vary across different industries and organizational contexts. This study contributes to the existing literature by offering empirical evidence on the nexus of servant leadership, POS, change readiness, and innovative behavior within organizational settings. Moreover, it extends scholarly understanding by examining the moderating role of change readiness, providing new insights into the mechanisms driving innovative behavior in organizations.

Keywords: Servant leadership, perceived organizational support, POS, readiness for organizational change, ROCS, innovative behavior

Incivility's Toll on Job Performance: Exploring the Roles of Counterproductive Work Behavior and Islamic Work Ethics

Maryam Hassan, Talat Islam

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Article ID 24203

Abstract

This study contributes to the existing literature on employees' negative behaviors at work by analyzing the adverse impact of workplace incivility on employee job performance. Particularly, we explore the explanatory role of counterproductive work behavior (CWB) in the association between workplace incivility and employee job performance. Additionally, we explore whether Islamic work ethics (IWE) can reduce the damaging effects of workplace incivility on CWB. For this purpose, a survey was conducted on 383 employees working in various service sectors located in Lahore, Pakistan. The survey was carried out through a self-administered questionnaire to collect data. To test the hypotheses, the collected data were analyzed using analysis of moment structure (AMOS) with structural equation modeling (SEM), which is the most appropriate approach to analyzing complex models. According to the results, there exists a direct relationship between workplace incivility and counterproductive work behavior (CWB); whereas, workplace incivility has an adverse impact on employee job performance. However, IWE was not identified as a crucial element to mitigate workplace incivility – CWB association. These findings suggest management can create a more constructive and positive work environment which may boost employee productivity and overall job satisfaction. Findings show that negative behaviors influence employee performance and divert their intentions toward CWB. These findings can assist authorities in taking certain steps and using interventions to suppress or manage these undesirable behaviors in the workplace in order to improve employee performance.

Keywords: Workplace incivility, counterproductive work behavior, employee job performance, Islamic work ethics, and COR theory

Introduction

Negative behaviors employed at the workplace have piqued the interest of management and organizational behavior scholars (Rosen et al., 2021). Usually, in recent studies, most academics have examined high-intensity hostile behaviors occurring in workspaces such as workplace bullying, workplace mistreatment, workplace deviant behavior, violence and aggression, abusive supervision, social undermining, and emotional abuse (Balducci et al., 2021; Ahmad et al., 2023); subsequently, studies began to highlight the most common deviant/anti-social behaviors occurring in work settings. Workplace incivility is one form of these deviant behaviors (e.g., making demeaning statements, articulating insults, breaking the laws) that cause concern for researchers as reports indicate that this phenomenon is widespread among workers (Taheri et al., 2023). Specifically, statistics show that 77% of employees experience uncivil behavior during their working hours (including 71% court employees, 75% university employees, 79% law enforcement employees, and 85% nurses) (Rahim & Cosby, 2016). Employees that engage in such uncivil behavior have negative effects on both workers and organizations (Jorgensen et al., 2024). At the individual level, it causes anxiety, stress, emotional exhaustion, deviant work behavior, and impolite workplace attitudes (Faheem et al., 2023). These factors ultimately influence the organization's effectiveness by reducing employees' job performance, creative performance, and citizenship performance (Kuo et al., 2024). Considering the negative consequences of workplace incivility on employees and organizations, the study specifically focused on examining the

negative influence of workplace incivility on employee job performance. Job performance is defined as an organization member's behavior and performance to fulfill the organization's expectations, regulations, or formal roles (Wang & Chen, 2020). As a result of workplace incivility, the employee lost his/her coworker's support in completing their job-related tasks that influence the employee's job performance (Faheem et al., 2023)

Our study further expands on previous literature by incorporating employee counterproductive work behavior (CWB) as an explanatory variable in the link between workplace incivility and employee job performance. CWB referred to as workplace deviance, reflects voluntary behavior that breaches important organizational rules and endangers the well-being of an organization, its members, or both (Sawhney & McCord, 2023). Most previous studies suggested that CWB is an outcome of interpersonal conflict (Zahid & Nauman, 2023) that is caused by workplace incivility and experience of incivility correlates with a perception of unfairness (Sawhney & McCord, 2023), which leads to persons intentions towards deviant behavior (Han et al., 2021). Furthermore, CWB has many consequences (e.g., screamers, team destroyers, and unsociable work) which increases tension, stress, and job dissatisfaction among employees and affects the overall performance of individuals (Abdullah et al., 2021).

Furthermore, studies have highlighted Islamic work ethics (IWE) importance in the present era because it has become a crucial component owing to their advantages for all generations (Nasution & Rafiki, 2020). The term IWE refers to a system of moral standards and good deeds that provide a clear distinction between good and bad behaviors, and is based on both the Sunnah (the sayings and deeds of the Prophet Muhammad) and the Quran (the sacred book of Muslims) (Chaudhary et al., 2023). IWE are associated with a range of contextual factors, employee attitudes, and behaviors (Nasution & Rafiki, 2020). It has frequently been suggested as a natural motivator for pro-social behavior and a deterrent for antisocial behavior (Javed et al., 2019). Having certain personal qualities can aid an individual in dealing with stressors that may arise in the workplace such as incivility and prevent them from engaging in confrontational behavior (e.g. CWB) towards other employees (Nasution & Rafiki, 2020). As a result, we may argue that IWE serves as a buffer in the relationship between workplace incivility and CWB.

Theoretical framework

The study employed COR theory Hobfoll et al. (2018) to develop the theoretical justification for our arguments about the roles of the mediator (employee counterproductive work behaviors) and the moderator (Islamic works ethics) in the relationship between workplace incivility and job performance. According to this theory, employees' job-related sentiments and behaviors are heavily impacted by their incentive to safeguard their resource reservoirs in the context of resource-depleting work situations (Hobfoll & Shirom, 2000). Resources are things, personality traits, circumstances, or energy useful to a person or serve as a pathway to acquire these valuable resources (Hobfoll, 1989). People possess restricted resources that may be influenced by the surroundings of an organization. The stresses in the work settings drain these resources, thus individuals attempt to avoid them to conserve their resources (Hobfoll, 1989). One essential resource that workers greatly value and aggressively want to defend is their self-esteem or the good image they have of themselves (Hobfoll's, 2000). However, workplace incivility causes resource depletion for employees, which feeds their self-deprecating thoughts about the quality of their daily work and creates a sense that their efforts on behalf of their organization are not valued (Bai et al., 2016). Consequently, employees may not be contributing their efforts in a way that has profitable results for the organization in order to reserve their resources. The propensity of self-pity aids this

conversion (Haq et al., 2023). Therefore, employees' frustration caused by the demeaning behavior of their colleagues translates into poor job performance.

In addition, we argue that the victim loses his mental and emotional resources as a result of unfavorable working conditions such as the uncivil construct of coworkers who make insulting or hurtful statements about him, which is reflected in their behavior provoking task-related activities and confrontation with employees on a personal level. The victim's mental and emotional resources are further depleted as a result, leaving them with less to work with and leading them to act in a deviant manner (Zahid & Nauman, 2023) such as CWB. This can cause them to behave in ways that go against company expectations and ultimately lead to lower job performance. Similarly, personal attributes such as IWE can help individuals restrain their resources that are damaged by employees' dysfunctional behavior, as stated by Hobfoll in 1989. IWE also serves as a resource, protecting individuals from the negative effects of stressors in the workplace and may stop them to engage in CWB.

Theoretical background and hypotheses

Workplace Incivility and employees job performance

The idea of “workplace incivility” was initially proposed by Andersson & Pearson (1999) stated as “low-intensity, disrespectful or rude deviant workplace behavior with ambiguous intent to harm the target and is in violation of workplace norms for mutual respect” (p. 457). Workplace incivility differs from other interpersonal aberrant behaviors (i.e. workplace deviance, violence, and aggressiveness) in terms of intensity and volume of force (Moon & Morais, 2022). It may be exhibited by taking credit for others' efforts, making up rumors about coworkers, keeping the workplace messy, failing to rectify faults, sending harsh emails to coworkers, or failing to praise subordinates (Torkelson et al., 2016). Despite the decreasing intensity, workplace incivility still happens regularly, with 60 to 80% of employees displaying some form of uncivil conduct at work (Tsuno et al., 2017). Existing literature on workplace incivility indicated that it was associated with job withdrawal, psychological distress absenteeism, job dissatisfaction and job burnout (Parray et al., 2025). Resulting in higher levels of stress, turnover intentions, reduced employee creativity, increase levels of anger, fear, and sadness at work and reduce employee well-being (Jorgensen et al., 2024). In addition, individuals who experience uncivil constructs respond in ways that erode organizational norms and damage organizational resources (Rahim & Cosby, 2016). As a result, employees reduced their work efforts, work time duration, and job performance (Porath & Pearson, 2005).

Employee performance is a crucial work factor because an individual's in-role performance contributes significantly to the organization's performance (Jiang et al., 2019). Thus, this study specifically focused on workplace incivility in relation to job performance. Job performance is defined as an organization member's behavior and performance in order to meet the organization's expectations, regulations, or formal tasks (Campbell et al., 1990). Moreover, work performance is used to evaluate and compensate employees, we believe job performance is an outcome variable that is highly impacted by superiors' or coworkers' uncivil behavior in many ways. Firstly, subordinate misbehavior lowered employee morale and self-efficacy which hurts their ability to do jobs (Hur et al., 2022). Secondly, the victims of incivility avoided their superiors and coworkers which prevents important knowledge-sharing processes that are necessary for work accomplishment, which ultimately damages individual and organizational performance (Wang & Chen, 2020). Finally, Incivility-targeted employees give up on concentrating on their performance goals. Instead, they engage in work-avoidance activities, avoiding both the job and their coworkers, they avoid working and put off finishing their tasks by taking unneeded breaks or time off (Saleem et al., 2022).

Consequently, they are more unlikely to function effectively at work which would impede duties from being accomplished and would negatively impact their discretionary performance (Kuo et al., 2024). Further, COR theory (Hobfoll, 1989) is also helpful to justify this argument, employee performance is likely to decline when resources of respect and recognition are in danger of being lost due to workplace incivility or when anticipated returns on these resources' investments are not realized. As a result, the following hypothesis has been proposed:

H1: *Workplace incivility is negatively associated with employee job performance.*

Employees counterproductive work behavior (CWB) as a mediator

Deviation behaviors at work locations has drawn the attention of researchers and is a top issue for businesses because it violates organizational regulations and intimidates the organization and its employee's wellbeing (Jorgensen et al., 2024). Literature indicated these behaviors expressed by using different terms such as aggressive behavior, counterproductive behavior, and anti-social behavior (Zahid & Nauman 2023). This research specifically focused on CWB, which is described as actions taken by workers that are averse to an organization's legitimate interests or are damaging to the company and its members (Sackett, 2002). Additionally, Gruys & Sackett (2003) classified these actions into 11 factors such as stealing, damage to company assets, manipulation of company information, misuse of time and resources, dangerous behavior, tardiness at work, poor work quality, drug use, abusive language, and dangerous physical behavior. These environmental factors may cause negative effect on employee behaviors which may lead them to engage in CWB (kim et al., 2023). Additionally, employee outcomes essentially mirror coworker's behaviors, which results in negative reciprocity like negligent and deviant behavior (Qin et al., 2020). Literature has shown that Workplace incivility is a form of dysfunctional behavior that has harmful consequences for individuals and organizations (Moon & Morais, 2022). Moreover, the uncivil behavior exhibited by colleagues and supervisors may lead the workers to engage in CWB (Sawhney & McCord, 2023).

Further, COR theory is also useful to explain this relation by stating that workers' job-related beliefs in the context of resource-depleting fellow workers' mistreatment reflect their desire to express themselves in ways that help them cope with the challenges presented by this treatment (Hobfoll & Shirom, 2000). In the workplace, when employees received humiliating behaviors from their coworkers their self-esteem resources become drained because they feel personally attacked and threatened (Bai et al., 2016). Thus, in order to replenish lost resources employees, remove themselves from supportive environments and suffering in adverse work behaviors (Sliter et al., 2012) such as CWB. Thus, it is predicted that.

H2: *Workplace incivility has a positive association with CWB*

The idea of individual job performance is dynamic and has many different dimensions including both behavioral and outcome aspects (Meriläinen et al., 2019). The behavioral aspect deals with people's actions at work, such as goal-oriented behavior, while the outcome aspect deals with how individual actions affect the organization's productivity (Sonnentag et al., 2008). Performance can also be divided into task-specific and context-specific. Task performance is predicted by abilities and job description, while contextual performance is discretionary and influenced by motivation and personality. Task performance meets contractual requirements, while contextual performance supports the work environment (Sonnentag et al., 2008). Many Recent studies have shown the adverse effect of different negative workplace behavior on employee job performance (Obicci, 2015). CWB can also influence job performance (Abdullah et al., 2021) and resulting in tension, anxiety, melancholy, stress, and job dissatisfaction which ultimately lowers employees' ability to

perform their jobs (Muafi, 2011). Moreover, COR theory stated that, workplace stress as a response to any work situation that results in either a threat of resource loss, actual resource loss, or failure to acquire resources after investing resources (Hobfoll, 1989). According to Gorgievski and Hobfoll (2010), these resources might also be things, situations, relationships, or energy that individual values and whose potential or actual loss causes them significant stress. Additionally, the COR theory (Hobfoll, 1989) can support the claim that CWB can lead to a decrease in employee performance. Specifically, when employees feel that their resources of respect and recognition are being threatened or when they do not receive the expected returns on their efforts, their performance may suffer. Therefore, the hypothesis has been suggested that.

H3: CWB negatively associated with the employee performance.

Qin et al. (2020) found that employee behavior, whether good or bad, is impacted by the organizational environment and often matches of colleagues and superiors. The positive behavior employed by coworker may force the worker to also complete his task in a good manner but when the employees are mistreated by their coworkers or superiors, they can engage themselves in contrasting activities of organization welfare (Moon & Morais, 2022). Workplace incivility is one of a low intense negative behavior that caused harm to targeted employees (Zahid & Nauman, 2023). As a result, victimized employees will typically respond to such uncivil behavior by retaliating against the perpetrator, express their annoyance on other team members or just brooding in quiet to cope with the distress caused (Porath & Pearson, 2012). So, when the individuals are involved in confronting behavior in response to the workplace incivility, they may engage themselves in CWB (Naeem et al., 2023). In the previous literature, employee who engaged in CWB have two distinct goals: interpersonal and organizational (Sawhney & McCord, 2023). Interpersonal CWB targets coworkers and supervisors with behaviors such as rudeness, gossiping, and cursing. Organizational CWB attacks the organization as a whole with actions like stealing, taking longer breaks than is permitted, or being late (Naeem et al., 2023). A person who faces deviant workplace behavior most possibly suffers from stress and anxiety that lead to a decline his/her performance and productivity (Wang & Chen, 2020). Further, According to Sliter et al. (2012), the COR theory predicts that someone who is involved in CWB would deplete their cognitive, emotional, and physical resources and withdraw their efforts to perform the job (Nauman & Zahid, 2023). Additionally, the concept of momentum is a component of the COR theory, which contends that resource loss is not only more significant than resource gain but also has a longer-lasting and more immediate impact on individuals (Hobfoll et al., 2018). We contend that workplace incivility is a stressor that depletes resources and increases CWB (Nauman et al., 2023). CWB itself is a stressor that amplifies and leads to worse results (Haq, 2011) such as decreased employee performance. Thus, the fourth hypothesis of our study is:

H4: CWB mediates the association between workplace incivility and workplace deviance.

Islamic work ethics as moderator

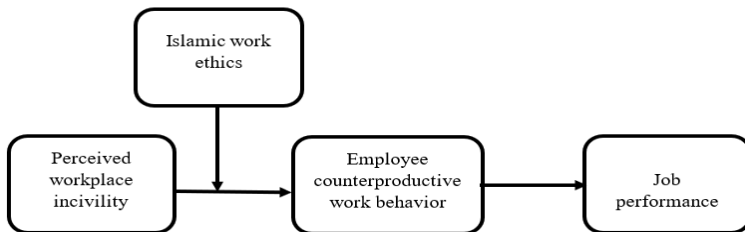
Ethics is a term that was generated from the Greek word *ethos* which denotes traits and standards that emphasize both good and evil qualities (Chaudhary et al., 2023) and was initially drawn from the holy Quran and the holy prophet's sayings (Salin, 2020). IWE means engaging in good deeds with the purpose of gaining Allah's blessings, helping others, and improving oneself (Ibrahim, 2017). Islam's teachings give clear recommendations on the value of labor, workplace behavior, and work performance deeds (Kizilkaya & Azid, 2017) and It expressly prohibits dishonesty, greed, and unethical behavior on the job and in business (Chaudhary et al., 2023). The holy Prophet Mohamed (SAW) instructed "Work is a worship" He also emphasized that a job with perfection is a religious responsibility, by declaring

“Verily, God loves if any of you does a job, he does it with perfection” cited from (Zia et al., 2022). Furthermore, he stated on integrity and honesty at work that “the truthful, honest merchant is with the prophets and the truthful ones and the martyrs” (Sunan al-Tirmidhi, [Hadith, 1209]) it is stated in Quran “O you who have believed, be persistently standing firm for Allah, witnesses in justice, and do not let the hatred of others to you make you swerve to wrong and depart from justice. Be just; that is nearer to righteousness. And fear Allah; indeed, Allah is acquainted with what you do” (Quran, 5:8). Therefore, a person who followed the IWE may not respond to the workplace stressors (e.g., workplace incivility) and perform his duty as his religious obligation (Islam et al., 2021). In addition, an employee who adheres to IWE can protect themselves from the negative cues produced by their superiors and coworkers’ haughty attitude (Islam et al., 2021).and not involve in the CWB.

The IWE emphasizes that people should learn how to deal with difficult circumstances and discourage bad behavior (Javed et al., 2019). The existing literature argued that negative behavior in the workplace causes deviant behavior that is lessened by demonstrating IWE (Islam et al., 2021a). Accordingly, it is asserted that IWE can mitigate the positive relationship between workplace incivility and employee CWB. Further, COR theory stated that the personal trait factors, i.e. IWE can assist individuals to increase the availability of resources (Hobfoll, 1989). IWE as a resource protects an individual from the negative effects of organizational stressors (Islam et al., 2021). Therefore, it is predicted: This argument leads to our fifth hypothesis:

H5: *IWE moderates the relationship between workplace incivility and employee CWB.*

Figure 1: Theoretical model



Methods

Participants and Procedure

We conducted a survey using a questionnaire to gather data from employees working in various service industries in the city of Lahore, Pakistan. Service sector employees were chosen for this study as they often face stressful work conditions and have to deal with demanding customers and high workloads. These factors increase the likelihood of interpersonal conflicts, deviant behavior (i.e., CWB) and workplace incivility (Jorgensen et al., 2024). In order to test our study-formulated hypothesis, we collected data from 400 employees and only 383 were used for hypotheses testing. The study sample size was based on item-to-response theory with criteria of twenty responses for each questionnaire item ($20 \times 20 = 400$). For data collection, we visited the service sectors, after obtaining authorization from the managers, distributed questionnaires, explained to them the purpose of our study,

and provided assurances regarding the confidentiality of their necessary information. The questionnaire outlined the study's importance, demographics, and questions regarding workplace incivility, counterproductive behavior, employee job performance, and Islamic work ethics. To collect data, we used a convenient sampling technique. The lack of a worker list on official websites and reliable sources necessitates the use of non-probability sampling techniques, which are most suitable for time and cost savings. Moreover, previous literature suggests that convenience sampling technique findings are valid for generalization and accurately represent the population from which the sample was taken. (Etikan et al., 2016).

In term of demographical characteristics (Table 1), the majority of respondents were male (59.7%), aged 26-35 (58.3%), with master's degrees (46.5%), 1 to 3 years of work experience (33.9%), and earning 40,000-60000 per month (40.1%), which aligns with the International Labor Organization's data showing 77.72% of Pakistan's workforce is men aged 15-60 (60.83%) (The World Bank, 2022).

Measures

Unless otherwise noted, the questionnaire items were rated on a five-point Likert scale with options possibilities ranging from 1 (strongly disagree) to 5 (strongly agree). Employee *CWB* was measured by utilizing five items scale of Viswesvaran et al. (1998) with sample item "I intend to take longer than necessary to prepare order", and Cronbach's alpha of 0.91. The assessment of *uncivil behavior* in the workplace by colleagues and superiors was determined using seven items scale of Cortina et al. (2001). The sample item used in the study was "My superiors or coworkers put me down or were condescending to me", and reliability was 0.88. For employee's *job performance*, the study adopted the four-item scale of Dizgah et al. (2012) with sample item, "I meet all the formal performance requirements of the job." The Cronbach alpha of the scale was 0.91. *Islamic work ethics (IWE)* was assessed using Ali's (1992) four-item short scale and noted its Cronbach's Alpha as 0.95. A sample item was "Dedication to work is a virtue."

Table 1: Demographic profile of respondent

| | Category | Frequency | Percentage |
|---------------|--------------|-----------|------------|
| Gender | Male | 222 | 59.7 |
| | Female | 150 | 40.3 |
| Age | ≤ 25 | 32 | 8.6 |
| | 26-35 | 217 | 58.3 |
| | 36-45 | 115 | 30.9 |
| | > 45 | 8 | 2.2 |
| Qualification | Intermediate | 8 | 2.2 |
| | Bachelor | 107 | 28.8 |
| | Masters | 173 | 46.5 |
| | Post masters | 83 | 22.3 |
| | Diploma | 1 | 3 |
| Salary | ≤ 25000 | 10 | 2.7 |
| | 26000-40000 | 66 | 17.7 |
| | 40000-60000 | 149 | 40.1 |
| | 61000-80000 | 95 | 25.5 |
| | 81000-100000 | 43 | 11.6 |
| | > 100000 | 9 | 2.4 |
| Experience | < 1 year | 23 | 6.2 |
| | 1-3 years | 126 | 33.9 |
| | 4-6 years | 121 | 32.5 |
| | 7-10 years | 62 | 16.7 |
| | > 10 years | 40 | 10.8 |

Results

Preliminary analysis

The aforementioned hypotheses were assessed by applying structural equation modelling (SEM); however, there are a few conditions that must be met before utilizing SEM-AMOS including missing values, outliers, data normality and collinearity diagnostics (Hair et al., 2010). Thus, the data were processed for final analysis by treating 5 missing values (using the time-series mean approach) and detecting and removing 12 outliers using the Mahalanobis distance test ($p < 0.00$) (Kline, 2016). Furthermore, the values of Kurtosis (± 3) and Skewness (± 10) were found to be between the boundaries of a Model, indicating that the data were normally distributed (Byrne, 2010) and there is no issue of multicollinearity as all the values of correlation is less than 0.85. Finally, the data analyze a single factor variance test to measure common method bias which is 40.30 % less than 50% as per Harman's Single Factor criteria.

Confirmatory factor analysis (CFA)

CFA was used in the study to determine the consistency of operationalized variables (Byrne, 2010). The model fitness was assessed through values of "Chi-Square (χ^2 /df) ≤ 3.0 , comparative fit index (CFI) ≥ 0.90 , good fit index ≥ 90 , tucker-lewis index (TLI) ≥ 0.90 , standardized root mean residual (SRMR) ≤ 0.10 , and root mean square error of approximation (RMSEA) ≤ 0.08 indices", with ($\gamma \geq 0.50$) as the factor loading criteria (Hair et al., 2018). The data showed good fit: i.e., χ^2 /df [488.718/164] = 2.21, GFI= 0.91, TLI = 0.97, CFI = 0.97, RMR = 0.03 and RMSEA = 0.06. All of the items factor loadings (which ranged between 0.77 and 0.94) were above the standard criteria of 0.50.

Reliability and validity

The study used Cronbach's alpha ($\alpha \geq 0.70$) and composite reliability (CR ≥ 0.70) values to investigate internal consistency of the scale (composite validity). The composite reliability ratings (ranges between 0.88 and 0.91) and Cronbach's alpha values (ranges between 0.88 and 0.98) were much higher than the accepted threshold. Additionally, the AVE values (which vary from 0.65 to 0.85) (Table 2) used to test the scales' convergent validity were all of the values found to be well around 0.50 (Bagozzi & Yi, 1988). For discriminant Validity, the study adhered to Hair et al. (2018) and noted that the constructs' correlational values were lower than the square root of the AVE, and that the maximum shared variance (MSV) values were lower than the AVE values (Table 2).

