ISSN: 2219-6145

Global Management Journal for Academic & Corporate Studies (GMJACS)

Volume 11, Number 1, 2021

Bahria University
Discovering Knowledge

Department of Business Studies
Bahria Business School Bahria University Karachi Campus, Pakistan

Advisory Board

Global Management Journal for Academic & Corporate Studies
(GMJACS) ISSN: 2219-6145 (Print), 2305-0756 (Online)
Volume 11 Number 1 2021
Editor: Dr. Aamir Firoz Shamsi

Publisher: Business Studies Department, Bahria University Karachi Campus, Pakistan.

Table of Contents

Disclaimer

Research papers published in the journal have been checked through plagiarism software. All views expressed in the journal are those of the authors and do not necessarily reflect the policies or preferences of GMJACS or Business Studies Department, Bahria University Karachi Campus, Pakistan.

Author is responsible for any sort of grammatical and techniquel error.

Editor GMJACS

Editorial

Education is not the learning of facts but training of the mind to think– Albert Einstein

The overwhelming response in contributions by authors/researchers is commendable. Contributors are requested to follow the guidelines given to frame their research papers in letter and spirit. I sincerely hope that the emphasis on building bridges will continue to guide us in selecting the most important research for publication in GMJACS. I am particularly intent on making sure that any academic and corporate research endeavor finds its due place in the journal. With a review board that is larger and more diverse than before, we are ready to accept quality submissions. We invite authors to take a more active part in the assessment process; it will be an honor and privilege for me and my team to help you make that work known by our distinguished readership. We encourage to consider submitting your best work to GMJACS.

As we know, a great journal is recognized not only as one where authors choose to send their most exciting findings, but also as one handed to students to illustrate the sorts of important questions management science students should be asking and the methodologies that need to be adopted. In a time when interdisciplinary research is ubiquitous, it can be difficult to define what truly bridges disciplines and simultaneously combine theory and application. Academicians, researchers and managers value interdisciplinary research because it challenges assumptions, interrogates as to which questions are most important, which methods are most appropriate, and what evidence should constrain the interpretation of any given research finding.

The current issue of GMJACS contains thirteen research papers. Out of the total received research papers, only fifty six percent research papers were found publishable after passing through our rigorous evaluation process. Rejection rate of fortyfour percent by this journal is evident of the quality standard in higher education maintained by Business Studies Department, Bahria University Karachi Campus. We congratulate and appreciate the efforts of all authors whose manuscripts could make space in the current issue.

I would like to thank all members of the editorial board, review board, contributors, and all colleagues and staff members who have extended their support that made this edition of GMJACS possible. We expect our readers to send us their precious feedback at gmjacs@gmail.com, so that we can assimilate value in order to further enhance the quality of the journal.

Dr. Aamir Firoz Shamsi
Editor

Workplace Harassment & Organizational Liability: Application of Situational Crime Prevention Techniques as Deterrence

Fouzia Ashfaq[1], Alia Ahmed[2], Sehrish Ilyas[3]

Abstract:

Workplace harassment with its serious consequences is a persistent workplace problem for individuals and organizations. Varying from physical health problems to emotional dilemmas, harassment takes a toll on victims whereas organizations suffer as well, with its effects in the form of turnover, low job satisfaction, reduced commitment and absenteeism. Therefore, all such initiatives that prevent this negative workplace behavior are crucial for the effective working of the organizations. This paper uses Clarke's situational crime prevention techniques as an anti-harassment framework however it presents a sixth technique that needs to be followed by organizations if they effectively want to combat harassment i.e. grooming of transformational leaders. The situational crime prevention framework developed by Clarke put significant importance on physical security. Whereas the anti-harassment framework presented in this paper is mainly focused on administrative systems of vigilance, governance and guidance. The current study proposes that organizations can get the benefit of placing the situational crime prevention framework if they increase awareness among their leaders that how their behaviors significantly affect their employees in the workplace. Organizations need to understand that a long-term proactive perspective that enhances social relations is needed to promote a harassment-free environment at the workplace.

Keywords: Workplace harassment, Anti-harassment framework, Situational crime prevention, Negative Workplace behavior

1. Introduction

Attention has been directed towards workplace harassment since the 1980s when Leymann's ideas published regarding negative workplace behavior (Nielsen, Matthiesen, & Einarsen, 2010).

[1]Assistant Professor, Lahore College for Women University, Fouzia.Ashfaq@lcwu.edu.pk
[2]Professor, Dean Business School, NCBA& E,Lahore,Pakistan
[3]Assistant Professor, Lahore College for Women University

It is essential to differentiate between psychological and physical practices of harassment. Physical harassment accounts for aggressive acts of physical nature (Devís, García &Peris 2017; Becton, Gilstrap, & Forsyth, 2017) whereas psychological harassment is of non-physical nature in which workers are mistreated. This has been conceptualized in the literature under several different labels, including incivility (Demsky, Fritz, Hammer, & Black, 2018), workplace bullying (Glambek, Skogstad & Einarsen, 2018), social undermining (Yu, & Zellmer-Bruhn, 2018; Duffy, Ganster, & Pagon, 2002), victimization (Nielsen, Glasø, & Einarsen, 2017; Aquino & Lamertz, 2004) and supervision of abusive nature (Tepper, 2000). The strand that links these several concepts is the representation of negative workplace connections (Neilson et al,.2017).

The negative consequences associated with harassment at the workplace makes it important to study. It is not merely a problem for the targeted, yet for the institutions also (Becton et al., 2017; Hoel, Glasø, Hetland, Cooper, & Einarsen, 2010). Both longitudinal and cross-sectional shreds of evidence suggest that moral workplace harassment has negative consequences on the health and well-being of victims (Nielsen et al., 2017). The longitudinal research supports the argument that different psychological complications as depression, anxiety (Finne, Knardahl, & Lau, 2011), muscular & skeletal problems (Nielsen et al., 2017) and ideation of suicides have been observed in victims. Moreover, not only the victims but the observers may also feel mental health problems, stress and anxiety which ultimately may reduce their job satisfaction and increase their intentions to switch to some other organizations as a likely consequence (Astrauskaite, Notelaers, Medisauskaite, & Kern, 2015). Besides, stress level increases when non-exposed coworkers are called in investigations by the senior management, as a witness(Becton et al., 2017; Hoel et al., 2010). This leads to a greater turnover of employees, higher absenteeism, and lower output, ultimately putting a negative effect on organizational profitability.

There exist several studies that take into account the prevalence of workplace harassment both sexual and psychological along with highlighting the factors that increase the risk for different forms of harassment, however, still little is known about organizational responses to these problems (Bac, 2018; Salin, 2008). In Pakistan, for instance, there is no consensus generally, that what and how much is expected to be done by the employer. Research is scarce regarding the liability of the organizations in these circumstances and how they are supposed to respond. Western studies cannot be replicated in the South Asian context. Our study hence intends to fulfil this gap by conducting research, particularly in Pakistan's context.

The development of situational crime prevention theory by Clarke (2005) has its applications in a vast range of crimes; that includes corruption (Tunley, Button, Shepherd, & Blackbourn, 2018), terrorism (Clarke, 2005), e-commerce (Clarke & Newman, 2006), sex offending activities (Wortley, R., & Smallbone, 2006) and organized crimes (Bullock, Clarke, & Tilley, 2010). The premise of the theory is based on the idea that criminal activities are closely linked with available opportunities resulting out of situational factors. It follows an approach that analyses criminal settings in a common-sense way that increases the perceived risks of being caught and ‘‘design out’’ such opportunities that may avert the would-be offenders (Tunley et al., 2018). The rationale choice theory that considers the offenders as rational actors provides the basis of this premise (Clarke & Cornish, 1985; Tunley et al., 2018). Implementing situational crime prevention techniques with alternations, according to the existing settings can become successful in reducing crimes. It analyzes the circumstances and focuses on the identification of control remedies for the weak legal administrations (systemic opportunities) and poor supervision (localised opportunities) that entice offenders (Becton et al., 2017; Tunley et al., 2018). The current paper intends to take this debate forward by devising multiple ranges of deterrence practices through the framework of Clarke (2005) for moral harassment

1. Literature Review

Repeated behaviours that are deliberately or unconsciously directed towards one or more personnel, unwelcomed by the targets, causing them disgrace and distress, interfering with their work performance and forming an unpleasant work atmosphere are called harassment at work (Hoel et al., 2010). A wide range of definitions addresses the problem of psychological violence in organizations e.g. ‘bullying’ (Einarsen et al., 2020), ‘incivility’ (Demsky et al. 2018; Pearson, Andersson & Porath, 2005), ‘mobbing’ (Leymann, 1990), ‘mistreatment’ (Spratlen, 1995) and ‘emotional abuse’ (Harvey & Keashly,2003). Yet, these definitions are increasingly converging, having a focus on unwanted negative behavior and a disparity of influence between target and perpetrator (Di Martino, Hoel and Cooper, 2003; Einarsen et al., 2003). According to Adams (1992), the harassing behaviours may be ‘subtle, devious and immensely difficult to confront’. Therefore, the non-affected colleagues can’t even recognize it (Hoel et al., 2010). However, even when these become frequent and entrenched, the witnesses may choose to remain uninvolved. (Einarsen, 1999). According to Leyman (1996), some colleagues may support the target while others may not and some of them may even turn against the target. Their vulnerability and fear of becoming targets themselves ask them to ignore the situation rather than to support the target and in some instances collude in harassing behaviour (Hoel et al., 2010).

1.1 Definitions and Theoretical Background

Source	Definition
Pakistan Penal Code, 1860	‘Whoever; Intending to insult the modesty of any woman, utters any word, makes any sound or gesture, or exhibits any object, intending that such word or sound shall be heard, or that such gesture or object shall be seen, by such woman, or intrudes upon the privacy of such woman’.

Harassment Act 2010	'Harassment means any unwelcome sexual advance, request for sexual favors or other verbal or written communication or physical conduct of a sexual nature or sexually demeaning attitudes, causing interference with work performance or creating an intimidating, hostile or offensive work environment, or the attempt to punish the complainant for refusal to comply to such a request or is made a condition for employment'.
Bjo¨rkqvist, O¨sterman and Hjelt-Ba¨ck (1994)	'Repeated activities, with the aim of bringing mental (but sometimes also physical) pain, and directed toward one or more individuals who, for one reason or another, are not able to defend themselves'.
Saunders et al. (2007)	'Occurrence of some negative behavior that must be persistent'.
Canadian Human Rights Commission (2013)	'Harassment is a form of discrimination. It involves any unwanted physical or verbal behaviour that offends or humiliates you. Generally, harassment is a behaviour that persists over time. Serious one-time incidents can also sometimes be considered harassment. Harassment occurs when someone makes unwelcome remarks or jokes about your race, religion, sex, age, disability or any other of the 11 grounds of discrimination'.
Claybourn, Spinner & Malcom (2014)	'A questionable behavior may be considered harassment if it occurs once (if it results in harm) or more than once'.
Einarsen et al. (2000), p. 22	'Harassing, offending, socially excluding someone or negatively affecting someone's work. For the label bullying (or mobbing) to be applied to a particular activity, interaction or process, it has to occur repeatedly and regularly (e.g., weekly), and over a period of time (e.g., about 6 months)'.
Brodsky (1976)	'Repeated and persistent attempts by one person to torment, wear down, frustrate or get a reaction from another. It is the treatment that persistently provokes, pressures, frightens, intimidates, or otherwise discomforts the target'.

Tepper (2000)	‘The extent to which subordinates perceive supervisors to engage in the sustained display of hostile verbal and nonverbal behaviors while at work, yet excluding physical abuse’.
Lutgen-Sandvik, Tracy and Alberts (2007)	‘A type of interpersonal aggression at work that goes beyond simple incivility and is marked by the characteristic features of frequency, intensity, duration and power imbalance’.
(Nielsen et al., 2017)	‘Workplace harassment is not about isolated and one-off instances of aggression, but do rather refer to ongoing and repeated exposure to mistreatment. Although there is no definitive list of harassing behavior, harassment mainly involves exposure to verbal hostility, being made the laughing stock of the department, having one's work situation obstructed, or being socially excluded from the peer group.’

The studies contend that confusion has arisen due to this proliferation of constructs in which number of researchers are exploring almost similar forms of mistreatment with different terminologies (Nielsen et al., 2017). To avoid this confusion the current study, in line with the influential work of Carroll Brodsky (1976) “The harassed worker” aims to define workplace harassment as a systematic non-physical, higher-order, mistreatment of and among employees. Different behaviours at the workplace represent harassment.

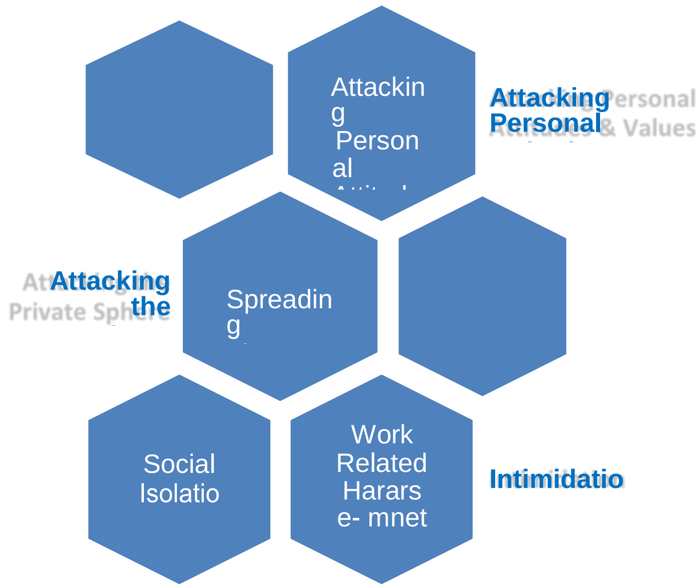


Figure: 1 Harassing Behaviors (Zapf, Knorz, & Kulla, 1996)

Exposure to aggression of physical nature will not be addressed in this study as it aims to investigate psychological and emotional harassment. Empirically, Zapf, Knorz, & Kulla, (1996) have defined seven categories to differentiate these behaviors. In certain incidents, with such acts, threats or intimidation of physical forms may occur in conjunction (Nielsen et al., 2017). The operationalization, as well as measurement methods of occurrence of harassment, differs from one study to another due to variances and inconsistencies in meanings along with geographical and cultural dissimilarities (Van de Vliert, Einarsen, & Nielsen, 2013). Conducting a meta-analysis comprising 130,973 respondents, across 86 independent samples revealed a global rate of 14.6% for harassment (Nielsen et al., 2010) showing harassment at the workplace as a large-scale problematic behavior confronted even daily by several employees (Nielsen et al., 2017).

The identification and classification of harassment can be done as a vertical descendant, vertical ascendant, horizontal and mixed-among several people (Guimarães, Cançado, & Lima, 2016).

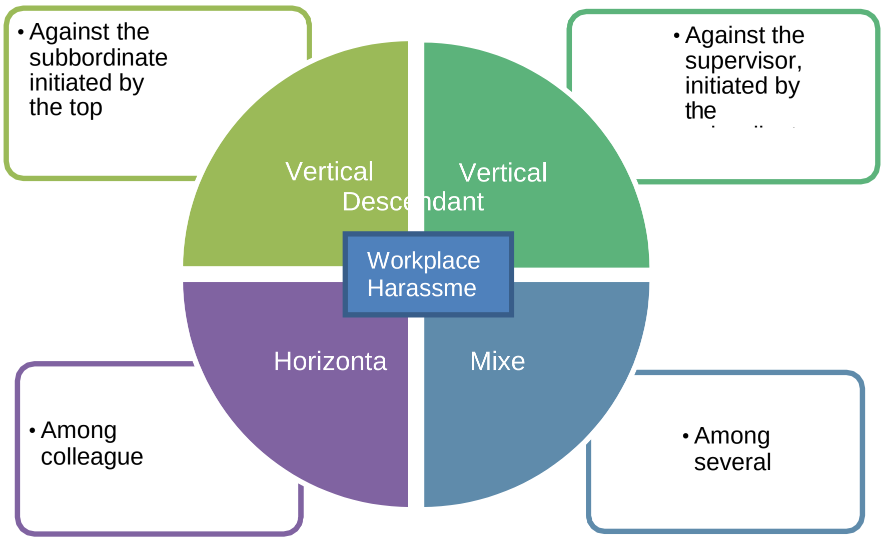


Figure 2: Classification of Harassment (Guimarães et al., 2016)

Nunes & Tolfo (2019) has elaborated the few fundamental elements that are essential to outline moral harassment:

Table:1 Elements of Moral Harassment

1	**Temporality**	Triggering the process with events.
2	**Duration**	Ranges between fifteen and forty months.
3	**Intentionality**	Reflection of the intention, whether subtle or implied, for causing damage to the other.
4	**Directionality or Personhood**	Actions of hostility have a specific target.
5	**Repeated & Customary Actions**	Repetition of hostile behavior repeated over an extended period of time.
6	**Geographic Limits**	Spaces of everyday practices in the field of tasks.
7	**Deliberate Degradation**	Degradation of working conditions, by means of psychological attacks.

1.2 Situation in Pakistan

A survey was conducted by Dawn in Karachi, Islamabad, Lahore, Peshawar and Quetta to assess the situation of workplace harassment faced by women working in various industries. The survey results published in March 2018, revealed the following facts (Sethna, Masood & Jahangir, 2018):

1. Workplaces harassment incidents are prevalent in all work domains including medicine, technology, parliament, police, law and universities. However mostly these are unreported and ignored by senior managers.

2. 61% cent of the women surveyed said their employers did not force them to keep quiet about the harassment.

3. 35% of the women said that they were specifically told to keep silence by their associates and supervisors.

4. According to the survey, only 17% of those who faced harassing attitudes went to their organization's internal probe committees with their complaints.

5. 59% reported that their management does take harassment seriously, but remains unable to do anything about the harassers.

6. Most of the women said that their management did not believe them when they approached them with their complaints.

7. More than half of the women who were surveyed said that they would quit their jobs in case of harassment.

8. For 12% of families, reactions at workplaces would decide whether they continue after harassment or not.

Until the year 2000, the United Nations was the only organization that had a policy on anti-harassment. However, with the awareness of this significant issue, different measures have been taken across the globe. In Pakistan, more than 300 organizations have not only adopted but also helping in sorting the cases of harassment after the approval of '**The Protection against Harassment of Women at the Workplace Act 2010'.** Anti-harassment law was passed to provide a safe environment that is free of harassment threats. The law requires that each organization whether it is public, civil or private to maintain an internal code of conduct that facilitates the development of a self-regulatory mechanism that permits the workers to highlight any form of harassment or unsuitable behaviour. According to this act, upon registration of a complaint by an employee, an inquiry committee that also consists of a female member, must probe the issue and within 30 days of initiation of inquiry submit the findings. Upon establishing the accused guilty, the committee may recommend the authorities to levy penalties that are withholding the promotion or increments for a specific time period or removal or dismissal from the service, or even asking for forced retirement. According to legal experts, although harassment can now be punished by imprisonment or fine however because of the shortfalls of the criminal justice system it has not fully served its purpose.

2. Methodology

For this concept paper, harassment is defined as:

'….a set of willful and immoral practices, based on authoritarianism and power asymmetry, which occur repeatedly and systematically through verbal and non-verbal communication. It is focused on the internal environment along with the situations which are within the immediate influence and agency control of an organization's members' (Guimarães et al., 2016).

The methodology presented in this paper for initiating an anti-harassment framework for effectively combating harassment is based on Clarke's five situational crime prevention techniques combined with a sixth technique i.e., grooming of transformational leaders. The situational crime prevention framework developed by Clarke put significant importance on physical security. Whereas the anti-harassment framework presented in this paper is mainly focused on administrative systems of vigilance, governance and guidance. The current study proposes that organizations can get the benefit of placing the situational crime prevention framework if they increase awareness among their leaders that how their behaviors significantly affect their employees in the workplace.

The methodology focuses on five strategies of situational crime prevention developed by Clarke (2005) with a proposal of an additional sixth strategy of grooming leaders with transformational attributes. Leaders can influence the workplace greatly, their support with resources and authority can create a deterrence for harassment at the workplace.

Table:2 Situational Crime Prevention Framework (Clarke, 2005)

Increase Effort	**Increase Risks**	**Reduce Rewards**	**Reduce Provocations**	**Remove Excuses**
Supervisory Controls (Tunley et al., 2018)	Natural Surveillance (Willison & Siponen, 2009)	Publicize Sanctions (Tunley et al., 2018)	Employee Assistance (Tunley et al., 2018)	Rule Setting (Wortley, 1996)
Provide adequate supervision (Tunley et al., 2018)	Assess all roles (Dion, 2008)	Regulatory Prosecution (Tunley et al., 2018)	Controlling Disihibitors (Clarke, 1997)	Customs declarations Harassment codes (Willison & Siponen, 2009)
Pre & Post-employment staff screening (Tunley et al., 2018)	Monitor staff social networking (Tunley et al., 2018) Monitoring of harasser (Becton et al., 2017)	Denying Benefits (Wortley, 1996) Demotion; Reduction of Wages; Suspension	Personal / Ethics Counselling (Salin, 2008) Trainings of harasser to ensure that company policy	Reinforce rules (Tunley et al., 2018)

		(Becton et al., 2017)	is understood (Becton et al., 2017)	
Facilitate upward voice behavior (Becton et al., 2017)	Encourage individuals to inform authorities (Banaji et al., 2015)	Make offender's aware of the high costs of the consequences (Clarke, 1997)	Strengthening moral condemnation (Wortley, 1996)	Signature on codes / rules (Tunley et al., 2018)
Enforce Job Rotations (Tunley et al., 2018)	Promote Whistleblowing (Banaji et al., 2015)	Put the sanctions in practice (Dion, 2008)	Learn from incidents & modify techniques	Facilitate compliance (Wortley, 1996)

2.1 Increase the Effort

According to Clarke (1995), the first strategy involves increasing the effort for offenders to commit a crime. Here, continuous and visible management controls raise organizational safeguards that disrupt offenders' plans. Few other prevention techniques are job rotations that disrupt offenders' schemes with their corrupt relationships and restore complacent supervision (Tunley et al., 2018). Rigorous recruitment screening along with psychological and personality tests also supports the prevention framework.

2.2 Increase the Risks

The second strategy aims to increase risks for the offender. Such practices that can vigilantly spot deviant behaviours may increase the opportunity cost of committing a crime. Organizations can develop techniques which are situation-specific that may emphasize safety measure and increase the possibility of detection and intrusion. Continuous supervision and whistleblowing may increase detection risks. Initiating a culture where authorities are within reach of all employees, increases risks for the offenders (Banaji et al., 2015) and their rational decision making halts their deviant behavior.

2.3 Reduce Rewards

To discourage deviant behavior, reducing or finding ways to remove rewards is an important strand of situational crime prevention techniques (Clarke & Eck 2014). Some of the control methods that are focused on increasing effort may also become a source of reducing rewards. Moreover, strategies for stimulating the consciousness of the offender with respect to the high cost of consequences (Clarke 1995) that includes sanctions, removing freedom, denying career and career benefits, demotion and wage reduction (Tunley et al., 2018) become a deterrent for deviant behavior.

2.4 Reduce Provocations

The last two categories are closely linked with each other rather both of these are forms of social crime prevention, as their focus remains on changing and supporting the values and behaviour of the social group and its members. Rather than directly focusing on opportunity signals, their main premise is on 'features of the situation that precipitate or induce crime' (Clarke and Eck 2014). An environment with exploitative employers may lead to provocations, also personal circumstances outside the workplace may trigger these (Tunley et al., 2018). Counselling; dismantles the rationale behind crime choices and reduces risks (Tunley et al., 2018). The main premise of the technique is that offenders try to escape the self-blame for their activities. Instead, they put the responsibility on other external factors, blame others, employ disinhibitions and claim lack of behavioral alternatives, or use groups, supervisors or organisations to make their involvement in anti-social acts obscure. The technique controlling disinhibitors is concerned with reducing conditions that weaken the capacity of individuals to critically self-evaluate their actions. The most obvious example of this strategy is the restriction of access to alcohol and drugs.

2.5 Remove Excuses

This strategy focuses on the removal of ambiguities through clearly setting out, dissemination and reinforcement of rules. This strategy is linked with reducing provocation strategy as their concern revolves around would-be offenders instead of predatory offenders (Tunley et al., 2018). Further, its premise also includes dismantling rational justifications to pursue criminal behaviour (Tunley et al., 2018). The first strategy towards handling excuses is ‘rule setting’. The offenders can deny the wrongfulness of their ideas and can even claim the morality of their actions by contrasting these with more heinous actions of others. Clarke (2005) observed the ‘rule setting’ technique mos tly in terms of clarification of legitimacy of a behavior; harassment codes and customs declarations serve this purpose. The main focus of rule setting is reducing uncertainty regarding the impermissibility of a given action / behavior (Wortley, 1996). When individuals are facilitated, compliance of rules becomes possible (Wortley, 1996).

2.6 The Sixth Strategy- Grooming Transformational Leaders

According to EEOC (1999), the content of anti-harassment policies is significantly important, yet to safeguard against claims of harassment, it is not adequate to depend only on written policies and procedures. Slobodien and Peters (2012) contend that cases in lower courts propose that an employer’s responsibility is not limited to written statements rather he has to take such steps through his conduct and training that involves and engages employees in policies. This engagement creates such an environment that provides deterrence for deviant behaviour (Becton et al., 2017).

3. Discussion

The discussion proposes that support from an organization’s leadership that have authority as well as resources is a determining factor for the implementation and effectiveness of counter-harassment techniques. O’Moore et al. (1998) state that the significant determinant between huge differences of harassed and non-harassed employees lies with their satisfaction that their leaders have the capacity to resolve conflicting issues at the workplace.

Hamilton and Sanders (1992) presented three models for the prevention of ‘crimes of obedience’:

(1) Subordinates need to be encouraged to follow a changed superordinate;

(2) Individuals need to be encouraged for whistleblowing i.e., to notify authorities as soon as observe some wrongdoing and

(3) Such hierarchical frames need to be broken that reason subordinates to accept that their choices are limited.

According to Hamilton and Sanders, the adoption of these models can weaken the causes that drag employees into “dead-end situations”. Many times, individuals are unable to see the available different options a situation could have, as they interpret the situation according to their given roles within their given duties. The models imply the empowerment by the leader and expect that the worker will be given means to enhance their self-efficacy (Dion, 2008).

To reduce workplace harassment, recent studies have established that the deterring effect of leadership particularly the transformational style of leading is significant (Astrauskaite et al., 2015). Social networks within the organizational setup can intervene in the silence that surrounds harassment (Hershcovis et al. (2021). The idea that leaders can be transformed through training and development was first initiated by Bass in the early nineties. Later many studies endorsed this concept (Barling, Weber, & Kelloway, 1996; Abrell, Rowold, Weibler, & Moenninghoff, 2011). Training of transformational leadership needs to be taken into account as one of the most important tools that can prevent harassment at the workplace (Astrauskaite et al., 2015). The study conducted by Astrauskaite et al.(2015) revealed that one of the strong deterrents for workplace harassment is leader, displaying high attributes of transformational leadership. Hence proper training along with dose-response analysis may serve their purpose practically. It is significant to probe further than how much leadership of transformational style is required. Furthermore, how consistent this style of leadership should be, to achieve a harassment-free environment (Astrauskaite et al., 2015; Liu, Song, Li, & Liao, 2017).