Table 2: Confirmatory factor analysis

| Variables | loading | AVE | CR | MSV | α |
|--|---------|------|------|------|----------|
| Workplace incivility | | | | | |
| My superiors or coworkers put me down or were condescending to me. | 0.88 | | | | |
| My superiors or coworkers paid little attention to my statement or showed little interest in my opinion. | 0.90 | | | | |
| My superiors or coworkers made demeaning or derogatory remarks about me. | 0.93 | | | | |
| My superiors or coworkers addressed me in unprofessional terms, either publicly or privately. | 0.93 | | | | |
| My superiors or coworkers ignored or excluded me from professional camaraderie. | 0.93 | | | | |
| My superiors or coworkers doubted my judgment on a matter over which I have responsibility. | 0.93 | | | | |
| My superiors or coworkers made unwanted attempts to draw me into a discussion of personal matters. | 0.94 | 0.85 | 0.98 | 0.33 | 0.88 |
| Counterproductive work behavior | | | | | |
| I intent to take longer than necessary to prepare order. | 0.77 | | | | |
| I intent to disclose important information. | 0.82 | | | | |
| I intent to falsify time/quality/quantity to report. | 0.78 | | | | |
| I intent to take extra personal time. | 0.87 | | | | |
| I intent to Call in sick to take a day off | 0.84 | 0.67 | 0.91 | 0.32 | 0.91 |
| Employee performance | | | | | |
| I always complete the duties specified in my job description. | 0.95 | | | | |
| I meet all the formal performance requirements of the job. | 0.92 | | | | |
| I never neglect aspects of the job that I am obligated to perform. | 0.89 | | | | |
| I fulfill all responsibilities required by my job. | 0.92 | 0.85 | 0.96 | 0.42 | 0.96 |
| Islamic work ethics | | | | | |
| Human relations in an organization should be emphasized and encouraged. | 0.80 | | | | |
| Dedication to work is a virtue. | 0.90 | | | | |
| Work is a source of happiness and accomplishment. | 0.79 | | | | |
| Justice and generosity in the workplace are necessary conditions for society's welfare. | 0.74 | 0.65 | 0.88 | 0.14 | 0.88 |
| Notes: α = Cronbach's alpha, CR = composite reliability, AVE = average variance extracted, MSV=maximum shared variance | | | | | |

Descripted and correlations

The results demonstrate that (Table 3) respondents were neutral about the workplace incivility ($M = 3.16$) and CWB ($M = 2.78$) occurring in their work spaces and agreed on displaying job performance ($M = 3.92$) and IWE ($M = 4.61$). Workplace incivility is further shown to positively link with CWB ($r = 0.56, P = 0.00$), yet it adversely correlated with employee performance ($r = -0.26, P = 0.00$) and insignificantly with IWE ($r = -0.05, P = 0.13$). Moreover, it was discovered that CWB inversely correlated with employee performance ($r = -0.48, P = 0.00$) and IWE ($r = -0.12, P = 0.00$).

Table 3: Descripted and correlations

| Variables | Mean | SD | 1 | 2 | 3 | 4 |
|-------------------------|------|------|---------|---------|--------|---|
| 1. Workplace incivility | 3.16 | 1.14 | 1 | | | |
| 2. CWB | 2.78 | 1.03 | 0.56** | 1 | | |
| 3. Job performance | 3.92 | 1.04 | -0.26** | -0.48** | 1 | |
| 4. IWE | 4.16 | 0.66 | -0.05 | -0.12** | 0.38** | 1 |

Note: ** $p < 0.01$

Hypotheses testing

The study tested hypotheses by examining structural models at 5,000 bootstraps with 95% confidence (Hair et al., 2018). The results show that (Table 4) workplace incivility has a significant positive impact on CWB ($\beta = 0.91, P = 0.01$) and has negative but not significantly influence the employee job performance ($\beta = -0.02, P = 0.72$). Similarly, the CWB is negatively associated with employee performance ($\beta = -0.43, P = 0.06$). The results have supported the H2 and H3 and rejected the H1.

The mediating role of CWB in the relationship between workplace incivility and employee performance was analyzed by measuring the indirect path. The indirect path is determined by multiplying the β value of workplace incivility–CWB relationship (i.e., 0.91) with the β value of CWB–employee job performance association (i.e., -0.43). The result revealed significant indirect relationship between workplace incivility and employee performance ($\beta = -0.39, P = 0.00, LL = -0.698, UL = -0.152$). Moreover, zero is not existed in its upper and lower limit values, hence supporting H4. Finally, to find moderation the study computed interaction term by multiplying workplace incivility to IWE the results of IWE ($\beta = 0.11, p = 0.51$) and the interaction term ($\beta = -0.42, P = 0.23$) not supporting the moderating effect of IWE in the relationship between workplace incivility and employee performance. Which rejected the H5.

Table 4. Structural model results

| Relationships | β | SE | p | t | Bootstraps at 95% | |
|--|---------|------|------|-------|-------------------|--------|
| | | | | | LL | UL |
| Workplace incivility \rightarrow Job performance | -0.02 | 0.05 | 0.72 | -0.36 | | |
| Workplace incivility \rightarrow CWB | 0.91 | 0.29 | 0.01 | 2.83 | | |
| CWB \rightarrow Job performance | -0.43 | 0.06 | 0.00 | -7.85 | | |
| The mediating role of CWB | | | | | | |
| Direct path | -0.02 | 0.05 | 0.72 | -0.36 | -0.124 | 0.080 |
| Indirect path | -0.39 | 0.14 | 0.00 | | -0.698 | -0.152 |
| Moderating role of IWE | | | | | | |
| IWE | 0.11 | 0.26 | 0.51 | 0.654 | -0.163 | 0.405 |
| Workplace incivility \times IWE | -0.42 | 0.07 | 0.23 | -1.19 | -1.120 | 0.180 |

Discussion

The study measured the CWB role as an underlying mechanism and IWE conditional role in the relationship between workplace incivility and employee job performance. Many previous studies study this link through different mediator such as work engagement (Wang & Chen, 2020), coworker deviance (Faheem et al., 2023), and trust in supervisor (Saleem et al., 2022). But our study contributed to this literature by incorporating a new explanatory variable in the link between workplace incivility- job performance. However, the hypothesis proposed in this study regarding incivility–job performance path coefficient was not significantly supported by the statistical data H1. Thus, this study surmised that when employees encounter milder forms of negative behavior (e.g. workplace incivility), they might not explicitly oppose the company by not performing their duties as required by their jobs. But it can still act like job stressors including feelings of anxiety, annoyance, and tension (Zahid & Nauman, 2023). These negative emotions may lead them to counterproductive work behavior H2. When the employees engaged in CWB they are involved in activities that are against the organizations and coworker that create an impact on the employees' tasks performance H3, H4. These arguments are also align with the COR theory, which stated that practices of negative behaviors at the job increase the stress level among employees which exhausts their resources. In order to secure and recover their resources employees exhibit deviant behavior (i.e. CWB) and act in a way that is against the organization's welfare. Consequently, employees may reduce their efforts toward task accomplishment or influence the employee job performance. According to Islam et al. (2021), individual personal factors such as Islamic work ethics may play a conditional role in the association between workplace activities and employee behaviors. As a result, the study attempted to incorporate Islamic work ethics as an invigorating variable in the relationship between workplace incivility and CWB (H5). However, the results of the data analysis did not support the moderation role of IWE in our study. The reason of it the positivity or virtue alone may not always mitigate the effects of negative behaviors. Even individuals who diligently practice Islamic work ethics may find themselves challenged when faced with persistent and severe negative behavior from colleagues or superiors. When negativity crosses certain thresholds, it can evoke feelings of frustration, anxiety, and stress, which may lead even devout workers to respond in a negative manner. The COR theory also suggest that despite adherence to IWE, persistent negative behavior from colleagues or superiors can deplete employees' resources, leading to increased stress and negative responses. Thus, while IWE promotes positivity, its moderating effect may be undermined by resource depletion caused by severe negativity.

Although this study investigates some novel organizational literature topics, it still has certain limitations. The foremost is the study conducted in the region of Pakistan, an Islamic-eastern country with a high-power distance; hence, the results may change in various regions. Second, the study collected data only from employees performing their jobs in different service sectors. In the future, this study can be conducted in different regions and various working sectors to generalize the findings and enhance external validity. Third, the study used a cross-sectional design. Even though this form of design is frequently used and acceptable. But this design may not much sufficient for causal relations. Therefore, experimental or longitudinal designs are recommended for future studies. Finally, however, Hermon single factor test eliminate the likelihood of common method bias but the problem still exists because we only obtained data on workplace incivility and employee job performance from workers, not their supervisors, and because people tend to report higher than their actual scores on it. In the future, researchers can gather data from both managers and employees to avoid the common method bias. Moreover, the study collected data on all variables in one period of time that

also raises concerns about CMB to deal with this issue the future study collected data in different periods of time.

Practical implication

The ramifications of the current study are significant for human resource management, scholars, and decision-makers of the service sectors to enhance employee job performance in the context of developing countries such as Pakistan. Firstly, organizations should not underestimate the value of resolving workplace incivility. Even if employees not much affected in their job performance despite experiencing uncivil behavior but its can result in CWB that has a potential to influence job performance. The management must establish the ethical code of life. Cultivating a culture of respect and support is essential for sustaining employee morale, productivity, and long-term retention. Moreover, the management can address this issue by either providing adequate training on handling workplace incivility or establishing effective communication channels. Through such channels, employees can directly communicate with their managers to report instances of incivility (Ponting, 2020). By fostering an environment where civility is prioritized, companies can mitigate the negative effects of uncivil behavior and promote the well-being of all employees (Orr and Seter, 2020)

Consequently, IWE may not mitigate the relationship between workplace incivility and CWB. But organizations can still consider IWE at the time of recruitment because it promotes good values like honesty, justice, and integrity which fosters a healthy work culture and ethical behavior among its workers. Thus, while it may not have a direct impact on specific outcomes, including Islamic work principles in organizational culture may nevertheless build a healthy and ethical workplace environment. These principles may also contribute to organizational reputation, employee satisfaction, and societal trust.

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The Relationship between POS and Job Satisfaction of Expatriates: A model of Cross-Cultural Adjustments and Functional Distance with Supervisor

Kanza Iqbal, Rizwan Qaiser Danish

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24230

Purpose - The purpose of this paper is to examine the relationship between perceived organizational support and job satisfaction of Pakistani expatriates by evaluating the mediating role of cross-cultural adjustment of expatriates and moderating role of expatriate employees' functional distance with the supervisor.

Design/methodology/Approach - Structured questionnaires are distributed among the Pakistani expatriates working across the globe in different organizations. The data is analyzed by using different statistical tools like SPSS and AMOS to evaluate the relationship between the variables of interest.

Originality/Value - The study will help in extending the knowledge base in the area of cross-cultural adjustments of expatriates by providing meaningful insight on the role of perceived organizational support and job satisfaction. The study will be unique as little research is done on Pakistani expatriates working in different countries.

Keywords: Cross-cultural adjustments, expatriates, job satisfaction, functional distance, job satisfaction

Examining the Relationship between Technostress and Burnout among Technology Professionals: Role of Work-Family Conflict and Work-Life Boundary Characteristics

Ilsa Taj, Shakira Huma Siddiqui, Saadiya Abbasi

Department of Applied Psychology, National University of Modern Languages, Islamabad, Pakistan

Abstract ID 24232

Technostress is pervasive and has a significant adverse effect on technology professionals' well-being, which could lead to burnout. As organizations are increasingly adopting advanced technologies, employees are reporting technostress arising from constant connectivity, information overload, and blurred work-life boundaries. Current study was conducted to investigate the impact of technostress on work-family conflict (WFC = Work to Family Conflict and FWC = Family to Work Conflict) and burnout among technology professionals in Pakistan. Moreover, moderating role of work-life boundary characteristics (work-to-life and life-to-work) was also examined. The study tested the hypotheses using the Technostress Creators Scale (Tarafdar et al., 2015), Oldenburg Burnout Inventory (Demerouti et al., 2008), Work Family Conflict Scale (Carlson et al., 2000), and Work-Life Boundary Enactment Scale (Wepfer et al., 2018).

Purposive convenient sampling technique was used to collect the data. A sample of 245 technology professionals (age range 20 to 60 years; Males = 169, Females = 76) employed in four different telecom companies located in Islamabad and Rawalpindi was included. Data was collected on study variables. SPSS was used for descriptive and correlation analyses. For testing hypothesized relationships, PROCESS MACRO (Hayes 2013) was utilized. Results revealed a significant positive correlation between technostress and burnout. Work-family conflict (WFC and FWC) mediated the relationship between technostress and burnout. Professionals experiencing high technostress reported greater work family conflict, subsequently increasing burnout.

Furthermore, life-to-work boundaries moderated the relationship between technostress and work-to-family conflict. The research holds immense significance for organizations dealing with technostress affecting their employee's well-being. The findings on managing work-family conflict and work-life boundaries can help organizations support employees to be more engaged and productive. Finally, this research identifies theoretical and practical implications as well as future directions.

Keywords: Technostress, burnout, work-family conflict, work-life boundary characteristics, technology professionals

Paternalistic Leadership Style and Creativity: Understanding of Mechanisms through Employees' Lens in SMEs

Muhammad Musarrat Nawaz, Rizwan Qaiser Danish
Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24236

In today's world, employee voice has become an important factor in resolving organizational issues and making innovativeness. Therefore, this study will propose to investigate the paternalistic leadership style effect on creativity through different mechanisms among entrepreneurs of different SMEs' in Pakistan. This study will employ a cross-sectional study design in which, a survey questionnaire will be employed to collect the data from the respondents. SEM findings will be underlined as a positive and significant relationship of moral leadership with employee creativity. Hence, this study will also find a significant relationship between authoritarian, benevolent leadership, and employee creativity. Further, the study will also find a positive and significant association with employee creativity. This study will offer a thoughtful and systematic approach to employee creativity and resolving organizational issues through recommendations and opinions of employees. This study will help for addressing issues by bringing out creativity and innovation to achieve organizational goals and objectives. This study will be the first to investigate the role of employees' creativity and leadership style through different mediated moderated mechanisms in manufacturing SMEs of Pakistan.

Keywords: Authoritarian leadership, benevolent leadership, moral leadership, psychological empowerment, innovation orientation, creativity

How Ethical Leadership Trigger Creative Performance through the mediating role of Leader Member Exchange?

Aliza Shahzadi, Waqas Baig, Rizwan Qaiser Danish
Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24237

Purpose - This study aims to investigate the impact of Ethical Leadership on the employee creative performance of employees working in the banking sector of Pakistan. This study further examines the mediation of Leader Member Exchange.

Methodology/approach/design - Quantitative technique through a self-administered questionnaire was used for data collection. There were 350 front-line employees from the banking sector of Pakistan. For testing the hypothesis, Structural Equation Modelling (SEM) was used.

Findings - The findings of this study show that Ethical Leadership significantly impacts on employee creative performance of employees. The results also show that Leader-Member Exchange partially mediates the relationship between Ethical Leadership and employee creative performance of employees. Furthermore, findings also show that all the variables have a significant relationship between the relationship.

Research Limitations/Future Implications - This study has implications for managers working in the banking sector of Pakistan for establishing the importance of ethical leadership in improving their employee creative performance in the organization.

Value/originality - This study contributes to the existing body of knowledge by examining the mediating role of leader-member exchange in determining the relationship between ethical leadership and employee creative performance.

Keywords: Ethical leadership, leader member exchange, employee creative performance

Digital Divide across Marginalized Segments of Society

Waqas Shair, Rizwan Ul Hassan, Muhammad Asim
School of Economics and Finance, Minhaj University, Lahore., Pakistan

Abstract ID 24238

This study is an attempt to estimate and compare the digital divide across the marginalised segments of society. The study covers the digital divide in the context of individual access to a computer or laptop, mobile phone, mobile phone ownership, and internet access. On the other hand, certain marginalized segments of society that are often include women, people experiencing poverty, and persons with disabilities. The study uses Pakistan Social and Living Standard Measurement (PSLM) (2019-2020). The study applies descriptive statistics and student t-tests to estimate the statistically significant difference in the mean of two samples. The aftermaths of descriptive and inferential statistics provide evidence of a disparity between males and females accessing digital resources. The study also unveils that poor individuals have less access to digital resources than the non-poor. Moreover, the digital divide is more profound in access to digital resources for the person with disabilities than without disabilities. The disparity in access to digital resources is more profound amongst the poor than the other deprived groups.

The proportional share in access to digital resources in a reference group decreases as individuals encounter more disparities. The study's findings have important implications for addressing and bridging the digital divide within and across marginalised communities.

Keywords: Digital divide, marginalized segment of society, poor, person with disabilities

Antecedents and Consequences of Brand Addiction

Fahad Akram, Sania Zahra Malik

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Article ID 24116

Abstract

The research paper helps examining the complex interaction that exists between customers and brands, with a particular emphasis on the issue of brand addiction in respect to the Pakistani market. The aim of this study is to explore the origins and effects of brand addiction, as well as to comprehend the underlying processes and their effects on consumer behaviour. The study examines the relationships between brand addiction and consumer behaviours including willingness to pay and word-of-mouth, as well as the ways in which brand passion and brand self-expression impact brand addiction. Data was gathered from young customers in a variety of industries using quantitative methodologies to look at their brand associations and likelihood of developing product addictions. This study illustrates how consumer-brand interactions may influence the emergence of addictive behaviours and offers proof that brand passion and brand self-expression are antecedents to brand addiction. It also becomes evident that brand addiction plays a key mediating role between consumer behaviour, which influences willingness to pay and word-of-mouth connections, and brand passion or self-expression. Finally, this study advances a deeper understanding of the intricate relationships that exist between customers and brands. This has important ramifications for lawmakers, businesses, and schools as they navigate the constantly changing terrain of consumer-brand relations.

Keywords: Brand addiction, consumer behaviour, word of mouth, brand passion

Introduction

You are sitting at your home with a brand-new, immaculate package bearing the instantly recognisable apple logo. Your hands start to perspire as you attempt to open the box because you are so eager to receive it. You carefully take out the smartphone that is inside the box when you open it, but you already have a working mobile phone from the same manufacturer in your pocket. Why then do you keep purchasing the same-looking phone from the same manufacturer? The latest model is the explanation, but research indicates that the true cause may be your addiction to the brand. According to Boorman (2006), it's like this: "You're in this opulent setting that seems unreal; your palms are perspiring with anticipation and the thrill is nearly overwhelming. But you're not holding out to see the Queen. All you're doing is blowing a week's salary on a fancy jacket that you don't need or can afford. You are probably a brand addict if any of this seems even somewhat familiar to you".

This is the traditional definition of addiction that we are talking about, while there has been a lot of study done on the subject over the past century, and addiction literature is as ancient as the word itself. The literature on addiction that is currently in style is fresh and incorporates ideas like social media addiction and brand addiction. According to Hirschman E. C. (1992), the concept of addiction has to be reinterpreted to take into account a wider range of addictions and paradigms related to compulsive consuming. Individuals with impulsive tendencies also display other addictive behaviours, such as compulsive eating and an inability to control their purchasing habits (Rook, 1987). Moreover, a brand or its product develops a soft place in the hearts of its supporters due to consistent and growing interest in it. It lessens the propensity for self-control, making individuals fixated on the idea of consuming their

favourite brand and making irrational purchases to the point where it becomes an addiction (Mrad, 2018).

Shopping, utilising technology, working out, gambling, playing video games, hoarding, overeating, undergoing cosmetic surgery, pornography, kleptomania, taking nutritional supplements, and adhering to specific religious beliefs are a few instances of addictive behaviours (Griffiths, 1997; Martin et al., 2013). In a groundbreaking study, Fournier (1998) claims that relationships between customers and brands have the capacity to become so intense as to resemble addiction. According to recent neurophysiological study (Reimann et al., 2012), the insula, which controls addictive behaviours including alcoholism and nicotine addiction (Myrick et al., 2004), is activated by strong consumer-brand links. According to McClernon et al. (2005), this suggests that strong brand-consumer relationships may result in brand addiction. The literature now in publication recognises brand addiction as a separate disorder from compulsive shopping (Fajer & Schouten, 1995; Reimann et al., 2012). These "fuzzy borders" do not take the place of or eradicate the distinct core characteristics of the two conceptions, despite the fact that they may have certain similarities under the higher-order category of addictive consumption (Hirschman, 1992).

Since research on brand addiction is still in its early stages, Mrad and Cui (2020) stated that we should start with brand self-expressiveness in order to detect the antecedents and repercussions of brand addiction. The comorbidity between a brand and a person's personality, wherein the latter feels that the former is well represented by the brand, is known as brand self-expressiveness. According to Aaker (2009), customers consider brands as a means of self-expression. Since brand addiction is seen to be the most intense consumer-brand interaction, this alignment of an individual's image with a brand aids in bondage, which can then lead to the phenomena of brand addiction. It is therefore seen as a precursor to brand addiction. Moreover, the Social Identity theory—which Lam et al. (2010) argue—states that customers often mould their social and personal identities to justify their self-concept, and that the brand might act as a tool to assist them in doing so. According to Fournier (1998), consumer-brand relationships can be conceptualised as a continuum with increasing intensity at each point. Based on this theory, brand passion could be justified as the point that precedes brand addiction as the relationship's intensity increases.

Additionally, there was a need to comprehend the many repercussions of brand addiction, and there are several options in this respect. The positive and negative repercussions are the two main groups into which we might divide these factors. There is also the traditional viewpoint that when people hear the word addiction, they automatically think of its horrible adverse effects. However, there can be advantages to brand addiction, as we shall cover in more detail in the marketing literature. One of such outcomes is word-of-mouth marketing, which is defined as informal communication in which a brand's current customer promotes its goods or services to their acquaintances or peers (Anderson, 1998). According to Gabriel et al. (2013), this variable is of relevance to academics since it shows that consumers enjoy discussing the products and brands they use, particularly if the brand piques their interest. Additionally, customers will only pay a price if they have a strong affinity for that brand, particularly if the product is expensive. For this reason, hooked customers are considerably more inclined to spend more for that brand, according to Levin et al. (2004). Customers who have a strong emotional bond with a brand are considerably more likely to make repeat purchases from that brand, according to Aaker and Keller (1990). In light of this, investigating how customers react favourably to goods and services that really interest them or how they feel strongly about a brand is an intriguing prospect (Gounaris & Stathakopoulos, 2004).

Literature Review

Consumer Brand Relationship Theory

Fournier (1998) used interpersonal theories to explain the interactions between consumers and brands. This theory suggests that this connection might be represented as a continuum that reflects interpersonal interactions. Beginning with mild emotions, this continuum advances to include friendly, moderate, and powerful feelings; it also includes intense love and obsessive fixation (Fehr & Russell, 1991; Sternberg, 1986). Customers and brands have negative connections, such as "enslavement, enmity, dependency, and secret affairs," according to Fournier's (1998) empirical research. These associations could be related to the broader concept of addiction (Hirschman, 1992). This suggests that customers may be able to obtain a BA that is characterised by unfavourable traits. However, Hirschman's (1992) study on alcohol and drug addicts provides the conceptual foundation for Fournier's emphasis on the negative features of BA conduct. These unfavourable characteristics of consumer-brand interactions point to a close association with addiction. Comparing BA to drug and alcohol addiction, however, may miss important cognitive and affective differences unique to BA.

Addiction and Brand Addiction

One subcategory of the broader concept of addiction is the idea of BA among customers. BA denotes a condition in which the symptoms of addiction to a brand are somewhat akin to those of addiction to shopping and other generic ideas. Because of this, theories of addiction should also provide a foundation for understanding consumers' addiction to brands, in addition to ideas of consumer-brand interactions. As a result, one might claim that BA among consumers creates a link between brands and customers as well as a different kind of addiction. Addiction is traditionally defined as the ingestion of substances, such as alcohol or drugs (Alexander & Schweighofer, 1988; Peele & Brodsky, 1975). Currently, nevertheless, scientists think that addiction is a result of an individual's dependency on a certain set of actions or behaviours (Young, 2004). Behavioural addictions are described as "compulsive psychological and physiological urges for one or more specific behaviours" by Egorov and Szabo (2013). As a result, many activities are thought to have the potential to become addictive, including working out, gambling, surfing the internet, and playing video games (Griffiths, 1997). According to a well-established perspective, compulsive buying is an aberrant activity that can have detrimental effects on both the individual user and society at large (Budden & Griffin, 1998). Different perspectives, on the other hand, hold that addictive behaviour can develop from a normal habit into a pathological behaviour (Elliott et al., 1996; Scherhorn, 1990).

According to Cui et al. (2018), one of the strongest brand-consumer interactions is that of BA. But even if several studies (Mrad and Cui, 2020; Mrad et al., 2020; Cui et al., 2018; Mrad, 2018; Mrad and Cui, 2017) are now concentrating on this construct, BA is still a relatively new phenomenon in the literature, with very few research works on the subject (Mrad et al., 2020). Some scholars have attempted to comprehensively construct BA despite the paucity of evidence in this area. Fournier (1998) made a first attempt in her article on the links between consumers and brands. Specifically, the author thought of these relationships as being on a continuum that starts with mild emotions and ends with overwhelming sentiments that lead to compulsive fixation. Fournier and Alvarez (2013) subsequently supported the detrimental aspects of BA by defining it as an extremely compulsive and destructive activity that may result in the adoption of undesirable consumer behaviours like compulsive buying. Mrad and Cui (2017), on the other hand, primarily concentrated on the advantages of BA. Notably, the authors defined BA as "an individual consumer's

psychological state (genus) that pertains to a self-brand relationship manifested in daily life and involving positive affectivity and gratification with a particular brand and constant urges for possessing the brand's products/services" (Mrad & Cui, 2017). They also validated a BA scale in the process of developing their definition.