The literature attributes transformational leadership to the work environment quality(Liu et al., 2017). Gautschi and Jones (1998) contend that an ethical stance among employees from top to blue-collar workers has no alternative for strong ethical culture. Transformational leadership influences the personal moral values of their followers, hence play a significant role in preventing corporate crimes. Odom & Green (2003) argues that the application of principles of transformational leadership principles could minimize the need for legal or governmental interferences. An organization itself permeate an ethical culture by having transformational leaders as role models for ethical conduct. The transformational style of leadership by focusing on the moral development of its followers ultimately leads to ethical decision making. Multiple researchers (Carless, Wearing, & Mann, 2000; Bass and Riggio, 2006; Popper and Mayseless, 2003) states that transformational leadership style has the capacity to create positive conditions in the workplace. This positivity contributes towards the prevention of workplace harassment by fostering an ethical and moral environment while encouraging pro-social beliefs (Popper & Mayseless, 2003). Based on these foregoing assumptions, the current study argues that apart from applying situational crime prevention techniques, the grooming of existing leaders as transformational leaders may serve as a significant deterrent to harassment in the workplace.

Strenuous environments at the workplace may be a major cause of workplace harassment (Wolf, Perhats, Delao, & Clarke, 2017; Notelaers et al., 2013). However, stress management becomes more effective under a transformational style of leadership that focuses on being a social supporter (Bass & Riggio, 2006), ultimately diminishing the possibility of exposure to negative work behaviours. Wolf et al., (2017) has analyzed the situation and proposed that in the early stages of workplace harassment, with the first instance or threat, when it is difficult to detect, followers turn to a leader (Bjo¨rkqvist, 1992; Notelaers et al.,2013). According to researchers poor conflict management skills shows an upward trend in workplace harassment (Wolf et al., 2017; Baillien et al., 2009). Transformational leader in the case of a conflict, focus on collaborative efforts by portraying the conflict as a challenge or considering it a learning opportunity (Carless et al., 2000); communicating to its followers that neither party can get much without the assistance of the other (Bass & Riggio, 2006). With the effective resolution of conflict management, a transformational leader can effectively deter harassment at the workplace (Baillien et al., 2009). Moreover, by setting superordinate goals, a transformational leader can encourage a shared vision and raise team spirit (Bass & Riggio, 2006) that affects employees social identification with the team and ultimately developing a sense of belongingness and mutual well-being (Ferguson, 1984). Bass & Riggio (2006) states that in such environment in which follower considers himself part of the group, reduces his stress levels, which helps in the management of conflicts, thus the risk of harassment at the workplace becomes minimized (Baillien et al., 2009; Baillien et al., 2011)

Finally, by addressing the self-worth of the employees, a transformational leader raises the self-esteem of his followers that becomes a deterrent to workplace harassment (Dion, 2008). By increasing the self-esteem of employees, acceptance of individual differences increases, giving followers confidence, support and encouragement (Carless et al., 2000). According to Nielsen et al (2017), harassment is linked with a lack of self-confidence. The victim as compared to the instigator seems to be in an inferior position, in the situations of work harassment (Bjo¨rkqvist et al., 1994). In these instances written policies cannot do much, rather a leader's capability to contribute towards enhancement of self-esteem of followers can significantly guard potential targets from the advances of the offenders (Tsuno & Kawakami, 2015).

4. Conclusion

Workplace harassment with its serious consequences is a persistent workplace problem for individuals and administrations. Varying from physical health problems to emotional dilemmas, harassment takes a toll on victims whereas organizations suffer as well, with its effects in the form of turnover, low job satisfaction, reduced commitment and absenteeism. Therefore, all such initiatives that prevent this negative workplace behavior are crucial for the effective working of the organizations. This paper proposes a prevention framework on the grounds of Clarke's five strategies with a sixth strategy involving a leader's efforts to have an effective preventive program for harassment at the workplace.

According to Clarke (2005), situational crime prevention techniques do not have the agenda of improving societies or institutions rather these are served to focus on the avenues that reduce opportunities for criminal activities. This paper uses situational crime prevention techniques as an anti-harassment framework however it presents a sixth strategy that needs to be followed by organizations if they effectively want to combat harassment i.e. existence or grooming of leaders with transformational traits to change the institutional culture. Without the sixth strategy, the framework may only be kept as a writing of the policies and would not achieve much. The situational crime prevention framework developed by Clarke put significant importance on physical security. Whereas the anti-harassment framework presented in this paper is mainly focused on administrative systems of vigilance and governance. It establishes a road map for the engagement of employees and supervisors to analyze particular situations and implement prevention methods. Ethical Counselling undoubtedly possesses the potential power to establish moral values in the organization, however, the quality of leadership remains the significant factor. Research shows that poor quality of leadership leads to negative workplace behaviours particularly workplace harassment. The current study sheds light on how organizations can effectively implement situational crime prevention framework if they increase awareness among their leaders that how their behaviors significantly affect their employees in the workplace (Wolf et al., 2017; Avolio and Gardner 2005). Moreover, the collective activities, of employee engagement and involvement needs to be part of the prevention framework. Organizations need to understand that a long-term proactive perspective with investment for maintaining and enhancing social relations at the workplace is needed to promote a harassment-free environment (Francioli et al., 2015).

Future studies may address that to what extent organizational responses towards the implementation of situational crime prevention techniques along with groomed leaders have succeeded in creating a harassment-free work setting while reforming perpetrator behavior and restoring the victim’s workability and job satisfaction.

References

Abrell, C., Rowold, J., Weibler, J., & Moenninghoff, M. (2011). Evaluation of a long-term transformational leadership development program. German Journal of Human Resource Management, 25(3), 205-224.

Aquino, K., & Lamertz, K. (2004). A relational model of workplace victimization: social roles and patterns of victimization in dyadic relationships. Journal of Applied Psychology, 89(6), 1023.

Astrauskaite, M., Notelaers, G., Medisauskaite, A., & Kern, R. M. (2015). Workplace harassment: Deterring role of transformational leadership and core job characteristics. Scandinavian Journal of Management, 31(1), 121–135. https://doi.org/10.1016/j.scaman.2014.06.001

Bac, M. (2018). Wages, performance and harassment. Journal of Economic Behavior and Organization, 145, 232–248. https://doi.org/10.1016/j.jebo.2017.11.008

Baillien, E., Neyens, I., & De Witte, H. (2009). Organizational, team related and job related risk factors for workplace bullying, violence and sexual harassment in the workplace: A qualitative study. International Journal of Organisational Behaviour, 13(2), 132-146.

Baillien, E., Neyens, I., & De Witte, H. (2011). Organizational correlates of workplace bullying in small- and medium-sized enterprises. International Small Business Journal, 29(6), 610-625.

Banaji, M., Diekmann, K., Malhotra, D., Margolis, J., Rhodewalt, F., Sondak, H., … Fragale, A. (2015). MORAL SYMBOLS: A NECKLACE OF GARLIC AGAINST Moral Symbols: A Necklace of Garlic against Unethical Requests Sreedhari D . Desai (corresponding author) University of North Carolina at Chapel Hill. Academy of Management Journal.

Barling, J., Weber, T., & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. Journal of applied psychology, 81(6), 827.

Becton, J. B., Gilstrap, J. B., & Forsyth, M. (2017). Preventing and correcting workplace harassment: Guidelines for employers. Business Horizons, 60(1), 101–111. https://doi.org/10.1016/j.bushor.2016.09.005

Bullock, K., Clarke, R. V. G., & Tilley, N. (Eds.). (2010). S. prevention of organised crimes. T. & F. (2010). Situational prevention of organised crimes. Taylor & Francis.

Carless, S. A., Wearing, A. J., & Mann, L. (2000). A short measure of transformational leadership. Journal of business and psychology, 14(3), 389-405.

Clarke, R. V. (1997). Situational Crime Prevention Second Edition. Harrow and Heston. Retrieved from http://www.popcenter.org/library/reading/pdfs/scp2_intro.pdf

Clarke, R. V. (2005). Seven misconceptions of situational crime prevention. Handbook of Crime Prevention and Community Safety, 39–70.

Clarke, R. V. G., & Newman, G. R. (2006). O. the terrorists. G. P. G. (2006). Outsmarting the terrorists Greenwood Publishing Group. Greenwood Publishing Group.

Clarke, R. V., & Cornish, D. B. (1985). Modeling Offenders' Decisions: A Framework for Research and Policy. Crime and Justice, 6, 147–185. https://doi.org/10.1086/449106

Demsky, C. A., Fritz, C., Hammer, L. B., & Black, A. E. (2019). Workplace incivility and employee sleep: The role of rumination and recovery experiences. Journal of occupational health psychology, 24(2), 228.

Devís-Devís, J., Pereira-García, S., Valencia-Peris, A., Fuentes-Miguel, J., López-Cañada, E., & Pérez-Samaniego, V. (2017). Harassment patterns and risk profile in Spanish trans persons. Journal of homosexuality, 64(2), 239-255.

Dion, M. (2008). Ethical leadership and crime prevention in the organizational setting. Journal of Financial Crime, 15(3), 308–319. https://doi.org/10.1108/13590790810882892

Duffy, M. K., Ganster, D. C., & Pagon, M. (2002). Social Undermining in the Workplace. Academy of Management Journal, 45(2), 331–351. https://doi.org/10.5465/3069350

Eck, J. E., Clarke, R. V., & Guerette, R. T. (2007). Risky facilities: Crime concentration in homogeneous

Einarsen, S. (1999). The nature and causes of bullying at work. International journal of manpower.

Einarsen, S. (2000). Harassment and bullying at work: A review of the Scandinavian approach. Aggression and violent behavior, 5(4), 379-401.

Einarsen, S. V., Hoel, H., Zapf, D., & Cooper, C. L. (2020). The concept of bullying and harassment at work: The European tradition. In Bullying and harassment in the workplace (pp. 3-53). CRC press.

Einarsen, S., & Mikkelsen, E. G. (2003). Individual effects of exposure to bullying at work. Bullying and emotional abuse in the workplace: International perspectives in research and practice, 6.

Finne, L. B., Knardahl, S., & Lau, B. (2011). Workplace bullying and mental distress—a prospective study of Norwegian employees. Scandinavian journal of work, environment & health, 276-287.

Francioli, L., Conway, P. M., Hansen, Å. M., Holten, A.-L., Grynderup, M. B., Persson, R., … Høgh, A. (2015). Quality of Leadership and Workplace Bullying: The Mediating Role of Social Community at Work in a Two-Year Follow-Up Study. Journal of Business Ethics. https://doi.org/10.1007/s10551-015-2996-3

Gautschi, F. H., & Jones, T. M. (1998). Enhancing the ability of business students to recognize ethical issues: An empirical assessment of the effectiveness of a course in business ethics. Journal of Business Ethics, 17(2), 205-216.

Glambek, M., Skogstad, A., & Einarsen, S. (2018). Workplace bullying, the development of job insecurity and the role of laissez-faire leadership: A two-wave moderated mediation study. Work & Stress, 32(3), 297-312.

Guimarães, C. A., Cançado, V. L., & Lima, R. de J. C. (2016). Workplace moral harassment and its consequences: A case study in a federal higher education institution. Revista de Administração, 51(2), 151–164. https://doi.org/10.5700/rausp1231

Hamilton, L. V., & Sanders, J. (1992). Everyday justice. Yale University Press.

Hershcovis, M. S., Vranjes, I., Berdahl, J. L., & Cortina, L. M. (2021). See no evil, hear no evil, speak no evil: Theorizing network silence around sexual harassment. Journal of Applied Psychology.

Hoel, H., Glasø, L., Hetland, J., Cooper, C. L., & Einarsen, S. (2010). Leadership styles as predictors of self-reported and observed workplace bullying. British Journal of Management, 21(2), 453–468. https://doi.org/10.1111/j.1467-8551.2009.00664.x

Liu, W., Song, Z., Li, X., & Liao, Z. (2017). Why and when leaders' affective states influence employee upward voice. Academy of Management Journal, 60(1), 238–263. https://doi.org/10.5465/amj.2013.1082

Nielsen, M. B., Glasø, L., & Einarsen, S. (2017). Exposure to workplace harassment and the Five Factor Model of personality: A meta-analysis. Personality and Individual Differences, 104, 195–206. https://doi.org/10.1016/j.paid.2016.08.015

Nielsen, M. B., Matthiesen, S. B., & Einarsen, S. (2010). The impact of methodological moderators on prevalence rates of workplace bullying. A meta-analysis. Journal of Occupational and Organizational Psychology, 83(4), 955–979. https://doi.org/10.1348/096317909X481256

Notelaers, G., Baillien, E., De Witte, H., Einarsen, S., & Vermunt, J. K. (2013). Testing the strain hypothesis of the Demand Control Model to explain severe bullying at work. Economic and Industrial Democracy, 34(1), 69-87.

NuNeS, T. S., da Rosa Tolfo, S., & Espinosa, L. M. C. (2019). A percepção de servidores universitários sobre as políticas, ações e discursos institucionais sobre o assédio moral no trabalho. Revista Organizações em Contexto, 15(29), 191-222.

O'Moore, M., Seigne, E., McGuire, L., & Smith, M. (1998). Victims of workplace bullying in Ireland. The Irish Journal of Psychology, 19(2-3), 345-357.

Odom, L., & Green, M. T. (2003). Law and the ethics of transformational leadership. Leadership & Organization Development Journal.sets of establishments and facilities. Crime prevention studies, 21, 225.

Popper, M., & Mayseless, O. (2003). Back to basics: Applying a parenting perspective to transformational leadership. The Leadership Quarterly, 14(1), 41-65.
Popper, M., & Mayseless, O. (2003). Back to basics: Applying a parenting perspective to transformational leadership. The Leadership Quarterly, 14(1), 41-65.
Salin, D. (2008). Organisational responses to workplace harassment. Personnel Review, 38(1), 26–44. https://doi.org/10.1108/00483480910920697

Sethna, R., Masood, T., & Jahangir, R. (2018). Misogyny in the Workplace: Hidden in Plain Sight-Special Report: Sexual Harassment in Workplaces in Pakistan.

Slobodien, A., & Peters, E. (2012). LEGAL TRENDS-Beyond Harassment Prohibitions-Brush the dust off your anti-harassment policies and take reasonable steps to prevent harassment. HR Magazine-Alexandria, 57(11), 75.

Tepper, B. J. (2000). Consequences of Abusive Supervision. Academy of Management Journal, 43(2), 178–190. https://doi.org/10.5465/1556375

Tsuno, K., & Kawakami, N. (2015). Multifactor leadership styles and new exposure to workplace bullying: a six-month prospective study. Industrial Health, 53(2), 139–151. https://doi.org/10.2486/indhealth.2014-0152

Tunley, M., Button, M., Shepherd, D., & Blackbourn, D. (2018). Preventing occupational corruption: Utilising situational crime prevention techniques and theory to enhance organisational resilience. Security Journal (Vol. 31). Palgrave Macmillan UK. https://doi.org/10.1057/s41284-016-0087-5

Van de Vliert, E., Einarsen, S., & Nielsen, M. B. (2013). Are national levels of employee harassment cultural covariations of climato-economic conditions?. Work & Stress, 27(1), 106-122.

Willison, R., & Siponen, M. T. (2009). Overcoming the Insider: Reducing Employee Computer Crime Through Situational Crime Prevention. Communications of the ACM, 52(9), 133–137. https://doi.org/10.1145/1562164.1562198

Wolf, L. A., Perhats, C., Delao, A. M., & Clark, P. R. (2017). Workplace aggression as cause and effect: Emergency nurses' experiences of working fatigued. International emergency nursing, 33, 48-52.

Wortley, R. K. (1996). Guilt, shame and situational crime prevention. Crime Prevention Studies, 5, 115–132.

Wortley, R., & Smallbone, S. Applying situational principles to sexual offenses against children. Crime Prevention Studies, 19(7).

Yu, L., & Zellmer-Bruhn, M. (2018). Introducing team mindfulness and considering its safeguard role against conflict transformation and social undermining. Academy of Management Journal, 61(1), 324-347.

Zapf, D., Knorz, C., & Kulla, M. (1996). On the relationship between mobbing factors, and job content, social work environment, and health outcomes. European Journal of Work and organizational psychology, 5(2), 215-237.

Transformational Leadership, Emotional Intelligence, and Innovative work behavior: The role of psychological empowerment

Essa Khan [1], Muhammad Mumtaz Khan[2] and Syed Saad Ahmed[3]

Abstract:

The purpose of study is to examine the mediating role of psychological empowerment between the leader characteristics of transformational leadership and emotional intelligence with employee innovative work behaviour.This study employed partial least square- structural equation modeling (PLS-SEM) to examine the mediating role of psychological empowerment. In addition, this study collected data through structured questionnaire and convenience sampling from 185 respondents.The finding of this research shows that psychological empowerment is important mediator between the relationships of emotional intelligence and transformational leadership with innovative work behavior. In addition, the result yield that emotional intelligence does not affect employee innovative work behaviour. However, tranformational leadership found to be positively affecting psychological empowerment and innovative work behaviour. This study has wider implications for the business leaders, managers, and consultants. Results of this reseach imply that the psychological empowerment of employee is sine qua non for the innovative work behaviour. The leader has onerous responsibilty to cultivate environment where employee feel motivated and free to embark on creativity and demonstrate innovative behaviour.

1. Introduction

The innovation process reflects a dynamic development and application of ideas nowadays. It is quite different from the earlier time when innovation was only regarded as a linear progression through scientific methods (Parjanen et al., 2011). The rise of competition in the business world has turned organizations towards the cultivation of the employees' innovative abilities (Bate & Johnston, 2013). Farr & Ford (1990) defined innovative work behavior (IWB) as an individual's behavior who goes for initiation and introduction of new ideas, processes, and products or procedures.

Many scholars consider transformational leadership an important factor for innovative work behavior (Bass, 1999; Bednall et al., 2018; Eisenbeiß & Boerner, 2010; Sanders & Shipton, 2012).

[1]Assistant Professor Bahria University Karachi Campus. essakhan.bukc@bahria.edu.pk
[2]Assistant Professor Bahria University Karachi Campus. mumtazkhan.bukc@bahria.edu.pk
[3]PhD. Scholar, Beihang University, Beijing, China. saadahmed@buaa.edu.cn

However, empirical studies yielded mixed results regarding the relationship between transformational leadership and innovative behavior (Pieterse et al., 2009). The concept of transformational leadership was first introduced by James Burns in 1978. In the context of political science, he defined it as the phenomenon of encouraging people to achieve goals with values, fulfilling the needs of followers and leaders (Kessler, 2013). However, Bernard Bass brought the concept of transformational leadership to the management science and leadership literature through its seminal book titled 'Leadership and performance beyond its performance' (Bass, 1985). The interesting and important aspect of transformational leadership was the values and motivation alignment of leaders and followers.

As transformational leadership drew the attention of management science scholars, similarly, the concept of emotional intelligence witnessed a sharp rise in publications. Mayer & Salovey (1999) first formally recognized the term EI and defined it as "the ability to monitor one's own and others' feelings and emotions, to discriminate among the mand to use this information to guide one's thinking and actions." Recent studies examined the relationship of leadership and emotional intelligence with psychological empowerment as a mediator and innovative work behavior or creativity as an organizational outcome (Alotaibi et al., 2020a; Dincer et al., 2011; Javed et al., 2017; Mathew & Gupta, n.d.; S. J. Zhang et al., 2015; X. Zhang, 2020).

These inconclusive findings of past studies suggest that the understanding of transformational leadership, emotional intelligence could be enhanced through the introduction of psychological empowerment as a mediator. Thomas & Velthouse, (1990) consider "Psychological Empowerment" as the practice of inner motivation that rises among employees who distinguish four cognitive areas of impact, competency, meaning, and choice. Hence, this study argues that the relationship between transformational leadership, emotional intelligence, and innovative work behavior is dependent upon the employee's psychological empowerment.

The subsequent part discusses different theories of Emotional Intelligence, Innovative Work Behavior, Transformational Leadership, and Psychological Empowerment. It also explains the relationship between the role of Emotional Intelligence, Transformational Leadership, Innovative Work Behavior, and Psychological Empowerment. Section three of this paper describes the research design and methodologies employed for this study. Besides, it also describes the questionnaire design, sample design, methods employed for collection, and analysis of data. Section four illustrates the data analysis. It discusses the rationale of descriptive statistics, inferential tests, and the presentation of results. Section five will discuss the result in the light of past studies, and offer insights regarding the various relationships. The last part will present concluding remarks with the recommendations and future areas for studies.

2. Literature Review

2.1 Emotional intelligence and Innovative work Behaviour

Employee emotional intelligence enables him to develop an understanding of his and other actions. Emotional intelligence as a tool serves to identify and distinguish the right actions out of emotions. Subsequently, the smartness of emotions also leads to having a positive effect on employee innovative behavior. (Mayer et al., 1999). (Wong & Law, 2002) argue that employees having high emotional intelligence score are motivated and perform better at jobs. Additionally, they also enjoy a better relationship with their peers.

According to (Forgas, 1995), Emotions impacts people thinking patterns by the way information is processed. The positive impact of emotions could assist in processing knowledge for creativity (Lyons & Schneider, 2005). (Scott & Bruce, 2020) also argued that employees with higher emotional intelligence are likely to have higher skills on creativity and that the organization's emotional environment tends to impact positively on the innovative work behavior of employees.

2.2 Emotional Intelligence and Psychological Empowerment

(Spreitzer, 1995) considers Psychological empowerment as a process that particularly motivates individuals and creates feeling of accomplishment. Additionally, (Jenskins, 1996) also describes psychological empowerment as a motivating tool that increases people's morale to perform certain tasks which they were unable to perform earlier. It also includes the capability to recognize and manage the emotions of oneself and others. It could also be referred to as emotional intelligence (Howe, 2008).

2.3 Psychological Empowerment and Innovative Work Behaviour

The social cognitive theory provides a premise for the relationship between psychological empowerment and innovative work behavior (Bandura, 1986). According to this theory, relevant circumstances and conditions shape and modify human behavior. (Thomas & Velthouse, 1990a) also studied employees' cognitive state (psychological empowerment) with relation to behavior. Similar studies argue that the cognitive state is a very important factor to motivate people for certain behavior. The relationship was also found to be statistically significant(Spreitzer, 1990). Further, (Javed et al., 2017) using cognitive evaluation theory to the role of psychological empowerment between the relationship of leadership and creativity. The results identified psychological empowerment as an important mediator between the impact of leadership on creativity.

2.4 Transformational Leadership and Innovative Work Behaviour

Past studies have shown that there is a positive relationship between organizational innovation and transformational leadership. Some studies argued through various mediators that transformational leadership and innovative work behavior does not enjoy a direct relationship (Bass, 1999; Bednall et al., 2018; de Jong & Den Hartog, 2007; Pieterse et al., 2009; Reuvers et al., 2008; Sanders & Shipton, 2012; Weng et al., 2015, 2015). However, the intervening variable play important role in determining the relationship. Transformational leadership comprises vision, motivation, self-confidence, awareness of goals, and inspiration Bass (1985) and Bass &Avolio (1989). The mentioned qualities of a leader ignite intrinsic motivation and create an environment for creativity and innovation (Eisenbeisset al., 2008).

Transformational leaders encourage and task subordinates to think freely to refine their problem-solving and analytical skills which result in creativity. Besides, transformational leaders support employees do not abstain employees from risk-taking for the new improved processes (Afsar et al., 2014).

2.5 Transformational Leadership and Psychological Empowerment

Transformational leadership and psychological empowerment have been subject of interest from researchers in recent times. A number of studies not only examined the direct relationship but also through mediation and moderation (Allameh et al., 2012; Barroso Castro et al., 2008; Dust et al., 2014; Jha, 2014; Özaralli, 2003; Pradhan et al., 2017).

Transformational leader grants employee empowerment and impacts positively on the employees' psychological outcomes (Lee & Nie, 2014). According to them, a great environment could be shaped through psychological empowerment and transformational leadership skills. This invokes employee recognition, employee development, participative decision making, and professional growth. Positive psychological dealing leads to the enhancement of employee sense of psychological empowerment. Transformation leadership deals also with employee stress in a very productive way. Hence, psychological empowerment intervenes positively in the relationship of transformational relationship and employee innovative work behavior (Afsar et al., 2014).

2.6 Transformational leadership, emotional intelligence, psychological empowerment, and Innovative work behavior

The association between employee innovative work behavior, emotional intelligence, and transformational leadership has been endorse by many scholarly works. However, some studies suggest that the mediating role between innovative work behavior and transformational leadership could not be overlooked (Alotaibi et al., 2020b; Pieterse et al., 2009; Reuvers et al., 2008; Weng et al., 2015). Psychological empowerment is regarded as a strong mediator, which plays important role in the interactions between employee innovative behavior and transformational leadership (Masood & Afsar, 2017).

(Alotaibi et al., 2020b) studied the role of empowering leadership and emotional intelligence in increasing employee psychological empowerment and engagement. They concluded that the employee with higher emotional intelligence and leadership skills exhibited higher psychological empowerment and engagement. In another study of 230 employees, (Pieterse et al., 2009) concluded that psychological empowerment was noticed as essential to the relationship of transformational leadership and innovative work behavior. The conceptual model is given below as figure 1.

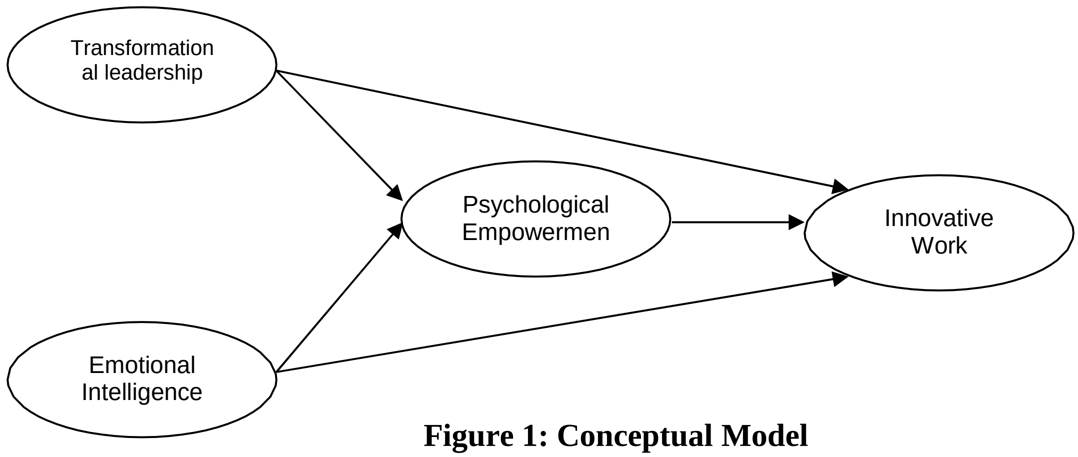


Figure 1: Conceptual Model

2.7 Research Hypotheses

H_1. Psychological empowerment of the employee is related to the level of transformational leadership of the manager.

H_2. Innovative work behavior of the employee is related to the level of transformational leadership of the manager.

H_3.Psychological empowerment of the employee is related to the level of emotional intelligence of the manager.