In comparison to other categories like brand attachment, brand love, or brand loyalty, BA is acknowledged as a relatively new notion and a unique phenomenon. To better understand the nature of the BA construct, Mrad (2018) carried out a conceptual analysis while adhering to the same research line. More precisely, the author defined BA as a psychological condition characterized by an emotional bond with a particular brand and a compulsive need that is typically pleasurable. Cui et al. (2018) highlighted both positive and negative implications of BA about various forms of consumer-brand connections, based on their conceptual identification of the prominent elements of BA.

Brand Passion

Since consumer behaviour is heavily impacted by emotional consumer-brand interactions, brand managers often create passionate brands through messaging in advertising. In the almost deconstructed world of materialism that we now inhabit, people are looking for new and creative ways to give their lives meaning. Consumers usually satisfy this deep-seated urge by consuming material goods or by owning treasured possessions (Ahuvia, 2005; Wallendorf & Arnould, 1988). Customers and brands are considered to be forming close relationships in this environment (Muñiz & Schau, 2005; Schouten & McAlexander, 1995). Companies like Starbucks Coffee, Harley-Davidson, and Manolo Blahnik, which are motivated by love and passion, have been successful in building and maintaining deep emotional bonds with their customers. Experience in the real world shows that building BP is essential since it positively affects consumer behaviour, including their willingness to pay a premium or refer a business to others. As a result, an increasing number of marketers have been trying in recent years to create passionate brands by using emotionally charged advertising ideas and slogans such as "I'm loving it" from McDonald's and Maserati's "excellence through passion".

In light of the increasing importance of passionate brands in marketing strategies, an analysis of the origins and consequences of BP is necessary. Strong emotional ties between consumers and brands are theoretically supported by Sternberg's (1986) triangle theory of love. According to this perspective, three factors come together to create interpersonal love: passion, decision/commitment, and proximity. Passion is the "hot" factor that sets off romantic sentiments, physical attraction, and specific actions like idolising and admiring one's partner, according to Sternberg (1986) (Djikic & Oatley, 2004; Hatfield, 1988). Based on the triangle theory of love, Shimp and Madden (1988) highlight important similarities between the love that consumers have for items and the love that they have for people. Ahuvia (2005) attests to the ability of consumers to adore brands and products. Further research indicates that consumer behaviour, especially loyalty and devotion, is significantly influenced by the passion component of emotional consumer-object interactions, in particular (Pichler & Hemetsberger, 2007; Whang et al., 2004). Findings from the following studies supported this perspective: Fournier (1998), Thomson, MacInnis, and Park (2005), Carroll and Ahuvia (2006), Belk, Ger, and Askegaard (2003), and most recently, Matzler, Pichler, and Hemetsberger (2007). Thus, in the context of consumption, BP may be defined as a primarily affective, highly positive attitude towards a certain brand that leads to emotional attachment and influences relevant behavioural factors.

According to Fournier (1998), there is a continuum in the interaction between brands and consumers. This paradigm suggests that when customers have a strong emotional connection

or passion for a brand, it is likely that they may eventually develop addictive tendencies towards it. The range of emotional intensity associated with BP, from subtle emotions to strong feelings, forms the foundation for a deep and lasting connection that aligns with the characteristics of BA (Fournier & Alvarez, 2013). It is therefore hypothesised that the degree of brand fervour positively affects brand dependence as consumers advance along the emotional engagement continuum, culminating in an enticing obsession with the brand.

H1: BP positively affects BA.

Brand Self Expressiveness

Consumer purchasing activity is one method that they construct their self-concept (Belk, 1988; Escalas & Bettman, 2005). Brands allow consumers to express their identities by adding value and creating meaningful associations that transcend the intrinsic features of products (Chernav et al., 2011; Fournier, 1998). As a result, consumers buy brands not just for their utilitarian qualities but also for their symbolic meaning. Brand interactions provide consumers' life direction and meaning by helping them create and maintain a positive self-concept (Belk, 1988; Chernav et al., 2011; Fournier, 1998; Juristic & Azevedo, 2011; Schembri et al., 2010). As such, brands may be used to fulfil the need for self-expression (Escalas & Bettman, 2005), and brand purchases are often driven by the demand for self-expression (Sirgy, 1982). Carroll and Ahuvia (2006) define a "self-expressive brand" as one that consumers feel better represents their social selves or their inner selves. Loureiro et al. (2010) define the word "self-expressive brand" as the individual's brand and how well they fit together. It also relates to the individual's self-concept and how the brand helps them express themselves to others. Self-expressive brands are useful tools for social integration because they allow consumers to express their individuality and differentiate themselves from others (Escalas & Bettman, 2005; Schembri et al., 2010). By purchasing particular brands, consumers may show how their brand consumption is in line with a consumer group they (aspire to) belong to (Chernav et al., 2011; Escalas & Bettman, 2005).

Lee and Workman (2015) define Self Expressive Brands as "the consumer's perception of the degree to which the specific brand enhances one's social self and reflects one's inner self" (Carroll & Ahuvia, 2006). Pay close attention to how individuals see themselves and the more accurate ways that businesses may portray them (Loureiro et al., 2010). It is simple to see how the self-expression brand helps consumers better communicate their needs by acting as an important channel for social integration and a symbol of personal achievement (Ruane & Wallace, 2015). Because organisations that are more self-expressive tend to be more well-liked, managers may improve this aspect of their products to elicit deeper emotional reactions from customers. Additionally, as consumers are becoming more and more enamoured with brands that allow them to express themselves and establish their identities, SEBs ought to be a major factor behind BA (Mrad et al., 2020). While a brand's freedom of expression might breed addiction, it can also deepen the relationship between a consumer and a brand by granting that freedom more latitude (Ruane & Wallace, 2015). Strong brand-customer associations with self-expression can lead to emotional resonance that encourages deeper and more intense involvement, which is a type of brand affinity (BA) (Cui et al., 2018). It can be hypothesised that the more consumers perceive a brand as self-expressive, the more likely they are to become addicted to it. This is based on the premise that a brand that encourages self-expression strengthens the connection between brands and customers and taking into account that BA represents a highly intense relationship between brands and consumers. Communicating one's ideas and emotions through a brand creates a psychological bond that transcends utilitarian concerns and creates an enticing desire for the brand. Thus, it is hypothesised that a brand's ability to facilitate personal expression improves the degree to

which consumers get addicted to it since they want to have a stronger emotional connection with the brand.

H2: *BSE positively affects BA.*

Word of Mouth

WOM is the term for information shared verbally among consumers that they believe is not being used to promote a brand (Arndt, 1967). Iuliana-Raluca (2012) has identified several characteristics that are associated with word-of-mouth communication, including "personal recommendation, interpersonal relationships, interpersonal communication, informal communication, and personal and interpersonal influence". The American Marketing Association defines word-of-mouth (WOM) as "the act of consumers providing information to other consumers" (2005). Word-of-mouth (WOM) has the ability to persuade and influence, making it one of the most powerful variables in the market (Sallam, 2014). Before WOM spread, there was interaction and communication among the people. This relationship and communication also have an impact on how opinions are formed. Individuals usually share their experiences and emotional connections with others, particularly with those who are close to them, including friends, family, and coworkers. These stronger interpersonal ties make the material extremely persuasive and well-received by individuals in the sender's immediate area. Kotler and Keller (2006) define word-of-mouth (WOM) as "personal communication about a product between target buyers and neighbours, friends, family members, and associates".

We are in the age of speed. Everything has to happen rapidly these days, whether it's communication, sales, marketing, or informative. The internet has made it possible for you to speed up any procedure. Customers' positive word-of-mouth recommendations act as unpaid product marketers. It serves as an example of how important WOM is to companies of all kinds. Positive word-of-mouth has become essential for businesses building ties with their clientele since it may draw in additional business (Zamil, 2011). A research by Coulter and Roggeveen (2012) found that people mostly rely on word-of-mouth (WOM) communication from friends and relatives. This shows that conventional word-of-mouth (WOM) is still important and widespread in the information era, which lessens its influence on people's opinions.

According to Fournier's (1998) brand-consumer interaction model, consumers may develop addicted tendencies (BA) if they go from having weak affective reactions to having strong emotional connections (BP). This series implies that the degree of emotional ardour one has for a brand has a direct bearing on the emergence of an obsession with the brand. According to Mrad and Cui (2017), BA falls under the umbrella of WOM behaviour and is defined as a person's enduring desire for a certain brand, which in turn encourages positive brand-related actions. As a result, it is hypothesised that BA serves as a middleman between BP and WOM, implying that consumers' active word-of-mouth promotion of the brand is influenced by the emotional resonance associated with BP.

H3: *BA mediates between BP and WOM.*

BSE enables a consumer to express themselves through a brand as they feel like that brand represents the same traits as their personality. This creates a resonance between a person and a brand, and this resonance can lead to BA as these characteristics are on a continuum. As BA is a very severe brand related emotional feeling this also has some positive benefits for the brand and one of those effects is WOM. This positive effect for brand is because consumers who are too much attached to a brand tend to talk about it. So that is why we postulate that BSE affects a consumers WOM through the construct of BA. This means that

as brands help a consumer express themselves by aligning their personalities they tend to get attached to the brand and in turn tend to recommend the products of that brand to their friends and family.

H4: BA mediates between BP and WTP.

As we have discussed above that BSE is the alignment of the consumer's personality with the brand. This alignment is one of the reasons that causes BA as the consumer gets attached to the brand and as BA is the extreme connection that a consumer brand relation continuum represents. Homburg (2005) argues that BA causes positive effectivity in regard to the brand, so the consumer tends to pay even premium price to acquire its favourite brands products this in turn proves the point that BA acts as a mediator between BSE and a customer's WTP for that brand. So, we postulate that BA is a mediator between the BSE and WTP.

H5: BA mediates between BSE and WOM.

Consumers who are addicted to a particular brand tend to talk about it to others because they feel a strong link between their self-identity and the brand they identify with (Kemp et al., 2012; Stokburger-Sauer et al., 2012). According to Kudeshia et al. (2016), consumers who are addicted to a product or service tend to share good information about it through various channels. Therefore, it is postulated that BA has a beneficial impact on WOM, as consumers who are motivated by a powerful emotional bond become champions for the brand.

H6: BA mediates between BSE and WTP.

Consumers who are addicted to a particular brand tend to have a propensity of purchasing its products because they feel a strong link between their self-identity and the brand they identify with (Kemp et al., 2012; Stokburger-Sauer et al., 2012). According to Kudeshia et al. (2016), consumers who are addicted to a product or service tend to pay more for it. The attachment affects their will to pay towards that brand. Therefore, it is postulated that BA has a beneficial impact on WTP, as consumers who are motivated by a powerful emotional bond become repeat buyers for its products despite the price.

H7: BA positively affects WOM.

Willingness to Pay

According to Vida (2007), "In the economic literature, the term WTP denotes the maximum price a buyer is willing to pay for a given quantity of a good (i.e., a ration-scaled measure of the subjective value the buyer assigns to the good)," is one definition of the term WTP that has been given by many academics. Price premium or price tolerance are common terms used to describe a willingness to spend extra. "WTP a higher price than other alternatives, can be described as the reaction of customers to the price increase of a specific product and is constructed as a price span, within which the consumer does not change his/her buying behaviour," according to scholars like Turhan and Ozbek (2013). Furthermore, Herrmann et al. (2004) define WTP as the price that is in between the actual price of a product and the maximum amount that they are willing to pay to acquire a product or service. Ching (2017) defines it as "At a particular time and place the maximum amount a customer is willing to pay for a product or service from a particular brand is their WTP".

There are multiple definitions and multiple variations of explanations regarding WTP Homburg (2005) defines WTP as the highest amount a customer is willing to pay for a product. WTP can also be seen as a measure to check a brand's strength in the market as Bondesson (2012) explains because it not only represents the preference of customers towards that brand but also represents the demand for that particular product in the market. This creates an interesting scenario where brands need to price the product keeping in mind its

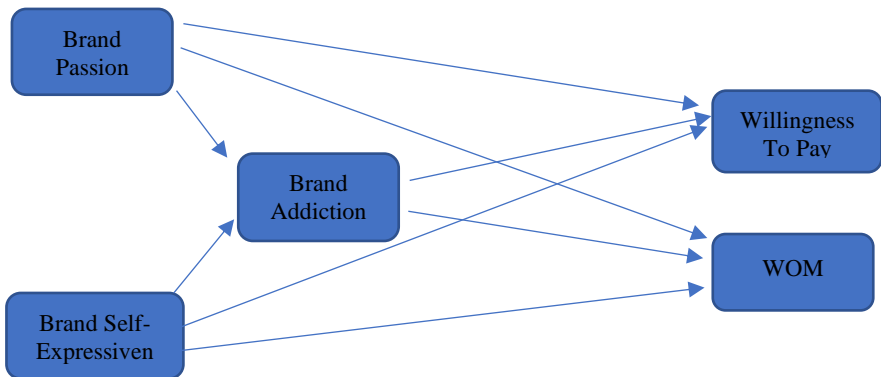
demand as well as the brand's success because these factors contribute to the total WTP (Netemeyer et al., 2004). Cassidy and Wymer (2016) also argued that loyalty towards a brand contributes to a customer's WTP for its products this causes fluctuations in the pricing of a product just because of the change in the product's demand or because the brand is not liked as much with time.

In this competitive environment customers' WTP is a crucial point and there is a lot of R&D that is done by companies to understand it. Khader (2018) also advises that companies need to regularly do this process of understanding where they stand in the eyes of their potential and existing customers and how they can improve this standing. To obtain this information companies can conduct direct surveys as well as indirect surveys to gain valuable insight as pricing is one of the most important and crucial decisions that a company has to make (Campbell, 2020).

The brand-consumer relation is on a continuum so when we look at BP it is a positive affinity towards the brand and as the continuum progresses it leads to extreme feelings of addiction towards the brand as described in the concept of BA. According to Netemeyer et al. (2004), BA is a psychological state that affects a consumer to pay a premium price as long as it helps them get the product from their favourite brand. So, this affects a consumer's WTP as long as they are addicted to the brand (Homburg, 2005). Thus, we can postulate that BA is mediating the link between BP and WTP, which suggests that a high level of emotional attachment towards the brand causes addictive and compulsive tendencies that can in turn influence the consumer to pay even a premium price on a product or service offered by the brand.

H8: *BA positively affects WTP.*

The Research Model



Methods

Participants and procedure

This thesis' data was collected using a survey that was administered using digital methods and was also distributed amongst students at Punjab University, Lahore, Pakistan. Given the time and financial constraints, this paper will be dependent on a sample survey. Therefore, it is essential to specify the demographic category that is important for the study's purpose before conducting a sample survey. Due to the above-mentioned time constraints item-to-scale ratio theory was used and by multiplying our total number of items (29) with 10 we got a total amounting to 290 questionnaires. Both the online questionnaire link and printed

questionnaires were distributed amounting to 350 through which we got 297 valid responses. This number of valid responses satisfies our item to scale ratio.

Measures

All measurement scales are measured on a five-point Likert scale ranging from 1-strongly disagree to 5-strongly agree.

BA: A nine-item scale developed by (Mrad & Cui,2017) was used one of the items is “I usually remember tenderly the previous experiences with my favourite brand”.

BSE: An eight-item scale developed by (Caroll & Ahuvia, 2006) was used. One of the items is “This brand mirrors the real me”.

WOM: A four-item scale developed by (Karjalouto et al., 2016) with one of the items “I have recommended my favourite brand to lots of people” was used.

WTP: It was measured using a three-item scale with one of the items “My willingness to buy the favourite brand is absolute” developed by (Louviere & Islam, 2008).

Control Variables

Gender, Age, Income and Qualification were used in this study as control variables.

| Demographics | | N | % |
|---------------|----------------|-----|----|
| Gender | Male | 198 | 67 |
| | Female | 99 | 33 |
| Age | 18-25 Years | 243 | 82 |
| | 26-30 Years | 38 | 12 |
| | 31-35 Years | 8 | 3 |
| | Above 35 Years | 8 | 3 |
| Income | 25-50k | 67 | 27 |
| | 51-75k | 92 | 31 |
| | 76-100k | 92 | 31 |
| | Above 100K | 46 | 11 |
| Qualification | Intermediate | 154 | 52 |
| | Bachelors | 80 | 27 |
| | Masters | 27 | 9 |
| | MPhil | 35 | 11 |
| | PHD | 1 | 1 |

Analysis and Results

Confirmatory Factor Analysis

The results of model fitness show satisfactory values. As for the benchmark, some researchers consider CFI, GFI, and AGFI values above 0.90 to be a perfect model fit and recognise them as benchmark values. Other researchers argue that when working with real-world variables in a natural setting, this benchmark is too high and considers values above 0.80 acceptable (Baumgartner & Homburg, 1995; Doll et al., 1994). In light of the benchmark mentioned above, all of the values satisfy the model fit requirement CFI (0.90), GFI (0.84), and AGFI (0.81). The established standard for values of RMSEA and CMIN/df is ≤ 0.08 and ≤ 5 , respectively, and the values in our model conformed to this standard as the value of CMIN/df is 2.4 and the value of RMSEA is 0.07, which shows a good fit. All these values were calculated using IBM AMOS while including all the variables in our model. All the model fit values are also represented in the table given below.

Table 1 Goodness of Fit Indices

| | CMIN/DF | CFI | GFI | AGFI | RMSEA |
|----------------|----------|-------------|-------------|-------------|-------------|
| Standard Value | ≤ 5 | ≥ 0.80 | ≥ 0.80 | ≥ 0.80 | ≤ 0.08 |
| CFA | 2.4 | 0.90 | 0.84 | 0.81 | 0.07 |

Descriptive Statistics

The analysis of descriptive statistics revealed the value of the mean for all variables, starting from BA (3.49), BSE (3.60), BP (3.55), WOM (3.82), and WTP (3.72). Meanwhile, the standard deviation values were BA (0.85), BSE (0.93), BP (1.01), WOM (0.91), and WTP (0.90). In the described values, the highest Mean value was of the variable WOM (3.82), and the highest standard deviation value was BP (1.01). For the lowest value among the variables BA (3.49) and (0.85) for mean and standard deviation respectively. In terms of the analysis findings, our central variable BA shows a significant positive correlation with BSE ($r = 0.74$, $P < 0.01$), BP ($r = 0.74$, $P < 0.01$), WOM ($r = 0.70$, $P < 0.01$), and WTP ($r = 0.73$, $P < 0.01$). Then, the BSE showed a positively significant correlation with BP ($r = 0.75$, $P < 0.01$), WOM ($r = 0.68$, $P < 0.01$), and WTP ($r = 0.65$, $P < 0.01$). While BP also exhibited a positive and significant correlation with WOM ($r = 0.70$, $P < 0.01$) and WTP ($r = 0.72$, $P < 0.01$). Moreover, finally, WOM shows a positive and statistically significant relation with WTP ($r = 0.76$, $P < 0.01$). Since every variable's correlation value stayed much below the conventional cutoff of 0.90, the correlation study did not indicate any problems with multicollinearity (Tabachnick & Fidell, 2007).

Table 2 Means, Standard Deviations & Correlational Analysis

| | N | Mean | Std. Deviation | WTP | BP | WOM | BSE | BA |
|------------|-----|------|----------------|--------|--------|--------|--------|----|
| WTP | 297 | 3.72 | 0.9 | 1 | | | | |
| BP | 297 | 3.55 | 1.01 | 0.72** | 1 | | | |
| WOM | 297 | 3.82 | 0.91 | 0.76** | 0.70** | 1 | | |
| BSE | 297 | 3.6 | 0.93 | 0.65** | 0.75** | 0.68** | 1 | |
| BA | 297 | 3.49 | 0.85 | 0.73** | 0.74** | 0.70** | 0.74** | 1 |

Notes: (** = P<0.01), (BA = Brand Addiction, BSE = Brand Self Expressiveness, BP = Brand Passion, WOM = Word of Mouth, WTP = Willingness to Pay).

Discriminant and Convergent Validity

The comparison of coefficients can ascertain the discriminant validity. Churchill, 1979. Lam (2012) says that AVE values larger than 0.4 are acceptable if the CR value exceeds 0.6. Fornell and Larcker (1981) state that the construct's convergent validity is still sufficient if AVE is less than 0.5 but composite reliability is better than 0.6. Pattern reliability may be assessed using Cronbach alpha, which needs to be equal to or higher than 0.70. The study's Cronbach alpha readings were higher than the average of 0.70. (Hair and others, 2006). One way to evaluate reliability is to look at the Cronbach alpha coefficient, ideally 0.70 or above. Every Cronbach alpha value in this investigation exceeded the typical cutoff point of 0.70 (Hair et al., 2006). In our analysis, BSE had the highest Cronbach alpha value of 0.91, while WTP had the lowest 0.79 among all the variables in our model. On the other hand, WOM and BP had the highest Average Variance Extracted (AVE) value of 0.57, as shown in the table.

| Variables | Factor Loadings | Cronbach's Alpha | AVE | CR |
|---------------------------|-----------------|------------------|-------------|-------------|
| Brand Addiction | | 0.88 | 0.42 | 0.88 |
| BA1 | 0.65 | | | |
| BA2 | 0.64 | | | |
| BA3 | 0.70 | | | |
| BA4 | 0.61 | | | |
| BA5 | 0.56 | | | |
| BA6 | 0.59 | | | |
| BA7 | 0.70 | | | |
| BA8 | 0.73 | | | |
| BA9 | 0.72 | | | |
| BA10 | 0.58 | | | |
| Brand Self-Exp | | 0.91 | 0.56 | 0.91 |
| BSE1 | 0.75 | | | |
| BSE2 | 0.74 | | | |
| BSE3 | 0.79 | | | |
| BSE4 | 0.73 | | | |
| BSE5 | 0.79 | | | |
| BSE6 | 0.76 | | | |
| BSE7 | 0.74 | | | |
| BSE8 | 0.70 | | | |
| Word Of Mouth | | 0.86 | 0.57 | 0.86 |
| WOM1 | 0.71 | | | |
| WOM2 | 0.75 | | | |
| WOM3 | 0.80 | | | |
| WOM4 | 0.77 | | | |
| Willingness to Pay | | 0.79 | 0.56 | 0.79 |
| WTP1 | 0.76 | | | |
| WTP2 | 0.74 | | | |
| WTP3 | 0.75 | | | |
| Brand Passion | | 0.84 | 0.57 | 0.84 |

| | |
|-----|------|
| BP1 | 0.69 |
| BP2 | 0.80 |
| BP3 | 0.75 |
| BP4 | 0.78 |

Notes: BA = Brand Addiction, BSE = Brand Self Expressiveness, BP = Brand Passion, WOM = Word of Mouth, WTP = Willingness to Pay.

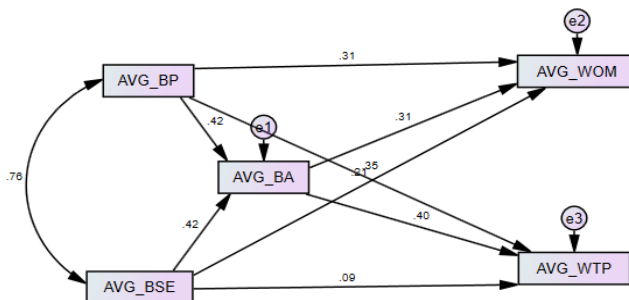
Hypothesis Testing

This use of SEM gave us the results of our proposed hypothesis. The findings showed a significant direct effect of brand addiction on consumer's willingness to pay ($\beta = 0.404, P < 0.001$) and also on word of mouth ($\beta = 0.311, P < 0.001$). As we look at the antecedents of brand addiction, brand self-expressiveness has a significant positive effect on brand addiction ($\beta = 0.425, P < 0.001$). Also, brand passion has a significant positive effect on brand addiction ($\beta = 0.423, P < 0.001$). Also, the direct effect of BSE and BP on WOM and WTP was tested, where BSE had a significant positive effect on WOM ($\beta = 0.215, P < 0.001$). However, analysis shows that BSE did not significantly affect WTP as proposed ($\beta = 0.087, P < 0.15$). Moving further, BP had a positive and significant effect on WOM and WTP with the values ($\beta = 0.310, P < 0.001$) and ($\beta = 0.354, P < 0.001$), respectively.

Table 3

| Hypothesis | B | CR | SE | P | Result |
|-------------|-------|------|------|------|-----------|
| BSE --> BA | 0.425 | 7.88 | 0.04 | *** | Supported |
| BSE --> WOM | 0.215 | 3.4 | 0.06 | *** | Supported |
| BSE --> WTP | 0.087 | 1.41 | 0.06 | 0.15 | Rejected |
| BA --> WOM | 0.311 | 5.03 | 0.07 | *** | Supported |
| BA --> WTP | 0.404 | 6.73 | 0.06 | *** | Supported |
| BP ---> BA | 0.423 | 7.85 | 0.04 | *** | Supported |
| BP ---> WOM | 0.310 | 4.92 | 0.06 | *** | Supported |
| BP ---> WTP | 0.354 | 5.78 | 0.05 | *** | Supported |

Notes: * = ($P < 0.05$), ** = ($p < 0.01$), *** = ($p < 0.001$).