H_4. Innovative work behavior of the employee is related to the level of emotional intelligence of the manager.

H_5. Psychological empowerment of the employee mediates the effect of transformational leadership on innovative work behavior.

H_6. Psychological empowerment of the employee mediates the effect of emotional intelligence on innovative work behavior.

3. Design and Methodology

The study explains the innovative work behavior with the help of independent behavior namely; transformation leadership and emotional intelligence. The deductive approach is being employed in this study, which attempts to elucidate the chosen variables' relationship. Hypotheses were developed to test the theoretical assumption.

For this purpose, data were collected to test psychological empowerment between the relationships of transformational leadership, emotional intelligence, and innovative work behavior. A survey strategy is used in this research for the collection of data. This strategy allows the collection of data in a cost-effective, which could be analyzed. Below, this research describes sample size, questionnaire design, and constructs.

3.1 Sample Size

The statistical studies are required to have larger sample sizes. For each construct there must be 30 respondents, so for the current study, the sample size we took was 185 respondents. The table given below shows the demographic distribution of the respondent.

3.2 Questionnaire Design

The questionnaire used in this study consists of two parts. In one part, the respondents are required to provide their demographic and job-related information and in the other part, the respondents were required to provide their rating for the statements intended to measure the constructs used in the study.

3.3 Measurement

This study adopted the scale from past scholarly works. The scale of transformational leadership was adopted (Bass & Avolio, 1997). It included 18 items. The construct of emotional intelligence was measured with the 10 item scale from (Rego et al., 2007). Psychological empowerment was measured through the 12 item scale of (Nestico, 2016). Innovative work behavior was measured with the 10 item scale developed by (de Jong & den Hartog, 2010).

3.4 Data Collection Method

The respondents were managers at medium or large size organizations. The qualified respondents were approached personally and they were given the questionnaire. Besides, respondents were also approached through the internet and they were required to fill a questionnaire on Google Forms. One hundred and thirty-one questionnaires were received from the internet and fifty-four questionnaires were collected physically.

4. Data Analysis

The data analysis was carried out in multiple stages. First of all the codebook was developed and then the data was punched in from the physical questionnaires and imported from Google Forms. Once the data was fully available in SPSS, it was checked for errors. The responses which were not complete were either discarded or missing values were replaced by the average values. As the responses were complete so there was no need for the missing value treatment.

The modeling was done through SMART-PLS-3. The effect of the constructs and the mediation of psychological constructs were evaluated through SMART-PLS-3. For data analysis, first of all, the reliability and validity of the data were checked for the scale employed in the study. Table 4.1 shows the results.

4.1 Validity and Reliability

Table 2 below illustrates the reliability and validity results. Cronbach's alpha and composite reliability (CR) were examined to comprehend the internal consistency of the constructs. The results reflect that the values of Cronbach's Alpha and Composite reliability is more than 0.70, which shows that all the constructs achieve internal consistency. Similarly, the output of factor- loading values enabled to examine indicator reliability. According to Hair et al (2016), factor loading should be greater than 0.70 to determine indicator reliability. In this study, the indicators were recorded more the 0.80, which reflects that indicators attain their loading targets for particular constructs.

Moreover, this study examined the constructs' convergent validity by examining the average variance extracted (AVE) values. The values of AVE were noted to be more than the suggested level of 0.50, which shows that all the constructs meet the goal of convergent validity.

Table 1: Confirmatory Factor Analysis with Reliability and Validity statistics.

Construct	Items	Factor Loading	AVE	CR	Cronbach Alpha
Emotional Intelligence	EI4	0.890	0.680	0.894	0.840
	EI5	0.865			
	EI6	0.868			
	EI7	0.655			
Innovative Work Behavior	IWB10	0.774	0.552	0.907	0.892
	IWB2	0.666			
	IWB3	0.817			
	IWB4	0.614			
	IWB6	0.763			
	IWB7	0.793			
	IWB8	0.726			
	IWB9	0.768			
Psychological Empowerment	PE1	0.898	0.626	0.952	0.945
	PE10	0.792			

	PE11	0.642			
	PE12	0.862			
	PE2	0.848			
	PE3	0.921			
	PE4	0.726			
	PE5	0.907			
	PE6	0.887			
	PE7	0.599			
	PE8	0.667			
	PE9	0.642			
Transformational Leadership	TL11	0.895	0.638	0.912	0.902
	TL12	0.628			
	TL15	0.720			
	TL2	0.871			
	TL3	0.715			
	TL6	0.921			

4.2 Results

Figure 2 reflects the estimated model mentioned underneath. Transformational leadership has six items. The construct of emotional intelligence initially had six items, but the analysis showed lower loading of the items which were removed from the scale, and finally, there were four items, which were retained to measure emotional intelligence. The construct of psychological empowerment is measured through twelve item scale. The construct of innovative work behavior has got 8 items.

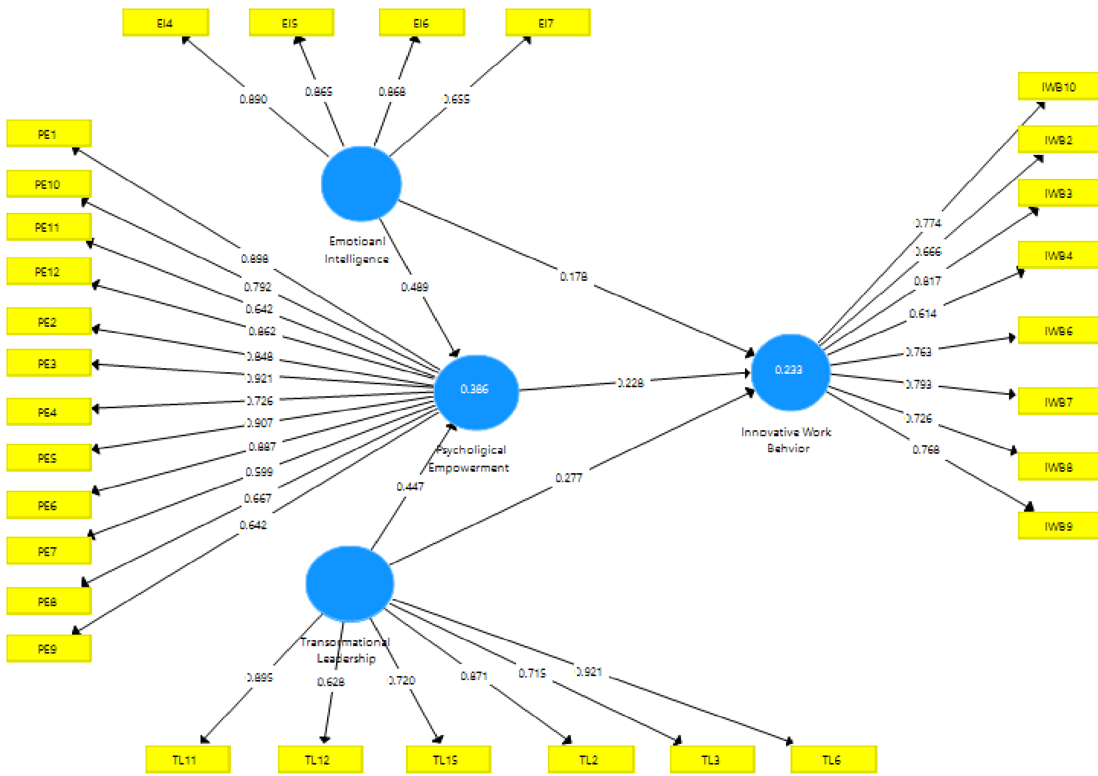


Figure 2: Estimated model

The hypothesis testing results are displayed in Tables 2 and 3. Transformational leadership (0.277, p<0.000) and psychological empowerment (0.228, p<0.000) have a significant impact on innovative work behavior. However, emotional intelligence (p> 0.065) was not found to be a significant estimator of innovative work behavior.

Additionally, the result shows that psychological empowerment mediates the relationship between emotional intelligence and innovative work behavior as the test is significant at a 5% significance level (p=.026). Furthermore, psychological empowerment mediates the relation between transformational leadership and innovative work behavior as the test is significant at a 5% significance level.

Table 2: Direct impact among Emotional intelligence, Transformational leadership, and Psychological Empowerment.

Relation	β	t-test	p-value
EI → IWB	0.178	1.85	0.065

EI → PE	0.489	8.297	0.000
TL → IWB	0.277	3.635	0.000
TL → PE	0.447	8.731	0.000
PE → IWB	0.228	2.753	0.006

EI: Emotional Intelligence, PE: Psychological empowerment, IWB: Innovative work behavior, TL: Transformational leadership

Table 3: Mediator role of Psychological Empowerment

Relation	**β**	**t-test**	**p-value**
EI →PE → IWB	0.112	2.228	0.026
TL →PE →IWB	0.102	2.320	0.021

EI: Emotional Intelligence, PE: Psychological empowerment, IWB: Innovative work behavior, TL: Transformational leadership

5.Discussion

The concepts and related issues of innovative work behavior, emotional intelligence, transformational leadership, and psychological empowerment are extensively discussed. This study examined the role of psychological empowerment as a mediator among the relationship of transformational leadership and emotional intelligence with innovative work behavior.

The results support the developed framework and yields similar findings from the previous studies (Eisenbeisset al., 2008; Zhou & George, 200; Afsar et al., 2014). The findings reflect that transformational leadership encourages intrinsic motivation, intellectual stimulation, and creates a supportive environment for creativity and innovations. As some studies argued through various mediators that transformational leadership and innovative work behavior does not enjoy a direct relationship (Bass, 1999; Bednall et al., 2018; J. P. J. de Jong & Den Hartog, 2007; Pieterse et al., 2009; Reuvers et al., 2008; Sanders & Shipton, 2012; Weng et al., 2015). Similarly, this study mediation model goes well along with the result of past studies as the result found to be significant at 5%.

This study also attempts to examine the relationship between psychological empowerment and emotional intelligence. A previous study by (Spreitzer, 2007) showed a positive relationship between employee emotional intelligence and psychological empowerment. This study also endorses the previous work of

Spreitzer as the results yielded similar findings.

The research of (Forgas, 1995; Lyons & Schneider, 2005; Scott & Bruce, 2020) also argued that employees with higher emotional intelligence are likely to have higher skills in creativity and that the organizations' emotional environment tends to impact positively on the innovative work behavior of employees. Conversely, this study does not find a significant relationship between emotional intelligence and innovative work behavior.

6. Conclusion

This study developed hypotheses to examine the mediating role of psychological empowerment with transformational leadership, emotional intelligence, and innovative work behavior. Leaders sit on top of the organogram, they formulate strategies and have a strong impact on employees' actions. This study shows that transformational leadership leads to the psychological empowerment of the employees, which cultivates the employee's innovative behavior.

The results of this research are generally consistent with the previous studies, except for the relationship between emotional intelligence and innovative work behavior. This study concludes that emotional intelligence does not influence an employee's innovative behavior. This result recognizes that the emotional intelligence of the leader is not a predictor of employee behavior particularly when it comes to cultivating innovative abilities.

Organizations are big stages available to the leaders and managers. If the managers are selfless and go a step further than their vested interest to coach, educate, and mentor subordinates. The employee is psychologically empowered to take initiative and determine his work priorities. This leads to the enhancement of innovative work behavior which brings novel ideas in the shape of novel processes, products, and services.

References

Afsar, B., F. Badir, Y., & Bin Saeed, B. (2014). Transformational leadership and innovative work behavior. *Industrial Management & Data Systems, 114*(8), 1270–1300. https://doi.org/10.1108/IMDS-05-2014-0152

Allameh, S. M., Heydari, M., & Davoodi, S. M. R. (2012). Studying the relationship between transformational leadership and psychological empowerment of teachers in Abade Township. *Procedia - Social and Behavioral Sciences*, *31*, 224–230. https://doi.org/10.1016/j.sbspro.2011.12.046

Alotaibi, S. M., Amin, M., & Winterton, J. (2020a). Does emotional intelligence and empowering leadership affect psychological empowerment and work engagement? *Leadership & Organization Development Journal*, *ahead-of-print*(ahead-of-print). https://doi.org/10.1108/LODJ-07-2020-0313

Alotaibi, S. M., Amin, M., & Winterton, J. (2020b). Does emotional intelligence and empowering leadership affect psychological empowerment and work engagement? *Leadership & Organization Development Journal, ahead-of-print*(ahead-of-print). https://doi.org/10.1108/LODJ-07-2020-

0313
Bandura, A. (1986). *Social foundations of thought and action.*
Barroso Castro, C., Villegas Periñan, M. M., & Casillas Bueno, J. C. (2008). Transformational leadership and followers' attitudes: The mediating role of psychological empowerment. *The International Journal of Human Resource Management*, *19*(10), 1842–1863. https://doi.org/10.1080/09585190802324601
Bass, B. M. (1985). *Leadership and performance beyond expectations.*
Bass, B. M. (1999). Two Decades of Research and Development in Transformational Leadership. *European Journal of Work and Organizational Psychology*, *8*(1), 9–32. https://doi.org/10.1080/135943299398410
Bass, B. M., & Avolio, B. J. (1989). Potential biases in leadership measures: How prototypes, leniency, and general satisfaction relate to ratings and rankings of transformational and transactional leadership constructs. *Educational and Psychological Measurement*, *49*(3), 509–527.
Bass, B. M., & Avolio, B. J. (1997). *Full range leadership development: Manual for the multifactor leadership questionnaire*. Mind Garden; /z-wcorg/.
Bass Bernard, M. (1985). *Leadership and Performance Beyond Expectations: New York: A Division of Macmillian*.
Bate, J. D., & Johnston, R. E. (2005). Strategic frontiers: The starting-point for innovative growth. *Strategy & Leadership*, *33*(1), 12–18. https://doi.org/10.1108/10878570510572608
Bednall, T. C., E. Rafferty, A., Shipton, H., Sanders, K., & J. Jackson, C. (2018). Innovative Behaviour: How Much Transformational Leadership Do You Need?: Innovative Behaviour. *British Journal of Management*, *29*(4), 796–816. https://doi.org/10.1111/1467-8551.12275
de Jong, J., & den Hartog, D. (2010). Measuring Innovative Work Behaviour. *Creativity and Innovation Management*, *19*(1), 23–36. https://doi.org/10.1111/j.1467-8691.2010.00547.x
de Jong, J. P. J., & Den Hartog, D. N. (2007). How leaders influence employees' innovative behaviour. *European Journal of Innovation Management*, *10*(1), 41–64. https://doi.org/10.1108/14601060710720546
Dincer, H., Gencer, G., Orhan, N., & Sahinbas, K. (2011). The Significance of Emotional Intelligence on the Innovative Work Behavior of Managers as Strategic Decision-Makers. *Procedia - Social and Behavioral Sciences*, *24*, 909–919. https://doi.org/10.1016/j.sbspro.2011.09.052
Dust, S. B., Resick, C. J., & Mawritz, M. B. (2014). Transformational leadership, psychological empowerment, and the moderating role of mechanistic-organic contexts: TRANSFORMATIONAL LEADERSHIP AND EMPOWERMENT. *Journal of Organizational Behavior*, *35*(3), 413–433. https://doi.org/10.1002/job.1904
Eisenbeiß, S. A., & Boerner, S. (2010). Transformational Leadership and R&D Innovation: Taking a Curvilinear Approach: TRANSFORMATIONAL LEADERSHIP AND R&D INNOVATION. *Creativity and Innovation Management*, *19*(4), 364–372. https://doi.org/10.1111/j.1467-8691.2010.00563.x
Eisenbeiss, S. A., van Knippenberg, D., & Boerner, S. (2008). Transformational leadership and team innovation: Integrating team climate principles. *Journal of Applied Psychology*, *93*(6), 1438–1446. https://doi.org/10.1037/a0012716
Farr, J. L., & Ford, C. M. (1990). *Individual innovation.*
Forgas, J. P. (1995). Mood and judgment: The affect infusion model (AIM). *Psychological Bulletin*, *117*(1), 39–66. https://doi.org/10.1037/0033-2909.117.1.39
Howe, D. (2008). What is Emotional Intelligence? In D. Howe, *The Emotionally Intelligent Social Worker* (pp. 10–23). Macmillan Education UK. https://doi.org/10.1007/978-0-230-36521-6_2

Javed, B., Khan, A. A., Bashir, S., & Arjoon, S. (2017). Impact of ethical leadership on creativity: The role of psychological empowerment. *Current Issues in Tourism*, *20*(8), 839–851. https://doi.org/10.1080/13683500.2016.1188894

Jenskins, D. (1996). *Managing Empowerment: How to Make Business Re-engineering Work*. Century Limited.

Jha, S. (2014). Transformational leadership and psychological empowerment: Determinants of organizational citizenship behavior. *South Asian Journal of Global Business Research*, *3*(1), 18–35. https://doi.org/10.1108/SAJGBR-04-2012-0036

Kessler, E. (2013). *Encyclopedia of management theory*. Sage Publications.

Lee, A. N., & Nie, Y. (2014). Understanding teacher empowerment: Teachers' perceptions of principal's and immediate supervisor's empowering behaviours, psychological empowerment and work-related outcomes. *Teaching and Teacher Education*, *41*, 67–79. https://doi.org/10.1016/j.tate.2014.03.006

Lyons, J. B., & Schneider, T. R. (2005). The influence of emotional intelligence on performance. *Personality and Individual Differences*, *39*(4), 693–703. https://doi.org/10.1016/j.paid.2005.02.018

Masood, M., & Afsar, B. (2017). Transformational leadership and innovative work behavior among nursing staff. *Nursing Inquiry*, *24*(4), e12188. https://doi.org/10.1111/nin.12188

Mathew, M., & Gupta, K. S. (n.d.). *Transformational Leadership: Emotional Intelligence*. 1.

Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, *27*(4), 267–298.

Nestico, C. (2016). *Psychological Empowerment and Customer Orientation in the Grocery Industry* [PhD Thesis]. Walden University.

Özaralli, N. (2003). Effects of transformational leadership on empowerment and team effectiveness. *Leadership & Organization Development Journal*, *24*(6), 335–344. https://doi.org/10.1108/01437730310494301

Parjanen, S., Melkas, H., & Uotila, T. (2011). Distances, Knowledge Brokerage and Absorptive Capacity in Enhancing Regional Innovativeness: A Qualitative Case Study of Lahti Region, Finland. *European Planning Studies*, *19*(6), 921–948. https://doi.org/10.1080/09654313.2011.568804

Pieterse, A. N., van Knippenberg, D., Schippers, M., & Stam, D. (2009). Transformational and transactional leadership and innovative behavior: The moderating role of psychological empowerment. *Journal of Organizational Behavior*, *31*(4), 609–623. https://doi.org/10.1002/job.650

Pradhan, R. K., Panda, M., & Jena, L. K. (2017). Transformational leadership and psychological empowerment: The mediating effect of organizational culture in Indian retail industry. *Journal of Enterprise Information Management*, *30*(1), 82–95. https://doi.org/10.1108/JEIM-01-2016-0026

Rego, A., Sousa, F., Pina e Cunha, M., Correia, A., & Saur-Amaral, I. (2007). Leader Self-Reported Emotional Intelligence and Perceived Employee Creativity: An Exploratory Study. *Creativity and Innovation Management*, *16*(3), 250–264. https://doi.org/10.1111/j.1467-8691.2007.00435.x

Reuvers, M., van Engen, M. L., Vinkenburg, C. J., & Wilson-Evered, E. (2008). Transformational Leadership and Innovative Work Behaviour: Exploring the Relevance of Gender Differences. *Creativity and Innovation Management*, *17*(3), 227–244. https://doi.org/10.1111/j.1467-8691.2008.00487.x

Sanders, K., & Shipton, H. (2012). The relationship between transformational leadership and innovative behaviour in a healthcare context: A team learning versus a cohesion perspective. *European J. of International Management*, *6*(1), 83. https://doi.org/10.1504/EJIM.2012.044759

Scott, S. G., & Bruce, R. A. (2020). *Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace*. 29.

Spreitzer, G. (2007). Giving peace a chance: Organizational leadership, empowerment, and peace. *Journal of Organizational Behavior*, *28*(8), 1077–1095. https://doi.org/10.1002/job.487

Spreitzer, G. (2020). Psychological Empowerment in the Workplace: Dimensions, Measurement, and Validation. *Academy of Management*, *38*(5), 1442–1465.

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measure-ment, andvalidation. *Academy of Management Journal*, *38*(5), 1442–1465.

Thomas, K. W., & Velthouse, B. (1990a). Cognitive Elements of Empowerment: An 'Interpretive' Model of Intrinsic Task Motivation. *Academy of Management*, *15*(4), 666–681.

Thomas, K. W., & Velthouse, B. A. (1990b). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. *Academy of Management Review*, *15*(4), 666–681.

Weng, R.-H., Huang, C.-Y., Chen, L.-M., & Chang, L.-Y. (2015). Exploring the impact of transformational leadership on nurse innovation behaviour: A cross-sectional study. *Journal of Nursing Management*, *23*(4), 427–439. https://doi.org/10.1111/jonm.12149

Wong, C.-S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly*, *13*(3), 243–274.

Zhang, S. J., Chen, Y. Q., & Sun, H. (2015). Emotional intelligence, conflict management styles, and innovation performance: An empirical study of Chinese employees. *International Journal of Conflict Management*, *26*(4), 450–478. https://doi.org/10.1108/IJCMA-06-2014-0039

Zhang, X. (2020). *LINKING EMPOWERING LEADERSHIP AND EMPLOYEE CREATIVITY: THE INFLUENCE OF PSYCHOLOGICAL EMPOWERMENT, INTRINSIC MOTIVATION, AND CREATIVE PROCESS ENGAGEMENT*. 23.

How Social Gratification affects Social Network Gaming Habitual Behavior: A Sequential Mediation Model

Kashif Abrar[1], Dr. Asif Khurshid Mian[2], Sobia Zaman[3]

Abstract:

The present research has explored the role of social interaction and social presence, two components of social gratification, in shaping up social network gaming habitual behavior. The study has analyzed sequential mediation of flow experience and consumer satisfaction in between the association social gratification facets and social network gaming habitual behavior. 500 responses were collected from social gaming consumers of Pakistan using convenience sampling technique. 471 responses were found to be appropriate for data analysis. SPSS 25.0 was used for descriptive statistics, frequency distribution and correlation analysis while PROCESS SPSS Macro was used for examining the mediation effects. The proposed research model was also analyzed and validated using structural equation modelling through AMOS 22. Results of the study revealed that flow experience and consumer satisfaction play significant role as sequential mediators between social gratification facets and social network gaming habitual behavior. Consumer satisfaction was observed to play the most effective role among all determinants considered in the present research. Theoretical and practical implications, limitations and future research directions have been discussed as well.

Keywords: Social gratification, social interaction, social presence, flow experience, consumer satisfaction, social network gaming habitual behavior, Pakistan.

1. Introduction

Success of social network games (SNGs), for instance Cityville and Farmville, has paved ways for this specific niche of digital games to become one of the most illustrious sources of entertainment while enticing millions of gaming consumers. The acceptance and interest of consumers towards social network games has been increasing in past few years all across the globe (Vanwesenbeeck, Ponnet, & Walrave, 2017). For instance, candy crush, one of the most popular SNGs, is played by 93 million players daily all over the world and considering Pakistani context, more than 70 million players play candy crush every week (Zafar, 2018). Social network games are online games which are linked with or distributed through social networking sites (SNSs), such as, Facebook. Since these games are easily accessible and more convenient for the players, gaming consumers can enjoy SNGs at anytime and anyplace (Kim et al., 2019). Majority of SNGs are developed as independent applications and then integrated with social networking sites. Players are required to open SNGs and then log in via their SNSs accounts in order to experience full features provided by these games. This way SNGs are able to take advantage of existing massive networks of SNSs (Killian & Hulland, 2016).

[1] Ph.D. Scholar, Department of Management Sciences, Bahria University Islamabad, kashif_411@hotmail.com
[2] Senior Assistant Professor, Department of Management Sciences, Bahria University Islamabad, asif.k.mian@gmail.com
[3] Senior Assistant Professor, Department of Business Studies, Bahria University Islamabad, shujaatsobia@hotmail.com

Some prior studies have focused on the factors that can lead towards prolonged consumption of SNGs across diversified contexts. Wei and Lu (2014) considered the perspective of uses and gratification theory and network externalities for understanding players' intention to play SNGs. Similarly, Park et al. (2014) identified few psychological factors that positively influence intention to play SNGs. Additionally, Su et al. (2016) studied loyalty perspective in SNGs through flow experience. Although, these studies provide significant theoretical base for understanding how to enhance frequency of play for SNGs, retaining large pool of consumers is equally important for SNGs to survive in the market of fierce competition. Most of the SNGs are freemium games as users can download and enjoy these games for free. The revenues earned by SNGs come primarily through in-game advertisements and selling virtual goods. Therefore, understanding habitual behavior formation of social network gaming consumers becomes impetrative for long-term sustainability of SNGs.

The significance of social component as an influencer to continuously play social network games has been acknowledged by quite a few researchers in recent times (Hamari et al., 2017). However, research from the perspective of social components and habitual behavior remains scarce particularly in SNGs context. There are studies that have acknowledged the indirect role of some factors such as flow experience in online gaming perspective that lead towards continuous gameplay behavior. Hsiao and Chen (2016) identified some factors that can help to attract SNGs players but this study did not discuss about mediating role of other factors that can affect behavior of players within SNGs. Since, the indirect role of some factors, such as flow experience and consumer satisfaction, can be important to determine prolonged consumption behavior of SNGs (Liu, 2017), the present study has aimed at exploring social network gaming habitual behavior through indirect effect of flow experience and consumer satisfaction. The study intends to shed light on key determinants of social network gaming habitual behavior and help to explain how to retain large pool of consumers in SNGs context. From practitioners' perspective, the present study provides suggestions regarding important elements and strategies based on preferences of SNGs players that can be considered by SNGs service providers for developing SNGs in a highly competitive marketplace.

2. Literature Review

2.1 Social Network Gaming Habitual Behavior

Habit is a term which is explained as a mental construct and it is based on automaticity regardless of previous behaviors and self-recognition frequency. In SNG context, De Grove and Van Looy (2015) defined it as "long-standing motives to play a social networking game". Habitual behavior has been extensively studied in social psychology, food consumption, organization behavior and health science (Griffiths, 2018). However, in information system (IS) context, studies focusing on habitual behavior are very scarce. Molyneux (2018) identified media usage habit to be a primary motive for media consumption behaviors. Moreover, Hu et al. (2018) argued that users pay more attention and prolong their consumption of a specific media as a result of media habit. It is important to mention that habitual behavior aids in minimizing mental efforts and saving time thus it generates positive effects, therefore it is imperative to focus on habitual behavior instead of addiction (Chiu & Huang, 2015). The present study has focused on analyzing motivations and media habits in social network gaming context.

2.2 Uses and Gratification Theory

One of the most commonly adopted theories in the domain of information systems and consumer behavior is the theory of uses and gratification (Ifinedo, 2016). Furthermore, many researchers have studied this theory in diversified settings as this theory is not confined to limited number of constructs or factors (Choi et al., 2016). For past few years, marketing researchers have been actively investigating the reasons behind prolonged consumption behavior of digital gaming consumers. The widely accepted theories that have been considered by researchers to study this phenomenon include uses and gratification theory (Mahfuzra et al., 2019), self-determination (Proulx, Romero, & Arnab, 2017) and social cognitive theory (De Grove, Cauberghe, & Van Looy, 2016). Among these theories, the uses and gratification theory, being domain specific, is considered to be an adequate and effective approach for understanding consumer's motivation in social network gaming context (Li et al., 2015).