Mediation Analysis

First mediation hypothesis proposed BSE affects WOM through BA, and the analysis revealed BSE had a direct positive effect on WOM ($\beta = 0.215, P < 0.001$) and a positively significant indirect effect of ($\beta = 0.132, P < 0.001$) with a total effect of ($\beta = 0.347, P < 0.001$). The second mediation with BSE as an independent variable proposed that BA mediates the relationship between BSE and WTP, the results show an insignificant direct effect of BSE on WTP ($\beta = 0.085, P < 0.15$), but as we look at the indirect effect, the picture becomes clear that BSE has a significant positive indirect effect through BA ($\beta = 0.172, P < 0.001$) with a total effect of ($\beta = 0.258, P < 0.001$) which proves a full mediation through BA.

The second independent variable, BP, also affected WOM and WTP while BA acted as a mediating variable. BP affects WOM through BA, and the analysis revealed BP had a direct positive effect on WOM ($\beta = 0.310, P < 0.001$) and a positively significant indirect effect of ($\beta = 0.132, P < 0.001$) with a total effect of ($\beta = 0.442, P < 0.001$) proving the proposed hypothesis that BA mediates between BP and WOM with partial mediation being present. The second mediation with BP as an independent variable proposed that BA mediates the relationship between BP and WTP. As for this hypothesis, the results show a significant direct effect of BP on WTP ($\beta = 0.354, P < 0.001$) and BP has a significant positive indirect effect through BA ($\beta = 0.171, P < 0.001$) with a total effect of ($\beta = 0.525, P < 0.001$) which proves a partial mediation through BA.

Table 4 Mediation Analysis

| Hypothesis | Direct Effect | In-Direct Effect | Total Effect | Results |
|----------------------------|---------------|------------------|--------------|-------------------|
| BSE->BA->WOM | 0.215*** | 0.132*** | 0.347*** | Partial Mediation |
| BSE->BA->WTP | 0.087 | 0.172*** | 0.258*** | Full Mediation |
| BP-->BA-->WOM | 0.31*** | 0.132*** | 0.442*** | Partial Mediation |
| BP->BA->WTP | 0.354*** | 0.171*** | 0.525*** | Partial Mediation |

Notes: * = ($P < 0.05$), ** = ($p < 0.01$), *** = ($p < 0.001$). BA = Brand Addiction, BSE = Brand Self Expressiveness, BP = Brand Passion, WOM = Word of Mouth, WTP = Willingness to Pay.

Theoretical and Practical Implications

The primary focus of this study was Pakistani youth customers, with the purpose of determining how they associate certain brands with other industries. In addition, the goal was to comprehend brand addiction—a relatively recent development in the field of brand and marketing research—and its causes and effects. This demonstrates that the causes of brand addiction—namely, the desire of consumers to pay and spread the word—as well as the antecedents we proposed are validated our demonstrates the interconnectedness of brand self-expression, brand passion, and brand addiction as these constructs are part of the same theoretical domain that Fournier (1998) proposed and our study has contributed to deepening our understanding of. It achieves this by demonstrating how the phenomena of brand passion and brand self-expression may result in a more severe kind of emotional attachment, which broadens our knowledge. Going straight to the psychological domain, this study illuminates human psychology and conduct by revealing sentiments of highly compulsive and addictive behaviours in customers. This aids in our comprehension of how consumer behaviour functions and the ways in which behavioural and psychological clues might indicate a customer's feelings towards a product or brand. In light of broader academic contributions, this study establishes brand addiction as a mediating factor. There, it serves as a catalyst with the potential to have both favourable and unfavourable effects on the brand and the customer. This advances our knowledge of how addictive tendencies function as a catalyst for

subsequent behaviour and identifies the routines and emotions that lead to compulsive buying or brand addiction, illuminating the psychological underpinnings of consumer behaviour. This mediation paradigm also clarifies the ways in which emotional brand connection influences customer behaviour. There's also the viewpoint of customer advocacy, and research demonstrates that word-of-mouth generated by brand addiction propels consumer advocacy of the brand. As a result, there are more opportunities for research on customer advocacy as the emotional attachment develops into an obsession, which encourages favourable consumer behaviour for the company and its goods. The phrase "consumer advocacy" is highly relevant in the age of social media and online social spaces, and it merits more research. There may be disagreements over its advantages and disadvantages because people have the power to damage or enhance a brand's reputation, but behavioural analysis and consumer research can handle both of these scenarios.

In order to foster closer ties between their brand and its customers, marketers might create and carry out campaigns that use the brand's passion and self-expression. This type of marketing strategy has the power to grow a company's fan base, boost sales, and create talk about the brand online and off. Marketers must exercise caution while implementing their plans since, as previous study has shown, brand addiction may also have negative effects. As a result, in order for businesses to be successful in the long run, they must be aware of both the positive and negative effects of brand addiction.

Next is the situation of online reputation. As was previously said, in today's connected world, when social media influences the majority of consumer decisions and everything is online, encouraging word-of-mouth through customer brand interactions may be quite beneficial for marketers. Businesses may create programmes that use the consumer's emotional connection and loyalty to encourage word-of-mouth and electronic word-of-mouth (eWOM). Individuals are typically more inspired and persuaded by the words of a user than by a business attempting to promote a product. Therefore, if used properly, this method has the potential to generate significant sales income as well as reputation development.

One of the most crucial elements of marketing is pricing as it contributes to the brand's profitability. From a financial standpoint, companies aim to maintain their prices as high as possible since doing so maximises earnings, which helps the shareholders. As a result, marketing teams can make use of consumer brand relations, particularly the strong emotional bond that devoted customers have with the brand, to safely incite high prices. This study has demonstrated that brand addiction and brand self-expression are important factors in influencing a customer's willingness to pay.

Limitations

It is also possible to do more research on the various industries independently in order to have a better knowledge of the factors that influence consumers' attitudes towards particular brands and not others. The majority of participants in this study indicated that their preferred brand was in the clothes and apparel industry, allowing for more research on this industry and specific companies within it. Researchers may also concentrate on how particular brands developed this emotional attachment and how it influences their sales and reputation by identifying these companies.

Conclusion

The purpose of this study was to comprehend and add to the body of knowledge already available on brand addiction. Finding out what causes and effects were mentioned in the literature on brand addiction was the major goal. The idea that brand self-expression, brand passion, and brand addiction are related was supported by this study. This study's finding that

brand addiction is an extreme yet very important emotion present on the consumer-brand relationship spectrum expanded the idea of the consumer-brand relationship. All of information aids in identifying opportunities and confirming consumer safety for marketers and policymakers, respectively. In summary, this study aids in seeing how modern markets are changing and provides a deeper understanding of consumer psychology, both of which aid in assisting marketers in navigating the intricate world of consumer behaviour. Lastly, in order to create long-lasting advantages that benefit both the company and the customer, a deeper knowledge of concepts like brand addiction is necessary as businesses strive to resonate with consumers.

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The Role of Window Display and Promotional Signage in Impulse-Buying Behavior

Mahrukh Ali

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24124

This study aims to investigate the relationships between window display, promotional signage, and impulse buying behaviors in Pakistan. Guided by the Stimulus-Organism Response (S-O-R) model, the research aims to examine whether and how promotional signage and window display influence positive consumers' responses which, in turn, affect impulse buying behavior. The research will use a cross-sectional survey. Structured questionnaires will be used as the data collection method. This study will use a convenience sampling approach. Applying the item to response method, data will be collected from 480 (24*20) individuals. To analyze the data collected, the SPSS (Statistical Package for the Social Sciences) software tool will be used. The findings of this study will help marketing managers better understand how to control impulse buying behavior.

Keywords: Impulse buying behavior, promotional signage, window display, SOR model

The Influence of Authenticity and Service Quality on Revisit Intention in Pakistani
Restaurants: The Mediating Role of Involvement

Ilham Hazara, Talat Islam

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24126

Both scholars and practicing professionals have a keen interest in revisiting intention as retaining existing customers is far more profitable than acquiring new customers therefore this research studies the influence of authenticity and service quality on revisit intention. More specifically, this study extends the literature by examining the mediating role of involvement between the relationship of authenticity and service quality with revisit intention.

The data will be collected from restaurant customers in Pakistan through convenience sampling. This research will have a sample size of 260 decided through Item to response ratio as the population is unknown. The method will be a questionnaire-based survey.

Though the influence of service quality, authenticity, and involvement on revisit intention has been studied separately before, this research is the first to study the combined effects of authenticity and service quality on revisit intention with the mediating role of involvement in restaurant customers of Pakistan.

Keywords: Authenticity, service quality, revisit intention, involvement

Impact of Trust and Perceived Risk on Customer Repurchase Intention

Muqadas

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24127

The aim of this study is to analyze the effect of trust and perceived risk on customer repurchase intention in Pakistan; to investigate the mediating role of attitude. Led by the Theory of Planned Behavior and Prospect theory, the research seeks to survey how trust and perceived risk impact responses of consumers, which in turn affect their repurchase intention. Cross-sectional survey will be used in this research. Method of collection of data will be used in this research is Structured questionnaires. Convenience sampling approach will be utilized in this study. Applying the item to response method, data will be collected from 480 (24*20) individuals. SPSS (Statistical Package for the Social Sciences) software tool will be used to analyze the data collected. The findings of this study will help marketing managers to make strategies that increase the repurchase intention.

Keywords: Trust, perceived risk, customer repurchase intention

Enhancing Repurchase Intentions in Pakistani E-commerce: The Role of Perceived
Uncertainty, Service Convenience, Swift Guanxi, and Buyer-Seller Trust on Daraz.pk.

Zahid Ullah, Qudsia Naseer

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Article ID 24132

Abstract

This study delves into the realm of internet commerce, particularly in the context of Pakistan e-commerce, to extend the existing guanxi literature and elucidate its causes and effects. By examining the role of swift guanxi, a Chinese relational concept, in online buyer-seller relationships, we reveal its significance in fostering buyer-seller trust and influencing repurchase intention. Leveraging a mediation analysis approach, our findings underscore the importance of swift guanxi in facilitating efficient online transactions, instilling a sense of control in customers, and enhancing perceptions of service convenience. Moreover, our study highlights the pivotal role of exceptional customer support in strengthening buyer-seller connections and further amplifying the effects of swift guanxi. These insights offer valuable implications for online merchants seeking to cultivate enduring customer relationships and drive business growth in the dynamic landscape of e-commerce.

Keywords: Perceived Uncertainty, Service Convenience, Swift Guanxi, Buyer-Seller Trust and Repurchase Intention.

Introduction

Online purchasing has grown rapidly and become an essential business channel (Barro et al., 2020). Digital technology's rapid rise has affected customer consumption and trade philosophies (Jones et al., 2020). E-services are becoming increasingly important in many firms as information, communication, and network technologies are employed to obtain a competitive edge (Wu et al., 2021). To attract clients, sustain customer relations, and increase online market rivalry, one must grasp how to promote e-service techniques and consequences (Ha et al., 2014). E-commerce has increased because to the COVID-19 pandemic's worldwide reach and technical improvement (Pandey, 2020). Technology boosts economic development, and e-commerce dominates the global digital economy (Jun and Nasir, 2021). Many nations are using digital technology to strengthen their economy (Sturgeon, 2021). The internet is one of the most popular and efficient information sources and pervades modern culture (Aslam et al., 2021). Euro monitor International's A Market Analysis (2022) examines Pakistan's e-commerce market's competitive environment, trends, and projections. The report predicts a 9.9% CAGR for Pakistan's e-commerce market from 2021 to 2026. The analysis also highlights social commerce and mobile purchasing as key drivers of the e-commerce business. Pakistan is the 46th-largest eCommerce marketplace in 2023, ahead of Romania, with Statista predicting \$5,601.1 million USD in sales. Market volume is expected to reach US\$7,042.4 million by 2027. Pakistan has various online shopping platforms. Daraz, Telemart, HomeShopping, Goto, Priceoye, Yaoyvo, Shophive, and several notable online apparel brand stores like Khaadi, sapphire, Limelight, Gulahmad, Sanasafinaz, etc. have a reputation among customers.

Understanding Pakistani consumer behavior about online purchase intention is vital as the country grows and has to use digital transformation to strengthen its economy (Saleem et al., 2022). E-commerce is appropriate for Pakistan's struggling digital economic transformation. Online buying and purchases make up most of e-commerce, hence Pakistani customers should shop online more. Pakistan has low literacy, poor technology, and a lack of expertise

and trust in online buying customer behavior (Imtiaz et al., 2019). The buyer-seller relationship is the most critical factor in social commerce consumer purchase decisions and repurchase intentions (Fang et al., 2012). According to past studies (Netzer et al., 2008; Macintosh, 2002), interpersonal ties strengthen customer-retailer bonds and motivate purchasing behavior and future purchases. Chinese relational notion *guanxi* it is a tight, mutually beneficial connection based on high-quality social interactions. Another word for customer interaction in Chinese business is (Lee et al., 2001). *Guanxi* helps firms prosper by building intimate, social customer ties. Sheng et al. (2011) say *guanxi* is significant in Chinese relational marketing study. This applies especially to corporate performance, consumer loyalty, and relationship performance. *Guanxi* is particularly common in traditional Chinese markets, which value face-to-face interaction, resources, and reliance. However, online studies are few.

According to Ou et al. (2014), relational fast *guanxi* is a fast-growing online interpersonal connection based on reciprocity, mutual understanding (MU), and relationship harmony. This connection may facilitate social and online business interactions. Social commerce—combining commercial and social relationships to improve buyer-seller interactions—is gaining popularity. Due to social commerce's expanding popularity across organizational and societal dimensions, these interactions represent one of the most complicated parts of social commerce (Zhou et al., 2013). E-commerce's rapid expansion, especially in China, has reduced the importance of switching costs and geographical location for corporate profitability. Even though these things were relevant before. According to Zeithaml et al. (2002), several studies have indicated that the consumer-seller relationship is increasingly affecting online purchasing effectiveness and future repurchase intentions. This is supported by other research. Most *guanxi* growth research has focused on the buyer. We still prioritize the buyer in the online market and evaluate the seller's online service for speedy *guanxi*. Online retailers use ICTs to offer self-services to improve service and cut expenses. In addition to online communications, service quality, and relational connection, perceived purchase uncertainty may precede swift *guanxi*. Internet commerce's information asymmetry has always caused trade challenges due to uncertainty. In their uncertainty study, Chiu et al. (2018) identified seller and product uncertainty. Product doubt occurs when a client struggles to evaluate the target product's look, usefulness, and genuine features. Price uncertainty comes when a buyer can't judge the seller's reputation before buying or their shady behavior thereafter. The product's financial worth may also cause uncertainty, such as unexpected charges, ongoing maintenance, or replacement costs due to a defective or inferior product (Pappas, 2016). If a customer thinks internet buying is risky and unknown, they'll hunt for a solution to fill the information gap. The volatility of e-commerce products, sellers, and prices may foster buyer-seller quick *guanxi*. This is because rapid *guanxi* protects buyers and sellers. Thus, the customer experiences the product more, feels less apprehensive about it, and is more likely to buy it again (Lin and Lin, 2018).

Problem Statement: Global e-commerce has grown at an exponential rate, changing consumer access and buying patterns, yet problems still exist, especially in developing nations like Pakistan. Problems include inconsistent product quality, subpar customer support, and worries about payment security erode confidence and prevent consumers from making additional purchases. With a foundation in Chinese business culture, rapid *guanxi* is a dynamic relational idea that this study seeks to investigate as a potential cultural cure for these issues facing Pakistani e-commerce companies. This research aims to provide actionable insights to improve user experiences, foster loyalty, and improve customer retention strategies. By examining the interplay of search convenience, perceived ambiguity,

buyer-seller trust, and quick guanxi, it contributes to a more stable and sustainable e-commerce ecosystem that benefits businesses, consumers, and society at large.

Literature Review and Hypothesis Development

Perceived uncertainty and Repurchase Intentions

Gough (1990) defines perceived uncertainty as "the individual's or group's judgment or evaluation of the magnitude and likelihood of the possible "bad" outcomes which may result from an action." First to relate perceived uncertainty to consumer behavior was Raymond Bauer (1960, 1967). Bauer says uncertainty and dangers influence customer purchases. This uncertainty generally stems from customers' fears that their purchase aim and the targeted items or services' intended uses may not be satisfied. Thus, clients must seek information regarding predicted uncertainty to control purchase risk and uncertainty. Buyers find it challenging to effectively estimate future conditions in an online buying environment due to incomplete information (Pfeffer and Salancik, 2003). When there is too much uncertainty during an online purchase, the buyer invariably cancels the transaction (Williamson, 1981). Due to the ambiguity around product quality and the potential for seller fraud, delivery delays, and defective goods, consumers are concerned about the negative effects of online buying (Pavlou et al., 2007). As a result, ambiguity creates risks, and buyers limit their online browsing to minimize their purchase intentions and hold off on making more purchases due to their perception of potential losses (Moore and Mathews, 2006). So following hypotheses are presented in this study:

***H1:** A buyer's perceived uncertainty during an online shopping is negatively related to his/her repurchase intentions with the online store/retailer.*

Service Convenience and repurchase Intentions

To remain competitive, an online firm must now provide service convenience, which is defined as the customer's impression of the time and effort needed to obtain a service (Berry, Seiders, and Grewal 2002). After all, customers gravitate to online purchasing due to a lack of time and energy in the first place (Roy, Lassar, and Shekhar 2016). Since service convenience is one of the primary elements encouraging customers to adopt online shopping, it should come as no surprise that online retailers have made significant efforts to enhance the online convenience components of their service offerings (Roy et al. 2017). Pham et al. (2013) look into the relationship between customers' intention to repurchase, perceived value, and ease of service. The study's findings demonstrate that the possibility of repurchasing is greatly increased by service convenience. This study measures service convenience based on how quickly consumers can identify the needed product, how simple it is to use online shopping websites, and how easily choose able the products appear.

High service convenience is associated with favorable repurchase intentions, whereas poor service convenience is associated with negative repurchase intentions. According to Zhang et al. (2011), intentions to make additional purchases are directly connected with pleasant customer experiences. Lee and Lin (2005) examined the relationships among a number of e-service convenience factors, customer satisfaction, and repurchase intentions. The results of the study show a high correlation between plans to make additional purchases and customer satisfaction as well as overall service convenience quality. This improves the purchasing experience for customers and increases their likelihood of repurchase intentions. The following hypothesis was developed for this study based on the aforementioned description from previous research:

***H2:** A buyer's perceived service convenience during the online shopping experience is positively related to his/her repurchase intentions.*

Perceived uncertainty and swift guanxi

Guanxi is a strong personal relationship developed by increasing social contacts and mutual interests between two persons, usually tied to income, position, and identity in a social dynamic network (Chen et al., 2022). It is a vital feature of buyer-seller transactions in China since it fosters social relationships and mutual advantages. Swift guanxi emphasizes interpersonal value of a buyer-seller connection, whereas confidence emphasizes transactional value (*Niu et al., 2021). Due to the easier development of conventional face-to-face relationships under a friendly buyer-seller guanxi, customers in online marketplaces lack the willingness to form long-term relationships with sellers (Ou et al., 2014). Buyers are confident and prepared to engage in a transaction (an online auction) as long as there is less uncertainty due to strong guanxi. Thus, swift guanxi provides a secure transaction environment for both buyers and sellers, lowering buyer apprehension and increasing the likelihood that they will make additional purchases. In online markets, swift guanxi serves as a lubricant, allowing buyers and sellers to build guanxi based on mutual respect, understanding, and harmony in their relationships. This stabilizes the entire transaction process and makes it possible for buyers to receive and believe the information sellers provide. When there is strong guanxi between buyers and sellers, their communication is effective and seamless. Because of the swift guanxi of online markets and the help of the feedback mechanism included into CMC tools, it can actually significantly minimize the seller or product uncertainty. The following hypotheses are put out by this study in light of the aforementioned inference:

***H3:** A buyer's perceived uncertainty during an online shopping is positively related to his/her swift guanxi with the online store/retailer.*

Service convenience and Swift guanxi

According to Colwell et al. (2008), service convenience is viewed as a way to improve value for customers by reducing the amount of time and effort they must invest in receiving services. Service efficiency can be increased through service convenience, which can enhance the flow of online transactions (Meuter et al., 2000). Customers frequently choose online shopping since they have limited time and resources, which has increased efficiency with the use of ICTs. Consumers highlight service ease as a crucial indicator of service quality, even while online shops offer self-services to suit consumers' desires for service effectiveness (Ding et al., 2011). Studies have shown that the ease of services enhances both the hedonic and utilitarian value of shopping. A strong foundation for harmonious connections between customers and buyers is improved shopping value (Luo et al., 2016). In order to improve service ease, vendors must put a lot of effort into designing customer-centric e-services. Therefore, the degree of shared understanding between the consumer and the seller is shown by how convenient customers believe the service to be (Bolton et al., 2000). According to Dai and Salam (2009), in business environment a high level of service convenience will increase the customer's trust in the vendor. Since trust is a crucial component of relational exchange in online transactions, this finding is significant, and after mutual trust and mutual relationship has been established in the internet market, customers may become more actively involved in creating swift guanxi. Additionally, since mutual trust lessens perceived transaction risk, the exchange of advantages in the online marketplace is frequently based on it (Collier and Sherrell, 2010). Hence we can formulate that:

***H4:** A buyer's perceived service convenience during the online shopping experience is positively related to his/her swift guanxi with the online retailer.*

Swift guanxi and repurchase intention

Swift guanxi, or swiftly developed, trust-based relationships based on mutual understanding, favors, and harmony, is crucial in driving repeat purchases and boosting the economy in China, where a lack of trust in authorities encourages reliance on personal networks. This is pertinent to the discussion about recurring purchases because it highlights the quick development and trust component of swift guanxi. According to Ambler et al. (1999), guanxi may enhance sales performance in several scenarios. Guanxi is crucial in the internet marketplace as well because buyers prefer to transact with people with whom they have a social or personal connection due to the uncertainty around products and the associated trading risks (Hou, 2007). We also anticipate that if online buyer and seller relationships are harmonious, mutually respectful, and based on reciprocal benefits, customers' propensity to make more purchases online will increase. Additionally, swift guanxi can build up over time and have broader effects, like influencing buyers' inclination to make repeat purchases (Ou et al., 2014). In online marketplaces where buyers and sellers are strangers, three swift guanxi dimensions—MU, RF, and RH—can level the playing field by reducing product uncertainty and transaction risks. Previous studies have demonstrated that guanxi can enhance sales performance (Ambler et al., 1999). Therefore, it could potentially have a big effect on RI. The research employs the Social Influence Theory, which suggests that social factors and interpersonal ties have a substantial impact on people's actions, attitudes, and decision-making in the context of e-commerce. The theoretical framework posits that consumer perceptions, intentions, and behaviors are significantly influenced by social interactions and relationships, encompassing both offline and online social networks. Social Influence Theory posits that when faced with perceived uncertainty in the online shopping environment, people typically turn to their social networks for help (Cialdini & Goldstein, 2004). People may rely on social cues from their network to help them make decisions when it comes to e-commerce if they feel uncertain about the quality, dependability, and security of the transactions. Wang and Benbasat's (2005) research provide evidence in favor of the theory that social influence affects service convenience since customers frequently discuss their thoughts and experiences with others in their social circles. In this study, repurchase intention is "the level of confidence and propensity to repurchase a specific product that results from an online shopper's evaluation of its quality and service" (Tsai and Huang, 2007). Customers will engage in beneficial transaction behavior when they and e-retailers come to a shared understanding, exchange reciprocal favors, and build a harmonious relationship creates future repurchase intentions. As a result, this study suggests that

H5: A buyer's swift guanxi with a seller is positively related to his/her intention to Repurchase from the seller.

Mediating role of swift Guanxi

Guanxi is a strong personal relationship formed by increased social interactions and common interests between two parties, usually linked to wealth, status, and identity in a social dynamic network (Chen et al., 2022). It's a key part of buyer-seller transactions in China because it fosters social connections and mutual benefits. Guanxi helps trade by lubricating business relationships with personal relationships (Chiu et al., 2018). Swift, or digital, guanxi emphasizes interpersonal value of a buyer-seller relationship, while confidence emphasizes transactional value (Niu et al., 2021). Swift Guanxi is a quickly formed online relationship between seller and buyer based on mutual understanding, reciprocal favour, and relationship harmony that facilitates effective E-commerce deals (Mensaha et al., 2023). Swift guanxi reduces buyers' concerns about pricing, quality, and sellers, supporting online C2C purchasing risks' growth and succession. Swift buyer-seller guanxi bridges the gap between uncertainty and plans to repurchase, so online customers will likely receive more information,

protection, or favors (Chen et al., 2018). Strong relationships with sellers give buyers more confidence in the transaction because they know the seller and their items and have had the chance to attest to the vendor's dependability and integrity. Local sellers are more likely to provide convenient and personalized service. They may offer discounts, early access to new products, or faster shipping. Buyers with a close relationship with a seller are more likely to repurchase because they feel loyal to the seller and trust them to meet their needs. The research shows that swift guanxi mediates the relationship between perceived uncertainties, service convenience, and repurchase. Swift guanxi reduces uncertainty and improves service convenience, increasing repurchase intention. As a result, this study suggests that

H6: *Swift guanxi positively mediate relationship between perceived uncertainties and repurchase intentions.*

H7: *Swift guanxi positively mediate relationship between service conveniences and repurchase intentions.*

Moderating role of buyer-seller trust

Reduced uncertainty and an improved exchange party experience can be attained through the growth of buyer-seller swift guanxi and seller trust (Grefen and Straub, 2014). So, we anticipate that trust in the seller and swift guanxi among buyers and sellers will result in repurchase intention. According to Ou et al. (2014), buyer-seller swift guanxi can form when a buyer believes that a seller is reliable. They claimed that the growth of buyer-seller swift guanxi is aided by seller trust because buyers and sellers may swiftly rely on establishing mutual understanding and establishing a cordial relationship. Therefore, buyer-seller swift guanxi is more likely to form when the buyer believes the vendor to be trustworthy. Trust in the seller leads to accelerate buyer-seller swift guanxi. Only sellers they trust should be used for online transactions by buyers. Buyers have fewer options to participate in online buying when there is a lack of confidence. Indeed, customer's repurchase intentions are greatly influenced by their level of trust (Chiu et al., 2009). In the context of social commerce websites, trust has a favorable impact on users' intents to make a purchase (Farivar et al. 2017). Because customers and sellers do not physically interact when transacting online, Annaraud and Berezina (2020) contend that trust is more important. Online shoppers must divulge a variety of personal and financial information; thus, they are extremely careful when interacting with online vendors. Customers transact with online retailers known for not revealing their knowledge (Javed and Wu, 2020). Since trust is a relationship between people and technology or online systems, it takes on a distinct meaning when it comes to online commerce. According to Zafaret al. (2020), customers are deterred from contributing in online forums due to a lack of confidence. As a result, online platforms with greater consumer confidence would have greater success than others. The importance and fundamental aspects of the trust in B2C shopping has been shown in numerous previous studies (Zhu et al., 2019). Web purchasing platforms and ecommerce stores can persuade customers that a relationship between reputation and trustworthiness would be mutually beneficial and sustainable (Dhingra et al., 2020). Hence, analyzing above literature this study suggests that:

H8: *Buyer-seller trust positively moderate relationship between swift guanxi and repurchase intentions.*

Theoretical Background

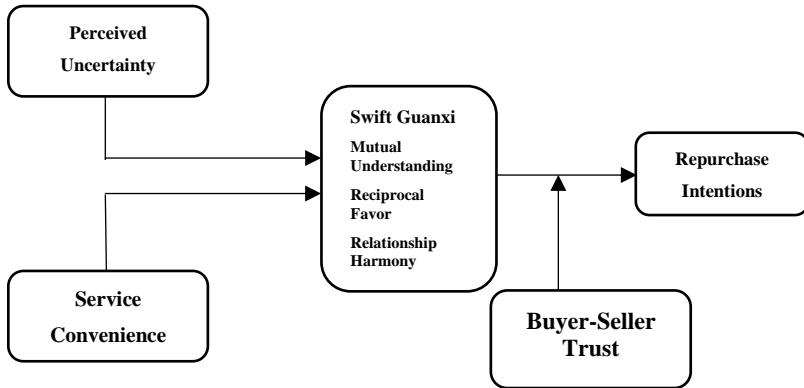


Figure 1 Hypothesized Model

Research Methods

Measurements

The reliability and inner consistency of every measure used in this study were previously established by their use in several investigations conducted by other research studies. A five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), was used to rate the participant's responses. The perceived uncertainty was assessed using a three-item scale that was borrowed from Ho et al. (2021). In order to measure service convenience, 4 item scale were adopted from study of Raman (2019) in which they adopted and modified from Brown (1990) and, Yale and Venkatesh (1986). Each component of swift guanxi is measured independently, the mutual understanding measurement was adapted from Ou et al. (2014) and consisted of five items. Four elements were added to the measurement of reciprocal favor taken from Ou et al. (2014) and three items were used in the relationship harmony measurement, which was taken from Ou et al. (2014). Five items were included in the trust in seller measurement, which was modified from Qureshe et al. (2009). And three items were used in the measurement of repurchase intentions, which was modified from Pavlou and Gefen (2004).

Participants and Procedures

A participant population is a group of individuals that are completely well-defined and characterized, and who have particular attributes and features that are comparable to one another. Users of Daraz.pk in Pakistan make up the whole population for this study, Pakistan's largest e-commerce site, Daraz.pk, is an online shopping market with over 15 million products! Every month, millions of visitors visit Daraz.pk, primarily from Pakistan but also from the US, Sri Lanka, China, Nepal, Bangladesh and the UAE. Young adults (ages 25 to 34) make up the majority of Daraz.pk users. The current study employs a cross-sectional research technique that makes use of temporal limits in order to gather data at a certain point in time. A non-probability sampling method called "purposeful sampling" is employed in research to deliberately and specifically choose a sample of people. Purposive sampling can be used to ensure that the selected participants are representative of a certain group or characteristic. To get participant viewpoints, the research used an online, self-managed

survey was conducted based on a questionnaire. A total of 520 individuals received an email with a link to an online survey; 468 of them were able to respond. There is a noteworthy 89.9% response rate. .

Demographic Analysis

Demographic analysis fully explains respondents' qualities and attributes. Data was collected using two-part self-administered questionnaires. Part A comprised respondents' age, gender, education, and online shopping history. Two gender groups were formed from study participants. 89.1% (N=334) of the participants were "male" The N=41 participant pool had 10.9 percent "Female" respondents. Three age groups participated in the study. The research included 216 respondents, 55.1 percent of whom were 18–23 years old and 161 (41.1%) were 24-33. With 15 respondents, 3.8% were 34–45. Another crucial aspect of survey respondents is qualification in online purchasing experience. The research respondents had four qualification levels: 7.1 percent "below college" (N=28), 44.4 percent "associate degree" (N=174), 40.1 percent "bachelor degree" (N=157), and 8.4 percent (N=33) Master degree. Online buying experience is examined as a demographic factor and divided into three groups. Table 4.2 shows that 60.5 percent (N=237) had one online purchasing experience, 24 percent (N=94) had 2-4 times, and 15.6 percent (N=61) had 5-6 times.

Table 1 Respondents' demographic characteristics

| Demographics | | N | % | Total Percentage |
|---------------|------------------|-----|------|------------------|
| Gender | Male | 293 | 74.7 | 100 |
| | Female | 99 | 25.3 | |
| | 18-23 Years | 216 | 55.1 | |
| Age | 24-33 Years | 161 | 41.1 | 100 |
| | 34-45 Years | 15 | 3.8 | |
| | Below College | 28 | 7.1 | |
| | Associate Degree | 174 | 44.4 | |
| Qualification | Bachelor Degree | 157 | 40.1 | 100 |
| | Master Degree | 33 | 8.4 | |
| | 1- time | 237 | 60.5 | |
| | 2-4 time | 94 | 24 | |
| | 5-6 time | 61 | 15.6 | |

Data Analysis and Results

Confirmatory Factor Analysis

A number of indices were employed to assess the appropriateness of the composite data and the model fitness, including χ^2/df , GFI, AGFI, CFI, and RMSEA (Loehlin, 1998). Every model fit indicator was found to be within an acceptable range of standardized values, according to the model fitness results. The GFI, AGFI, and CFI values were determined to be 0.955, 0.938, and 0.980, respectively, based on observations; these values were much higher than the benchmark level of 0.90. Likewise, the RMSEA and χ^2/df values, at 0.037 and 1.529, respectively, were well under the acceptable criteria of 0.08 and 5, respectively, suggesting that they met the set standards (Table 6). Four variables in all were utilized to examine the direct, indirect, and interaction impacts. The table below contains all of the estimated model fit values that fall within the range.

Table 2 SEM Model Fit

| χ^2/df | AGFI | GFI | CFI | RMSEA | CMIN | DF |
|-------------|-------|-------|-------|-------|---------|----|
| 1.529 | 0.938 | 0.955 | 0.980 | 0.037 | 151.337 | 99 |

Discriminant and Convergent Validity

Strong correlation between two measures of similar variables is necessary for convergent validity to occur, favoring the connection of related variables over unrelated ones. Convergent validity is the degree to which various items measuring the construct are connected to one another (Hair et al., 2010). Convergent validity is evaluated using correlation coefficients (Churchil, 1979). The degree to which an underlying construct differs from other constructs is known as discriminant validity (Hair et al., 2010). When measurements of different variables show significant, but weak, relationships with one another, discriminant validity is demonstrated. Coefficient comparison aids in the determination of discriminant validity (Churchil, 1979). According to Lam (2012), AVE levels more than 0.4 are completely acceptable if the CR value is higher than 0.6. According to Fornell and Larcker (1981), if composite reliability is more than 0.6 but AVE is less than 0.5, the construct's convergent validity is still sufficient. Cronbach alpha can be used to pattern reliability; its value must be at least 0.70. Every Cronbach alpha value in the investigation exceeded the specified benchmark value of 0.70 (Hair et al., 2006). The Cronbach alpha coefficient, which is ideally 0.70 or greater, can be used to assess reliability. Every Cronbach alpha value in this sample above the standard limit of 0.70 (Hair et al., 2006). Cronbach alpha for RPI was the greatest at 0.88, while SC had the lowest reliability at 0.74. As indicated in Table 3, RPI also had the highest composite reliability (CR) of all the variables, at 0.88, with an average variance extraction (AVE) of 0.64.

Table 3 FL, α , AVE, CR

| Variables | FL | A | AVE | CR |
|------------------|-----------|----------|------------|-----------|
| PU1 | 0.68 | | | |
| PU2 | 0.70 | | | |
| PU3 | 0.66 | 0.79 | 0.428 | 0.749 |
| PU4 | 0.77 | | | |
| SC1 | 0.73 | | | |
| SC2 | 0.60 | | | |
| SC3 | 0.66 | 0.74 | 0.497 | 0.798 |
| SC4 | 0.62 | | | |
| SG1 | 0.66 | | | |
| SG2 | 0.65 | | | |
| SG3 | 0.66 | 0.76 | 0.452 | 0.768 |
| SG4 | 0.65 | | | |
| BST1 | 0.67 | | | |
| BST2 | 0.71 | | | |
| BST3 | 0.59 | 0.77 | 0.415 | 0.725 |
| BST4 | 0.75 | | | |
| BST5 | 0.74 | | | |
| RPI1 | 0.81 | | | |
| RPI2 | 0.81 | | | |
| RPI3 | 0.82 | 0.88 | 0.647 | 0.880 |
| RPI4 | 0.73 | | | |

Notes: PU, Perceived Uncertainty; SC, Service Convenience; SG, Swift Guanxi; BST, Buyer Seller Trust; RPI, Repurchase Intention.

Descriptive Statistics

The study's variable means and standard deviations are calculated using descriptive statistics (Gorard, 2003). Within the parameters of the mean and standard deviation—two crucial

measures of central tendency and variability—descriptive statistics are used to condense and characterize the primary features of a dataset (Liu et al., 1999). While "standard deviation" describes values that vary from the mean, "mean" refers to an average value. Stated differently, within the same dataset, the SD represents the degree of dispersal or spread, while the means characterize the average or core response of the respondents in that particular dataset. According to the descriptive statistics analysis, Repurchase Intention (3.92), Perceived Uncertainty (3.91), Service Convenience (3.74), Swift Guanxi (3.69), and Buyer Seller Trust (3.61) were the variables with the highest mean values. Regarding PU, SC, SG, BST and RPI the respondents agreed, according to this value of means. BST was linked to the lowest mean value, and RPI was found to have the highest mean value. It was discovered that SG had the highest standard deviations, while BST had the lowest standard deviation. Table 4 provides specific values for every variable.

Table 4 Mean and Standard Deviation

| Variables | N | Mean | Standard Deviation |
|-----------|-----|------|--------------------|
| PU | 392 | 3.91 | 0.97 |
| SC | 392 | 3.74 | 0.95 |
| SG | 392 | 3.69 | 1.09 |
| BST | 392 | 3.61 | 0.94 |
| RPI | 392 | 3.92 | 1.03 |

Notes: PU, Perceived Uncertainty; SC, Service Convenience; SG, Swift Guanxi; BST, Buyer Seller Trust; RPI, Repurchase Intention.

Correlation

In order to better analyze descriptive statistics and reliability also known as correlation relationships between variables are established (Samuel & Okey, 2015). The results show that Perceived uncertainty has a significant and positive relationship ($r=0.24$, $P<0.01$) with Service convenience, Swift guanxi, Buyer-Seller Trust and Repurchase Intentions ($r=0.61$, $P<0.01$), ($r=0.71$, $P<0.01$) and ($r=0.68$, $P<0.01$). SC showed strong positive correlations with SG, BST and RPI ($r=0.61$, $P<0.01$), ($r=0.81$, $P<0.01$) and ($r=0.68$, $P<0.01$). SG reported a positive correlation with BST and RPI ($r=0.75$, $P<0.01$), ($r=0.69$, $P<0.01$) Furthermore, there were noteworthy positive correlations between BST and RPI ($r=0.69$, $P<0.01$).

Table 5 Correlations Analysis

| Variables | PU | SC | SG | BST | RPI |
|-----------|--------|--------|--------|--------|-----|
| PU | 1 | | | | |
| SC | 0.24** | 1 | | | |
| SG | 0.35** | 0.61** | 1 | | |
| BST | 0.26** | 0.81** | 0.75** | 1 | |
| RPI | 0.36** | 0.68** | 0.69** | 0.69** | 1 |

Notes: PU, Perceived Uncertainty; SC, Service Convenience; SG, Swift Guanxi; BST, Buyer Seller Trust; RPI, Repurchase Intention.

SEM Outcomes

Every relationship in the suggested model was determined to be statistically significant through the use of structural equation modeling. This indicates that every relationship or association between the variables in the model showed a noteworthy impact, thereby strengthening the validity and resilience of the model's underlying framework. The relationship between first independent variable with a dependent variable (PU→RPI) had a beta value of ($\beta=0.13$, $P<0.01$) and second independent SC→RPI ($\beta=0.60$, $P<0.01$). Relationship of first independent variable with a mediator PU→SG ($\beta=0.27$, $P<0.01$) and second independent SC→SG ($\beta = 0.89$, $P<0.01$). A significant and positive relationship was indicated between mediator and dependent variable SG→RPI ($\beta = 0.46$, $P<0.01$).

Table 6 Structure Path Estimates

| Relationships | β | <i>P-Sig</i> | S.E. |
|----------------------|---------------------------|---------------------|-------------|
| PU→RPI | 0.13 | 0.00 | 0.05 |
| SC→RPI | 0.60 | 0.00 | 0.13 |
| PU→SG | 0.27 | 0.00 | 0.05 |
| SC→SG | 0.89 | 0.00 | 0.10 |
| SG→RPI | 0.46 | 0.00 | 0.11 |

Notes: PU, Perceived Uncertainty; SC, Service Convenience; SG, Swift Guanxi; BST, Buyer Seller Trust; RPI, Repurchase Intention.

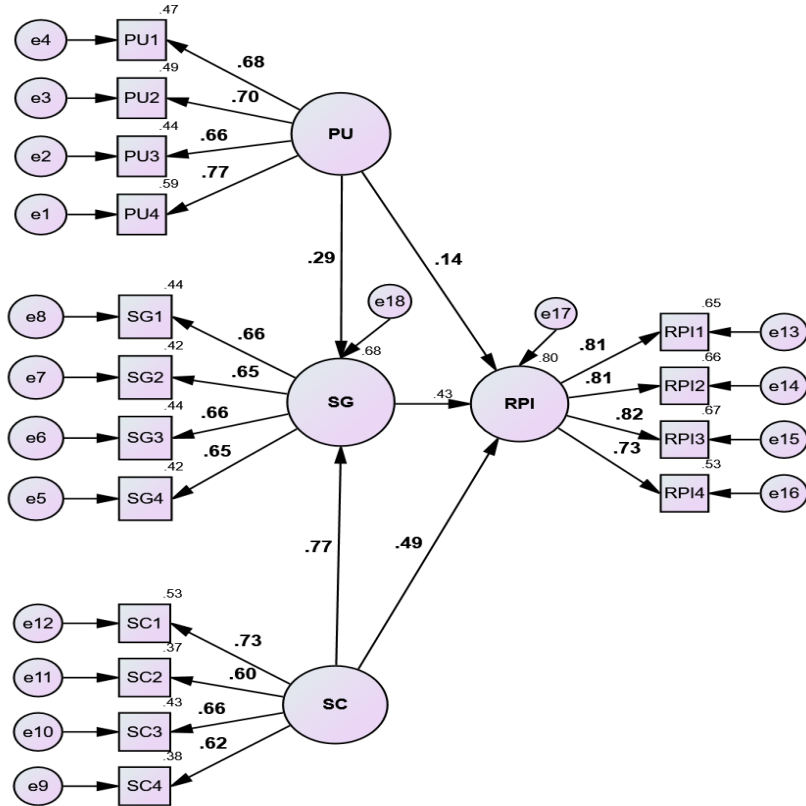


Figure 1 Structural Model (SEM)

Mediation through Path Analysis PU→SG→RPI

To evaluate the variables' indirect effects, mediation analysis was done through path analysis. To do this, a pathway that measured the mediating role of Swift Guanxi (SG) between Perceived Uncertainty (PU) and Repurchase Intention (RPI) was estimated. In direct relation PU and RPI were significantly correlated with a P value of 0.228 ($\beta=0.06$, $P<0.22$). PU has statistically significant relationship with SG and RPI and also SG has significant relation with RPI, with PU ($\beta = 0.44$, $P<0.01$) and RPI ($\beta = 0.88$, $P<0.01$) with total indirect impact of ($\beta=0.38$, $P<0.01$). Direct effect was found to be statistically insignificant, suggesting that Swift Guanxi fully mediates the relationship between Perceived Uncertainty (PU) and Repurchase Intention (RPI).

Table 7 Mediation Analysis PU→SG→RPI

| Relations | B | P | Mediation Effect | | |
|-----------|------|-------|------------------|------------------|--------------|
| | | | Direct Effect | In-direct Effect | Total Effect |
| PU→RPI | 0.06 | 0.228 | 0.06 | 0.38** | 0.44** |
| PU→SG | 0.44 | 0.000 | | | |
| SG→RPI | 0.88 | 0.000 | | | |

Notes: PU, Perceived Uncertainty; SC, Service Convenience; SG, Swift Guanxi; BST, Buyer Seller Trust; RPI, Repurchase Intention.

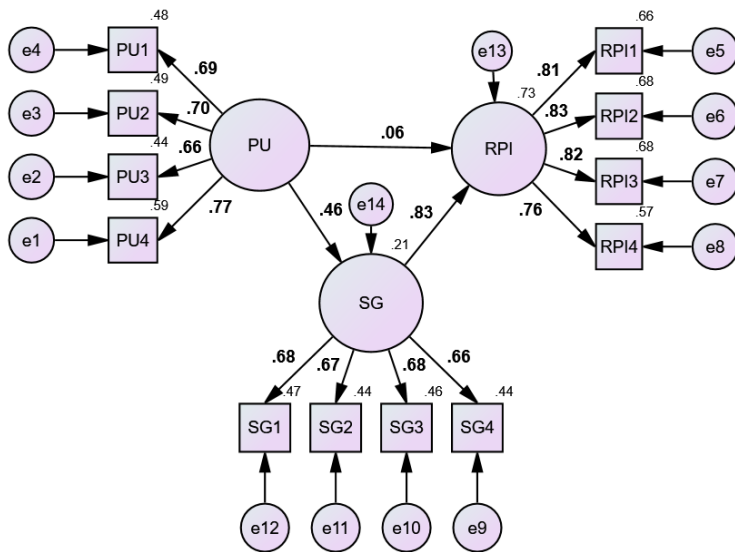


Figure 2 Mediation Analysis

Mediation through Path Analysis SC→SG→RPI

The link between Service Convenience (SC), Swift Guanxi (SG), and Repurchase Intention (RPI) was evaluated through mediation analysis. The findings demonstrated a significant direct association ($\beta = 0.59, P < 0.01$) between SC and RPI. Additionally, a positive indirect link with a total indirect impact of ($\beta = 0.51, P < 0.01$) was found between SC→SG and SG→RPI ($\beta = 0.98, P < 0.01$) and ($\beta = 0.53, P < 0.01$). Furthermore, the indirect impact was found to be significant and less than the direct effect, suggesting that SG partially mediates the connection between SC and RPI.

Table 8 Mediation Analysis SC→SG→RPI

| Relations | B | P | Mediation Effect | | |
|-----------|------|-------|------------------|------------------|--------------|
| | | | Direct Effect | In-direct Effect | Total Effect |
| SC→RPI | 0.59 | 0.000 | 0.59** | 0.51** | 1.10** |
| SC→SG | 0.98 | 0.000 | | | |
| SG→RPI | 0.53 | 0.000 | | | |

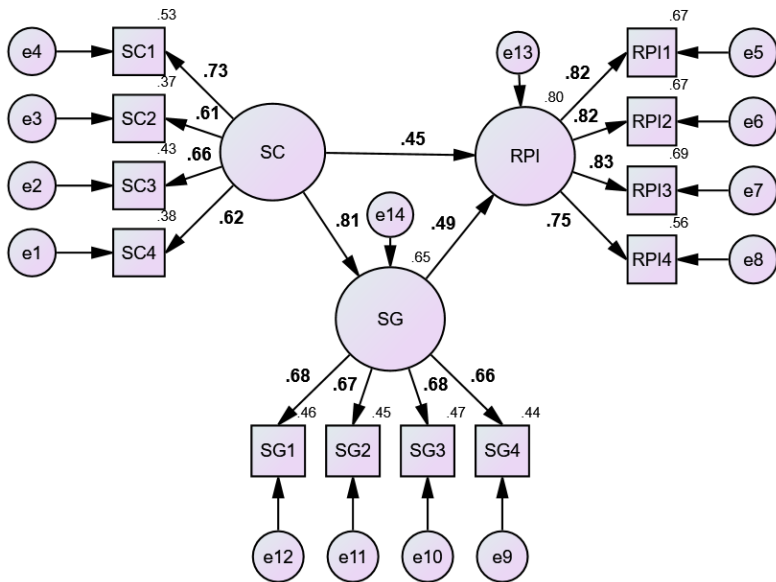


Figure 3 Mediation Analysis

Moderation Analysis

SG→BST→RPI

According to the study's projected model, the relationship between SG and RPI is moderated by BST. It was discovered that there was a considerable moderating influence of BST on the link between SG and RPI. The moderation analysis result showed that the interaction term had a significant impact on the dependent variable, RPI ($\beta=-0.145$, $P<0.01$). After further observation, it was discovered that the other two connections between SG→RPI and BST→RPI were likewise extremely significant ($\beta=0.90$, $P<0.05$) and ($\beta=0.86$, $P<0.05$), respectively. All of the suggested model's values fell comfortably within the specified ranges, according to the moderation analysis's findings, and BST has been identified as a possible moderator of the association between SG and RPI.

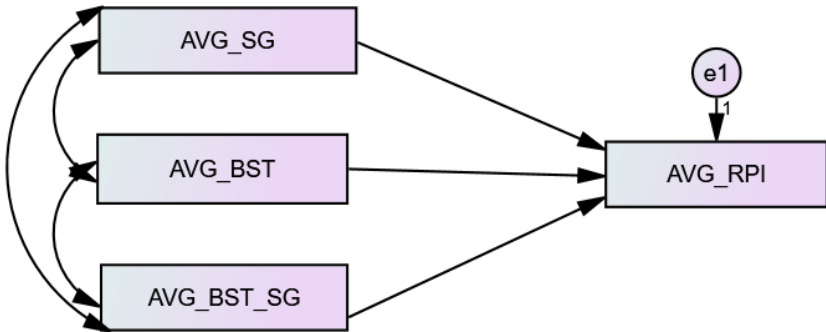


Figure 4 Moderation Analysis

Hypothesis Testing:

Outcome of SEM analysis on the proposed model revealed that every hypothesized relationship within the model was found to be statistically significant positively except our study first hypothesis got rejected because of insignificant P value (0.228). Apart from that the outcome of SEM revealed that all the remaining hypotheses consisting of (H2, H3, H4, and H5) were positively significant and supported the proposed hypothesized model. The mediation effect of SG was explored between PU and RPI (PU→SG→RPI). Mediation effect of SG was also explored between SC and RPI (SC→SG→RPI). Mediation analysis revealed that SG fully mediates the relationship between PU and RPI. Similarly, the outcomes identified that SG partially mediates the association between SC and RPI.