The theory of uses and gratification has an assumption that individuals make use of specific platforms for fulfilling certain needs and wants. This theory has its implications in order to understand media consumption patterns and motives behind prolonged consumption patterns pertaining to social network games (Ifinedo, 2016). A study conducted by Wei & Lu (2014) elaborated that the entire gaming process is actively influenced by gaming consumers as they have potential to diversify game consumption experiences and play choices. This clearly indicates that game players engage within the game intentionally and they also anticipate different kinds of gratification during the game play. Hence, the theory of uses and gratification has been proposed as an appropriate approach to study interactive nature of game play across internet mediated environment i.e. social media platforms.

The present study has concentrated on examining habitual behavior of Pakistani consumers in social network gaming context. For this purpose, the "consumer gratification" as postulated by uses and gratification theory has been considered for analysing the determinants that result in motivating consumers of Pakistan to keep on playing a social network game for a longer time period. There are several types of gratification (social, hedonic, utilitarian, content, internet) that have been considered by marketing researchers in diversified contexts (Ifinedo, 2016; Kaimann, Stroh-Maraun, & Cox, 2018). However, in the present research, social gratification has been considered since quite a few studies in online gaming context and social network gaming context have suggested social gratification to be a core gratification (Li et al., 2015; Huang, Bao, & Li, 2017). Furthermore, this study has also focused on analyzing the mediating role of flow experience and consumer satisfaction because the significance to examine the role of these mediators in online gaming context has been elaborated in few prior studies (Chang, 2013; Ghazali, Mutum, & Woon, 2019). Therefore, the present study has aimed at identifying the impact of social gratification over social network gaming habitual behavior with concentration of flow experience and consumer satisfaction as sequential mediators.

2.2.1 Social Gratification

Quite a few researches that have incorporated theory of uses and gratification, have particularized that motivations for the purpose of enhancing social relationships of individuals (social integrative motivations) are important predictors for media selection media consumption behavior. For example, Facebook is a social networking site that helps to connect people online and smartphone technology is providing flexible platform for this reason (Chen, Kim, & Lin, 2015). Similarly, social network games are expected to create and maintain social relationships among individuals and consequently, this may increase frequency of paly of social network games. Molyneux, Vasudevan, and Gil de Zúñiga (2015) examined the influence of online community engagement of SNGs and concluded that just like brand community engagement, some SNGs have created their own online communities over different social networking sites which are helping game players to interact with others and discuss topics related to the game. This way, SNG can be viewed as "conversation starter" that may assist the SNG players to establish new relationships. Killian and Hulland (2016) studied behavior of SNG consumers and concluded that SNGs serve as an effective medium for players to get in touch with one another. Alzahrani et al. (2017) further elaborated that most of the times, SNGs are played with friends online which increases the duration of interaction among friends while fostering stronger relationships.

One of the most important reasons for using online social media platforms is to maintain closer bonds among friends. Social gratification in online gaming context is important as players actively share their accomplishments with a game, at different levels, with their friends and other players. According to Li et al. (2015), social gratification refers to "the fulfillment of the urge among consumers to engage socially across the gaming platforms". Therefore, it is expected that social gratification directly relates to prolonged consumption of a specific SNG since individuals tend to engage with an online platform not for the purpose of primary activity, but for spending more time with friends (Killian & Hulland, 2016). Furthermore, social gratification has been proven to be a strong predictor of continuous usage behavior of SNGs (Li et al., 2015). Review of previous literature suggests that in online gaming context, two facets of social gratification have been most commonly used i.e. social interaction and social presence. Both of these facets have been investigated in numerous prior studies and they have comprehensively explained the concept of social gratification.

2.2.1.1 Social Interaction

In social network gaming context, social interaction can be explained as "the extent to which players use SNG as a social environment to interact with others" (Deci & Ryan, 2010). Many researchers believe that social interaction can enable players to be motivated enough to keep playing the game. Argyle (2017) argued that social interaction can be regarded as an essential motivation for the users who value socializing, belonging to a specific community, sharing experiences and making new relationships. A simple interaction among players while playing online games can also motivate the players to continue their gaming activity for a longer period of times, which makes social interaction an interesting prospect to study in social network gaming context. It can also be deliberated as a unique element within the game that actually goes beyond the gaming activity itself and implicates exchange of information and players meeting one another online. McGloin, Hull and Christensen (2016) elaborated that social interaction comprises of characteristics of cooperation and competition because SNG players are not only competing with others but they are also assisting others in overcoming some challenging tasks at different levels. This way, social interaction goes beyond competition element particularly in SNG context.

2.2.1.2 Social Presence

Li et al. (2015) described social presence within social network gaming context as "the extent to which a player's psychological sense of physically interacting and establishing a personal connection with others via playing a SNG is achieved". Social presence seems to be significant for users as it is a psychological factor that makes users believe that they are a part of internet mediated environment and they are actively and physically interacting with others to make personal connections and association (Van Doorn et al., 2017). Furthermore, social presence makes players believe that they are socially likable and competent within the online game and consequently, it generates positive perception among individuals (Baabdullah, 2018). Social presence is an integral component of social gratification not only in digital gaming context but also in SNG context as well and it has been found to enhance user engagement in online games (Baabdullah, 2018). As the social encounters are increasing within SNGs, it is has been observed that social gratification plays an influential role in determining prolonged consumption behaviour in the domain of social network games.

2.3 Flow Experience

Csikszentmihalyi (1990) presented flow theory that explained flow experience as "the holistic experience that people feel when they act with total involvement". Flow experience characterizes a situation where individuals are deeply absorbed in the activity they enjoy and sometimes they lose consciousness about time passing (Csikszentmihalyi & Nakamura, 2018). The behavior of consumers within internet mediated environment may be described by means of flow experience and talking specifically about digital gaming context, games can gauge immersion behavior of players into flow experience (Harmat et al., 2015). A well designed game that can provide cheerful experience to the players can definitely transport those players into the state of flow (Wang, Wu, & Tsau, 2019). The activities in which flow experience plays a significant role, the outcomes (for example intention, continuous usage, loyalty) are also affected by flow experience. During a certain activity, when people experience flow, there is a strong probability for repetition of that particular activity (Csikszentmihalyi & Nakamura, 2018). The repetition of the activity can easily be developed into habitual behavior which elaborates importance of flow experience. In SNG context, flow experience has been rarely examined (Huang, Bao, & Li, 2017) although few researchers have elaborated the need to identify the role played by flow experience in online and social network gaming context (Ghazali, Mutum, & Woon, 2019).

2.4 Consumer Satisfaction

Consumer satisfaction has been an essential and major component of marketing literature since early 1950s. When it comes to determining subsequent consumer behavior, consumer satisfaction may be considered as the single most important construct. According to Yuan (2015) "consumer satisfaction is related to the quality of the service, product and the environment in which the product/service is being offered. Being an abstract concept, the term refers to the fulfillment of the needs and desires of the consumers". Most of the recent studies have considered ECM (expectation–confirmation model), proposed by Bhattacherjee (2001a), for studying satisfaction and continuous usage behavior in IS products/services context. From IS products/services perspective, consumer satisfaction and retention are critical factors since many costs are linked with acquiring new consumers that include configuring advertising strategies and initiating new accounts (Chang, 2013). Shin (2017) argued that a notion of satisfaction is formed among consumers when their certain needs (for instance, social needs) are gratified by using a particular product or service. In digital applications and gaming context, the level of satisfaction of consumers has been identified to have a strong influence over attitude, continuous usage and intention (Sailer et al., 2017). The present study has also focused on the significance of studying consumer satisfaction as an important determinant of social network gaming habitual behavior.

3 Conceptual Framework and Hypotheses Development

Social interaction has been proven to be a critical factors that leads towards prolonged consumption of social networking sites where SNG players are able to interact with others regardless of location, age and gender (Moriuchi, 2016). Moreover, social interaction has a significant and positive impact over flow experience in online gaming context which results in continuous usage behavior (Su et al., 2016). When players are able interact more with others, this can lead them towards state of flow. Furthermore, social interaction also affects consumer satisfaction in digital gaming context because satisfied players engage with the game for a longer period of time (McGloin, Hull, & Christensen, 2016). Additionally, Kang, Lee and Namkung (2018) argued that flow experience has some positive outcomes in virtual environments which include consumer satisfaction and continuous usage behaviour. Therefore, it is expected that in SNG context, flow experience and consumer satisfaction may sequentially mediate the association of social interaction and habitual behaviour. Hence, it is hypothesized that:

H_1: The association between social interaction and social network gaming habitual behaviour is sequentially mediated by flow experience and consumer satisfaction.

Social presence encourages SNG players to find social media where they can build extensive social connections as the players are willing to develop associations and interact physically with other players (Baabdullah, 2018). Social presence also leads towards prolonged consumption of SNSs (Li et al., 2015). Furthermore, a sense of immersion is generated as a result of social presence in online games which signifies positive association of social presence and flow experience in online gaming context (Zhou, 2019). Also, social presence has a significant and positive association with consumer satisfaction within social network games which encourages repeat gameplay (Li et al., 2015). Moreover, flow experience has been identified as a strong determinant of consumer satisfaction and continuous usage behavior within virtual contexts (Kang, Lee, & Namkung, 2018). Therefore, it is expected that in SNG context, flow experience and consumer satisfaction may sequentially mediate the association of social presence and habitual behaviour. Hence, it is hypothesized that:

H_2: The association between social presence and social network gaming habitual behaviour is sequentially mediated by flow experience and consumer satisfaction.

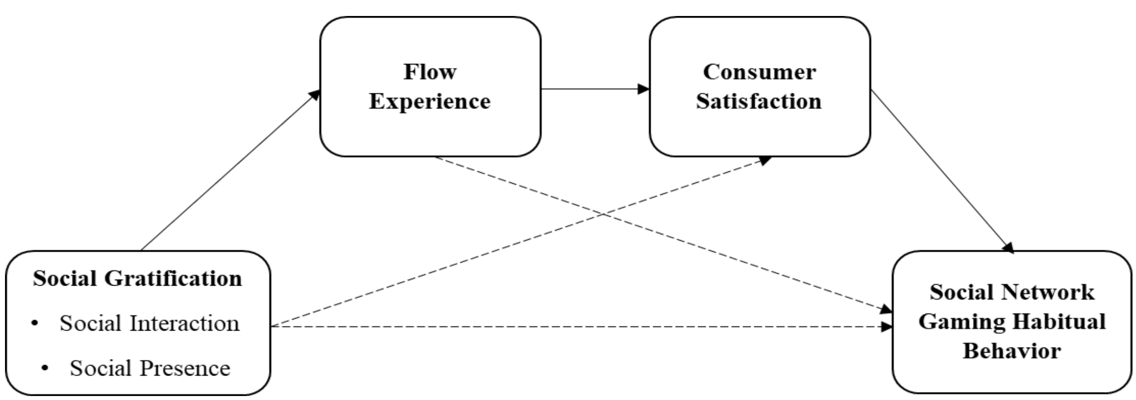


Figure 1: Conceptual Framework

4 Methodology

Quantitative research methodology has been adopted by the authors for present research which has been used in few prior similar studies (Huang, Bao, & Li, 2017). For all variables, data was collected at one point in time, hence the time horizon was cross sectional. The target market for the present study comprised of players of famous SNGs living in major cities of Pakistan. Data was gathered via online questionnaire which comprised of few demographic questions and items for measuring the selected variables. The variable items, as shown in table-1, were adapted from several validated, generalized and reliable scales. All items were accounted for by using 5-point Likert scale indicating “5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree and 1 = Strongly Disagree”.

Table 1: Variables, Number of Items, Items Source, Cronbach’s Alpha, Mean and Standard Deviation

Variable	No. of Items	Items Source	Cronbach’s Alpha	Mean (SD)
Social Interaction	5	Lee (2009) and Lee and Tsai (2010) Colwell (2007)	0.89	3.63 (0.84)
Social Presence	5	Weibel et al. (2008) and Wu et al. (2010)	0.85	3.51 (0.80)
Flow Experience	3	Chou & Ting (2003)	0.91	3.28 (0.72)
Consumer Satisfaction	3	Park and del Pobil (2013)	0.70	3.45 (0.79)
SNG Habitual Behavior	4	Verplanken and Orbell (2003)	0.83	3.77 (0.86)

Web based questionnaire has been considered as a suitable approach for data collection in marketing researches (Saunders et al., 2009; Ifinedo, 2016). The web based survey strategy has been adopted in the present study since it is reliable as well as cost effective strategy and provides instant access to numerous potential participants. The purpose of using online questionnaire was that it ensures internet literacy as well as complete response and it is convenient in terms of recording information. The online questionnaire was distributed via Facebook groups of Pakistani gaming consumers. Convenience sampling was used for collecting 500 questionnaires that were filled completely, in all aspects, by the respondents. Out of these, few questionnaires were dropped as they were observed to be filled with a very high frequency of selecting same answer for all questions. 471 responses were considered appropriate and they were used for further analysis. All of the respondents participated in the study voluntarily and no incentives or rewards were offered. Each respondent was allowed to record the response only once and afterwards any change or modification in the submitted response was not allowed. SPSS 25.0 and PROCESS SPSS Macro (Hayes, 2017) were used for analyzing descriptive statistics, frequency distribution, reliability, correlation and mediation effects.

5 Results and Discussion

5.2 Reliability and Validity Analysis

The recommended range of Cronbach's Alpha coefficient for accepting reliability of the data, according to Nunnally and Bernstein (1994) is 0.7 to 0.95. As shown in table-1, the reliability measure for all variables falls within acceptable range. The mean and standard deviation values for all variables have also been summarized in table-1.

5.3 Correlation Analysis

Person's correlation analysis was executed in order to determine association among main constructs of the study prior to validating the proposed hypotheses. Table-2 depicts that correlation coefficients (*r*) are significant and range between 0.143 and 0.783. Precisely, the two independent variables (social interaction and social presence) of the study had marginally significant correlation. Hence, for hypotheses testing, sequential mediation analysis on independent variables have been carried out separately.

Table 2: Correlation Analysis

Variable	SI	SP	FL	CS	SNGH
SI	1				
SP	.143*	1			
FL	.699***	.206*	1		
CS	.712***	.219**	.686***	1	
SNGH	.598***	.264**	.619***	.783***	1

***** p <. 01, ** p < .05, * p <. 1**

5.4 Hypotheses Testing

For examining the role of social interaction and social presence on flow experience and consumer satisfaction, and the mediating impact of flow experience and consumer satisfaction on social network gaming habitual behavior, multi-step mediation analyses have been executed using model 6 in PROCESS SPSS Macro (Hayes, 2017). This program is generally used for analyzing several kinds of path models, for instance, multiple as well as sequential mediation models using bootstrapping. While using bootstrap method, the null hypothesis (i.e. "there is no indirect effect") is rejected when "zero" is excluded between maximum and minimum values of confidence interval. As suggested by Preacher and Hayes (2004) and Hayes (2017), confidence interval and number of resamples were set to 95% and 5000 respectively. With each independent variable, a series of path model analyses have been executed.

5.4.1 Effect of Social Interaction on Social Network Gaming Habitual Behavior

As an outcome of sequential mediation model analysis for impact of social interaction on SNG habitual behavior, direct path for influence of social interaction over SNG habitual behavior is not significant ($\beta = 0.146$, SE = 0.072, 95% CI = [−0.08 to 0.31], $p = 0.238$). Nevertheless, indirect effect of mediating path (where social interaction affecting SNG habitual behavior has been mediated by flow experience and consumer satisfaction) is significant ($\beta = 0.17$, SE = 0.06, 95% CI = [0.07 to 0.23]). As a result, the first hypothesis of the study is accepted. When social interaction within a particular SNG increases, SNG consumers perceive higher level of flow experience which has positive influence over SNG habitual behavior by enhancing level of consumer satisfaction. Considering first mediating variable only (flow experience), the indirect effect is insignificant (β = 0.07, SE = 0.04, 95% CI = [−0.03 to 0.15]). On the other hand, indirect effect of path that involves second mediating variable (consumer satisfaction) is significant (β = 0.31, SE = 0.08, 95% CI = [0.11 to 0.39]). All these results have been summarized in table-3. Social interaction within SNGs results in consumer satisfaction which further leads towards SNG habitual behavior. Hence, consumer satisfaction plays an integral role in formation of habitual behavior in SNG context. Figure 2 shows sequential mediation effects of flow experience and consumer satisfaction between social interaction and SNG habitual behavior.

Table 3: Model Coefficients for Sequential Mediation Model (Effect of Social Interaction on SNG Habitual Behavior)

Antecedent	**Consequent**								
	M1(Flow Experience)			**M2 (Consumer Satisfaction)**			**Y (Social Network Gaming Habit)**		
	Coeff,	***SE***	***P***	**Coeff,**	***SE***	***p***	**Coeff,**	***SE***	***p***
X (Social Int.)	.440	.052	<.001	.248	.065	<.001	.146	.072	.238
M1 (FL)				.239	.075	<.001	.159	.081	.115
M2 (CS)							.589	.109	<.001
Constant	1.271	.213	<.001	.534	.201	<.05	.172	.258	.530
	R^2=.401			R^2=.489			R^2=.528		
	F(1,99)=69.421, p<.001			F(2,98)=42.937, p<.001			F(3,97)=39.332, p<.001		
Direct Effect of SI on SNGH				*B*=.146, *SE*=.07, 95% CI= (-.08 to .31), *p*=.238					
Indirect Effect									
SI ➔FL➔SNGH				*B*=.07, *SE*=.04, 95% CI= (-.03 to.15) (insignificant)					
SI ➔FL➔CS➔SNGH				*B*=.17, *SE*=.06, 95% CI= (.07 to .23) (significant)					
SI ➔CS➔SNGH				*B*=.31, *SE*=.08, 95% CI= (.11 to .39) (significant)					

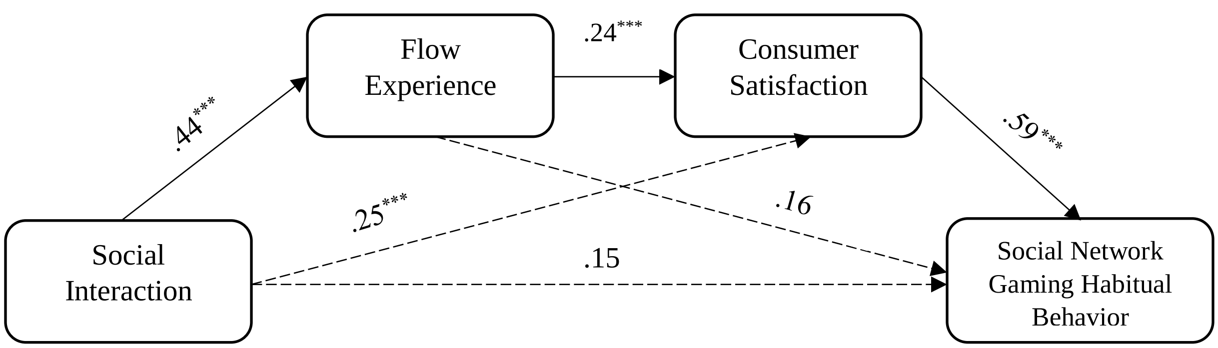


Figure 2: Sequential Mediation Model for Effect of Social Interaction on SNG Habitual Behavior (***p<.001)

5.4.2 Effect of Social Presence on Social Network Gaming Habitual Behavior

Secondly, as an outcome of sequential mediation model analysis for impact of social presence on SNG habitual behavior, direct path for influence of social presence over SNG habitual behavior is not significant (β = 0.06, SE = 0.05, 95% CI = [−0.07 to 0.26], p = 0.253). But, indirect effect of mediating path (where social presence affecting SNG habitual behavior has been mediated by flow experience and consumer satisfaction) is significant (β = 0.09, SE = 0.06, 95% CI = [0.02 to 0.20]). Therefore, the second hypothesis of the study is also accepted. To explain this finding further, as social presence within a particular SNG is perceived to be more, this leads towards flow experience. Flow experience results in higher level of consumer satisfaction which ultimately results in SNG habitual behavior. Bearing in mind the first mediating variable only (flow experience), the indirect effect is insignificant (β = 0.05, SE = 0.04, 95% CI = [−0.02 to 0.18]). Additionally, indirect effect of path that involves second mediating variable (consumer satisfaction) is also insignificant (β = 0.04, SE = 0.07, 95% CI = [−0.03 to 0.21]). The results have been summarized in table-4. Figure 3 shows sequential mediation effects of flow experience and consumer satisfaction between social presence and SNG habitual behavior.

Table 4: Model Coefficients for Sequential Mediation Model (Effect of Social Presence on SNG Habitual Behavior)

Antecedent	**Consequent**								
	M1(Flow Experience)			**M2 (Consumer Satisfaction)**			**Y (Social Network Gaming Habit)**		
	Coeff,	***SE***	***P***	**Coeff,**	***SE***	***p***	**Coeff,**	***SE***	***p***
X (Social Pres.)	.113	.084	.047	.056	.069	.299	.061	.052	.318
M1 (FL)				.491	.057	<.001	.193	.088	<.05
M2 (CS)							.519	.099	<.001
Constant	2.235	.274	<.001	..876	.301	<.01	.054	.289	.717
	R^2=.032			R^2=.391			R^2=.518		
	F(1,99)=.0699, p=.060			F(2,98)=28.121, p<.001			F(3,97)=37.769, p<.001		
Direct Effect of SP on SNGH					*B*=.06, *SE*=.05, 95% CI= (-.07 to .26), *p*=.253				
Indirect Effect									
SP ➔FL➔SNGH					*B*=.05, *SE*=.04, 95% CI= (-.02 to.18) (insignificant)				
SP ➔FL➔CS➔SNGH					*B*=.09, *SE*=.06, 95% CI= (.02 to .20) (significant)				
SP ➔CS➔SNGH					*B*=.04, *SE*=.07, 95% CI= (-.03 to .21) (insignificant)				

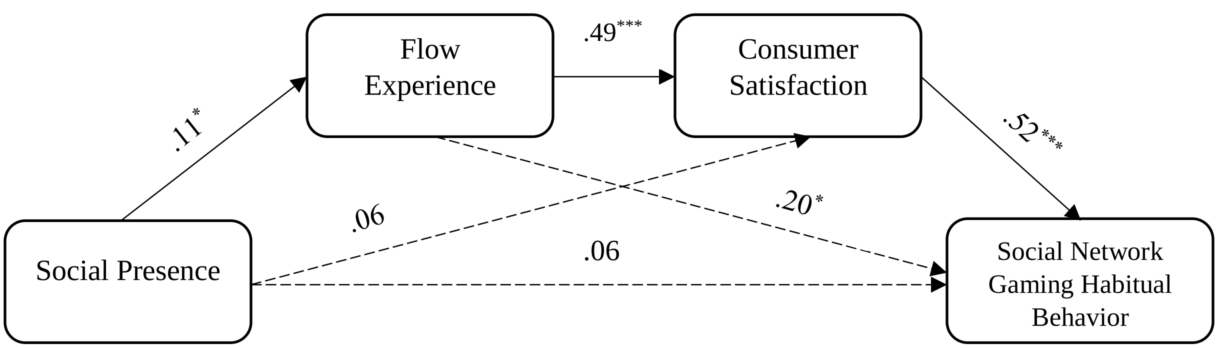


Figure 3: Sequential Mediation Model for Effect of Social Presence on SNG Habitual Behavior (*p<.05, ***p<.001)

Furthermore, the proposed research model has also been analyzed through SEM (structural equation modeling) technique in order to examine the associations for all constructs including social interaction and social presence in one model. CFA (confirmatory factor analysis) results depict that fitness of overall measurement model can be accepted ($\chi 2$/df = 1.015, p < 0.001, CFI = 0.912, TLI = 0.900, RMSEA = 0.054). The construct validity for each variable has been satisfied as the standardized coefficient for items is found to be significant (p < 0.001). Composite reliability and average variance extracted values for all constructs are exceeding .08 and .059 respectively which is considered satisfactory. Moreover, the convergent validity and discriminant validity for all variables has also been confirmed. Afterwards, SEM analysis has been carried out which also depicts acceptable structural model fit ($\chi 2/df = 1.017$, $p < 0.001$, CFI = 0.908, TLI = 0.896, RMSEA = 0.056). The outcomes of SEM analysis indicate that as social interaction increases, flow experience is also enhanced ($\beta = 0.73$, $p < 0.001$). Consumer satisfaction also increases with an increase in flow experience ($\beta = 0.76$, $p < 0.001$). The positive impact of consumer satisfaction on SNG habitual behavior is significant as well ($\beta = 0.82$, $p < 0.001$). Hence, SEM analysis has also confirmed the first hypothesis. Conversely, the effect of social presence on flow experience is insignificant ($\beta = 0.11$, $p = 0.219$). This outcome might be due to existence of correlation among social interaction and social presence. The Pearson's correlation between these two independent variables has been found to be marginally significant ($r = .143$, $p < 0.1$), while SEM results have identified significant covariance among social interaction and social presence.

6 Discussion and Conclusion

The present research has identified impact of social gratification on social network gaming habitual behavior through sequential mediation of flow experience and consumer satisfaction. The respondents comprised of experienced SNG consumers in Pakistan. The components of social gratification (social interaction and social presence) have indirect influence over SNG habitual behavior and these indirect effects are sequentially mediated by flow experience and consumer satisfaction. When SNG consumers experience higher level of social interaction and social presence, this leads towards flow experience which results in consumers satisfaction that ultimately results in formation of SNG habitual behavior. This finding adds to prior studies, which indicated that social factors positively affected continuous intentions to play (Killian & Hulland, 2016; Alzahrani et al., 2017).

A large number of prior researches on gaming using uses and gratification theory have only identified direct impact of social gratification over continuous intention to play (Huang, Bao, & Li, 2017). Whereas few other studies have focused on how social gratification influences flow experience and others have investigated how this flow experience can in turn affect behavioral intentions of players (Li et al., 2015; Wang, Wu, & Tsau, 2019). The present research has proposed an integrated and holistic framework to explore sequential mediating effect of flow experience and consumer satisfaction on SNG habitual behavior in order to extend previous studies that have primarily focused on role of social gratification only. However, opposed to findings of prior studies and contrary to expectations, the analysis of sequential mediation model has revealed that direct effect of social interaction and social presence over SNG habitual behavior and the indirect effect mediated by flow experience is not significant. The facets of social gratification have significant and positive influence over SNG habitual behavior only when the effect is mediated by consumer satisfaction. The consumer satisfaction would then enhance SNG habitual behavior, and thus the findings support and extent outcomes of prior studies focusing on continuous playing intention (Shin, 2017; Sailer et al., 2017).

Some prior studies, focusing on social gratification, have considered role of flow experience as core mediating variable which influences consumer behavior in different contexts (Su et al., 2016). While, few recent studies have highlighted the need to consider more factors that may play critical role between flow experience and behavior of consumers (Ghazali, Mutum, & Woon, 2019). However, findings have specified that only flow experience, as a result of social gratification, is not sufficient for prolonged SNG consumption. Higher level of satisfaction must be provided to SNG consumers in order to prolong their exposure with a particular SNG. The results are in accordance with Chang (2013) and Sailer et al. (2017) who identified significant mediating role of consumer satisfaction in digital gaming context which leads towards continuous usage behavior. Hence, it is important for SNG developers to consider the element of user satisfaction in SNG context instead of just incorporating the factors of social gratification while designing SNGs. Even though there is strong presence of flow experience in SNGs, without consumer satisfaction, SNGs might fail to retain large pool of regular players.

Focusing specifically on habitual behavior in social network gaming context that too from developing countries perspective is a rare attempt and novel contribution of the present research. Literature on SNG habitual behavior in Pakistani consumer market is very scarce. The attempt to add knowledge in this particular domain is an important theoretical contribution of this research. Social network gaming is gaining popularity all across the world including developing economies. The present study has identified some important determinants of SNG habitual behavior in form of social gratification, flow experience and consumer satisfaction. All of these factors and their specific direct and indirect linkages must be taken into consideration by SNG developers and marketers if they are to gain competitive advantage among fierce competition. SNG service providers should regularly inject new elements to elicit social interaction and social presence of SNG players within the game. Additionally, some in-game rewards can be offered to the SNG players on the basis of sharing their performance and opinions over different social networking platforms. Special attention needs to be given to satisfy all sorts of needs of SNG players pertaining to social gratification. The maximum output can be achieved only if all of these constructs are considered simultaneously while designing a particular SNG.

7 Limitations and Future Research Directions

The present study has identified insignificant direct effect of both facets of social gratification over SNG habitual behavior. This elaborates need to identify other factors that have strong direct influence over SNG habitual behavior. Only two components of social gratification have been considered in the present research. Future studies can examine the role of other facets of social gratification, for instance social enhancement, in SNG context. Because of time and budget constraints, the time horizon for present study was cross sectional. Future studies can opt for longitudinal data collection to identify if there is any change in behavior of SNG players after some time period. The proposed research model has been tested in Pakistan only. Future researchers can validate the same model in other developing as well as developed countries having diversified cultural backgrounds.

References

Abrar, K., Zaman, S., & Satti, Z. W. (2017). Impact of online store atmosphere, customized information and customer satisfaction on online repurchase intention. *Global Management Journal for Academic & Corporate Studies*, *7*(2), 22-34.

Abrar, K., Saeed, M. A., Ahmad, I., & Ali, S. (2020). How Customer Experience Quality affects Customer Satisfaction-Loyalty with Moderating role of Competitive Choices and Familiarity: Assessment of Private Hospitals in Pakistan. *Sukkur IBA Journal of Management and Business*, *7*(1), 75-91.

Alzahrani, A. I., Mahmud, I., Ramayah, T., Alfarraj, O., & Alalwan, N. (2017). Extending the theory of planned behavior (TPB) to explain online game playing among Malaysian undergraduate students. *Telematics and Informatics*, *34*(4), 239-251.

Argyle, M. (2017). *Social Interaction: Process and Products*. Routledge.

Baabdullah, A. M. (2018). Consumer adoption of Mobile Social Network Games (M-SNGs) in Saudi Arabia: The role of social influence, hedonic motivation and trust. *Technology in Society*, *53*, 91-102.

Bhattacherjee, A. (2001a). Understanding information systems continuance: an expectation-confirmation model. *MIS quarterly*, *25*(3) 351-370.

Chang, C. C. (2013). Examining users′ intention to continue using social network games: A flow experience perspective. *Telematics and Informatics*, *30*(4), 311-321.

Chen, K. J., Kim, J., & Lin, J. S. (2015). The effects of affective and cognitive elaborations from Facebook posts on consumer attitude formation. *Journal of Consumer Behaviour*, *14*(3), 208-218.

Chiu, C. M., & Huang, H. Y. (2015). Examining the antecedents of user gratification and its effects on individuals' social network services usage: the moderating role of habit. *European Journal of Information Systems*, *24*(4), 411-430.

Choi, E. K., Fowler, D., Goh, B., & Yuan, J. (2016). Social media marketing: applying the uses and gratifications theory in the hotel industry. *Journal of Hospitality Marketing & Management*, *25*(7), 771-796.

Csikszentmihalyi, M. (1990). Flow. The Psychology of Optimal Experience. New York (HarperPerennial) 1990.

Csikszentmihalyi, M., & Nakamura, J. (2018). Flow, altered states of consciousness, and human evolution. *Journal of Consciousness Studies*, *25*(11-12), 102-114.

De Grove, F., & Van Looy, J. (2015). Young people at play: Behaviors, motives and social structure. *Computers In Human Behavior*, *43*(1), 263-271.

De Grove, F., Cauberghe, V., & Van Looy, J. (2016). Development and validation of an instrument for measuring individual motives for playing digital games. *Media Psychology*, *19*(1), 101-125.

Deci, E. L., & Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry*, *11*(4), 227-268.

Ghazali, E., Mutum, D. S., & Woon, M. Y. (2019). Exploring player behavior and motivations to continue playing Pokémon GO. *Information Technology & People*, *32*(3), 646-667.

Griffiths, M. D. (2018). Adolescent social networking: how do social media operators facilitate habitual use?. *Education and Health*, *36*(3), 66-69.

Hamari, J., Alha, K., Järvelä, S., Kivikangas, J. M., Koivisto, J., & Paavilainen, J. (2017). Why do players buy in-game content? An empirical study on concrete purchase motivations. *Computers in Human Behavior*, *68*, 538-546.

Harmat, L., de Manzano, Ö., Theorell, T., Högman, L., Fischer, H., & Ullén, F. (2015). Physiological correlates of the flow experience during computer game playing. *International Journal of Psychophysiology*, *97*(1), 1-7.

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.

Hsiao, K. L., & Chen, C. C. (2016). What drives in-app purchase intention for mobile games? An examination of perceived values and loyalty. *Electronic commerce research and applications*, *16*, 18-29.

Hu, T., Stafford, T. F., Kettinger, W. J., Zhang, X. P., & Dai, H. (2018). Formation and effect of social media usage habit. *Journal of Computer Information Systems*, *58*(4), 334-343.

Huang, T., Bao, Z., & Li, Y. (2017). Why do players purchase in mobile social network games? An examination of customer engagement and of uses and gratifications theory. *Program*, *51*(3), 259-277.

Ifinedo, P. (2016). Applying uses and gratifications theory and social influence processes to understand students' pervasive adoption of social networking sites: Perspectives from the Americas. *International Journal of Information Management*, *36*(2), 192-206.

Kaimann, D., Stroh-Maraun, N., & Cox, J. (2018). A duration model analysis of consumer preferences and determinants of video game consumption. *Journal of Consumer Behaviour*, *17*(3), 290-301.

Kang, J. W., Lee, H., & Namkung, Y. (2018). The impact of restaurant patrons' flow experience on SNS satisfaction and offline purchase intentions. *International Journal of Contemporary Hospitality Management*, *30*(2), 797–816.

Killian, G., & Hulland, J. (2016). Marketing promotions in social network games: Making them work. *Journal of Digital & Social Media Marketing*, *4*(1), 54-69.

Kim, M. K., Kim, H. Y., & Kang, Y. A. (2019). Influence of gift-giving in social network games on social capital: Relationship types, gift-giving types, and the big five factors of personality. *International Journal of Human–Computer Interaction*, *35*(1), 38-52.

Li, H., Liu, Y., Xu, X., Heikkilä, J., & Van Der Heijden, H. (2015). Modelling hedonic IS continuance through the uses and gratifications theory: An empirical study in online games. *Computers in Human Behavior*, *48*(1), 261-272.

Liu, C. C. (2017). A model for exploring players flow experience in online games. *Information Technology & People*, *30*(1), 139-162.

Mahfuzra, H., Hidayanto, A. N., Hapsari, I. C., & Utari, P. (2019). What drives the intention to repurchase digital items in digital games? An integration of uses and gratifications theory and the expectation-confirmation model. *International Journal of Business Information Systems*, *30*(3), 253-276.

McGloin, R., Hull, K. S., & Christensen, J. L. (2016). The social implications of casual online gaming: Examining the effects of competitive setting and performance outcome on player perceptions. *Computers in Human Behavior*, *59*, 173-181.

Molyneux, L. (2018). Mobile news consumption: A habit of snacking. *Digital Journalism*, *6*(5), 634-650.

Molyneux, L., Vasudevan, K., & Gil de Zúñiga, H. (2015). Gaming social capital: Exploring civic value in multiplayer video games. *Journal of Computer-Mediated Communication*, *20*(4), 381-399.

Moriuchi, E. (2019). *Social media marketing: Strategies in utilizing consumer-generated content*. Business Expert Press.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychological theory*. New York: MacGraw-Hill.

Park, E., Baek, S., Ohm, J., & Chang, H. J. (2014). Determinants of player acceptance of mobile social network games: An application of extended technology acceptance model. *Telematics and Informatics*, *31*(1), 3-15.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, & computers*, *36*(4), 717-731.

Proulx, J. N., Romero, M., & Arnab, S. (2017). Learning mechanics and game mechanics under the perspective of self-determination theory to foster motivation in digital game based learning. *Simulation & Gaming*, *48*(1), 81-97.

Sailer, M., Hense, J. U., Mayr, S. K., & Mandl, H. (2017). How gamification motivates: An experimental study of the effects of specific game design elements on psychological need satisfaction. *Computers in Human Behavior*, *69*, 371-380.

Saunders, M., Lewis, P., Thornhill, A., & Wilson, J. (2009). Business research methods. *Financial Times, Prentice Hall: London*.

Shin, D. H. (2017). Conceptualizing and measuring quality of experience of the internet of things: Exploring how quality is perceived by users. *Information & Management*, *54*(8), 998-1011.

Su, Y. S., Chiang, W. L., Lee, C. T. J., & Chang, H. C. (2016). The effect of flow experience on player loyalty in mobile game application. *Computers in Human Behavior*, *63*, 240-248.

Van Doorn, J., Mende, M., Noble, S. M., Hulland, J., Ostrom, A. L., Grewal, D., & Petersen, J. A. (2017). Domo arigato Mr. Roboto: Emergence of automated social presence in organizational frontlines and customers' service experiences. *Journal of service research*, *20*(1), 43-58.

Vanwesenbeeck, I., Ponnet, K., & Walrave, M. (2017). Young adolescents' advertising literacy and purchase intention in social network games: Influence of perspective taking and need for cognition. *Journal of Consumer Behaviour*, *16*(1), 23-33.

Wang, C. H., Wu, K. C., & Tsau, S. Y. (2019). Flow Learning Experience: Applying Marketing Theory to Serious Game Design. *Journal of Educational Computing Research*, *57*(2), 417-447.

Wei, P. S., & Lu, H. P. (2014). Why do people play mobile social games? An examination of network externalities and of uses and gratifications. *Internet Research, 24*(3), 313-331.

Yuan, B. (2015). *Factors Influencing Customers Satisfaction In Online Shopping* (Doctoral dissertation, UTAR).

Zhou, T. (2019). The effect of flow experience on users' social commerce intention. *Kybernetes*.

Zafar, N. (2018). Candy Crush Addiction, Executive Functioning and CGPA of University Students of Lahore. *Bahria Journal of Professional Psychology*, *17*(1), 67-82.

Impact of Holistic Approach of Managers' Systems Thinking Skills on Strategic Performance of Organization – A case of Banking Industry

Ramesh Kumar[1], Kamran Ahmed Soomro[2], Muhammad Aqil[3]

Abstract:

This study aims to examine the impact of managers' systems thinking skills on the strategic performance of an organization with moderating role of gender. Organizational strategic performance has always been a significant measurement of overall actions of all employees specifically managers. Banking managers are nowadays facing challenges to cope with increasing new systems and processes of change, complexity, interaction, flexibility and uncertainty being core areas of systems thinking skills. 218 middle-level managers of employees participated by filling the self-administrated questionnaires from the banking sectors of Pakistan. The results were generated by using Structural Equation Modeling (PLS-SEM) technique. The results showed that there is significant relationship of managers' system thinking skills on strategic performance of organization whereas gender does not moderate relationship between these variables. The study provides a model to top management and leaders that can help management to foster a positive attitude towards systems thinking skills. Further, the study also highlights that managers' systems thinking skills is most significant and companies have to ensure that all organizational processes, policies and systems must be efficient and effective to meet needs of the company's strategic performance. Implications and Avenue for future research are also suggested at the end of study.

Keywords: Flexibility, Complexity, Interaction, Uncertainty, Systems Thinking Skills, Strategic Performance

1. Introduction

Systems thinking skills enable professionals to take a look at the favorable and unfavorable events as a progression of interconnected elements all in all. The situations in organizations are sometimes perplexing in nature because of cultural, social and political environment. Dissatisfactions in unpredictable outcomes can result from non-specialized reasons and can be tended by individual differences (Tampoe & Macmillan, 2000). The unpredictable idea of a business structure provokes

[1] Research Scholar, Management Sciences, SZABIST, Karachi, rameshkumaranu2012@gmail.com
[2]Assistant Professor, Management Sciences, SZABIST Karachi,dr.kamran@szabist.edu.pk
[3]Assistant Professor, Management Sciences, SZABIST Karachi,Muhammad.aqil@szabist.edu.pk

specialists to accomplish compelling and selected choices leading to good decisions. Answers for complex systems structure should be concentrated more on fulfilling arrangements that will prompt successful and satisfactory results for the organization (Jaradat et al., 2017). Hence, to readily deal with systems thinking, an increasingly fundamental approach ought to be utilized (Keating et al., 2018). There are models that help in systems thinking skills; one of the paramount is the Iceberg Model. The Iceberg Model exemplify the various level of concept to a certain situation or organization, from the apparent events to underlying patterns of behaviors that generate, to the supporting structure and finally the mental models used by a company (Hagiwara et al., 2002). The Iceberg Model assists managers and companies to enhance their perception of a certain situation to look it within the perspective of the entire systems and not limited those to looking at just a single action or event. It is well designed to help managers to step back and recognize the different patterns of behaviors, the event which is caused due to it. The possible structures that might be reason to happen and finally, the model that is creating those structures.

Another important area of discussion is organizational performance which is very much dependent on systems thinking skills progressively turning into a specific design in the field of management plan (A. A. Jaaron & Backhouse, 2019a). Does the question arise that how managers' systems thinking skills have positive impact on organizational strategic performance? How gender with different thinking levels can significantly contribute to organization performance? Therefore, debate will be to confirm who is better male or female in making those systems thinking approaches effectively and efficiently. Second, the focal point of discussion is to check employees at the middle and senior level management of different banks play their important role because only authorized employees are the ones who are in charge of this responsibility and authority. The banking sector is one of the most significant business and financial areas in Pakistan. Because of globalization and modernization, just as expanding competition, Pakistan's banking sector faces numerous challenges, particularly given the contention and shakiness from many financial sectors. Also, work stress and increased working hours are a major cause of job dissatisfaction in the banking sector in Pakistan which can be countered by effective managers' systems thinking skills offering certain changes and programs to improve the satisfaction level among the employees (Shujat et al., 2011). Some common reasons for the success of a company are how good organization in managers' systems thinking skills approaches by good management (Rahnama & Rahpeyma, 2015).

Highlighting the gaps in the literature review, the association of system thinking skills was analyzed by very limited studies and the topic has grown in recent years and several aspects to address the issue of managers' creativity remained unreciprocated. The current study is an attempt to examine how an organization can achieve its strategic performance with systems thinking skills of managers. This first study carried out in Karachi, Pakistan on the banking sector of Pakistan as no prior research on this specific topic has been done in this sector i-e banking industry of Karachi, Pakistan. Additionally, moderating impact of gender will reveal whether male or female has significant influence in achieving strategic results for organization.

As far as role of gender in achieving better strategic performance is concerned, there has been ongoing discussion on this point and few examinations been done (Schuh et al., 2014). This study will further enlighten the new thoughts that how gender may make significant difference in this process and organization should focus which gender can contribute better results. The two objectives of this research are 1) to examine the impact of managers' systems thinking skills on strategic performance of organizations and 2) to analyze impact of gender between managers' systems thinking skills and strategic performance of organizations.

2. Literature Review and Hypotheses Development

From last couple of decades, systems thinking skills have been known to develop company towards successful phase and it is only possible when organizations should be in a position to respond to feedback from external as well as internal stakeholders on its strategic performance (A. A. Jaaron & Backhouse, 2018). These needs to be done at dreamed strategic performance level. It is as said by R. Ackoff (2008), the utilization of systems thinking in management tasks successfully draws in the company with such condition, especially managers, to improve existing strategies and inner capacities. One core area of systems thinking skills in making an inner move in management procedures is the improvement of systems for lessening asset utilization through overhauling management activities in the best way (Dougherty & Dunne, 2011). This decrease of assets utilization coming about because of systems thinking methodologies has been depicted (Kugland et al., 2012) as an important advance toward asset utilization from financial area, and hence accomplishing a practical future. To put it simply, the predominant idea is contributions of systems thinking (for example, proper processing and versatile decisions) can make a plan that can respond to performance changes and can likewise diminish human exhaustion and proficiency in operations. In this manner, it very well may be said that systems thinking as well as each issue that is significant by design contends that systems thinking a type of method which has highlighted the kind of effect remarkably and straightforwardly and at a similar, it happens with a blend of instinct and innovativeness (Mintzberg, 1994b).

2.1 Systems thinking skills, constructs and strategic performance

Mancia et al. (2007) asserted that a perspective of systems is unseemly for the adaptability of many things to accept, as it depends on systems working with breaking points essentially cooperation between all elements of systems. Additionally, R. L. Ackoff (1999) clarified that overseeing systems parts without understanding their collaborations makes the systems weak and confront unintended results. In light of these interconnections, company's actuate relies on bigger and littler inward systems to make performance better, for example, better distribution of human and financial assets and increasingly viable help for strategic issues (Winn & Pogutz, 2013). This interconnection between elements is a basic element of systems thinking skills of management activities and its configuration (Gharajedaghi, 2006).

The systems thinking skills is to get data about the future in vibrant, intricate, and indistinct conditions that influence companies legitimately by taking initiatives from an earlier time. Effective companies need to integrate the learning they have gained and the systems they have created to adapt to future outcomes (Liedtka, 1998). Along these lines, systems thinking will settle on decisions for managers in imperative options and will furnish those with a dream of their future circumstance (Mintzberg, 1994a). Cook (2010) expressed that organizational performance is very much dependent on manager's way of thinking and systems based on that have appeared when taking the systems overall. The good systems thinking skills plays an important role towards strategic performance of an organization. Researches also suggest that systems thinking theory is a strategy that attempts to dispose of vulnerabilities just as it takes care of key issues identified with systems thinking, creativity, and vision (Bonn, 2005).

Of specific significance, there is the conduct of working environment that may drive transformational change of human assets' utilization strategies and creation of management. This has huge positive effects on presentation of company's vision and objectives (Badham & King, 2019). What's more, managers are backing to the sustainable generation of managements who encourages employees to rapidly adjust to systems elements to actualize fundamental required changes (Wong et al., 2011). Regardless of this reality, many studies researching the effect of systems thinking on strategic performance of companies, thinking about different components of supportability was emphasized (Starik & Kanashiro, 2013). Moreover, connecting the restraints of systems thinking skills is a way to deal with the sustainable performance for the most part centered at the theoretical level without giving experimental help to these connections (Gao et al., 2012). As per system thinking theory, organizational strategic performance is more versatile in which all elements/constructs of system thinking skills constantly pursue better outcomes on regular basis (Missimer et al., 2017). The details and impact of constructs are mentioned as below:

Change: Prefer taking multiple perspectives into consideration, focus more on external forces, like long range plans, keep options open, and most importantly work best in a changing environment with comfort of rapidly shifting systems and situations.

Complexity: Expect uncertainty, work on multi-dimensional problems, prefer a working solution, and explore the surrounding environment.

Flexibility: Accommodating to change, like a flexible plan, open to new thoughts, and motivated by routine. Accommodation of change or modifications in systems or approach is required.

Interaction: Inclined to interactions, follow a general plan, work within a team, and interested less in identifiable cause-effect relationships. It focuses on interconnectedness in coordination and communication among multiple systems and people.

Uncertainty: React to situations as they occur, focus on the whole, comfortable with uncertainty, believe the work environment can be difficult to control and enjoy subjectivity and nontechnical problems.

H1: Change has positive impact on strategic performance of organization

H2: Complexity has positive impact on strategic performance of organization

H3: Flexibility has positive impact on strategic performance of organization

H4: Interaction has positive impact on strategic performance of organization

H5: Uncertainty has positive impact on strategic performance of organization

H6: Systems thinking skills have significant impact on strategic performance of organization

2.2 Systems thinking skills and gender

Under general rules, men are commonly more likely than women to get rewards. This shows up in managers' recommendations for reward, advancement, and bonus, and happens despite equivalent performance appraisal. Regardless, this predisposition against women doesn't develop with less emphasis on individual legitimacy (Castilla & Benard, 2010). However, legitimacy plans are normal and reviews uncover around 90% of firms utilize this system (Heneman & Werner, 2005). It lies in accidentally activating gender orientation generalizations and inclinations, specifically when stressing merit. Rules that underscore individual legitimacy and gender orientation balance increment trust in one's capacity to settle on certain choices (Ellemers, 2014). Along these lines, they deceive employees into depending on their stereotypic desires without seeing that what they do. At the point when employees by one way or another are persuaded they are impartial, they are less disposed to screen the accuracy of their impressions (Moore & Tenbrunsel, 2014). In this manner, the very conviction that individual authenticity is the main significant paradigm—and can be judged dispassionately makes individuals less careful for inclination. Management at that point neglects to stifle decisions that may lead them to incline toward male over female applicants in contracting or advancement (Derks et al., 2011). Systems thinking as one explanation behind the under image of female pioneers is along these lines not so much new. However, by far most of essential examinations on this topic were already done somewhere in the 1970s and were somewhat hypothetical and explorative.

H7: Gender moderates relationship between systems thinking skills and strategic performance of organization

2.3 Theoretical Foundation

The model in Figure 1 shows the conceptual framework of this study. Five constructs of System Thinking Skills (H6), which is the independent variable, have a significant impact on Strategic Performance of banks. Additionally, all constructs Change (H1), Complexity (H2), Flexibility (H3), Interaction (H4) and Uncertainty (H5) have a positive impact on strategic performance. Gender is the moderator in the relationship between system thinking skills and strategic performance of organization (H7).

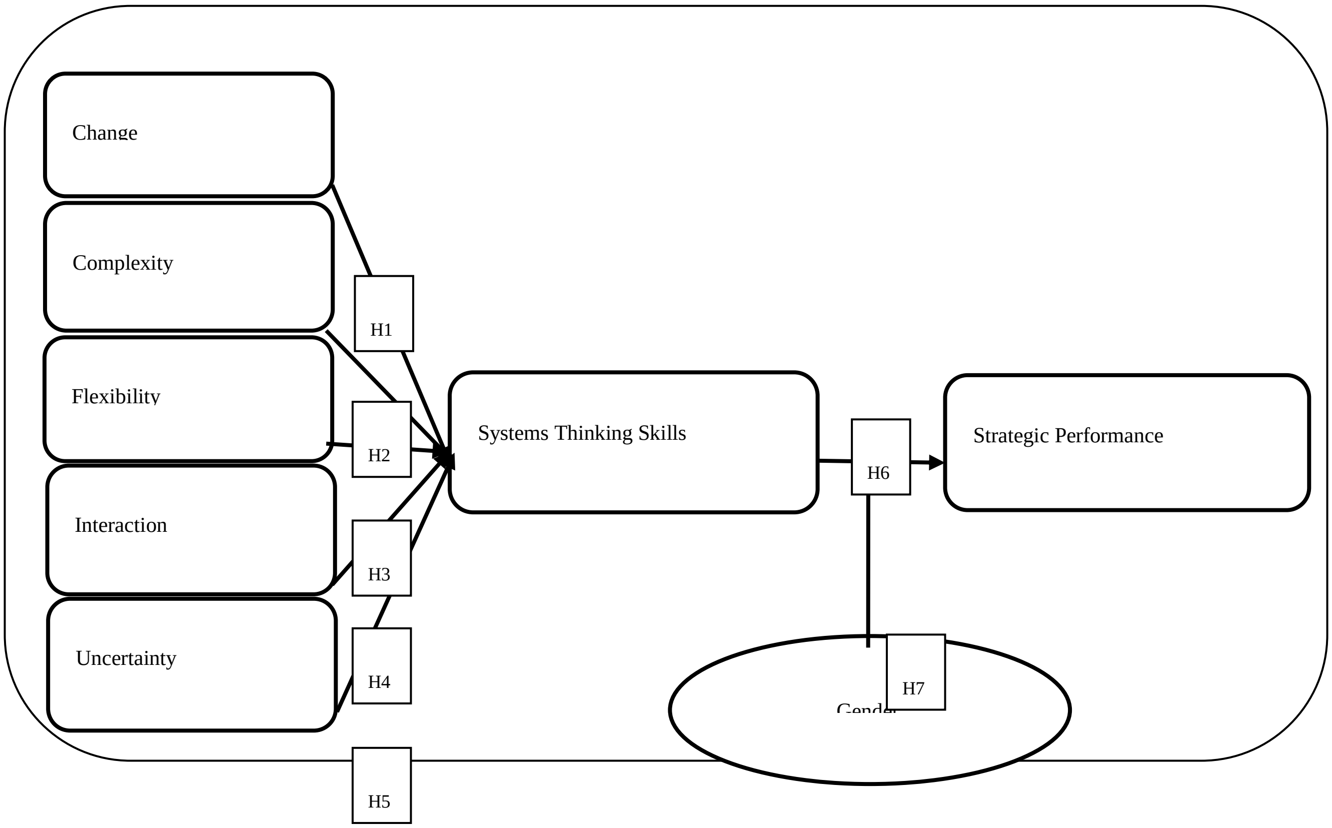


Figure 1 **Conceptual Framework**

3. Research Methodology

This study requires testing of the different hypotheses, therefore; a quantitative approach is more suitable. The cross-sectional study was conducted in Karachi, Pakistan and responses from manager level employees of different banks were collected for data analysis. Total of 250 close-ended questionnaires were distributed after the approval of concern supervisors. After one week a request reminder was also sent to those who did not submit the questionnaires and finally, 218 questionnaires were received. The non-probability sample technique was used. The final responses were analyzed using Smart PLS software.

3.1 Measurement of Variables

A synopsis of the various scales to measure the different constructs is as below:

Change was adopted by asking the bank respondents to give their rating on a four-item scale adopted from (Nagahi et al., 2019), with scales ranging from 1 (strongly disagree) to 5 (strongly agree). The scales have been previously applied to measure impact of change. An example of a question asked on the scale is "*I prefer to take time and think from many perspectives before going for any change*."

Complexity was measured on four-item scale adopted from (Nagahi et al., 2019), by asking the bank respondents to give their opinion with scales ranging from 1 to 5. The scales have also been previously applied to measure impact of complexity. An example of a question asked in the scale is *"Exploring in difficult situations is my interest and motivating others to become part of it.*"

Flexibility was adopted by asking the bank employees to give their rating on a four-item scale adopted from (Nagahi et al., 2019), with scales ranging from 1 to 5. The scales have also been previously used to measure impact of flexibility. An example of a question asked in the scale is "*I am flexible working with different employees of different departments at organization*"

Interaction was measured on four-item scale adopted from (Nagahi et al., 2019), by asking the bank employees to give their opinion with scales ranging from 1 to 5. The scales have also been previously used to measure impact of interaction. An example of a question asked in the scale is *"Working in team is my foremost priority*."