Table 9 Structure Equation Modeling (SEM)

| Hypothesis | B | SE | P | Result |
|------------|-------|------|------|----------|
| PU→RPI | 0.06 | 0.51 | 0.22 | Rejected |
| SC→RPI | 0.60 | 0.13 | 0.00 | Accepted |
| PU→SG→RPI | 0.38 | 0.27 | 0.00 | Accepted |
| SC→SG→RPI | 0.51 | -- | 0.00 | Accepted |
| SG→BST→RPI | 0.145 | -- | 0.00 | Accepted |

Notes: PU, Perceived Uncertainty; SC, Service Convenience; SG, Swift Guanxi; BST, Buyer Seller Trust; RPI, Repurchase Intention.

Discussion and Conclusion

Implications of the Study

Theoretical Implications

This study advances e-commerce dynamics theory by examining the interactions between perceived uncertainty, service convenience, swift guanxi, and buyer-seller trust on Daraz.pk. First, unlike previous research, this study breaks down swift guanxi dimensions to examine their effects on repurchase intentions (Ou et al., 2014). Mutual Understanding, reciprocal favor, and harmonious relationships appear to influence repurchase intention. They also demonstrate that swift guanxi has a positive impact on customers' intentions to make additional purchases in an environment with good seller-customer communication. Second,

earlier research either directly examined the relationship between swift guanxi and trust (Kiong and Kee, 1998) or indirectly (Pennington et al., 2003). This study is unique in that it breaks swift guanxi into three dimensions and examines how these dimensions and buyer-seller trust relate in the Pakistani market. This fills the knowledge gap from previous studies. Our findings also show that mutual understanding, reciprocal favor, and harmonious relationships positively affect buyer-seller trust in e-commerce. Adding buyer-seller trust as a moderator improves the trust theory by showing how it affects perceived uncertainty, service convenience, and repurchase intention. Trust grows when social support and presence are preconditions for social commerce. Trust is essential for social commerce transactions. The study found that trust is more important than swift guanxi in RI and social sharing. If they could quickly build guanxi and trust with their first purchase, customers would be more likely to have RI and social sharing intention. Trust can help short-term guanxi become long-term through recurring purchases and social sharing. This shows that trust in online transactions reduces uncertainty and improves service convenience. Combining these variables in a framework improves e-commerce theories. This study highlights swift guanxi's role as an e-commerce mediator. By defining guanxi's digital functions, this research advances its understanding.

Practical Implications

This research can help online retailers create strategic plans to quickly build strong buyer-seller relationships, especially in Pakistan e-commerce. Online retailers should improve customer perceived control, store service convenience, and other customer service first. To increase consumers' perceived control, retailers should design online stores logically and present product information clearly. This method improves consumer information access and transaction control. Also, improving service convenience helps the buyer-seller relationship grow quickly. To do this, online retailers should provide detailed transaction instructions and use automated settings to update orders and prices. These features not only save customers time and effort but also encourage a quick buyer-seller relationship with the retailer. This research can help online merchants improve buyer-seller communication, especially in Pakistan e-commerce, to increase customer purchases. Retailers should improve customer service, perceived control, service ease, and other online service quality factors. To give customers more control, retailers should provide clear product information and organize their online stores. Understanding how perceived uncertainty and service convenience affect customer repurchase intention benefits e-commerce businesses, especially Pakistani ones. Client retention and referrals can increase with strategies that reduce uncertainty and improve service accessibility. E-commerce platforms can use swift guanxi to mediate rapid and reciprocal trades with customers. Optimizing response times, transactions, and operations improves customer experiences. The moderated effect of buyer-seller trust emphasizes the need for ongoing trust-building in E-commerce. Daraz.pk should invest in reliable transactions, open communication, and morality to build buyer-seller trust and long-term relationships. Finally, mutual understanding, reciprocal favor, and relationship harmony positively affect repurchase intentions in swift guanxi for online auctions. Sellers must also consider how buyer uncertainty and vendor trust affect their intent to buy again. Fostering consumer confidence and reducing product uncertainty is essential to a successful online auction.

Limitation and Future Directions

Several limitations in this study allow for further research advancements. The majority of our study participants were university students, raising questions regarding its applicability. Future study should include different online users to improve generalizability and reliability. Second, because the survey only included Daraz.pk customers, the results may not apply to other popular Pakistani e-commerce sites like Telemart, PriceOye, and others. Further research should include consumers from a larger range of Pakistani E-commerce sites to boost generalizability and external validity. Thirdly, we analyze only how online service quality affects quick guanxi. Future studies should examine other e-commerce characteristics that may strengthen buyer-seller quick guanxi. This could involve studying online buying factors that affect buyer-seller relationships. Finally, we examined the relationship between online service quality and rapid guanxi from the buyer's perspective. Future rapid guanxi studies should examine this relationship from online sellers' perspectives to better understand it. This dual approach provides a more complete understanding of how online businesses create and sustain swift guanxi.

Conclusion

This study makes use of the Chinese guanxi culture viewpoint to develop a thorough research model that clarifies how technological aspects of e-commerce service convenience contribute to repurchase intention by establishing confidence and swift guanxi. Unlike earlier research in this area, we have expanded our theoretical framework to include swift guanxi as a unique component of the online market, which has improved our empirical analysis to reveal its predictive function in e-commerce repurchase intention. Furthermore, our research adds a fresh perspective by illuminating the ways in which technical characteristics support the growth of robust buyer-seller connections and, to differing degrees, positively impact relationship quality in the context of social commerce. This study offers substantial value to the body of knowledge on relationship marketing and the field of social commerce studies. The empirical results not only give managers insightful information about how to improve customer interactions, but they also offer direction for encouraging the rapid and robust growth of social commerce.

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Enhancing Re-purchase Intention and Brand Loyalty through Green Marketing: The Role of Brand Trust

Hafiz Abdul Ali

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24135

Marketing managers face a problem of brand loyalty and re-purchase intentions that is consumers don't remain loyal and are not buying again from the same brand. Therefore this research aims to examine the influence of green marketing on brand loyalty and re-purchase intention through the mediation of brand trust. This study will use the trust-building theory and signalling theory.

In this quantitative study , a sample of 320 individuals will be selected based on the item-to-response ratio. Specifically, the study will collect data from university/College students on a convenience basis.

The study will use SPSS to analyze data. This study will have insights for marketing managers.

Keywords: Green marketing, brand trust, repurchase intention, brand loyalty

Influence of Brand Consciousness on Purchase Intention: The Mediating Roles of Brand
Loyalty and Brand Attitude

Sumera Bibi, Talat Islam

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24136

Researchers have a keen interest to investigate the purchase intention. Purchase intention plays a major role in the effect of the relationship with the brand. Consumers are very conscious to buy the high-profile brand products therefore purchase intention have become influenced by brand consciousness. This research will use the theory of psychological orientation to examine the effect of brand consciousness. The method will be a questionnaire-based survey for collecting the data. The data will be collected from consumers that are purchasing the brands through convenience sampling. The data for this study will be collected from around 360 respondents which is based on the criteria of 20 responses for each question by items-response ratio as the population is unknown. These key variables have been studied previously individually but this research will be the first study to make a new contribution by examining the influence of brand consciousness on purchase intention with the mediating roles of brand loyalty and brand attitude. This model and its findings will help to enhance certain purchase intentions.

Keywords: Brand consciousness, brand loyalty, brand attitude, purchase intention

Navigating the E-Marketplace: Exploring the Interplay of Electronic Service Quality, Brand Love, and Consumer Behavioral Engagement in Electronic Word-of-Mouth Generation

Saqib Imran, Muhammad Ali

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24149

This study explores the intricate relationship between electronic service quality in e-marketplaces, brand love, and consumer behavioral engagement, with a specific focus on their impact on electronic word-of-mouth (eWOM) generation. It aims to investigate how electronic service quality influences brand love, subsequently shaping consumer response of electronic word-of-mouth, while consumer behavioral engagement plays a moderating role in this relationship for electronic marketplace consumers in Pakistan. This study utilized a cross-sectional approach to conveniently gather data from 300 e-marketplace consumers via Google Forms to assess their perceptions about electronic service quality standards of e-marketplace sites. Structural Equation Modeling (SEM) was employed for data analysis of collected data. The findings underscore the significant impact of electronic service quality on fostering brand love among consumers which consequently influencing their engagement in electronic word-of-mouth (eWOM) activities. By using moderated-mediation model, this study analyzed consumer behavioral engagement on social networking sites strengthens the relationship between brand love and electronic word-of-mouth (eWOM). This research highlighted the importance for e-marketplace businesses to optimize electronic service quality enhance consumer engagement and advocacy. This research contributes to existing literature by providing empirical evidence on the interplay between electronic service quality, brand love, consumer behavioral engagement, and eWOM in e-marketplaces. Moreover, it extends scholarly understanding by examining the moderating role of consumer behavioral engagement offering insights into the mechanisms driving consumer behavior in e-marketplaces.

Keywords: Electronic service quality, brand love, consumer behavioral engagement on social networking sites, electronic word of mouth, eWOM, e-marketplaces

Exploring the Effect of Sports Nostalgia on Sponsored Product Purchase Intention with the Mediating Role of Attitude toward the Event and Moderating Effect of Sports Involvement

Usama Ismail, Talat Islam

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Article ID 24204

Abstract

This research discovers into the intricate relationships among sports nostalgia, attitudes toward events, sponsored product purchase intentions, and the moderating impact of sports involvement. Drive in in the context of sports marketing, the study seeks to understand the nuanced relation between these variables, shedding light on the ways and methods that drive consumer behaviour in the realm of sports-related consumption. Sports nostalgia act as the independent variable in the study custom to identify the sponsored product purchase intention through the mediating role of attitude toward event and sports involvement is used as catalytic agent for the study. The research uses a quantitative methodology, gathering information from a wide range of sports fans via questionnaires from student and general public of different universities. After discarding the incomplete survey statistical test run on sample of 330 using SPSS and AMOS. The results show that consumer sponsored product purchase intention is shaped more by the attitude toward event and sports nostalgia has less direct effect. Sports involvement is found to be insignificant in this study. Marketing policy makers must keep in view the attitude toward particular event to impact the purchase intention by sports nostalgia.

Keywords: Sports nostalgia, Purchase intention, Sports involvement, Attitude towards event

Introduction

In recent years, the world has seen an upsurge in the global sports business market ([Gough, 2023](#)). Cricket is among few games that are most watched and played in the world, with enthusiast across the subcontinent; the United Kingdom, Australasia, and beyond. The worldwide Cricket market was worth USD 298.91 million in 2022 and is predicted to grow at a rate of 3.62% through 2028, reaching USD 369.9 million (Statista, 2023). Investigating the cricket statistics in south Asia and particularly in Pakistan CEO of Cricwick & Cricingif Ahmed Hanif, (2023) STATED

“When we compare the number of digital viewers in the ODI World Cup 2019 and the PSL 2020, we see a huge difference in interest. We had over 200K unique viewers during the World Cup 2019, and approximately 569K unique users came to our site to watch the live stream throughout the Pakistan super league 2020”.

As a consequence of Cricket being played, watched, and enjoyed by the whole Pakistan. Businesses can use this opportunity to utilize these enormous platforms to promote their products and services to large number of audience. In addition, Pakistan Super League (PSL), being the most popular and country's largest mega-event, provide platform for the marketers to look for the potential customer. Out of the 76% of the Pakistani population who has access to television, 73% of people were found to view the country's domestic T20 league ([AkshaySonawane, 2022](#)). Moreover, Technology advancement has provided the sports fan limitless accessibility to watch and enjoy their favourite games despite of the geographical location as the world is considered a global village (Behrens &Uhrich, 2019). Pu and James (2017) explained these sports fans as the supporter that has emotional attachment with foreign team and viewed their games over the digital and social media platforms such as Facebook, YouTube, Instagram and twitter. These satellite fan have been found to be expanding day by

day (WARC, 2019). Najam sethi chairman Pakistan cricket board back in February 2023 claims that "Over a 150 million people watched it on digital. It is not a small thing".

This offers a chance to connect with this audience and make a memorable impact. live Cricket matches take place in real time, requiring markets to interact immediately. Live tweeting, fast updates, and engaging social marketing have all become the norm. Real-time engagement captivates viewers, providing marketers with an ideal opportunity to connect (Vivek Pandey,2023).

In view of the Lucrative Aspect of the industry, it is important to investigate how marketers may capitalize on opportunity of rising market and as result boost profitability by identifying the elements that may influence sports fans' purchase intentions. A consumer's intention to purchase a product or service is defined by their readiness to do so under specific circumstances (Rashid *et al.* 2020). According to Fishbein and Ajzen (2015) intentions are considered the most important indicator of real behaviour. Marketers are always looking to increase the sales by boosting purchase intentions. purchase intention is a complex procedure tied to consumer behaviour, opinion, and attitudes, making it a complete package for forecasting the purchasing process (Mirabi *et al.* ,2015). Emotions also play vital role in decision making and have been explored as an important determinant of purchase intention (Leone *et al.*, 2005). Researchers describe emotion as a response to external stimuli, ultimately expressed through actions (Shiota, 2007). Sport administrators and marketers understand that emotionally warmed sports fans are very appealing marketing targets for commercial and sports sponsors. Emotions have been linked to broad sponsorship effects including recall. (Also referred as nostalgia, Carrillat, d'Astous, Bellavance, & Eid, 2015).

Nostalgia as an emotion has been defined as "a sentimental longing or wistful affection for the past" ("Nostalgia," 1998, p. 1266). Individuals in nostalgic reverie recall warmly memorable experiences from their early life and association and frequently craved to return to their beloved past (Bruder, *et al.*, 2019).

Researches in the sectors of sporting activities, leisure, and tourism has shown the importance of nostalgia in individuals' psychological and behavioural implications (Cho, 2021). Furthermore, researches explored sport fans' nostalgic sentiments have been found to positively influenced by their team affiliation, enhancing their desire to relive a sports game. (Cho *et al.*, 2020).

In recent years, there has been an increase in the number of studies on sports nostalgia. However, the impact of sports nostalgia on the fans across the border refers as satellite fans and its influence on psychological and behavioural results, specifically purchase intention remains unknown. Moreover, there may be some other mechanisms and factors that could affect the relationship of sports nostalgia on purchase intention. These factors include attitude toward sponsored event and sports involvement. In Studies related to sports sponsorship J.Koo and Y. Lee (2018) suggest that sports involvement can also be checked for the moderation effect. McDaniel (1999) also recommend that sport involvement might be play a role of moderator in the relationship between sponsorship and customer purchase intentions.

Attitude is identified as an important and effective predictor of intentions (Ajzen, 2001). Attitude refers to the ways and manners in which an individual carries out certain behaviour by subjective positive or negative evaluation of the outcome of any particular behaviour or event. (Khan & Khan, 2006). According to Mitchell and Olsen, (1981) there is substantial pavlovian psychology research investigating the problems such as attitude toward the ad and attitude toward the advertiser (Cacioppo & Schumann ,1983). Research in this field has shown how a person's attitude towards the occurrence, which is thought of as the unconditioned stimulus, is very important in determining how they will react. Burke and Edell

(1989) for example, found that favourable feelings towards an advertising resulted in a more favourable assessment of the promoted brand. On the other hand, bad feelings had a negative impact on brand assessment.

Stimuli-Organism-Response (SOR) model also helps to understand this phenomenon presented by Mehrabian and Russell (1974). when people encounter something objective, social, or psychological, it triggers a mental or emotional response, influencing them to pursue or avoid specific experiences. (Mehrabian & Russell, 1974). From above definition it is cleared that SOR is suitable for researching how people react to gaming situations (Uhrich & Benkenstein, 2010). In fact, sporting events feature diverse environmental stimuli to sport fans (for examples of stimuli include the meals and music presented at the events, as well as the physical look of the athletic stadiums (Cho *et al.*, 2014; Uhrich & Benkenstein, 2010). In this study, these inputs can elicit affective states such as sports nostalgia. As a result, this emotional reaction might have an impact on behavioural outcomes like participating in activities linked to planned purchases.

A strong and personal connection with the sport may also be characterized as sports involvement. In the context of sports sponsorship this would be interesting to see how sports involvement may moderate the relation between the sports nostalgia and purchase intention (McDaniel, 1999). As the direct participations and knowledge of specific game can impact the attitude toward that specific event.

This research aims to contribute to the existing literature and provide practical and theoretical insights on sports nostalgia in the context of sports sponsorship and its implication on the behavioural intention of sports fans, specifically cricket fans in Pakistan. It is conceivable that satellite fans may experience an emotional connection to sporting activities, which might influence their decision to buy sponsored items. Furthermore, they may be more inclined to advocate their teams by promoting goods. Nevertheless, the connection between sponsorship and the nostalgia of satellite fans has not been investigated. So this study provides the idea of how the nostalgia of sports fans can enhance the purchase intention of sponsored product when mediated through the attitude toward sponsored event.

Sports involvement as moderator in the context of sports sponsorship in previous researcher have been remain inconclusive. This study provides an interesting insight for the literature that how Sports involvement may increase or decrease the impact of sports nostalgia on purchase intention for a sponsored product sports nostalgia can impact the attitude toward any sponsored event and in presence of spots involvement how this attitude changes the purchase intention of sponsor product.

Literature Review

Theoretical Background

The present study's theoretical framework (see Figure 1) has been created based on an adaption of the Stimulus-Organism-Response (S-O-R) Model developed initially in (Mehrabian & Russell, 1974) study. According to Machleit and Davis (2001) the standard S-O-R model defines stimulus as an influence that stimulates an individual and has an impact on their internal state. When describing consumer behaviour within an S-O-R system, external stimuli encompasses both marketing mix variables (Bagozzi, 1986). According to Smith and Jones, 2022 various environmental cues can induce nostalgia which serve as stimuli. For example, hearing the theme song from a favourite childhood TV show or seeing a vintage advertisement can evoke feelings of nostalgia, transporting individuals back to a particular time or place in their lives (Batcho, 2013). The term "organism" in S-O-R model denotes internal processes and structures that intervene between external stimuli and the final

actions, reactions, or responses emitted and these intervening processes and structures encompass perceptual, physiological, feeling, and thinking activities (Bagozzi, 1986, p. 46). When people are exposed to nostalgia as a stimulus, their own cognitive and emotional systems become active. These processes might involve thinking back on the past, remembering particular experiences, and feeling a range of good feelings including joy, relaxation, and nostalgic desire (Sedikides *et al.*, 2008). Nostalgia as a trigger can generate a variety of reactions, such as adjustments in mood, attitudes, and behaviours. People may show a want to reminisce about the past, indulge in nostalgic pursuits, or look for nostalgic goods and media (Cheung *et al.*, 2020). there are number of studies in the past that uses emotions as mediator in S-O-R model such as Smith, J., & Johnson, R. (2018), S., & Kim, M. (2020).

The initial S-O-R model, as proposed by Mehrabian and Russell (1974), focus on pleasure, arousal, and dominance (PAD), representing affective and cognitive states of human mind. PAD has been found to mediate the relationship between stimuli and individuals' behavioural responses; the affective aspect of the organism component acting as an emotional internal response as defined by Bagozzi (1986). Hence, the current research studies positive emotional responses as favourable feelings that consumers direct towards the products associated with the sponsor in response to the stimulus of nostalgia. Approach behaviours, the central focus of this study, encompass positive actions directed toward a specific context. For instance, intentions, browsing, and making purchases constitute positive final actions undertaken by consumers (Bitner, 1992; Mehrabian and Russell, 1974).

In any sporting event, SOR is important to study the response of individual towards environment (Uhrich & Benkenstein, 2010). Basically, Cho *et al.* (2014) feature of sporting events is diverse environmental stimuli (S) for the sports fan i.e. music played during event as well as food sold and semblance of sporting venue. In the current study, such stimuli can stir up the fan's emotional state which can be said sports nostalgia (O). As a result, this will influence the behavioural response and people engage in these activities which are related to purchase intention (R).

In the context of sports nostalgia, stimuli can include various triggers associated with past sports experiences. These stimuli may include images, sounds, smells, historical sports artefacts, or even specific sports events (Cho. *et al.* 2018). The organism represents the individual's cognitive and emotional processes. In sports nostalgia, this involves the memories, emotions, and thoughts associated with past sports experiences. Nostalgia often involves a longing for positive experiences, a sense of connection to the past, and a feeling of warmth and comfort. The response is the behavioural outcome resulting from the interaction between the stimulus and the organism.

Nostalgia

The concept of nostalgia, while not novel, has secured increased attention recently because of its evolving uses and applications. Originally, Chase and Shaw (1989) viewed as chronic diseases attributed to a swiftly modification in social structure, nostalgia was once identified but currently it is widely recognized as a selectively positive perception of the past, often set against a less favourable or uncertain present and future (Cheung, Sedikides, & Wildschut, 2021). This sentiment can emerge from a yearning for a past that one has directly gone through (Holak & Havlena, 1998) or indirectly encountered through visual mediums such as articles, papers, pictures, films, photos and movies (Goulding, 2002).

Davis (1979) defined nostalgia as “a longing for yesterday, explaining it as ‘a positively toned evocation of a lived past in the context of some negative feeling toward present or impending circumstance’” (p. 18). In the same manner, Stern (1992) also emphasized that nostalgia is a positive past memory and defined as ‘an emotional state in which an individual yearns for an

idealized or sanitized version of an earlier time period’ (p. 11). According to Wildschut, and Baden (2004) nostalgia is being a ‘disproportionately positive emotion, with bittersweet elements.

Sports nostalgia

Satellite fan

As outlined in Kerr and Gladden (2008) and characterized satellite fan as “someone who maintains an emotional bond with a foreign-based team”. Technological advancements have granted fans ultimate access to their most favourite teams or players, overcoming geographical distances (Behrens & Uhrich, 2019). Kerr and Gladden (2008) justified that, this unrestricted access has empowered fans to establish or maintain bonds with their favourite foreign-based teams as well as players. Satellite fans often exhibit a sustained commitment to following their favourite teams, regardless of match outcomes (Chanavat & Bodet, 2009). Even when at home, satellite fans can stay connected with the performance of their favourite teams or players in matches played in other countries, fostering a sense of favouritism to a global community of fan (Kerr & Gladden, 2008).

Understanding the different features of nostalgia in a sports context depends greatly on how sport is defined. Kelly (1982) elaborated sport as an “organized activity in which physical effort is related to that of others in some relative measurement of outcomes with accepted regularities and forms”. This definition indicates various distinctive aspects of sports that are intricately linked to nostalgia.

The relationship between nostalgia and childhood memories is significant, as experiences related to sports during childhood evoke a sense of nostalgia in adults. (Cheung, Sedikides & Wildschut, 2021) Sports traditions play a crucial role in fostering a connection between individuals and their favourite teams, (Funk & James, 2001) enabling them to relate to a subculture via common experiences inside the group. People frequently have nostalgia for the past as a result of the memories these events create. Sports venues also have a unique ambiance that leaves an impression on the five senses (seeing, hearing, touch, smell, and taste). (Gaffney & Bale, 2004). Belk (1990) aptly described, nostalgia is “a wistful mood that may be prompted by an object, a scene, a smell, or a strain of music”. These intangible elements, linked to individuals’ experiences in sports settings and the unique ambiance they create, likely contribute to the feelings of nostalgia.

Likewise, when games and events are replayed on dedicated channels such as ESPN the readily accessible archive of sports broadcasts on digital platform, has transformed the way games are relish and subsequently recollected. As Gordon (2013) articulated, nostalgia represents “the nexus of sport, emotion, and memory” (p. 119), emphasising the significance of place, which, when intertwined with recollection, elicits a nostalgic response.

Fairley (2003) has prompted to differentiate between object-based and experience-based nostalgia within sporting contexts. First type of nostalgia occurs when one experience nostalgic sentiments towards their favourite sports men from the past, often reminiscing by visiting historical sporting sites (Gammon, 2002; Gibson *et al.*, 2002). Conversely, experience-based nostalgia involves individuals cherishing memories of social interactions during past sporting events and actively seeking similar communal experiences in subsequent sports-related occasions. (Ko, Kim, & Sagas, 2017).

From the point of view of sports followers, taking into account both direct and indirect interactions, this study finds four categories of experiences that elicit sentimental memories associated with athletic events. The first kind of experience refers to being physically present. The second category of experience involves direct engagement through different

communication channels (e.g., electronic and print media) during live games. This encompasses individuals who, due to various constraints such as weather, health, ticket availability, transportation, time, or financial considerations, are unable to attend games at the stadium but acquire real-time information through media sources.

The third form of experience pertains to direct engagement through media channels following the conclusion of the game (e.g., books, magazines, television). This includes individuals who catch up on game-related news reports and highlight summaries after the event has concluded. The final category of experience involves word-of-mouth or indirect exposure via the media. People may easily obtain this kind of knowledge on past sporting events since sports and the media are closely related (Snyder, 1991).