Participants were asked to rate the extent to which managers is involved in a series of behaviors related to varying aspects of uncertainty (Nagahi et al., 2019). Scales ranging from 1 to 5 was taken. The scales have also been previously used to measure impact of uncertainty. An example of a question asked in the scale is "*I always keep me and team calm cool when certain uncertainty situations arise*"

Strategic Performance was measured on four-item scale, by asking the bank employees to give their opinion with scales ranging from 1 to 5. In particular, the factors are achieving strategic objectives, expansion and diversification of business, awareness of organizational future goals and alignment with policies and vision (Jaradat et al., 2017). The scales have also been previously used to measure impact of organization performance. An example of a question asked on the scale is *"My organization has been successful in achieving its strategic objectives.*"

4. Data Analysis and Results

The data were collected with support of close-ended questionnaires, coding and organization of data was properly done to have accurate results. The observations derived are presented in two divisions (Chin, 1998). The first part focuses on the reliability and validity of the scales because it is important to check the validity of the measurement models before beginning to analyze the hypothesis (Bollen & Busse, 2001). The second part focuses on the assessment of the structural equation model.

4.1 Profile Analysis

A review of the profiles given in Table 1 below highlights the demographic information that the majority of the respondents were male (53.7%). Age group highlights the fact that the majority of the respondents fell in the age group of 25 to 34 years (59.5%).

Table 1 Profile analysis

Categories		Percent
Gender	Male	53.7%
	Female	46.3%
Age	Under 24	3.5%
	25-34	59.5%
	35-44	32.5%
	Above 44	4.5%

4.2 Factor Loadings, Composite Reliability and Convergent Validity

The validity of the measurement model refers to the fact that whether the markers of a variable measure what they are due to measuring whereas reliability provides internal consistency of scale. Measurement model takes into account loadings, convergent validity, composite reliability and Discriminant validity. Outer Loadings measures if all the items are significantly loaded on their respective constructs and should be 0.7 or higher, with a range of 0.6 to 0.7 being acceptable. Table

2 provides the outer loadings of all the 23 constructs used in the study. Other than CH1, CL2, FL4, IT4 and UN1 all the indicators have a loading of 0.70 and above. All the 23 variables have a loading of over 0.5 which is acceptable.

Composite reliability is also calculated that shows the internal stability and uniformity of each construct and assesses the overall reliability of all the markers of the same construct. Chi & Pan (2012) have proposed the composite reliability value of 0.7 to be acceptable. Table 2 highlights that the composite reliability of all the constructs used in this study is above 0.7. For average variance extracted (AVE), Fornell and Larcker (1981) suggest 0.5 as acceptable for AVE. Table 2 shows the AVE values for all the constructs used in this study are in the acceptable range.

Table 2 Factor Loadings, Composite Reliability, and Convergent Validity

Construct	Item	Loadings	Composite Reliability	AVE
Change	CH1	0.686	0.835	0.559
	CH2	0.763		
	CH3	0.793		
	CH4	0.744		
Complexity	CL2	0.593	0.764	0.523
	CL3	0.784		
	CL4	0.776		
Flexibility	FL1	0.775	0.832	0.557
	FL2	0.842		
	FL3	0.738		
	FL4	0.609		
Interaction	IT1	0.792	0.833	0.558
	IT2	0.818		
	IT3	0.750		
	IT4	0.611		
Uncertainty	UN1	0.612	0.816	0.528
	UN2	0.775		
	UN3	0.799		
	UN4	0.705		
Strategic Performance	SP1	0.800	0.874	0.635
	SP2	0.821		
	SP3	0.800		

SP4	0.765

Discriminant Validity, observes how easily two dissimilar constructs can be differentiated. It is measured through cross loading and Fornell-Larcker Test. Another measure of Discriminant validity is the Fornell-Larcker Criterion. Ab Hamid et al. (2017) explains that this method compares the square root of the average variance extracted (AVE) with co-relation of other constructs. Table III shows the result of this measure for this study and are acceptable.

Table 3 Fornell- Larcker Criterion

	CH	CL	FL	IT	SP	UN
CH	**0.748**					
CL	0.482	**0.723**				
FL	0.443	0.475	**0.746**			
IT	0.642	0.461	0.488	**0.747**		
SP	0.507	0.489	0.387	0.417	**0.797**	
UN	0.511	0.558	0.486	0.556	0.470	**0.726**

4.3 Testing the Direct and Indirect Relationships

Table 4 and Figure 2 depict the relationships between the independent variable (STS), the dependent variables (SP).

Table 4 Relation between Independent and Dependent Variables

Hypothesis	Relationship	OS	SD	T Values	P Values	Decision
H1	CH -> SP	0.276	0.080	3.466	0.000	Supported
H2	CL -> SP	0.226	0.073	3.101	0.002	Supported
H3	FL -> SP	0.073	0.067	1.089	0.277	Not Supported
H4	IT -> SP	0.010	0.083	0.126	0.900	Not Supported
H5	UN -> SP	0.161	0.091	1.761	0.079	Not Supported
H6	STS -> SP	0.613	0.045	13.647	0.000	Supported

Based on the above results, we find that change (H1) and complexity (H2) has a positive impact on strategic performance (t-value >1.96, $p<0.05$). However, it does not have a positive impact on flexibility (H3), interaction (H4) and uncertainty (H5) (t-value<0.196, $p>0.05$). On taking all constructs together that is systems thinking skills has a positive impact on strategic performance (H6) (0.000, $p<0.05$). It can also be deduced from the above that there exists a direct relationship between the independent and dependent variables.

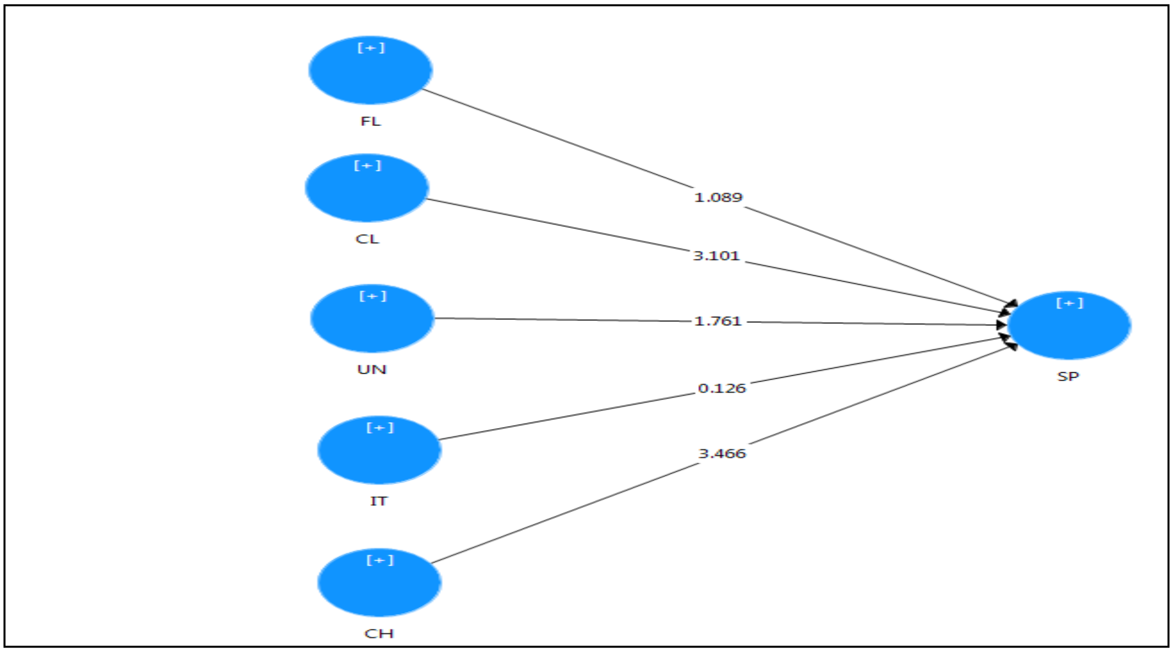


Figure 2 **– Constructs and Dependent Variables**

4.4 Impact of Moderating Variable

Table 5 and Figure 3 show the interaction between systems thinking skills and strategic performance. Gender is the moderating variable here and based on the data, it is evident that the hypothesis gender acts as a moderator in the relation of between systems thinking skills with strategic performance is not supported.

Table 5 Impact of Moderating Variable

Hypothesis	Relationship	OS	SD	T Value	P Values	Decision

H7	Moderating Effect of Gender on -> SP	-0.066	0.045	1.461	0.144	Not Supported

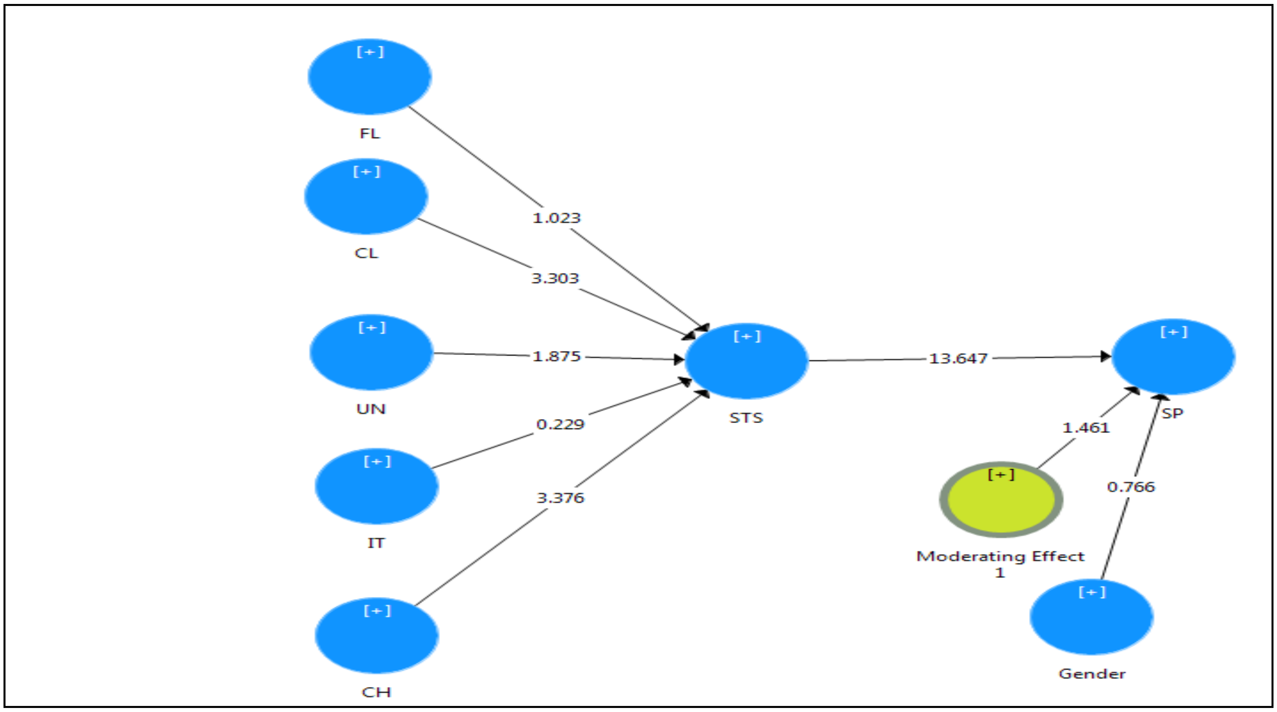


Figure 3- **The Impact of Moderating Variable**

5. Discussion

This study aimed at examining relationship between managers' systems thinking skills and organization strategic performance with moderating role of gender in banking industry of Karachi, Pakistan. System thinking skills enables managers and top management to decide on holistic level as a progression of interconnected outcomes all in all. Systems thinking is considered as intellectual knowledge and fitness – a capacity to think or examine things that prompts superior performance for organization (Boyatzis & Goleman, 2007). Failures and successes in the systems is of eye-catching elements from different perspectives that management has to take into account and can be treated by cautious attention and actions of managers. Solutions to complex systems issues are nowadays of focal point on fulfilling arrangements; that will prompt the desirable and satisfactory outcomes for companies leading to good strategic performance (Jaradat et al., 2017).

Recently, systems thinking skills is of high importance by top management because it influences overall performance of company at starting level of managers. After all, they are the one who are involved in day-to-day operations. The principles of systems thinking help in designing new processes and functions which improve organization performance. Results indicated that systems thinking skills has significant impact on overall organization strategic performance and hypothesis is accepted with T-value greater than 1.96 and P-values less than 0.05. Furthermore, five different hypotheses were tested to check relationship with each construct of system thinking skills on strategic performance, out of those two constructs (change and complexity) has direct impact whereas remaining three constructs (flexibility, interaction and uncertainty) showed weak relationship on strategic performance. Further, it is seen that organizational strategic performance has always been a significant measurement on overall actions of all employees. Stephens in her book stated that positive or negative inputs of different gender thinking skills at all times influence the performance independently thus policies, trends and behaviors are in discussion to measure the performance and outcome accordingly. Therefore, gender as moderator in this study was taken to see whether strategic performance will be affected if manager is male or female but based on results it showed that either working manager is of any gender it has not exaggerated on perceived organization performance thus hypothesis is rejected T value is lower than 1.96 and p-value is greater than 0.05. However, there exists a significant relationship between systems thinking skills and strategic performance but moderator does not throw in any significant moderating effect.

6. Conclusion

The current study also suggests that banks firmly identified with the reflection, ability and thinking skills. Thinking incorporates control of processes, arrangement of ideas and methods for critical thinking, scanning for reasons and deciding. Systems thinking skills is fundamental for each bank manager in his/her daily work, with a sight to the future results as it merits thinking about whether more precautions ought to be put if events are good and should try to make those best in the future. Supposing if events are negative then banks managers have to revise their patterns, trends and thinking behaviors along with mindsets. One of the approaches to improve the nature of consequences of an action is to upgrade the nature of thinking like how you think, how you act, the manner by which you are (Fukuda et al., 1998). Lastly, this research has been made in giving overall insight to organizations of Pakistan that the world has changed drastically and new ways of thinking processes are in force by Eastern and European countries so it's time to think differently if organizations want to have a competitive edge in market. Systems thinking skill is one of the most important steps towards success of companies and accomplishment of its mission and vision.

7. Research Implications

This research would certainly help entrepreneurs, policymakers and decision-makers of different companies and industries. It will act as a valuable source for management of organizations who are involved in creating and making their companies competitive in market and always look forward to achieve high level of strategic performance. The importance of managers' systems thinking skills without any doubt leads to betterment of organization and every employee under his/her supervision should know the overall objectives of company (McGurk et al., 2007). This research further highlights the role of managerial level leaders in the entire interaction. Bank managers can have important insight from this research to understand how five components/constructs leading to managers' system thinking skills impact on the whole strategic performance of a bank. Competition among the banking industry in Pakistan has been on threshold level due to quick technological innovation. State bank of Pakistan also imposes new rules and regulations on banking industry. These transformations especially in Karachi has changed way of thinking skills and managers are more active towards their core responsibilities. In this competitive world, managers are forced to tackle much greater diversity of problems (R. L. Ackoff, 1999). They have to ensure that all organizational processes, policies and systems are efficient and effective enough to meet needs of company's strategic performance. Changes in managers' thinking level require them to respond positively and eliminate discrimination which hindrances overall mechanism and organizations' activities.

Additionally, the current study of this research not only helps managers in their professional life but personal level as well. A person at every stage of career must be aware of when and how to take decisions that will make them victorious in life. For example, scales of questions which were filled by respondents on change, complexity, interaction, flexibility and uncertainly would realize them where they stand and whether they can be good assets for bank after evaluating their strengths and weakness.

8. Limitations and Future Research Directions

The current study has been limited to the only banking sector of Pakistan. As whole population was not approachable due to limited time frame, therefore, a sample of 250 respondents was targeted but only 218 employees from banking sector within Karachi took their time to fill up the questionnaire. A significant limitation in this study is the emergence of Halo Error due to the responses from the participants based on judgments rather than facts (Speklé & Widener, 2018). This has affected the linkage amongst the variables and can profess to be counterfeit results of general positive responses. This halo error may be seen in the responses collected in which a lower Cronbach's alpha values of 0.6 in one construct Complexity. Another important limitation could be the perception of the respondents, which is of major concern. The current research is cross-sectional and is limited to four months only; hence it is not possible to cover all aspects related to the area. Therefore, longitudinal research on the same area is suggested. Further, it is recommended to adopt other moderating variables as gender does not moderate the relationship between managers' system thinking skills on strategic performance. The mediating variables can also be taken to check the relationship between systems thinking skills and strategic performance.

References

Ab Hamid, M. R., Sami, W., & Sidek, M. M. (2017). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. *Journal of Physics: Conference Series*, *890*, 012163.

Ackoff, R. (2008). *Systems thinking for curious managers*. Triarchy Press.

Ackoff, R. L. (1999). *Ackoff's best: His classic writings on management* (Vol. 170). Wiley New York.

Badham, R., & King, E. (2019). Mindfulness at work: A critical re-view. *Organization*, 1350508419888897.

Bollen, N. P., & Busse, J. A. (2001). On the timing ability of mutual fund managers. *The Journal of Finance*, *56*(3), 1075–1094.

Bonn, I. (2005). Improving strategic thinking: A multilevel approach. *Leadership & Organization Development Journal*.

Boyatzis, R., & Goleman, D. (2007). Emotional and social competency inventory university edition workbook. *Boston, Massachusetts: HayGroup*.

Castilla, E. J., & Benard, S. (2010). The paradox of meritocracy in organizations. *Administrative Science Quarterly*, *55*(4), 543–676.

Chi, N.-W., & Pan, S.-Y. (2012). A multilevel investigation of missing links between transformational leadership and task performance: The mediating roles of perceived person-job fit and person-organization fit. *Journal of Business and Psychology*, *27*(1), 43–56.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, *295*(2), 295–336.

Cook, G. (2010). *Movement: Functional movement systems: Screening, assessment, corrective strategies*. On Target Publications.

Derks, B., Van Laar, C., Ellemers, N., & De Groot, K. (2011). Gender-bias primes elicit queen-bee responses among senior policewomen. *Psychological Science*, *22*(10), 1243–1249.

Diekman, A. B., & Eagly, A. H. (2008). Of men, women, and motivation. *Handbook of Motivation Science*, 434–447.

Dougherty, D., & Dunne, D. D. (2011). Organizing ecologies of complex innovation. *Organization Science*, *22*(5), 1214–1223.

Ellemers, N. (2014). Women at work: How organizational features impact career development. *Policy Insights from the Behavioral and Brain Sciences*, *1*(1), 46–54.

Fukuda, Y., Hayakawa, T., Ichihara, E., Inoue, K., Ishihara, K., Ishino, H., Itow, Y., Kajita, T., Kameda, J., & Kasuga, S. (1998). Evidence for oscillation of atmospheric neutrinos. *Physical Review Letters*, *81*(8), 1562.

Gao, F., Luo, T., & Zhang, K. (2012). Tweeting for learning: A critical analysis of research on microblogging in education published in 2008–2011. *British Journal of Educational Technology*, *43*(5), 783–801.

Gharajedaghi, J. (2006). Managing chaos and complexity: A platform for designing business architecture. *Buttermonth-Heinemann, Amsterdam*.

Hagiwara, K., Hikasa, K., Nakamura, K., Tanabashi, M., Aguilar-Benitez, M., Amsler, C., Barnett, Rm., Burchat, P. R., Carone, C. D., & Caso, C. (2002). Review of Particle Physics: Particle data group. *Physical Review D-Particles, Fields, Gravitation and Cosmology*, *66*(1 I), 100011–10001958.

Harris, J. D., Quatman, C. E., Manring, M. M., Siston, R. A., & Flanigan, D. C. (2014). How to write a systematic review. *The American Journal of Sports Medicine*, *42*(11), 2761–2768.

Heneman, R. L., & Werner, J. M. (2005). Merit pay-linking pay to performance in a changing world (2nd Eds.). *Greenwich, CT: IAP*.

Jaaron, A. A., & Backhouse, C. J. (2014). Service organisations resilience through the application of the vanguard method of systems thinking: A case study approach. *International Journal of Production Research*, *52*(7), 2026–2041.

Jaaron, A. A., & Backhouse, C. J. (2019a). Fostering sustainable performance in services through systems thinking. *The Service Industries Journal*, *39*(15–16), 1072–1098.

Jaaron, A. A., & Backhouse, C. J. (2019b). Fostering sustainable performance in services through systems thinking. *The Service Industries Journal*, *39*(15–16), 1072–1098.

Jaaron, A. A., & Backhouse, C. J. (2018). Achieving sustainability through service operations design: The role of systems thinking. *Proceedings of the 25th Annual EurOMA International Conference*, *24*, 26.

Jaaron, A., & Backhouse, C. J. (2011). A methodology for the implementation of lean thinking in manufacturing support services. *International Journal of Services and Operations Management*, *9*(4), 389–410.

Jaradat, R., Adams, F., Abutabenjeh, S., & Keating, C. (2017). The complementary perspective of system of systems in collaboration, integration, and logistics: A value-chain based paradigm of supply chain management. *Systems*, *5*(4), 50.

Keating, C. B., Katina, P. F., Joiner, K. F., Bradley, J. M., & Jaradat, R. M. (2018). *A method for identification, representation, and assessment of complex system pathologies in acquisition programs*.

Kugland, N. L., Ryutov, D. D., Chang, P.-Y., Drake, R. P., Fiksel, G., Froula, D. H., Glenzer, S. H., Gregori, G., Grosskopf, M., & Koenig, M. (2012). Self-organized electromagnetic field structures in laser-produced counter-streaming plasmas. *Nature Physics*, *8*(11), 809–812.

La Porta, R., & Shleifer, A. (2014). Informality and development. *Journal of Economic Perspectives*, *28*(3), 109–26.

Lezak, S. B., & Thibodeau, P. H. (2016). Systems thinking and environmental concern. *Journal of Environmental Psychology*, *46*, 143–153.

Liedtka, J. M. (1998). Strategic thinking: Can it be taught? *Long Range Planning*, *31*(1), 120–129.

Mancia, G., De Backer, G., Dominiczak, A., Cifkova, R., Fagard, R., Germano, G., Grassi, G., Heagerty, A. M., Kjeldsen, S. E., & Laurent, S. (2007). 2007 Guidelines for the management of arterial hypertension: The Task Force for the Management of Arterial Hypertension of the European Society of Hypertension (ESH) and of the European Society of Cardiology (ESC). *European Heart Journal*, *28*(12), 1462–1536.

McGurk, S. R., Twamley, E. W., Sitzer, D. I., McHugo, G. J., & Mueser, K. T. (2007). A meta-analysis of cognitive remediation in schizophrenia. *American Journal of Psychiatry*, *164*(12), 1791–1802.

Mintzberg, H. (1994a). Rounding out the manager's job. *Sloan Management Review*, *36*, 11–11.

Mintzberg, H. (1994b). The fall and rise of strategic planning. *Harvard Business Review*, *72*(1), 107–114.

Missimer, M., Robèrt, K.-H., & Broman, G. (2017). A strategic approach to social sustainability–Part 1: Exploring the social system. *Journal of Cleaner Production*, *140*, 32–41.

Moore, C., & Tenbrunsel, A. E. (2014). "Just think about it"? Cognitive complexity and moral choice. *Organizational Behavior and Human Decision Processes*, *123*(2), 138–149.

Mukherjee, D., Hanlon, S. C., Kedia, B. L., & Srivastava, P. (2012). Organizational identification among global virtual team members. *Cross Cultural Management: An International Journal*.

Nagahi, M., Hossain, N. U. I., & Jaradat, R. M. (2019). Gender differences in practitioners' preferences for systems-thinking skills. *Proceeding of American Society for Engineering Management 2019 International Annual Conference and 40th Annual Meeting*, 23–26.

Nguyen, N. C., & Bosch, O. J. (2013). A systems thinking approach to identify leverage points for sustainability: A case study in the Cat Ba Biosphere Reserve, Vietnam. *Systems Research and Behavioral Science*, *30*(2), 104–115.

Pech, R. (2003). Developing a leadership knowledge architecture: A cognitive approach. *Leadership & Organization Development Journal*.

Rahnama, S., & Rahpeyma, A. A. (2015). The influential factors of strategic thinking at the organizational level. *Journal of Marketing and Consumer Research*, *12*, 26–35.

Randeree, K., & Al Youha, H. (2009). Strategic management of performance: An examination of public sector organizations in the United Arab Emirates. *International Journal of Knowledge, Culture and Change Management*, *9*(4), 123–134.

Schuh, S. C., Bark, A. S. H., Van Quaquebeke, N., Hossiep, R., Frieg, P., & Van Dick, R. (2014). Gender differences in leadership role occupancy: The mediating role of power motivation. *Journal of Business Ethics*, *120*(3), 363–379.

Shujat, S., Cheema, F., & Bhutto, F. (2011). Impact of work life balance on employee job satisfaction in private banking sector of Karachi. *Journal of Management and Social Sciences*, *7*(2), 08–15.

Singh, S. K., Burgess, T. F., Heap, J., Almatrooshi, B., & Farouk, S. (2016). Determinants of organizational performance: A proposed framework. *International Journal of Productivity and Performance Management*.

Speklé, R. F., & Widener, S. K. (2018). Challenging issues in survey research: Discussion and suggestions. *Journal of Management Accounting Research*, *30*(2), 3–21.

Starik, M., & Kanashiro, P. (2013). Toward a theory of sustainability management: Uncovering and integrating the nearly obvious. *Organization & Environment*, *26*(1), 7–30.

Tampoe, M., & Macmillan, H. (2000). *Strategic management, process, content and implementation*. Oxford University Press.

Westley, F., Olsson, P., Folke, C., Homer-Dixon, T., Vredenburg, H., Loorbach, D., Thompson, J., Nilsson, M., Lambin, E., & Sendzimir, J. (2011). Tipping toward sustainability: Emerging pathways of transformation. *Ambio*, *40*(7), 762.

Winn, M. I., & Pogutz, S. (2013). Business, ecosystems, and biodiversity: New horizons for management research. *Organization & Environment*, *26*(2), 203–229.

Wong, E. M., Ormiston, M. E., & Tetlock, P. E. (2011). The effects of top management team integrative complexity and decentralized decision making on corporate social performance. *Academy of Management Journal*, *54*(6), 1207–1228.

Effect of Monetary Policy and Selected Macroeconomic Variables on Risk Taking Appetite and Performance of Banking Sector of Pakistan.

Muhammad Aun Abbas [1], Dr. Irshad Hussain[2],

Abstract:

This study attempts to investigate the impact of monetary policy and macroeconomic together with bank specific variables on bank performance and bank risk taking on their loan portfolios. In this study, reserves and loan loss provision are selected as a proxy to measure bank risk whereas return on assets is selected as a proxy for bank's performance. The study also include the two bank specific control variables such as bank size and bank capitalization, and macroeconomic variables such as consumer price index and gross domestic product. This study used fixed effect and random effect panel data estimation techniques on dataset of top twenty Pakistanis banks from 2006 to 2020. This study confirms that bank risk taking positively linked with gross domestic product, consumer price index but nothing to do with interbank offer rate. However, the bank size have negative relationship with bank risk, and bank capital have no role in changing bank risk. Whereas, bank performance is positively linked with the interbank offer, gross domestic product and bank specific variables. The consumer price index don't have any effect on bank performance. Study findings will be helpful for banks management to mitigate associated risks and enhance profitability in a more effective manner. However, for researchers it helps to understand critical areas dealing with banks risk taking appetite and performance.

Keywords: GDP, Consumer Price Index, Monetary Policy, Interbank Offer Rate, Return on Assets.1. Introduction

1.1 Background

The banking sector is an essential part of an economic development and inevitable role in economic activity. The bank's core role is to works as a financial intermediary to mobilize public

[1] Ph.D Scholar, Management Sciences, SZABIST, Karachi
[2]Assistant Professor, Iqra University

funds efficiently towards the badly needed economic segments. The bank financial statements are vital tool to assess the financial position of banking industry based on which banks performance can easily be calculated. The profitability is widely used as performance indicator derived through return on assets (ROA). It represent bank's ability to generate profit in a specified period of time. The financial crisis of 2008 and subsequent sovereign debt crisis raised several questions on role of banking system in the global economy (Anggari & Dana, 2020).

The bank risk-taking channel represents how a variation in monetary policy can affects the bank's risk appetite to loan portfolio. In the times of low interest rates banks tends to take more risk on credit portfolios which resulted in low loan quality with higher risk. The monetary policy stance has tendency to alter bank's incomes, cash flows, and risks and interest rates which could made banks aggressive in order to achieve profit targets. There are several justifications which endorsed to study risk-taking channel with respect to the monetary policy as historically it has been witnessed that after crises interest rates have decreased to low levels in various countries (Aboyadana, 2020).

There are several bank risk theories such as financial intermediation theory which stats that banks take advantages of information about borrowers based on which they made capital decisions and earn profits (Acharya, 1988). The expected bankruptcy hypothesis states that undercapitalized banks have higher expected bankruptcy costs, hence additional capital have a positive impact on the bank's earnings (Berger, 1995). Another study found a positive relationship between the bank capital and its performance, increased bank capital reduced moral hazard of shareholders and debt holders (Mehran & Thakor, 2011)

The study on US banks in late 1980s found two way granger causality among bank's earnings (return on equity) and capital (equity book value over assets). Whereas signal hypothesis explained that bank's management signals good private information such as lower costs, higher revenues or reduced risk by increasing capital. Empirical studies followed by Berger's work found a positive relationship between bank capital and profitability (Berger, 1995). The empirical analysis on Chinese banks reveals that their low profitability can be derived through scarce capitalization. (Garcia, Gavila, & Santabarbara, 2009). Similarly, bank size has a significant and positive effect on return on assets (Sarwar et al., 2018; Rahman et al., 2015), however it is analyzed that size of the banks have substantial negative effect on ROA (Ali & Puah, 2018). Another research confirmed that bank size did not have any impact on profitability, like return on assets (Kedia, 2016; Parvin et al., 2019). There are studies which used total assets as bank size with natural logarithm of total assets (Kim & Sohn, 2017).

The financial crisis of 2007-08 was triggered by subprime mortgage crises of the USA which emerged as an international banking crisis caused failure of Lehman Brothers Bank. It was criticized that the excessive banks risk-taking was the reason which magnified the adverse effect of financial crises. The governments gave massive bails to financial institutions and new monetary policies were implemented to avert possible failure of global financial system (Vanecia & Laeven, 2017).

The central banks were criticized due to implementation of loose monetary policy which ignite the crises. Therefore, it is emphasized that there is need to rethink the global financial system in order to address loopholes such as excessive bank risk taking and central bank governance. There are many theories that explain the banks behavior in the period of low interest rate such as managerial compensation scheme, low credit screening standards and nominal objective theory; all leads to higher risk taking by the banks (Anginer, Kunt & Zhu, 2014).

In this paper we shall assess the significance of monetary policy stance, selected macro-economic variables (GDP and inflation) and bank specific variables (bank size and capitalization) on banks risks and performance.

The core objectives of the study is to assess the impact monetary policy stance (variation in interbank offer rate), GDP, CPI and bank specific variables (size & capital) on banks risk taking and on their performance. In September 2015 State Bank of Pakistan (SBP) reduced the benchmark interest rate to six percent (6%) historically low in last forty two years of Pakistan history aimed to enhance investment activities and achieve price stability. It settled the Karachi Interbank Offer Rate (KIBOR) at its lowest level which urged policy makers to assess its possible impact on the financial sector.

There is no denying the fact that monetary policy, macroeconomic and bank specific variables plays a decisive role to affect the bank performance and risk. This study will provide valuable information to financial sector that how to manage risk and earn significant profit, provide better management alternatives to promote financial sector.

2. Literature Review

2.1 Bank Risk Taking Channel

The US global financial crisis with the collapse of subprime mortgages market and after the failure of the Lehman Brothers investment bank converted into international banking crisis. The excessive bank risk taking was identified which magnified the adverse impact and massive bail-outs were given by the government to financial institutions. Similarly, the European debt crisis of 2009 badly effect banking system of several eurozone member states as banks take excessive risk (Anginer, Kunt, & Zhu, 2014)

Eid (2011) utilized the data of thirty seven (37) banks of France and analyzed the banks risk-taking behavior during the low interest rate period, confirmed the existence of risk taking channel in French banking system during the period of low rate of interest. The empirical findings showed that liquid banks were prone to decrease in interest rate as compare to less liquid banks. Additionally, the banks with much reliance on fee and commission base income were more exposed to risk. Another study suggested that lower real interest rate as compare to natural rate for longer period, then banks suffer solvency issues when crisis hit the economy (Altunbas, Gambacorta, & Ibanez, 2012). The panel data of 2442 banks of twenty eight European Union countries from 2011 till 2017, study investigated that the negative rates significantly affect bank profitability and risk-taking, significantly reduced banks margins and bank enhanced non-interest income through higher fees and commission. Therefore, in the periods of negative rates banks tend to take less risk and reduces share of non-performing loans. Another study also found that negative rates effect banks profitability and risk -taking based on their balance sheet specific characteristics (Boungou, 2019). The low interest rates decreased profitability and NIM, as it found hard to transfer interest rates to deposits. The low profitability can enhance bank risk taking appetite so that the low profitability could be compensated (García, 2020). The higher profit relaxes bank borrowing constraints which induced banks to take risk on large scale. The effect enhanced when bank leverage constraints relaxed or investments can be financed with senior funding (Natalya, Lev, & Vlahu, 2019). The panel dataset of almost 9,421 banks from 59 countries from 2009 till 2018, concluded that the banks' risk-taking have been witnessed in those countries where negative rates were applied (Whelsy, 2019).

The study on Europe, North America and Africa found that monetary policy stance has significant effects on bank risk-taking, the effect varies across the types of risks. The monetary authorities must analyze bank's risk responses prior to implementation of monetary policies. Gabriel (2020). After analysis of traditional and new tools of monetary policy it is emphasized that the traditional monetary tools such as policy rate and bank lending channel has significant role in the transformation and effectiveness of monetary policy, requires in depth analysis by policy makers before implementation of any monetary instrument by the central bank. (Bernanke, 2020).

2.2 Macroeconomic Variables

The bank's specific variables such as loan loss provision, reserve, return on equity and asset and macroeconomic variables such as GDP and inflation was analyzed in order to measure bank's risk and performance and found a positive relationship. It is found that ROE, ROA, return on capital employed and NIM have positive relationship with bank size, capital, deposit, loan, GDP, inflation and market capitalization in banking sector (Eid, 2011).

The study on profitability determinants of domestic and foreign banks of banking industry of Pakistan confirmed that deposit growth is not the determinant of profitability i-e ROA and ROE of foreign banks but it is correct for domestic banks. Whereas, external determinant includes GDP growth and inflation which have positive effect the bank profitability (Khalid, 2011).The study on Tunisia banking industry stated that concentration of foreign bank ownership has negative impact on bank profitability whereas macroeconomic variables such as GDP growth, inflation have no significant impact on ROA and on NIM (Ameur & Mhiri, 2013). Subsequently, the research on bank performance of Kenya commercial banks was aimed to achieve stability in bank performance and identified key factor that may affect bank performance. The macroeconomic variables which include GDP and inflation, were inconclusive with no significant effect over bank performance (Ongore, 2013). The market variable such as GDP growth have positive effect on bank performance and risk taking (Garcia, 2020)

2.3 Bank Specific Variables

The study on fifteen top Pakistani banks analyzed impact of bank's internal and external factors on their profitability. The study analyzed that there is positive impact of equity, loan, deposits, inflation, economic growth and market capitalization on banks profitability which is reflected through ROA, ROE and NIM. The study found that there is a strong relationship between the banks specific factors which include size, capital, deposit, loan, on bank's ROE, ROA, return on capital employed and NIM (Khalid, 2011). Another study stated that well-capitalized and more liquid banks suffered less solvency issue during 2007-09 financial crises than other banks (Altunbas, Gambacorta & Ibanez, 2012). The study on Pakistan showed that independent variables such as credit risk, capital adequacy ratio, NIM, liquidity ratio and loan & deposit growth have positive impact on bank profitability (Saddique, 2012)

The study on Tunisia banks performance stated that capital adequacy have positive significant relationship with bank profitability as compare to banks with less capital, however bank size have negative substantial relationship with bank profitability (Ameur & Mhiri, 2013). The net interest margin, return on assets and independent variables such as interest rate, slop of the yield curve (diff b/w 1 on 10 year bond and 3 month IBOR) to assess the monetary stance, and bank specific variables such as market power, bank size, credit risk, degree of risk aversion, operating expenses, implicit interest payments, liquid reserve, and efficiency have significant relationship with bank performance and risk behavior (Garcia, 2020)

The study on Indian banks performance found that in crisis period bank age & size and labor productivity and revenue diversification had vigorous impact bank's performance. The more non-government interest and capital adequacy the good bank's performance, whereas larger found to be less profitable (Neeraj & Jitendra, 2020). The bank study of one hundred twenty five countries of 19 years from 2000–2018, which has normal and abnormal time, suggested that bank capital have positive relationship with bank profitability. It is also established that the positive risk relationship relied on environmental situations and bank size, stronger in the period of, in lesser and middle income countries and for big banks (Paolo & Girardone, 2020).

The study analyzed the effect of Capital Adequacy Ratio (CAR), Third Party Fund, Loan to Deposit Ratio (LDR), and Bank Size to Profitability of Indonesian banking sector from 2016 to

2018. The study utilized the data set of 44 banks. The study confirmed that third party funds, capital adequacy ratio, and bank size have a positive and substantial effect on profitability (Anggari & Dana, 2020). The panel dataset of almost 9,421 banks from 59 countries from 2009 till 2018, concluded that the low banks' risk-taking relied on the properties of country's banking system, specifically bank capitalization and size (Whelsy, 2019). The study on Europe, North America and Africa found that bank size and profitability have a vital role for monetary policy to influences positive bank risk-taking. The monetary authorities must analyze bank's risk responses prior to implementation of monetary policies (Gabriel, 2020).

2.4 Hypothesis of the Study

First Model Hypothesis

a) Interbank Offer Rate, decrease has negative relationship with bank return on assts.
b) Inflation has positive relationship with bank return on assets.
c) Gross Domestic Product has positive relationship with bank return on assets.
d) Bank Size and Capital has positive relationship with bank return on assets.

Second Model Hypothesis

a) Interbank Offer Rate, decrease, has negative relationship with bank loan loss provision.
b) Inflation has positive relationship with bank loan loss provision.
c) Gross Domestic Product has positive relationship with bank loan loss provision.
d) Bank Size and Capital has positive relationship with bank loan loss provision.

Dependent variable LLP and Independent variables GDP, CPI, KIBOR, BS and BC.

Third Model Hypothesis

a) Interbank Offer Rate, decrease, has negative relationship with bank reserves.
b) Inflation has positive relationship with bank reserves.
c) Gross Domestic Product has positive relationship with bank reserves.
d) Bank Size and Capital has positive relationship with bank reserves.

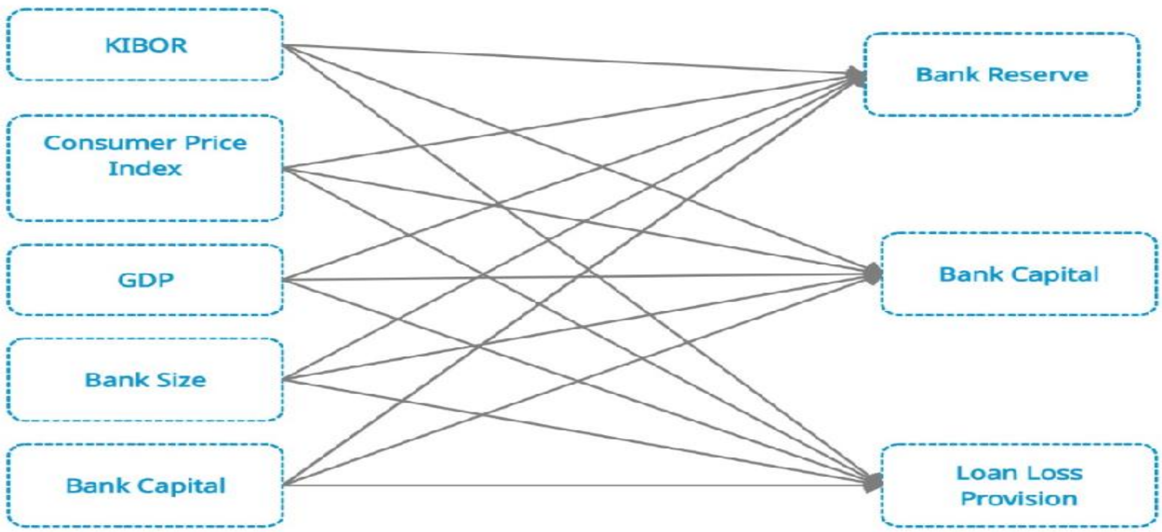
Dependent variable BR, Independent variables GDP, CPI, KIBOR, BS and BC.

Dependent variable ROA, Independent variables GDP, CPI, KIBOR, BS and BC.

2.5 Conceptual Framework

The conceptual framework of the study stated that all the dependent variables are effected by the all explanatory variables, presented hereunder in figure No1.

Figure No.1



3. Methodology

3.1 Sample and Data

The study use the sample of top twenty (20) Pakistani banks for the period of fifteen years from 2006 till 2020. In this way, total number of observations for 20 banks and 15 years become 300. The banks performance is measured through return on assets and data is collected from banks unconsolidated annual financial reports. Similarly, the bank risk assessment data such as loan loss provision and reserve, and bank specific data such as bank seize and bank capitalization is collected from banks unconsolidated annual financial reports. The macroeconomic variables data such as CPI, GDP and KIBOR is collected from official data bank of World Bank and Thomson & Reuters respectively. The data is cross sectional and time series therefore panel data analysis is employed.

Three different mathematical equations are tested, each represents a unique model with its own causal relationship. The first two models represents bank risk taking appetite;

Loan Loss Provision = LLP i,t = β 0 + β 1 GDP t + β 2 CPI t + β 3 KIBOR t + β4 BS t + β5 BC t + €

Bank Reserves = BR i,t = β 0 + β 1 GDP t + β 2 CPI t + β 3 KIBOR t + β4 BS t + β5 BC t + €

Whereas, third model represent bank performance;

Return on Assets = ROA i,t = β 0 + β 1 GDP t + β 2 CPI t + β 3 KIBOR t + β4 BS t + β5 BC t + €

4. Results and Discussions

The descriptive statistic represent pattern or properties of all dependent and independent variables. The outcome of descriptive statistics states the normal behavior of the data with no abnormalities. Subsequently, no element of multi collinearity found amongst explanatory variables.

4.1 Diagnostic Testing

4.1.1. Unit Root Test

The stationarity of the variables is checked through Harris-Tzavalis stationarity test, specifically designed for panel data. After OLS results, model is analyzed to predict and decide is it best or not. The model is good when high value of R square along with F statistics value and p value less than 0.05. Secondly the residual should not serial correlated and thirdly there should be no heteroskedasticity and fourth they must be normally distributed. When OLS has these four properties than model is finest and has enough power to forecast to predict change in dependent variable.

Table 1. Unit Root Test.

Variables	**Harris-Tzavalis Unit Root Test (STATA)**		
	I(0)	**I(1)**	**I(2)**
GDP	0.62* (0.00)	--	--
LLP	-11.93* (0.00)	--	--

CPI	-5.95* (0.00)	--	--
KIBOR	0.62* (0.00)	--	--
BS	2.92 (0.998)	-19.65(0.00)	--
BR	0.907* (0.00)	--	--
ROA	-13.940* (0.00)	--	--
BC	0.507* (0.00)	--	--

*Significance at 5 percent.

In table 1 the results have been derived from the summary stat of Panel Unit Root Test by regressing each dependent and independent variable. The null hypothesis represents the panel contain unit roots of selected variable and alternative hypothesis states that all panels are stationary. The significant P-value rejects the null hypotheses and made the series of selected variable stationary at level and at first difference.

After unit root tests the Jarque Bera test is performed separately for all three model to confirm the normality. All of the three models were normal, as they satisfy the null hypothesis of normality as chi square value for the models are not more than 5%, therefore we cannot reject the null hypothesis. The results of diagnostic tests confirmed the presence of heteroscedasticity in all three models which is addressed through Cross-section White Test. To check the correlation, all dependent variables are regressed and tested for the existing of multicollinearity. The rule of thumb is when the value of VIF is grater then 10 percent then there is high multicollinearity among the variables. However, we are unable to find multicollinearity in explanatory variables of all three models as values lies below ten percentage.

4.2. Data Analysis of Pakistani Banks.

The panel data estimation research methodology has been employed as data consist of time series and cross sections. Before estimations, recognition of the more appropriate model is imperative. Therefore, Hausman Specification test (1978) applied to find out which model, either fixed effect or random effect, is most significant. The null hypothesis of the Hausman test states random effect model is appropriate. The p-value for the first model is 1 which is greater than 0.05. So, we failed to reject null hypothesis, hence random effect model is appropriate.

4.2.1. First Model- Bank Performance.

Results of the Hausman test confirmed that the Random Effect Model is appropriate to interpret relationship among the dependent and explanatory variables for Pakistani banks. Results from "Random Effect Model" is reported here under,

Table 2. Random Effect Model.

Dependent Variable	Independent Variable	Co-efficient	Std. Error	t-Statistic	Prob.	F-Stat	R-square
ROA	CPI	0.00276	0.000353	0.36.	0.718	81.05	0.36
	KIBOR	0.00155	0.000551	2.83	0.005	P. Value 0.00	
	GDP	0.00276	0.0007	3.85	0.000		
	BC	0.05328	.008176	6.52	0.000	Constant Value	
	BS	0.00686	.00113	6.04	0.00	0.15	

In table 2. CPI, KIBOR, GDP, BC and BS are explanatory variables represents the slops of the model and ROA is a dependent variable. The first model hypothetical equation is mentioned here under,

$$ROA_{t,i} = \beta\, 0 + \beta\, 1\, CPI_t + \beta\, 2\, KIBOR_t + \beta\, 3\, GDP_t + \beta\, 4\, BC_t + \beta\, 5\, BS_t + €$$

Theoretically, hypothesis of the study states that gross domestic product and consumer price index are positively relate with return on asset of the banks. Similarly, bank size and bank capitalization also have positive relationship with the ROA. Additionally, theory and study hypothesis states that interbank offer rate is negatively related with ROA of the banks. Empirically it's concluded that there is no significant relation between CPI with ROA as P-value of CPI 0.718 which is insignificant with coefficient value of 0.00276. Whereas empirical results from the table states that

KIBOR, GDP, BC and BS has significant effect on ROA of the banks with a P-value of is less than 5 % along with a positive coefficient values. It indicates that one-percent increase of KIBOR will increase the return on asset for banks by 0.155 percent. Similarly, one percent increase in GDP, BC and BS will increase ROA by 0.27, 5.3 and 0.68 percent respectively. Whereas the value of R-Square 0.36 shows that dependent variable is 36% explained by the explanatory variables. The F-Stat explain the joint hypothesis of independent variable, weather CPI, IBOR, GDP, BC and BS jointly influence the ROA. Since the P-value is 0.00 which is significant, so explanatory variables can jointly effect dependent variable.

4.2.2. Second Model- Bank Risk Taking.

In second model of the hypothesis the risk-taking appetite of the banks operating in Pakistan has been analyzed by setting loan loss provision as a dependent variable. The null hypothesis of the Hausman test states that random effect model is appropriate. The p-value for the second model is 0.0001 which is less greater than 0.05, hence null hypothesis rejected. The fixed effect model is appropriate for the model. The results of “Fixed Effect Model” are here under.

Table 3. Fixed Effect Model.

<table>
<tr><th>Dependent Variable</th><th>Independent Variable</th><th>Co-efficient</th><th>Std. Error</th><th>t-Statistic</th><th>Prob.</th><th>F-Stat</th><th>R-square</th></tr>
<tr><td rowspan="5">LLP</td><td>GDP</td><td>1.9660</td><td>0.6327</td><td>-3.11</td><td>0.002</td><td>9.50</td><td rowspan="5">0.36</td></tr>
<tr><td>CPI</td><td>-0.2736</td><td>0.2864</td><td>-0.96</td><td>0.340</td><td rowspan="4">P. Value 0.000 Constant Value 115</td></tr>
<tr><td>KIBOR</td><td>0.0447</td><td>0.4379</td><td>0.10</td><td>0.919</td></tr>
<tr><td>BC</td><td>-10.4564</td><td>6.522</td><td>-1.60</td><td>0.110</td></tr>
<tr><td>BS</td><td>-4.9354</td><td>1.280</td><td>-3.86</td><td>0.00</td></tr>
</table>

In table 3, GDP, CPI, KIBOR, BC and BS are explanatory variables represents the slops of the model and LLP is a dependent variable. The second model hypothetical equation is,

$LLP_{t,i} = \beta\ 0 + \beta\ 1\ GDP_{t} + \beta\ 2\ CPI_{t} + \beta\ 3\ KIBOR_{t} ++ \beta\ 4\ BC_{t} + \beta\ 5BS_{t} + €$

Theoretical hypothesis states that gross domestic product and consumer price index positively relate with LLP of the banks. As such an increase in gross domestic product and CPI will enhance banks LLP and vice versa. Additionally, theory hypothesis states that interbank offer rate is negatively related with LLP of the banks, whereas the bank capital and bank size are also positively related to the loan loss provisions. Empirically it's concluded that CPI, KIBOR and BC have no significant relation with LLP as P-value of all those are greater than ten percent confidence level. Whereas empirical results from the table states that GDP and BS has significant negative effect on LLP of the banks with a P-value of less than one percent confidence level. It indicates that one-percent increase of GDP will increase the loan loss provision for banks by 19.66 percent, and one percent increase in BS decrease LLP by 49 percent. The value of R-Square 0.36 which shows that dependent variable is only 36% explained by the explanatory variables. The F-Stat explain the joint hypothesis of independent variable, weather CPI, IBOR, GDP, BS and BC jointly influence the LLP. Since the P-value is 0.00 which is significant, so independent variables can influence dependent variable.

4.2.3. Third Model- Bank Reserve

In third model of the hypothesis the risk-taking appetite of the banks operating in Pakistan has been analyzed by setting bank reserve as a dependent. The null hypothesis of the Hausman test states that random effect model is appropriate. The p-value for the third model is 0.98 which is greater than 0.05, hence we fail to reject null hypothesis. Therefore, random effect model is appropriate for the model. The results of "Random Effect Model" are here under.

Table 4. Random Effect Model.

Dependent Variable	**Independent Variable**	**Co-efficient**	**Std. Error**	**t-Statistic**	**Prob.**	**F-Stat**	**R-square**
BR	GDP	0.0826	0.03257	2.54	0.01	724	0.76
	CPI	0.0380	0.15021	2.53	0.01	P. Value 0.00	
	KIBOR	0.0028	0.0230	0.13	0.90		
	BC	0.19047	0.3450	0.55	0.58	Constant Value	

	BS	1.250	0.6322	19.78	0.00	-9.9	

In table 4, GDP, CPI, KIBOR, BC and BS are explanatory variables represents the slops of the model and BR is a dependent variable. The third model hypothetical equation is,

$$BR_{t,i} = \beta 0 + \beta 1\ GDP_t + \beta 2\ CPI_t + \beta 3\ KIBOR_t + + \beta 4\ BC_t + \beta 5\ BS_t + €$$

Theoretical hypothesis states that gross domestic product and consumer price index positively relate with reserves of the banks. As such an increase in gross domestic product and consumer price index will enhance banks reserve and vice versa. Additionally, theory and study hypothesis states that Karachi interbank offer rate is negatively related with reserve of the banks. Similarly, the bank capital and bank size have a positive relationship with the bank reserves. Empirically it is concluded that there is no significant relation between the KIBOR and BC with bank reserves as P-value is greater than 5 percent significant level. Whereas empirical results from the table states that GDP, CPI and BS has significant effect on BR as they have P-value less than 5% percent. It indicates that one-percent increase of GDP will increase the reserve for banks by 8.2 %, one percent increase in CPI increase BR by 3.8 percent and one percent increase in BS increase BR by 12.5 percent. Whereas the value of R-Square 0.76 shows that dependent variable is only 76% explained by the explanatory variables. The F-Stat explain the joint hypothesis of independent variable, weather GDP, CPI, KIBOR, BC and BS jointly influence the BR. Since the P-value is 0.00 which is significant, so explanatory variables can effect dependent variable.

5. Results and Discussion

In first model the Housman test selected Random Effect Model which is more appropriate model to interpret the relationship between the independent and explanatory variables. In first model, keeping the ROA as a dependent variable and GDP, CPI, BS, BC and IBOR as explanatory variables, the empirical results confirmed that there is no significant relationship found between the CPI and ROA as P-values is insignificant. Therefor it's concluded that any change in CPI didn't have significant impact on the performance of the banks operating in Pakistan.

Whereas results from the table confirmed that KIBOR, GDP, BC and BS has significant positive effect on ROA of the banks with a significant P-value with positive coefficient value. It indicates that an increase in one percent of KIBOR will enhance the return on assets of banks operating in

Pakistan by 0.15 percent, similarly GDP, BC and BS enhance bank profit by 0.276, 5.328 and 0.686 percent. Whereas the value of R-Square is 0.35 which showed that dependent variable is 36% explained by explanatory variables.

In second model, we kept LLP as a dependent variable and GDP, CPI, IBOR BS and BC as explanatory variables. The empirical results confirmed that there is no significant relationship found between the KIBOR, CPI and BC with LLP as P-value of explanatory variables are more than .05. Therefore, it's concluded that any change in CPI, BC and KIBOR didn't have significant impact on the Loan Loss Provision of the banks. Whereas results from the table confirmed that GDP has positive and significant effect on LLP of the banks with significant P-value. Whereas BS have significant effect on LLP of the banks with a significant P-value with negative coefficients. It indicates that an increase in one percent of gross domestic product will increase LLP by 19.6 percent and one percent increase in BS will reduce the LLP by 49.3 percent of banks operating in Pakistan. Whereas the value of R-Square is 0.36 which showed that dependent variable is 36% explained by explanatory variables.