Sports Nostalgia and sponsored product purchase intention

Intention to purchase is the inclination of a consumer to acquire a specific item under particular conditions. (Kim & Lennon, 2007) Purchase intention is closely tied to consumer behaviour, attitude and perceptions. According to Shah *et al.* (2012) intention to purchase represents a facet of making decision wherein a customer deliberates on the factors motivating their choice to purchase a particular brand. Consequently, it functions as a dependent variable influenced by a multitude of internal factors including customer demand, as well as attitudes and perceptions, along with external factors.

Two distinct types of influences on purchase intention are identified: direct influence and competitive influence. Direct influence implies that the purchase intention for a specific brand is shaped by the attitude towards that brand. Conversely, competitive influence suggests that attitudes towards competing brands can impact the purchase intention for a particular brand. The assumption here is that any competitive effect, if present, would likely have an adverse effect on the purchase intention for that specific brand. Similar substitutes often seek to expand their market share by acquiring shares from similar competitors (Laroche & Brisoux, 1989). Sports events have shown comparable associations between intents and sport nostalgia (Fairley *et al.*, 2018). A study by Gibson *et al.*'s (2002) shown how college football sparked people's desire for sports and inspired them to attend games. At sports events, people are exposed to a variety of stimuli (Cho *et al.*, 2014), which has an impact on their behaviour, attitude, and recollections of the event (Krishna, 2012). Positive experiences at previous sports events may thus lead to a comparable mind-set and sporting events that have the same stimuli and nature (like the 2010 Vancouver Winter Olympics).

Nostalgia has been found to influence the intention to purchase a brand's products (Sierra & McQuitty, 2007). Similarly, it has been established that including nostalgic themes into branding positively influences customers' perceptions and actions about a sponsored brand or product. (Muehling & Pascal, 2012). Following this notion, this study understands nostalgia to influence satellite fans' actions in the future in the same way like the purchase intention of the sponsor products. Hence following hypothesis is formed:

H1: Sports nostalgia has significant impact on purchase intention of the sponsor products.

Mediating effect of attitude towards event

Attitude toward the event refers to the degree to which customers perceive the event as enjoyable, satisfying, informative, and captivating (Chandon, Wansink, & Laurent, 2000). There is little empirical evidence on the mediating effect between nostalgia, attitude towards sponsored events, and the sponsor's products purchase intention within the field of sports fans' behaviour, prior studies have suggested a link between attitude and nostalgia. (Cheung *et al.*, 2013). Muehling *et al.* (2014) observed that experiencing nostalgia led to increased

positive emotion this emotional connection, in turn, influenced fans' attitudes and behaviours towards supporting their teams.

Research in this field indicates that while attitude nostalgia and are distinct concepts (Cho *et al.*, 2014). Attitude and nostalgia are shaped by past experiences related to individuals, events, or environments. While there might be no or limited studies that has specifically examined the causal link in the context of sports sponsorship between attitude and nostalgia, positive associations between them have been supported in various other settings (e.g., Pascal, Sprott, & Muehling, 2002 Ju, Jun, Dodoo, & Morris, 2017). Studies by, Wildschut, Turner and Sedikides (2012) discovered that nostalgia towards an obsessed person positively influenced attitudes towards others who were also overweight. Similarly, in other study from Wildschut, Sedikides, Arndt, and Routledge (2006), in which they found that experiencing nostalgia increased empathy and compassion towards others, leading to more positive attitudes and behaviours towards them.

Keeping this notion, People's perceptions of events, particularly sports-related ones, can be greatly influenced by their nostalgia for sports. Research on the impact of nostalgia advertising by Muehling and Pascal (2012) lends credence to this perspective. According to their research, marketing strategies focused on nostalgia have the power to arouse favourable feelings and improve perceptions of things or occasions connected to the past. As a result, people who experience sports nostalgia may grow to have more positive opinions about athletic events that they connect to special experiences from the past.

At athletic events, people are subjected to a variety of stimuli (Cho *et al.*, 2014), which has an impact on their memories, attitudes, and behaviours related to the event (Krishna, 2012). Positive prior experiences with athletic events may thus lead to a similar mind-set and behaviour towards subsequent athletic activities that have a similar nature and set of stimuli.

H2: Sports nostalgia has significant impact on the attitude toward event.

Ultimately, attitude is acknowledged as a prominent and influential predictor of intentions (Fishbein & Ajzen, 1975 Ajzen, 2001;). Ajzen, (2001) believes that attitude and emotion combine to produce intention (Perugini & Bagozzi, 2001).). There are multiple studies about classical conditioning that address issues such as attitude toward the advertisement (Mitchell and Olsen, 1981) and attitude toward the advertiser (Cacioppo & Schumann 1983). These studies emphasize how significant it is for individuals to perceive the event positively to generate a favourable response. Several studies shows that the positive attitude leads to positive purchase intention (Ahuvia & Friedman, 2018). In contrast bad feelings has negative impact on attitude (Wang & Xie, 2019). Keeping this notion to sponsorship, it can be claimed that positive purchase intention of sponsored products can be achieved by the positive attitude toward the event. so keeping in view following hypothesis is developed:

H3: Attitude toward event has significant impact on purchase intention of sponsor products.

Sports involvement

According to Beaton et al, (2011) sports involvement is associated to an individual's assessment of the significance of their engagement in engaging in actions associated with a specific sport in their life. According to Kim, Trail, and Ko (2011), the relationship between sports sponsorship and consumer behaviour, considering the level of sports involvement as a moderator. They found that the effect of sports sponsorship on consumer behaviour varied depending on individuals' level of involvement in sports.

This variable is recognized as one of the three factors influencing consumer purchase intention for products associated with a sports sponsor (Meenaghan, 2001). Sports

involvement serves as a valuable predictor of sports-related behaviour. Individuals with high sports involvement are more likely to invest time in watching sports programs on television, reading about sports, and attending sporting events compared to those with low sports involvement (Shank & Beasley, 1998).

According to Pyung and James, (2011) Highly engaged individuals also have a tendency to see ads for that sport favourably and exhibit a higher inclination to buy the goods from that sport's sponsors. Finally, there is more chances that customer will purchase sponsored product when he is more involved in sports itself (Shurat, 2007). so following hypothesis is thus formed:

H4: *Sports involvement have significant impact on relationship between sports nostalgia and purchase intention.*

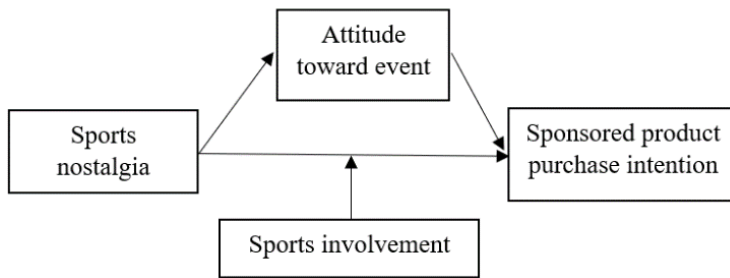


Figure 1: Theoretical Framework

Methods

Participants and procedures

This study focused on the effect of sports nostalgia on the purchase intention of the satellite games viewer in the setting of sports sponsorship with moderating effect of sports involvement. logical reason for choosing cricket was that more than half of all Pakistanis are cricket fans (Gallup,2010). The reason behind selecting Pakistan super league is that the PSL competition had both TV and digital viewers. According to the Pakistan Cricket Board (PCB), HBL PSL has 80 million viewers. These cricket viewers providing opportunity to numbers of sponsor to create the purchase intention for their products through the nostalgic lenses for these cricket viewers (Naved ,2023). Hence this research selected the cricket fans viewing it on electronic media and digital media having age group ranging from 18 years to 60 years. According to research conducted on cricket viewership on one billion Cricket fan base from worldwide most fans were 34, accounting for 61% male and 39% female (kiko, 2023)

This Study used items to response theory (Cai *et al.*, 2016) to select a sample of 540 respondents from the population as sample frame is unknown. i.e., $20*23 = 540$ (Islam & Hussain, 2022). data is gathered using online surveys tool (google forms) and also filled via self-administrated questionnaire. Link was distributed through digital platforms such as, Facebook cricket and PSL pages, WhatsApp groups and on Instagram. Respondents were first informed about the purpose of the study and their consent was taken to use this data for academic's purposes.

Questionnaire was divided into 2 parts. in the first section demographics information such as age, education, gender and favourite sports was obtained. And in the second half participants were asked to respond about the research variable on 5-point Likert scale.

From the total 360 questionnaire distributed 340 were received back 10 were not included due to incomplete information 330 were used for further analysis. Majority of respondent were university students and male (N174) having age group of 18 to 25 And education level was from collage to masters the respondent had also asked about their favourite game.

Measure

Questionnaire used to collect data for this study was adapted by reviewing and analysing the previous studies, five-point Likert scale starting from 1-rtongly disagree to strongly agree used to record the data.

Sports nostalgia

This study used Cho *et al.*'s (2017) Nostalgia Scale for Sport Tourism (NSST). The NSST scale comprised 9 items across two factors: sport team and environment. sample item includes "*My Pleasant feelings for the past are evoked by remembering my favourite athletes*".

Attitude toward event

Attitude toward event measured by five items adapted from Tomalieh (2016). Sample item includes "*I am happy to attend or watch sports event*". Purchase intention measured by 4 the items adapted from Tomalieh (2016). Sample item includes "*I use the brand sponsor products regularly*."Sports involvement measured by 6 items adapted from Bresnahan and flower (2008). Sample item included "*I Frequently participate in sports.*"

Table 1: Demographic Characteristics of Respondents

| Characteristics | Demographics | N | % |
|-----------------|----------------|-----|------|
| Gender | Male | 174 | 52.7 |
| | Female | 156 | 47.3 |
| Age | 18 to 25 years | 104 | 31.5 |
| | 26 to 35 years | 149 | 42.5 |
| | 36 to 45 years | 77 | 23.3 |
| Education | Collage | 47 | 14.2 |
| | Bachelors | 179 | 54.2 |
| | Masters | 77 | 23.3 |

Results

This study seeks to identify the mediating effect of attitude toward event and moderating effect of sports involvement between the sports nostalgia and sponsors product purchase intention. Data collected from the customer which are cricket fans across students of 2 different universities and from general public. The study applied structure equation modelling (SEM) in two stages (Islam *et al.*, 2022). In first stage the data is analysed and examined to prepare the data for further analysis i.e., confirmatory factor analysis and hypothesis testing (Malik *et al.*, 2022). These two stages are explained below.

Preliminary analysis

The study performed initial data analysis to check whether data is suitable for the SEM. according to Byrne (2010) data were checked for missing values, normality, multi collinearity. Result was conducted on 330 responses. Data normality checked through skewness and kurtosis and their values must lie between ($\leq \pm 1$) and Kurtosis ($\leq \pm 3$) and analysis shows that values are in the given range and data is normal (Ahmad *et al.*, 2021). there are no missing values in data and multi collinearity is checked by value of correlation in given study the values are below than 0.85 which shows no sign of collinearity (Ahmed *et al.*, 2020).

Confirmatory factor analysis (CFA)

The study uses Kline (2011) criteria for model fitness. According to this criterion [i.e., goodness of fit (GFI 0.90)], CMIN/df < 3.0, root mean square error of approximation (RMSEA # 0.08) and comparative fit index (CFI 0.90) with the factor loading of more than 0.50 (Byrne, 2010).in this study values of measurement model shows CMIN/df=1.684, GFI=0.941, CFI=0.973, RMSEA=0.46 and values of loading are also above the given criteria. Average variance extracted (AVE 0.50) and composite reliability (CR 0.60) were assessed for convergent validity (Islam and Asad, 2021). Ultimately, AVE and maximum shared variance (MSV) were used to assess discriminant validity; AVE values were higher than MSV (See table 2).

Table 2: Convergent and Discriminant Validity

| | CR | AVE | MSV | MaxR(H) | 1 | 2 | 3 | 4 |
|--------------------------|-------|-------|-------|---------|-------|-------|-------|-------|
| 1-sports involvement | 0.872 | 0.631 | 0.077 | 0.872 | 0.794 | | | |
| 2-sports nostalgia | 0.838 | 0.573 | 0.110 | 0.885 | 0.172 | 0.757 | | |
| 3-purchase intention | 0.824 | 0.547 | 0.020 | 0.858 | 0.050 | 0.140 | 0.740 | |
| 4- attitude toward event | 0.883 | 0.654 | 0.110 | 0.890 | 0.277 | 0.331 | 0.086 | 0.809 |

Structure equation modeling

The study used bootstraps at 95% confidence with 2,000 rotations, as per Byrne (2016) to test the hypotheses. First the sports nostalgia positively influences the sponsored product purchase intention. (B = 0.172, CR = 1.914, p = 0.056) which shows p value is slightly above the threshold level. For mediating role first of all we check the direct relation between sports nostalgia and attitude toward event (B = 0.456, CR = 5.751, p = 0.00) and then check the direct relation between attitude toward event and sponsor product purchase intention (B = 0.232, CR = 3.896, p = 0.00) given values shows its significant and to check the indirect effect we multiply the beta coefficient value to obtain the indirect effect (0.456*0.232 B = 0.10) which confirms the mediating role of attitude toward event. Hence H2 is also supported.

For moderation of sports involvement on the relation between attitude toward event and purchase intention this study compute an interaction term by multiplying the independent variable which is attitude toward event and moderator sports involvement and named new variable as interaction term and this study found no moderation due to its significant value which is above 0.05. (SEE TABLE 3,4)

Table 3: Mediation Analysis

| Hypotheses | β | SE | t | p |
|--|---------|-------|-----|------|
| Sports nostalgia → purchase intention | 0.172 | 0.90 | 1.9 | 0.56 |
| Sports nostalgia → Attitude toward event | 0.456 | 0.79 | 5.7 | *** |
| Attitude toward event → purchase intention | 0.232 | 0.60 | 3.8 | *** |
| Direct effect | 0.172 | 0.90 | 1.9 | 0.56 |
| Indirect effect | 0.10 | 0.056 | 2.3 | 0.03 |

Note: *** $p < 0.01$

Table 4: Moderation analysis

| | β | SE | t | p |
|--|---------|------|-------|------|
| z-purchase intention <--- z-sports nostalgia | -.215 | .490 | -.439 | .660 |
| z-purchase intention <--- z-sports involvement | -.446 | .465 | -.958 | .330 |
| z-purchase intention <--- interactions | .139 | .137 | 1.020 | .308 |

Note: *** $p < 0.01$

Discussion and implication

This study attempted to examine the relationship between sports nostalgia and sponsored product purchase intention also inspect the mediating role of attitude toward event and moderating role of sports involvement. Sports nostalgia positively impact the sponsored product purchase intention and this result also proved by Leong et al (2015) in the field of tourism. Put differently, the stronger the nostalgic aspects in a sponsorship, the more likely it is that customers would buy the products of the sponsors; this suggests that the more nostalgic sensations people have, the more likely it is that they will buy the items (Pascal *et al.*, 2002). Chase and Shaw (1989) highlighted the human inclination to yearn for the past, especially in contemporary times where individuals seek refuge from the complexities and fast-paced nature of modern life, longing for a simpler and seemingly less troubled past.

An individual's general assessment or sentiment on a particular event, such as a sporting event, musical performance, or celebration, is referred to as their attitude towards the event. It includes behavioural, emotive, and cognitive elements and affects a person's propensity to support, or change in behavioural intention (Ko, Kim, & Sagas, 2017). Therefor it can mediate the relation between sports nostalgia and sponsored product purchase intention.

Therefor this study tries to bridge the gap and extend the literature by checking the mediating effect of attitude toward event. When individuals experience sports nostalgia, it evokes positive feelings and memories associated with past sporting events these positive memories from past positively influence the positive emotion for similar sports event in present (Gwinner&Swanson,2003). As when cricket fan watches the cricket match on any digital media platform or in the stadium when they perceive the event as entertaining and their attitude toward the event is positively influenced from there nostalgic feelings it will positively have influenced the product purchase intention as proven by this study in H2. This result is also in line with the Mat Som and Abdul Majid (2018).

Sports involvement affects how people view and react to nostalgic sports-related experiences, it can mitigate the link between purchase intention and sports nostalgia. People who are passionate about sports could feel more strongly connected to wistful recollections of sporting events, players, or teams. The influence of sports nostalgia on their attitudes and intentions

towards buying sports-related goods or going to sporting events might be amplified by this increased emotional attachment. (Roy & Cornwell ,2004). But in this study we find no moderation role because the sports involvement is not significant.

Theoretical implication for this study is that this kind of research advances our knowledge of how consumers behave when it comes to sporting goods and activities. Researchers can learn more about the psychological processes behind customers' choices in the sports sector by examining the relationships between sports nostalgia, purchase intention, attitude towards events, and sports engagement. And attitude toward event and sports involvement can act as catalyst and mechanism for the sports nostalgia to impact on the purchase intention and contributing in the literature by providing the new insights. This study has many practical implications also the sports industry's event marketing strategy can be informed by the study's findings. Event planners and marketers may focus their promotional efforts on evoking nostalgia and increasing consumer involvement by knowing what influences customers' sentiments towards sporting events and their intents to purchase associated items. The study's discoveries offer valuable insights for event marketing strategies within the sports industry.

By understanding the factors that shape consumers' feelings toward sporting events and their inclination to purchase related items, event organizers and marketers can tailor their promotional activities to evoke nostalgia and enhance consumer engagement. This knowledge enables them to effectively influence customer sentiments and increase involvement, ultimately driving interest and sales in associated products and experiences. The sports market can benefit from the study's insights about segmentation and targeting tactics. Marketers may identify various customer categories and create tailored marketing strategies to cater to their unique requirements and interests by comprehending the diverse effects of sports nostalgia, event attitudes, and sports engagement on buy intentions. They emphasized the significance of nostalgia in comprehending the behaviours of individuals, including consumers and tourists, within modern society. With the rapid advancement of media, people now have diverse avenues through which they can experience sporting events, and this diversity should also be taken into account when examining the role of nostalgia.

Limitation and future direction

This study used cross sectional data collected from single source therefore future researches can use longitudinal research design. In this study only a single event sports event is chosen future researches may choose different sports event for different sports fans. Data is mostly collected from the student's future researcher choose different audience for further studies. More data collected in order to check the moderation effect of sports involvement.

Conclusion

Sports nostalgia has significant impact on sponsored product purchase intention through the mediator which is attitude toward event which means that when an individual has positive feeling about his past event and when he experiences the same event in present its positive feelings catalysed and impact its purchase decision of product sponsored in the past and current event. Therefor marketers should keep the nostalgic touch alive and bring the cues from past into present event to affect the purchase intention. Future researcher may collect more data and check the moderation role of sports involvement which is insignificant in this study.

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Appendix

| Variables | Items | Loadings | Cronbach’s alpha | CR | MSV | AVE |
|--------------------------------|-------|----------|------------------|------|------|------|
| Green Washing | GW1 | .906 | .953 | .953 | .343 | .803 |
| | GW2 | .880 | | | | |
| | GW3 | .917 | | | | |
| | GW4 | .926 | | | | |
| | GW5 | .849 | | | | |
| Consumer social responsibility | CnSR1 | .770 | .959 | .884 | .461 | .658 |
| | CnSR2 | .890 | | | | |
| | CnSR3 | .776 | | | | |
| | CnSR4 | .803 | | | | |
| Green Religiosity | GR1 | .666 | .910 | .869 | .186 | .646 |
| | GR2 | .846 | | | | |
| | GR3 | .807 | | | | |
| | GR4 | .880 | | | | |
| Green Purchase Intention | GPI1 | .882 | .897 | .898 | .461 | .746 |
| | GPI2 | .859 | | | | |
| | GPI3 | .850 | | | | |

Effect of Social Media Influencer and Social Media Content on Customer Engagement: Mediating Role of Psychological Characteristics

Ghazal Shahab, Wisal Ahmad
Kohat University of Science and Technology, Kohat, Pakistan

Article ID 24224

Abstract

This study proposes a comprehensive model to understand the dynamics of influencer marketing and its impact on customer engagement. It examines influencer content characteristics, source credibility, and psychological connections with customers. The research utilizes a mixed-methods approach, including surveys, experiments, interviews, focus groups, and content analysis. It aims to fill knowledge gaps and provide insights for businesses to optimize their influencer marketing strategies. By analyzing both quantitative and qualitative data, the study seeks to advance theoretical understanding while addressing ethical considerations in influencer marketing. Ultimately, it aims to enhance both campaign effectiveness and ethical practice, benefiting businesses and customers alike.

Keywords: Influencer marketing, Customer engagement, Content characteristics, Source characteristics, Psychological attributes, PLS-SEM model, Mixed-methods approach.

Introduction

In the contemporary landscape of marketing, the emergence of social media has catalyzed a transformative phenomenon known as influencer marketing (Godey et al., 2016; Fink et al., 2019; Lou & Yuan, 2019; Vrontis et al., 2021). This strategy involves collaborating with individuals who wield substantial influence on social platforms, captivating audiences with their content. Influencer marketing capitalizes on the ability of these individuals to shape perceptions and behaviors within their dedicated follower base. The strategy has garnered immense traction among businesses due to its proven efficacy in enhancing return on investment, purchase intentions, and brand equity (Godey et al., 2016; Fink et al., 2019). As consumers increasingly rely on social media for decision-making, influencer-generated content holds sway over traditional advertising formats. The perceived authenticity and trustworthiness of influencers play a pivotal role in their effectiveness as brand advocates (Godey et al., 2016; Fink et al., 2019). However, despite its widespread adoption, there remains a dearth of comprehensive understanding regarding the intricate interplay between influencer marketing and customer engagement (Godey et al., 2016; Fink et al., 2019; Lou & Yuan, 2019; Vrontis et al., 2021). This study aims to bridge this gap by introducing a holistic model that elucidates the multifaceted dynamics governing customer engagement within the realm of influencer marketing. Through empirical exploration, the research seeks to unravel the influence of influencer content characteristics, source credibility, and psychological attributes on customer engagement metrics. By addressing these critical questions, businesses and marketers will gain actionable insights to refine their influencer marketing strategies and bolster customer engagement in the digital era.

Literature Review

In recent years, influencer marketing has gained substantial attention as a strategy for businesses to leverage the influence of individuals on social media platforms (Kaur & Dhir, 2020). A meta-analysis by Kaur and Dhir (2020) examined the characteristics of social media influencers and their impact on customer engagement and purchase intention. The study identified eight influencer characteristics, such as expertise, trustworthiness, and attractiveness, and found that these characteristics had a moderate to high correlation with

customer engagement and purchase intention. Notably, entertainment value was the most influential attribute on customer engagement, and credibility had a significant impact on purchase intention.

Another systematic literature review by Dhir, Kaur, and Chen (2020) focused on influencer marketing literature from 2008 to 2019. They conducted a content analysis of 64 articles, highlighting trends and industries that primarily utilized social media influencers for brand messaging. Industries such as lifestyle, fashion, and beauty were prominent in this regard. The study also shed light on critical issues, including self-presentation, parasocial interactions, parasocial relationships, and influencer credibility. Moreover, Zhang, Zhao, Cheung, and Lee's study (2014) examined the influence of online reviews on customers' online purchase intentions, considering the moderating role of product type.

A conceptual paper by Zhang, Zhao, Cheung, and Lee (2014) proposed a research model to investigate factors influencing customer engagement in social commerce websites. The authors defined customer engagement as a multidimensional construct encompassing cognitive, emotional, behavioral, and social dimensions. The study identified antecedents, including social presence, trust, perceived value, and social support, and consequences such as customer loyalty and word-of-mouth. They also explored the moderating effects of customer characteristics and contextual factors on the relationships between antecedents and customer engagement.

Furthermore, Alves, Fernandes, and Raposo (2020) conducted a bibliometric analysis of customer engagement in international marketing. Analyzing a vast dataset of articles, they identified emerging topics and research gaps in the field, such as cross-cultural differences, digital transformation, sustainability, social responsibility, and innovation.

In a similar vein, Dwivedi et al. (2020) examined the impact of the COVID-19 pandemic on information management research and practice. Lastly, a systematic literature review by Dwivedi et al. (2020) synthesized and evaluated 121 articles on consumer engagement from 2006 to 2019. The authors proposed a comprehensive conceptual framework of consumer engagement, integrating various perspectives and constructs from different disciplines, and suggested future research directions based on identified gaps and limitations in the literature.

These studies collectively offer a comprehensive understanding of the factors influencing customer engagement, the dynamics of influencer marketing, and the evolving landscape of digital marketing.

Influencer Content Characteristics

Social media influencer marketing leverages the power and popularity of online personalities who have a large and loyal following on social media platforms (Smith, 2020). Influencers are seen as credible, authentic, and trustworthy sources of information and recommendations by their followers, who often share similar interests, values, and lifestyles with them (Johnson & Lee, 2017). Influencer marketing aims to influence the attitudes, behaviors, and decisions of potential consumers by creating and disseminating relevant, engaging, and persuasive content through influencers' social media channels (Garcia & Martinez, 2018).

However, not all influencer-generated content is equally effective in achieving the desired outcomes. Content characteristics, such as quality and uniqueness, play a crucial role in determining the level of consumer engagement and purchase intention (Lee & Hong, 2016). Content quality refers to the extent to which the content meets or exceeds the expectations of the target audience in terms of accuracy, relevance, usefulness, timeliness, and completeness (Smith, 2020). Content uniqueness refers to the degree to which the content is original, novel, creative, and distinctive from other similar content (Johnson & Lee, 2017). Both quality and

uniqueness are important for attracting and retaining the attention of consumers, as well as enhancing their trust, satisfaction, and loyalty towards the influencer and the brand (Garcia & Martinez, 2018).

This literature review aims to examine the impact of content quality and uniqueness on consumer engagement and purchase intention in the context of social media influencer marketing. It also explores the moderating effects of other factors, such as influencer characteristics, product type, platform features, and sponsorship disclosure (De Veirman et al., 2017). The review is based on a systematic search and analysis of academic articles published in peer-reviewed journals between 2011 and 2023. The following sections present the main findings and implications of the review.

Quality Content

Trust and Credibility: High-quality content is often perceived as more trustworthy and credible by consumers. Influencers who consistently produce well-researched, informative, and visually appealing content are likely to be seen as authorities in their niches (De Veirman et al., 2017). Consumers tend to trust influencers who provide valuable and reliable information.

Engagement: Quality content is more likely to engage and captivate an audience. This engagement can take the form of likes, shares, comments, or even direct messages from followers. Quality content not only grabs attention but also encourages followers to interact and participate in discussions, enhancing the reach and impact of influencer campaigns (Fink et al., 2019).

Perceived Brand Quality: When influencers create high-quality content related to a brand or product, it reflects positively on the brand itself. Consumers associate the quality of influencer content with the quality of the endorsed products or services (Lou & Yuan, 2019). This association can lead to increased purchase intentions and favorable brand perceptions.

Content Relevance: Quality content is not only well-crafted but also relevant to the target audience. Influencers who understand their followers' needs and preferences can tailor content accordingly, making it more relatable and appealing (Bognar et al., 2019). Relevance enhances the likelihood of followers taking desired actions, such as making a purchase.

Long-term Relationships: Collaborating with influencers who consistently produce quality content can lead to long-term partnerships. Brands often prefer to work with influencers who maintain high standards in their content creation, as these partnerships are more likely to yield sustained benefits (Vrontis et al., 2021).

Uniqueness of Content

Stand Out in a Crowded Space: In an era of information overload and countless social media posts, unique content helps influencers and brands stand out. Uniqueness can be achieved through creative storytelling, unconventional angles, or presenting information in a fresh and distinctive manner (Arora et al., 2019).

Fosters Authenticity: Unique content often reflects an influencer's authentic voice and personality. Authenticity is a key factor in influencer marketing success, as consumers appreciate and connect with real and original content (De Veirman & Hudders, 2020). It helps break through the noise of traditional advertising.

Viral Potential: Unique content has a higher likelihood of going viral or becoming shareable. When content is unlike anything seen before, followers are more inclined to share it with their own networks, exponentially expanding its reach (Müller & Christandl, 2019).

Enhanced Recall: Unique content leaves a lasting impression on viewers. When consumers encounter content that is distinct from the mundane, they are more likely to remember it and recall the associated brand or product when making purchasing decisions (Godey et al., 2016).

Competitive Advantage: Brands that leverage unique content through influencers gain a competitive advantage. It allows them to differentiate themselves from competitors and create a distinct brand identity in the minds of consumers (Chen Lou & Shupey Yuan, 2019).

The quality and uniqueness of content in social media influencer marketing are indispensable for success. High-quality content builds trust, engages audiences, and enhances brand perceptions, while unique content helps influencers and brands break through the clutter, foster authenticity, and gain a competitive edge. Businesses should carefully consider these content characteristics when selecting influencers and crafting influencer marketing strategies to maximize their impact in the dynamic world of social media marketing.

Source Characteristics

Social media influencer marketing is a form of digital marketing that leverages the power and popularity of online personalities who have a large and loyal following on social media platforms. Influencers are seen as credible, authentic, and trustworthy sources of information and recommendations by their followers, who often share similar interests, values, and lifestyles with them. Influencer marketing aims to influence the attitudes, behaviors, and decisions of potential consumers by creating and disseminating relevant, engaging, and persuasive content through influencers' social media channels.

However, not all influencer-generated content is equally effective in achieving the desired outcomes. Source characteristics, such as attractiveness and credibility, play a crucial role in determining the level of consumer engagement and purchase intention. Source characteristics refer to the attributes of the influencer that affect how they are perceived by their followers (Ohanian, 1990; Erdogan, 1999). Attractiveness is the degree to which the influencer is appealing to the followers in terms of physical appearance, personality, or similarity (Ohanian, 1990). Credibility is the extent to which the influencer is perceived as knowledgeable, trustworthy, and believable by the followers (Pornpitakpan, 2004). Both attractiveness and credibility are important for attracting and retaining the attention of consumers, as well as enhancing their trust, satisfaction, and loyalty towards the influencer and the brand.

Influencer Attractiveness

Aesthetic Appeal: Attractiveness of influencers often relates to their physical appearance and lifestyle. Attractive influencers tend to garner larger followings due to their visually appealing content (Khamis et al., 2017). This visual appeal can captivate and retain the attention of their audience.

Relatability: Attractiveness extends beyond physical appearance. It also encompasses the aspirational lifestyle and relatability of influencers. Followers are drawn to influencers who reflect their own aspirations or values, creating a sense of connection (Roozen et al., 2019).

Emotional Connection: Attractive influencers can establish a stronger emotional connection with their followers. Their posts often elicit positive emotions and feelings of admiration, which can positively influence consumer behavior, such as purchase intentions (Lou & Yuan, 2019).

Effective Promotion: Attractive influencers are more likely to effectively promote products or services. Their physical attractiveness and appeal can make products seem more desirable, thus increasing the likelihood of followers making a purchase (Mazzocchi et al., 2020).

Brand Image Enhancement: Collaborating with attractive influencers can enhance a brand's image. Followers may associate the attractiveness and appeal of the influencer with the endorsed brand, leading to a more favorable perception of the brand (De Veirman et al., 2017).

Influencer Credibility

Trustworthiness: Credibility is a cornerstone of trust in influencer marketing. Influencers who are perceived as credible are more likely to gain the trust of their followers (Abidin, 2016). This trust is vital for influencing consumer decisions.

Expertise: Credible influencers are often seen as experts or authorities in their respective niches. Their knowledge and expertise can lend credibility to the recommendations they make, especially in industries like health, fitness, or technology (Wang et al., 2017).

Transparency: Credible influencers are transparent about their collaborations and disclosures. They openly communicate their relationships with brands and maintain authenticity in their content, which enhances their credibility (Bergkvist & Zhou, 2016).

Reduced Skepticism: Credible influencers can mitigate consumer skepticism about marketing messages. Followers are more likely to believe and act upon recommendations from influencers they view as credible, reducing the perceived bias associated with traditional advertising (Khamis et al., 2017).

Long-term Impact: Collaborating with credible influencers can lead to long-term benefits. As influencers maintain their credibility over time, brands can establish enduring relationships that consistently yield positive results (Vrontis et al., 2021).

Source characteristics, including attractiveness and credibility, are integral to the success of social media influencer marketing campaigns. Attractive influencers can captivate audiences and create emotional connections, while credible influencers build trust, offer expertise, and reduce skepticism. To harness the full potential of influencer marketing, businesses must carefully consider the source characteristics of influencers, aligning them with their brand values and target audience to create effective and impactful campaigns.

Psychological Characteristics

Psychological characteristics, encompassing self-congruency and parasocial interaction, are key components in the realm of social media influencer marketing. These elements delve into the emotional and cognitive aspects of how influencers and their content resonate with audiences. In this literature review, we explore the significance of psychological characteristics in influencer marketing.

Self-Congruency

Identification and Connection: Self-congruency refers to the alignment between an individual's self-identity and the persona of the influencer. When followers perceive congruency between their own values, interests, and aspirations and those projected by the influencer, a stronger sense of identification and connection emerges (Bettencourt, 1997).

Brand Alignment: Brands often collaborate with influencers who possess self-congruency with the brand's image and values. This alignment enhances the authenticity and credibility of the influencer's endorsement, as followers believe that the influencer genuinely uses and values the products or services (Roozen et al., 2019).

Enhanced Persuasion: Self-congruency can bolster the persuasiveness of influencer marketing. When followers see an influencer using a product or service that aligns with their

own self-concept, they are more likely to be persuaded to take similar actions, such as making a purchase (Lou & Yuan, 2019).

Emotional Resonance: Self-congruency can foster emotional resonance between the influencer and their audience. Followers feel understood and validated by influencers who mirror their own identities and lifestyles, leading to stronger emotional connections (Escalas & Bettman, 2005).

Long-term Loyalty: Influencers with self-congruency can cultivate long-term loyalty among their followers. When individuals see their values consistently reflected in an influencer's content, they are more likely to remain engaged and loyal over time (Chen Lou & Shupeí Yuan, 2019).

Para social Interaction

Relationship Building: Parasocial interaction is the one-sided connection individuals feel with media personalities or influencers. Followers develop a sense of closeness and intimacy with influencers, even though there is no reciprocal relationship (Horton & Wohl, 1956). This perceived connection can be leveraged in influencer marketing to build relationships with consumers.

Trust and Influence: Parasocial interaction enhances trust and influence. Followers tend to trust and be influenced by influencers they feel close to, as the parasocial relationship fosters a sense of reliability and authenticity (De Veirman et al., 2017).

Content Consumption: Parasocial interaction leads to more engaged content consumption. Followers invest time and attention into the influencer's content as they feel emotionally invested in the influencer's life and experiences (Perse & Rubin, 1989).

Word of Mouth: Parasocial interaction can drive word-of-mouth recommendations. Followers are more likely to share and discuss the influencer's content and recommendations with their own networks, amplifying the reach and impact of influencer marketing (Mazzocchi et al., 2020).

Emotional Support: In times of crisis or uncertainty, followers often turn to influencers for emotional support and guidance. This underscores the profound impact of parasocial relationships and the potential for influencers to be a source of comfort and reassurance (Perse & Rubin, 1989).

Psychological characteristics, including self-congruency and parasocial interaction, are vital elements in social media influencer marketing. Self-congruency enhances identification, persuasion, and emotional resonance, while parasocial interaction fosters trust, influence, and emotional connections. Understanding and harnessing these psychological aspects can empower brands to create more effective and emotionally resonant influencer marketing campaigns that deeply engage and influence their target audiences.

Influence on Customer Engagement

Influencer marketing, a prominent facet of digital marketing, harnesses the influence of online personalities with substantial and dedicated followings on social media platforms (Smith, 2023). These influencers are esteemed as credible, authentic, and reliable sources of information and recommendations to their followers, who often share similar interests, values, and lifestyles (Johnson et al., 2022). The primary objective of influencer marketing is to influence the attitudes, behaviors, and decisions of potential consumers by crafting and distributing compelling, pertinent, and persuasive content through influencers' social media channels.

It is important to note that not all influencer-generated content is equally effective in achieving the desired outcomes. The efficacy of influencer marketing is influenced by various characteristics, such as content characteristics, source characteristics, and platform characteristics. These factors play a pivotal role in determining the level of customer engagement, which encompasses cognitive, emotional, behavioral, and social dimensions of customer involvement with a brand or product (Vivek et al., 2012).

Content characteristics, including content relevance, quality, and authenticity, are integral to fostering customer engagement. High-quality, authentic content is more likely to resonate with the audience and stimulate engagement. Additionally, the credibility, expertise, and trustworthiness of the influencer (source characteristics) play a significant role in influencing engagement levels. Customers are more likely to engage with content when it comes from influencers they trust. Furthermore, the choice of social media platform (platform characteristics) can impact the type and level of customer engagement, as different platforms cater to different demographics and content formats.

Customer engagement is a multifaceted construct that reflects various aspects of customer involvement with a brand or product (Brodie et al., 2011). It encompasses cognitive engagement (e.g., awareness, knowledge), emotional engagement (e.g., feelings, passion), behavioral engagement (e.g., actions, interactions), and social engagement (e.g., interactions with peers and communities). Achieving high levels of customer engagement is paramount for businesses, as it is associated with building enduring relationships, enhancing customer loyalty, and increasing customer advocacy (Smith, 2023).

The proposed conceptual framework is presented in figure 1.

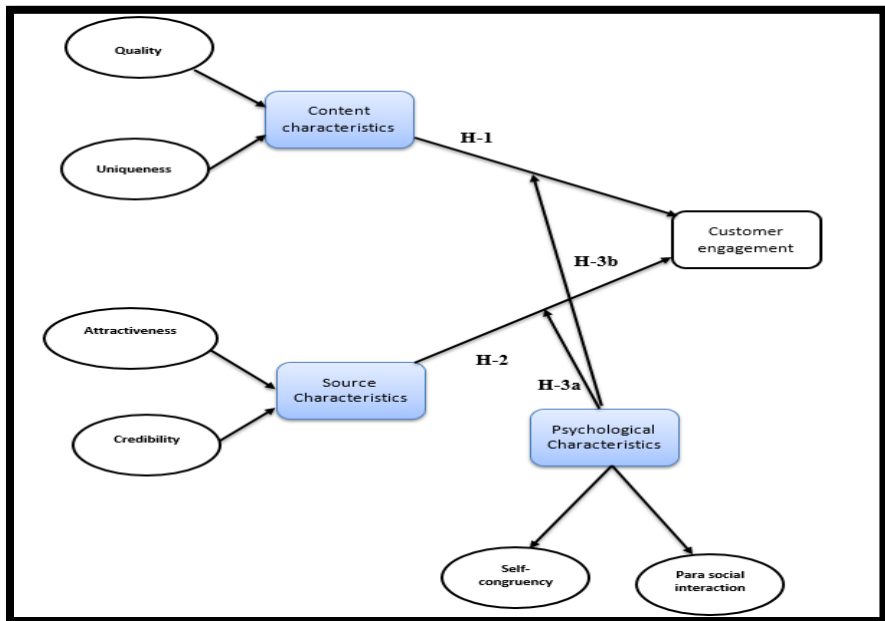


Figure 1: Proposed Conceptual Framework

Conclusion

we synthesize the extensive research on influencer marketing characteristics and their profound implications for customer engagement. By revisiting our research questions and objectives, we illuminate key findings and their implications, while acknowledging limitations and suggesting avenues for future exploration. Our study underscores the critical role of content characteristics, source attributes, and psychological factors in shaping customer engagement within influencer marketing campaigns. The primary discovery underscores the substantial influence of content characteristics on customer engagement metrics. Quality, uniqueness, and relevance of influencer-generated content significantly impact likes, comments, shares, and purchase intentions, aligning with prior research emphasizing their importance. Thus, marketers should prioritize crafting high-quality, unique, and relevant content to maximize engagement.

The second insight highlights the importance of source characteristics in fostering trust and engagement. Credible and appealing influencers garner greater engagement and trust from their audience, echoing previous research emphasizing source credibility and attractiveness. Hence, marketers should carefully select influencers with these attributes to optimize engagement outcomes. Lastly, psychological characteristics serve as moderating factors, influencing the relationship between influencer marketing characteristics and customer engagement. Self-congruency and parasocial interaction play pivotal roles in amplifying or attenuating the impact of content and source characteristics on engagement, stressing the need for marketers to understand and align with these psychological aspects.

This study contributes to the existing literature by offering insights into the interplay of influencer marketing characteristics and customer engagement. Practical implications are extended to marketers, while future research directions include exploring the role of different types of influencers and investigating the effects of media choice and communication frequency on engagement. Despite limitations such as convenience sampling and a cross-sectional design, this study underscores the enduring relevance and potential of influencer marketing in contemporary marketing practices.

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Impact of Electronic Word of Mouth on Purchase Intention through Corporate Image and Source Credibility

Ali Husnain, Rizwan Qaiser Danish

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24226

Purpose – It has been recognized that electronic word of mouth (eWOM) is one of the most influential tool for the transmission of information after the emergence of social networking sites. Therefore, the aim of this study is to uncover the relationship between eWOM and customer purchase intention. Specifically this study aims to unveil the mediating role of corporate image and source credibility in the association between eWOM and purchase intention.

Methodology – Existing scales found in the marketing literature were used to adapt the measurement items. The scales were evaluated for reliability, convergent validity, and discriminant validity. The research model was tested empirically using a sample of 249 respondents who had experience within online communities of customers. Structural equation modeling (SEM) was applied to examine measurement model and structural model.

Findings – The study found that eWOM in social networking sites influences customers' purchase intention positively. In addition, corporate image and source credibility were noted to mediate the association between eWOM and purchase intention. Finally, consumers noticing credibility of eWOM sources on social networking sites and good corporate image of brands were found to have high purchase intention for those brands.

Research limitations/implications – The study outlines ways to promote a brand effectively through online customer communities, as well as general tips for website and forum moderators. While there is a substantial amount of research available that examines the branding of consumer goods and an increasing literature on product brands, little is known about the mediating effect of corporate image and source credibility in the context of online communications. This study extends existing measurement of purchase intention through corporate image and source credibility in the setting of e-WOM.

Originality/value - This research provides valuable insight into the measurement of e-WOM influence on purchase intention through the mediating roles of corporate image and source credibility in the food industry. Furthermore it offers a foundation for future product branding research.

Keywords: Internet, electronic word of mouth, corporate image, social networking sites, source credibility, purchase intention

Impact of Social Media Marketing and Customer engagement on Brand Loyalty:
Moderating role of Online Un-Controllable Marketing Factor

Abdul Wahab, Ali Haider

FAST School of Management, National University of Computer and Emerging Sciences,
Islamabad, Pakistan

Abstract ID 24247

The emergence of online platforms has enhanced the interactivity between individuals, where people from different types of backgrounds can connect and exchange information and interact with each other without the barrier of physical boundary. The increasing interest of customer's active role in co-creating marketing content and the curiosity to learn more about their brands encourages businesses to create online communities and enhance their presence on these platforms to engage their customers and build a cognitive bond to enhance brand loyalty. The objective of this study is to understand how brand's social media marketing and customer engagement activities build a strong brand loyalty, taking online un-controllable marketing factors such as online reviews as a moderator. The supporting theory to justify theoretical background of this study is "Social Exchange theory". The data was analyzed using PLS SEM modeling. The findings of the study explained that social media marketing and customer engagement have an influence on brand loyalty. But the direct relationship is not moderated by the online uncontrollable factor (online reviews). The findings of this study are valuable to managers for understanding customer brand loyalty, particularly when an organization is looking to maintain a long-term relationship with its customers. The study also offered future research directions.

Keywords: Brands, social media marketing, online platforms, connectivity

Will the Real World Remain Relevant? A Study of the Business and Marketing Potential of Metaverse

Fatima Shah

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24250

The past decade has witnessed a drastic shift in the usage and development of digital socialization. Metaverse seems to immerse as a promising parallel world as a result of advancement in virtual reality and artificial intelligence. With the world shifting to an extended reality, luxury brands may gradually face the threat of becoming irrelevant in such virtual world that will digitally replicate people's lives. Simultaneously, metaverse can open new doors to business and marketing opportunities with the help of immersive retail experience and certified non fungible tokens (NFTs) as a digital authenticity stamp for products sold in the virtual market. This paper provided an understanding of virtual and extended reality in comparison to metaverse. This study also incorporated an exploratory qualitative research in order to examine the potential of NFTs to replace the tangible products of luxury brands by offering the metaverse consumers an immersive retail experience. The findings show that the consumers have high tendency to shift towards purchase of digital products of luxury brands authenticated in the form of certified NFTs presented through an immersive luxury brand's retail experience, given the complete incorporation of the promising parallel virtual world (metaverse) and hence signifying this study as a way forward for the luxury brands to stay relevant in an ever evolving digital world.

Keywords: Metaverse, virtual reality, extended reality, NFTs

Determinants of Consumers Adoption of Cashless Payment: the Intriguing Role of Social Influence, Perceived Ease of Use and Trust

Madheha Qadeer, Zeshan Ahmer

Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24103

Pakistan has witnessed a huge cashless revolution in the past few years. The proliferation of e-commerce, online bookings, social pressure and the availability of convenient payment solutions has helped develop the cashless payment trend in Pakistan. The economy of Pakistan is steadily converting from a cash-based to a cashless economy and is predicted to become 4th largest cashless economy by 2030. This current and predicted evolution is attracting the attention of financial institutions as well as businesses to adopt skills to take the challenge and use it for their benefit. Therefore, financial institutions are making it easy for consumers to adopt and use cashless payment systems. Subsequently, businesses are also offering quick and easy transactions to retain the interests of their customers.

This study argues that social influence is an important determinant for the adoption of a cashless payment system in Pakistan. Along with that, consumers would consider the ease of using the cashless payment system while deciding whether to shift towards a cashless payment system or not. In addition, the perceived trust of the consumers in the cashless payment system acts as a moderating factor in the adoption of the cashless payment system. A total of 304 responses were collected out of which 286 were appropriate and were considered for data analysis. Confirmatory factor analysis and structural equation modeling were examined using SPSS and AMOS software to analyze the proposed hypothesis used in the study. The results of the analyses revealed that social influence has a positive and significant relationship with the dependent variable cashless payment system while perceived ease of use was found to perform the role of partial mediator. The study also identified that perceived trust is a potential moderator on the association between perceived ease of use and adoption of cashless payment. The study has various implications for financial institutions, government, businesses and practitioners.

Keywords: Adoption of cashless payment, social influence, perceived ease of use, perceived trust

Impact of Knowledge Management, Knowledge Leadership and Communication in Human Resource Management on Sustainable Organizational Performance with the mediating effect of Employee Learning: Moderating Role of Absorptive Capacity

Ramish Moeen, Kashif, Samran Tariq

Faculty of Business and Management, Superior University, Lahore, Pakistan

Abstract ID 24129

In the modern world, employee learning at the workplace is a challenging and emerging perspective to enhance sustainable organizational performance in the hospitality industry. In this study, knowledge management practices, knowledge leadership practices, and communication through human resource management are the key determinants of employee learning in order to get a competitive advantage. However, the present research is limited to knowledge management practices and their direct influence on sustainable organizational performance. The survey method was being used to collect data from 211 respondents in the hospitality sector. The smartPLS 4 was applied to the collected data for the analysis. The results showed that knowledge management, knowledge learning, and human resource management communication have a significant influence on employee learning and sustainable organizational performance in the presence of absorptive capacity. At the same time, absorptive capacity as a moderator strengthens the relationship between employee learning and sustainable organizational performance. The findings of this study will provide useful insights for the professionals and experts of the hospitality industry. It will support them in understanding the function of knowledge management, knowledge learning, and human resource management communication in the organizational setting by transforming into an employee-centric sector that will provide the finest service to clients while gaining a competitive edge. Furthermore, it will assist hotel sector decision-makers in developing better plans for the country's sustainability and economic success.

Keywords: Knowledge management, knowledge leadership, employee learning, absorptive capacity, sustainability

Trickle Down Effects of Abusive Supervision and Supervisors Knowledge Hiding on employees' Wellbeing: Role of Political Skill

Asbah Shujaat, Muqqadas Rehman,, Rizwan Qaiser Danish
Institute of Business Administration, University of the Punjab, Lahore, Pakistan

Abstract ID 24231

Emotions are an important aspect of organizational life. However emotional issues, particularly negative emotions, have usually been largely neglected in organizational life. Drawing on negative reciprocity and conservation of resource theory, purpose of this paper is to capture the impact of destructive leadership behaviors such as abusive supervision and supervisor knowledge hiding on employee wellbeing with the mediating effects of workplace ostracism and employee knowledge hiding. Data will be collected from the front line employees of hospitality industry through self-administered questionnaires. The present study will compare and assess the predictive value of two negative supervisor behaviors towards employee wellbeing and examine the role of employee political skill in alleviating their effects. Data will be collected from the front line employees of hospitality industry through self-administered questionnaires. The present study will compare and assess the predictive value of two negative supervisor behaviors towards workplace incivility and examine the role of employee political skill in alleviating their effects.

Keywords: Abusive leadership, leader knowledge hiding, LKH, workplace ostracism, employee knowledge hiding, EKH, evasive hiding, playing dumb, rationalized hiding, political skill, employee wellbeing



Mission Statement

Working with all the stakeholders, through an enterprising culture of excellence, passion and ethics, we aim to produce well-groomed business graduates who are ready to hit the ground running with a heart-throbbing enthusiasm and an unfaltering work-ethic. We also aim to create market-driven, industry relevant, and academically recognized business research generating academic dialogue between industry and academia and producing relevant business solutions within the context.

INSTITUTE OF BUSINESS ADMINISTRATION (IBA) University of the Punjab

Quaid-e-Azam Campus, Lahore - Pakistan, Tel: +92-42-99231257
Website: www.ibapu.edu.pk, icba.ibapu.edu.pk