In our third model, we kept bank reserve as a dependent variable and GDP, CPI, KIBOR, BS and BC as explanatory variables. The empirical results confirmed that there is no significant relationship established between the KIBOR and BC with Bank Reserves as P-value of explanatory variables are insignificant. Therefore, it's concluded that any change in KIBOR and BC didn't have significant impact on the reserve of the banks. Whereas results from the table confirmed that GDP, CPI and BS has significant effect on reserves of the banks with a significant P-value with positive coefficient value. It indicates that an increase in one percent in consumer price index will increase the reserves by 3.80 percent of banks operating in Pakistan, whereas gross domestic product enhance bank reserves by 8.26 percent and BS by 12.50 percent. Whereas the value of R-Square is 0.76 which showed that dependent variable is 76% explained by explanatory variables.

5.2. Conclusion

The result of panel data shows that consumer price index has no significant effective on performance of banks. It implies that variation in inflation rate will not have any effect on the profitability of the banks operating in Pakistan. However, the GDP, KIBOR, BC and BS has a significant positive impact on the performance and profitability of the banks. The result of the study shows that increase in gross domestic product, KIBOR, BC and BR enhance bank return on assets.

From second model the results confirmed that the KIBOR, CPI and BC don't have any relationship with the loan loss provision of the banks operating in Pakistan. However, GDP has significant and positive relationship with the bank's loan loss provision which represent the risk of the banks. The lastly the BS have significant and negative relationship with the LLP, as bank size increase banks can manage bad debts with good compliant framework.

The third model results confirm the KIBOR and BC don't have any impact on the bank risk taking which is represented by the BR. However GDP and CPI has strong positive role in determination of bank reserve. Similarly, bank size also positively affect the bank reserve, bigger the bank more bank reserves.

Based on aforesaid results top management of the financial institutions can efficiently manage bank performance and bank risk. It is noted from the above captioned empirical evidences that monetary policy stance through interbank offer rate have no effect on bank risk taking but have nominal impact on banks performance. It is also concluded that interbank offer rate and bank capital remained redundant to perform their role in bank risk taking according to the previous studies. However, KIBOR, GDP, CPI along with BS and BC have significant positive effect on bank performance. With respect to risk taking GDP, CPI and banks size have significant role. It is highly recommended for the bank manager to consider every possible effect of gross domestic product and interbank offer rate against bank performance, and for risk management GDP and CPI along with bank size has important role. It is recommended that the central bank of the country must consider the impact of GDP, inflation and bank internal factors in order to attain financial stability for the economy at large.

This study helps banks and central banks to develop strategies to improve bank performance and to manage banks risk taking appetite. It will support the banks about what factors can contribute to overall risk and performance of the banks. It also helps practitioners to identify gray areas for corrective measures. A clear vision out of this study asserts the future direction of the banks management to identify loopholes.

References

Aboyadana, G. (2020). Monetary policy and bank risk-taking in sub-sahara Africa. *The European Journal of Applied Economics, 18*(1), p.15 – 38.

Ali, M., & Puah, C. H. (2018). Does bank size and funding risk effect banks' stability? A lesson from Pakistan. *Global Business Review*, *19*(5), p.1166–1186. https://doi.org/10.1177/0972150918788745

Altunbas, Y., Gambacorta, L., & Marques-Ibanez, D. (2012). Do bank characteristics influence the effect of monetary policy on bank risk? *Economics Letters*, *117*(1), p.220-222.

Ameur, I., Ben,G., Sonia, M. M., (2013). Explanatory factors of bank performance evidence from Tunisia, *Journal of Management*, *2*(1), 11.

Anggari,S.L.N., Dana,M.I., (2020). The effect of capital adequacy ratio, third party funds, loan to deposit ratio, bank size on profitability in Banking Companies on IDX. *American Journal of Humanities and Social Sciences Research*, *12*(4), p.334-338.

Anginer, D., Demirguc-Kunt, A., & Zhu, M. (2014). How does deposit insurance affect bank risk? Evidence from the recent crisis. *Journal of Banking & finance*, *48*, p.312-321.

Azam, Muhammad, and Sana Siddiqui. (2012). Domestic and foreign banks' profitability: Differences and Their Determinants, *Journal of Economics and Finance*, 14(2).

Benanke, B. S. (2020), The new tools of Monetary Policy? *American Economic Review 2020, 110(4): p.943–983*.

Berger, A. (1995). The profit-structure relationship in banking-tests of market-power and efficient-structure hypotheses. *Journal of Money, Credit & Banking*, *27*(2), 404–431. https://doi.org/10.2307/2077876.

Boungou, W. (2019). Negative interest rates, bank profitability and risk taking. *SSRN Electronic Journal*. doi: 10.2139/ssrn.3416762.

Coccorese, P., Girardone, C. (2020). Bank capital and profitability: Evidence from a global sample. *The European Journal of Finance,11(2)* Doi:10.1080/1351847X.2020.1832902

Eid, S. (2011). Monetary policy, risk-taking channel and income structure: An empirical assessment of the French Banking System. HAL Id: dumas-00643715.

Garcia, P. (2020). The impact of monetary policy on bank profitability. *Banking and beyond*, *palgrave macmillan studies in banking and financial institutions*. Springer International Publishing.

Herrero, A.G., Gavila, S., Santabarbara, D. (2009). What explains the low profitability of Chinese banks? *Journal of Banking and Finance,* 33 (3), p.2080–2092.

Gul, Sehrish, Faiza,I., Khalid, Z. (2011). Factors affecting bank profitability in Pakistan, *Romanian Economic Journal*, *14* (39).

Kedia, N. (2016). Determinants of profitability of Indian public sector banks. *IRA-International Journal of Management & Social Sciences*, *2*(3), 1–16.

Kim, D., and W. Sohn. (2017). The effect of bank capital on lending: Does liquidity matter? *Journal of Banking and Finance,* 77, 95–107.

Kuang. C , Yang. J , and Zhu. W (2020), Quantitative Easing and Bank Lending: The liquidity Channel, *Journal of Banking and Finance, University of International Business and Economics, 53*(2)*: 233-290.*

Laeven, L.,Valencia,F., (2017). Systemic banking crises: A new database. *Journal of Economic Policy Research, International Monetary Fund, Working Paper No. 52(1).*

Martynova, N., Ratnovski,L., Vlahu, L. (2019). Bank profitability, leverage constraints, and risk-taking. *Journal of Financial Intermediation,* 23(2).

Mehran, H., and A. V. Thakor. 2011. "Bank bapital and value in the cross-section." *Review of Financial Studies* 24, p. 1019–1067.

Ongore, V.O., Kusa. B.G., (2013). Determinants of financial performance of commercial banks in Kenya. *International Journal of Economics and financial issued*, 3 (1), p.2237.

Parvin, S., Chowdhury, A. N. M., Haque, M., Siddiqua, A., & Ferdous, J. (2019). Effect of liquidity and bank size on the profitability of commercial banks in Bangladesh. *Asian Business Review*, *9*(1), p.7–10.

Rahman, M., Hamid, K., & Khan, A. M. (2015). Determinants of bank profitability: Empirical evidence from Bangladesh. *International Journal of Business and Management*, *10*(8), 135–150.

Financial Literacy and Retirement Planning in Pakistan

Shumaila Zeb[1], Atif Bilal[2]

Abstract:

In this paper, we analyze the financial literacy level of individuals using socio-demographic variables, namely age, sex, education level, working in the financial sector, experience level, and income level. Next, we investigate the impact of financial literacy on retirement planning. The empirical results are based on a survey of 472 individuals from Pakistan. The results reveal that an individual's financial literacy has a positive and significant relationship with retirement planning. The findings further reveal that males are more financially literate than females. The results also show that as age increases, people become more careful in spending and concerned about their retirement life, hence start savings as a part of their retirement planning. The findings emphasize the necessity of creating more awareness to enhance the financial literacy levels to help the individuals to plan for their retirements.

***Keywords**:* Financial literacy; retirement planning; investment behavior

JEL Codes: D91; D14

1. **Introduction**

The quality of life depends on the quality of financial decisions taken by the individuals in any economy. In this financially driven world, an individual must have sufficient financial literacy and knowledge for making effective financial decisions and future planning. Financial literacy (FL) helps individuals make efficient investment decisions (Goyal, Kumar, 2021; Sachitra & Wijesinghe, 2018). Financial literacy also improves financial inclusion in the country and addresses the concern of low access to finance (Morgan, & Long, 2020). The increased financial literacy promotes Small and Medium Enterprises (SMEs) by facilitating the individuals to come forward and play a vital role in the economy's growth. It further helps the individuals to save money and control spending (Perry & Morris, 2005), to make plans for retirement (Lusardi & Mitchell, 2016), and ultimately, successfully accumulate wealth (Nicolescu, Tudorache, & Androniceanu, 2020). FL brings many advantages for the whole economy at both micro and

[1] Assistant Professor, SZABIST, Islamabad ,dr.shumaila@szabist-isb.edu.pk
[2]Assistant Professor, Management Sciences, SZABIST Islamabad, dr.atif@szabist-isb.edu.pk

macro levels (Lusardi, 2019). Individual savings help business firms to increase their businesses resulting in higher growth of the economy Xue et al., (2018). Investments in any economy bring more productivity leading to a positive growth rate for the whole economy. Individual savings at a smaller scale help the economy during economic downturns (Anderson, Baker, & Robinson, 2017; Grohmann, Menkhoff, 2018).

In Pakistan, a large segment of the population is working in the private sector. Most of the jobs in this sector are non-pensionable. Thus, it calls for a reasonable amount of savings so that people may have a peaceful retirement life. However, a peaceful retirement life requires retirement planning right from the start of the job. Retirement planning provides income support to the individuals, especially in old age or disability or death of wage earner in the family. During the last couple of decades, Pakistan is going through many social changes, including pension planning shifts from government institutions to individuals. The investments today have no geographic boundaries. Therefore, it becomes essential for investors to have appropriate financial literacy for decision making. The importance of FL may also be assessed from the fact that in 2015, the United Nations (UN) considered the quality of education as an essential sustainable development goal for the betterment of a common man. They modified the definition of literacy and included the element of finance in it. According to SDGs, a person is literate if he or she may undertake basic banking transactions.

Several studies have been done across the globe to empirically investigate the relationship between financial literacy, retirement planning, and other socio-economic factors (Arpana & Naidu, 2019; Boisclair, Lusardi, & Michaud, 2017; Moure, 2016; Seay, Kim, & Heckman, 2016). FL, however, yet not much have been done in developing countries like Pakistan, leaving it an under-explored region in the financial literacy literature. Therefore, there is a need to assess the level of FL in Pakistan. For this purpose, the present study employed a survey-based method. Further, it also investigated the relationship between FL and retirement planning. Finally, the difference between the male and female literacy rates has also been investigated.

The findings revealed that males are at higher FL levels than females. Similarly, the results proved that self-employed individuals are more financially literate than employees. The main delimitation of the study was that the questionnaires were distributed to the main cities of the country. The remainder of the study is planned as follows. After the introduction, the relevant literature is given in Section 2. Section 3 elaborates methodology results are given in Section 4 followed by the conclusion in the last section.

2. Literature Review

FL is defined by the Organization for Economic Co-operation and Development (OECD, 2005) as "a combination of awareness, knowledge, attitudes, and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing." The definition has three main components: financial knowledge, the behavior of an individual, and attitude. FL promotes savings in the form of diversifying assets and purchasing insurance. It makes sure that people keep track of their credit scores and make a rational investment decision. It encourages people to save money to help them utilize their resources efficiently (Ahunov, Van Hove, 2020; Van Rooj et al., 2011; Lusardi & Mitchell, 2011).

Different studies used different factors that might influence the FL levels and retirement planning. According to behavioral theory (Petit, 1967), humans are unique creatures and do not always make rational decisions. Since investors are also humans, they do not always make a well-informed decision because their judgment is clouded by their biases and attitudes. This theory provides us insights into how investors make decisions. In a similar context, Schmidt and Sevak (2006) used behavioral models to study how people behave, comprehend facts, and form opinions. A similar study was conducted in the USA by Shimizutani, and Yamada (2020). Their findings revealed that people with insufficient financial literacy were either young or old but rarely middle-aged. These people were also single; comparatively less educated, had less income, and belonged to a minority set of society. Similarly, other studies assessed the financial literacy level of Australian undergraduate students (Alkan, Oktay, Unver, & Gerni, 2020; Beal & Delpachitra, 2002). They deduced that students in this age bracket (average 18-24 years) were less financially literate. However, students who scored high were primarily males, having some work experience.

Further, Volpe et al., (2002) explored the differences in demographic and socio-economic groups in Australia. For this experiment, 530 online investors were examined. The findings revealed that the discrepancies lie within the literacy rates, gender, experience, age, and income. Women were less financially literate than men. Furthermore, older participants were found more financially literate than younger respondents. Similar findings were presented by Hamid and Loke (2021) and Kumari and Khalidah (2020).

Many studies found that gender plays an important factor in retirement planning. For instance, Al-Bahrani, Buser, and Patel (2020) studied the impact of gender on financial literacy and retirement planning. The findings suggested that females were more risk-averse and hence were less financially literate and did not plan for retirement. The financial ability of women was dependent on financial knowledge, risk-taking behavior, and confidence. This study further elaborated that society has contained females to conventional roles such as the homemaker and caregiver; women lack knowledge and confidence when it comes to financial matters.

Another Australia based study by Worthington (2006) found that people with inadequate financial literacy were unemployed females. They further found that individuals having less financial literacy were mostly from non-English speaking backgrounds. They further proved that people aged between 50-60 years were more financially literate, followed by professionals, business owners, and farm owners. In the UAE, the FL of investors was measured by Al-Tamimi and Al Anood (2009). They concluded that financial literacy is dependent on the education level, income level, and workplace activity of an individual. Similarly, a study was conducted in Hyderabad city of India, by Agarwal et al., (2010) to evaluate the financial literacy of online investors. They found that online investors were more financially literate. There were variations in financial literacy because of demographic and socio-economic differences.

Gallery et al. (2011) found factors affecting the investment decisions of the individuals. Their results revealed FL, demographic, socio-economic, and risk preferences were significantly related to retirement planning. Similar results were found by Nicolescu, Tudorache, and Androniceanu (2020). Similarly, Sohn et al., (2012) examined the relationship between spending habits and the financial literacy of students of Korean students. The results found that students having moderate monthly allowances were more financially literate than those with comparatively higher allowance. In Malaysia, Janor et al., (2017) provided evidence of financial distress among Malaysian youth because of the lack of financial literacy. They further suggested that authorities need to invest in organizations that may help people manage their finances. They also conducted a similar experiment in the lesser developed countries like India and Indonesia. They concluded that FL was strongly and significantly related to the financial behavior of individuals. Similarly, Kebede and Kuar (2015) examined the impact of FL on personal finance management in both developed and developing countries. They found that people lack the basic FL skills essential to making appropriate personal financial decisions. The result was the same in both developed and developing countries. They found that FL, age, educational level, income level, employment, and people with less experience in developed financial markets were significantly related to the investment decisions and retirement planning of an individual.

Fachrudin et al., (2016) measured the impact of education on investment decisions and financial literacy. The findings revealed that education was not significantly related to investment decisions. They also found that FL helped the individuals to make appropriate investment decisions. Janor et al., (2016) administered a comparative study out of Malaysia and the United Kingdom. They found that FL levels were extremely low in both countries. They concluded that authorities need to take effective measures for the economic health of these countries. They also revealed that FL was significantly related to retirement planning and investment decisions.

Lusardi and Mitchell (2011, 2014, and 2019) proved that individuals with less FL did not plan well for their retirement. They also found that females and the young were unable to answer the basic three questions related to FL. The large majority of Americans rely on the security net for retirement; because of this dependency, taxes may increase. Sekita (2011) proved that individuals in Japan had low financial literacy. Women, young people, and individuals with a low income were found to have less FL. They further found that savings habits from childhood helped individuals to plan for their retirement in adult age.

Similarly, Koenen and Lusardi (2011) and Boisclair et al., (2017) found that in different parts of Germany, people were at different levels of FL. In West Germany, the people were more financially literate as compared to East Germany. This was mainly due to a lack of education and low income earning opportunities in East Germany. The data used for this study was taken from the SAVE survey, a household panel designed to understand the behavior and savings. They surveyed via questionnaires and had a sample size of 1,059 respondents in 2009. The females were less likely to respond than males.

Klapper and Panos (2011) conducted a survey of 1,400 respondents in June 2009. The findings revealed that FL was high among young respondents and having a high educational level and low among the people living in rural areas. They also found that FL helped the individuals to plan for their retirement effectively and efficiently. They further added that the individuals in rural areas rely upon public provision and less on pension saving programs.

Van Rooij, Lusardi, and Alessie (2011) found similar results that FL helped individuals plan their retirement in the Netherlands. The response rate was 74 percent consisting of 1508 from the overall 2028 household surveyed from September 23 to September 27, 2005. They indicated that the policymakers of the Netherlands might consider investing in the financial education of the young. They found that a majority of the Dutch household did not plan for retirement. They also found that many of the Dutch people did not have a proper understanding of financial plans.

Agnew, Bateman, and Throp (2012) found that Australians were less financially literate than other countries. Therefore, many citizens of Australia did not plan for their retirement. They surveyed 1,024 Australians for this study in 2012. Likewise, Boisclair, Lusardi, and Michuad (2015) conducted surveys via the internet from May 17 till May 31 2012, and 6,911 respondents were interviewed. They found that approximately 42 percent of Canadians were able to answer three basic FL questions. Further, they proved that women, minorities, and individuals having little educational background scored worse.

Aubram, Kovarova- Simecek, and Wanzenried (2016) found that the Swiss were more financially literate than the people in Austria. They found that financially literate individuals start planning for their retirement at a younger age. The people working in the financial sector were more literate on average. They further found that the women in both of the countries were less financially literate than men. Overall findings showed stronger results for the Swiss. Also, the elder age citizen cared more about pension planning than the youth of both countries.

Similarly, Kalmi and Ruuskanen (2018) and Klapper and Panos (2011) investigated the relationship between FL and retirement planning. They also provide similar results. Niu and Zhou (2018, 2020) found that financial literacy helped individuals to plan for their retirement in China. The findings further revealed that families having more children decrease the probability of retirement planning. Women were relatively less financially literate than men (Gustafsson & Omark, 2015). Similarly, Gale, Harris, and Levine (2012) proved that individuals who study finance made better financial decisions and retirement planning.

Kalmi and Ruuskanen (2018) proved that the FL level was unevenly distributed among the population of Finland. One of the interesting findings of the study was that financial literacy was positively and significantly related to retirement planning. The results were significant only for the women population. Hsiao and Tsai (2018) investigated whether individuals with more financial literacy were more active participants in derivatives markets or not. The results revealed that FL helped individuals to purchase complex derivatives products. Similarly, Xue, Gepp, O'Neill, Stern, and Vanstone (2018) identified the FL level in elderly people in Australia. They found that FL in elder people decreased asset loss and increased savings. The findings further showed that young people were more financially literate. Better FL was also positively and significantly related to higher educational attainment, good health, outright home-ownership, and better occupation. Similarly, Çera, Khan, Belas, & Ribeiro (2020) and Grohmann, Klühs, and Menkhoff (2018) found that high financial literacy helped individuals make beneficial investments.

Retirement Planners are the respondents who save willingly for their retirement. In countries like Pakistan, relatively less work is done to know the FL levels in the populations. There is somewhat less work done in developing countries like Pakistan to investigate the financial literacy levels in the working population. In addition, there is less evidence available to see whether people are having a certain level of FL plan for their retirement or not. Therefore, this study helps to fill these research gaps, hence adds to the existing literature on FL and retirement planning.

3 Measurement of Financial Literacy

All three questions related to FL are adapted from the study of Lusardi and Mitchell (2011, 2019). We made a small change in the question related to compound interest. The currency was changed to the Pakistani rupee to create a better understanding of the respondents of Pakistan.

Understanding of interest rates: Suppose you have Rs.100 in a savings account, and the interest rate was 2% per year. After five years, how much do you think you would have in the account if you left the money to grow? More than Rs.102; Exactly Rs. 102; Less than Rs. 102; Don't Know

Understanding of inflation: Imagine that the interest rate on your savings account was 1% per year, and the inflation was 2% per year. After one year, how much would you be able to buy with the money in this account? More than today; exactly the same; Less than today; don't know

Understanding of risk diversification: Is the following statement true or false? Buying a single company's stock usually provides a safer return than a stock mutual fund. True; False; Don't Know.

The first question measures the understanding level of the people of Pakistan regarding the compound interest rate. The second question tries to evaluate the knowledge regarding the inflation rate and the savings rate. It tries to assess how the common man can relate the savings rate with the inflation rate prevailing in the country. The third question makes an effort to assess the understanding level of respondents of Pakistan regarding risk diversification.

1. Data Description and Sample Selection

The quantitative online survey was carried out from April 10 to July 20, 2020. The online questionnaire was created on Google docs and was distributed to the individuals via social networks. The questionnaire involved three famous questions related to FL adapted from the questionnaire originally developed by Lusardi and Mitchel (2011). In addition to financial literacy questions, the questionnaire also included questions pertaining to demographics like gender, age, working experience, education level, income level, employment status, working in the financial sector. We restricted our study between the age brackets above 24 years of age following the previous studies following Lusardi and Mitchell (2015, 2019). This age bracket is carefully chosen to include only those individuals in the sample having some prior work experience. In total, the sample of this study constitutes 472 responses covering all areas of Pakistan.

2. Research Methodology and Variables Description

The quantitative data are empirically examined by applying different statistical tools. After presenting summary statistics, we estimate ordered logit regression, Probit, and ordinary least square model to investigate the relationship between FL and retirement planning. The dependent variable is retirement planning. Retirement planners are those individuals who save willingly for their retirement.

The independent variable FL is an ordinal variable. In this paper, we created an index of self-assessed FL. The index is the sum of answers to three separate questions of financial literacy. Furthermore, the index presents the sum of correct answers; one point is assigned to each correct answer. Therefore, the answers of the index have a range between 0-3. Income information is reported using five broad categories. It is also not a continuous variable. These categories are further coded using dummy variables (one dummy for each income category from 1 to 5). The same is true for age. It is divided into four categories; each having a dummy variable starting from 1.Employment status is also divided into five broad categories starting from employed till retired people. This variable is also a dummy variable starting value from 1 to 5. Working in the finance sector is also a dummy variable having a yes or no answer. The dummy values used in the study are 1 and 0. Another important variable of the study is education. It is divided into six broad categories. The description stated from less than 10 years of education till 18 years of education and above. It is also a dummy variable starting from 1 to 6.

The econometric model of the study is defined as:

$$RP_i = \alpha_i + \alpha i FL_i + \alpha_3 Z_i + \varepsilon_i \qquad (1)$$

In the above equation, RPi stands for retirement planning, FLi stands for financial literacy and Zi is the vector of socio-demographic variables that includes age, gender, employment status, working in the financial sector, experience and income and εi is the error term.

3. Empirical Evidence

3.1 Summary Statistics

The summary statistics of the socio-demographic variables are presented in Table 1.

Table 1: Summary Statistics of Socio-Demographics Variables

%age	No. of Responses	
Age		
24-35 Years	307	65.0
36 to 54 Years	62	13.1
55 to 64 Years	55	11.6
65 or more	48	10.1
Gender		
Male	231	48.9
Female	241	51.1
Employment Status		
Employed	266	56.4
Self-Employed	54	11.4
Employed and Self Employed	83	17.5
Unemployed	69	14.6
Working In Financial Sector		
Yes	128	27.1
No	344	72.9
Experience		
Less than or equal to 10 Years	6	.12
12 Years	20	4.2
14 Years	66	14.0
16 Years	197	41.7
18 Years or Above	183	38.8
Income		
Less than Rs. 15,000	75	15.8
Rs. 15,001 to 50,000	177	37.5
Rs. 50,001 to 100,000	127	26.9
Rs. 100,001 to 150,000	58	12.3
Above Rs. 150,000	35	7.4

The study examines the demographics of the sample. The summary statistics reveal that 71.4% sample was between 24-35 years of age. The sample consists of 48.9% of the male while 51.1% of the female population. The survey consists of a large sample of employed individuals, out of which 72.9% of respondents were not working in the financial sector. The survey was mostly filled by the respondents who have a reasonable experience of working in any organization. Only 0.12% of the sample was filled from the respondents having less than or equal to 10 years of experience. 37.5% of the sample had income between Rs.15, 000 to 50,000. The average income per month above Rs.150, 000 was only 7.4%.

Table 2: Summary Statistics of financial literacy questions and Retirement Planning

%age	No. of Responses	
Compound Interest		
More than Rs. 102	351	74.4
Exactly Rs. 102	25	5.3
Less than Rs. 102	35	7.4
Do not Know	61	12.9
Inflation		
More than Today	66	14.0
Exactly the Same	27	5.7
Less than Today	279	59.1
Do not Know	100	21.2
Risk Diversification		
True	105	22.2
False	264	45.9
Do not Know	103	31.8
Saving Status		
I have no Savings and Investments	184	39.0
I have Savings	123	26.1
I have Investments	43	9.1
I have Savings and Investments	122	25.8
Total	**472**	**100.0**

Table 2 shows the results of the three financial literacy questions. The first question asked was about the compound interest question. About 74.4% of respondents answer this question correctly. Only 12.9% of respondents claim that they do not know the answer. The respondents who could not answer the question rightly were about 13% in Pakistan. The second question asked from the respondents was about the inflation and savings rate. 59% of the total respondents answer this question correctly. About 21.2 % chose don't know the answer. 19.7% of respondents could not answer the question correctly. The third question was about the returns of the individual stock and mutual funds. Only 22.2% of respondents answer this question correctly. 55.9% of respondents got this answer wrong. Only 22% of respondents answer the question correctly. Around 22% of respondents indicated that they do not know the answer. Similarly, we also wanted to see the saving pattern of the working population of Pakistan. Around 25% of respondents claim that they have both savings and investment. 26% of the respondents have only savings, whereas around 9% have only investments. Around 39% of the respondents claim they have neither savings nor investment for their future.

These findings are similar to the studies conducted in various other regions (Arrondel, 2018; Lusardi, 2019; Niu & Zhou, 2020). Similar findings suggest that questions related to the compound interest rate and inflation have a higher rate of acceptance in the individuals. However, the question related to risk diversification has fewer rates of correct answers. A large number of respondents prefer to choose do not know option in the risk diversification question. Even do not know responses to the risk diversification question seem higher in developed countries like the USA and Germany.

5.2 Who knows the more?

We use three different specifications for financial literacy: (1) whether the respondent answers all the questions correctly; (2) the number of questions the respondents answer correctly, and (3) dummies for each of the questions the respondents answered correctly.

Table 3: Distribution of responses to FL Questions

		TVM		**Inflation**		**Risk**		Over All	
		Correct	**DK**	**Correct**	**DK**	**Correct**	**DK**	**All Correct**	**>2=DK**
Age	24 to 35 Years	71.2	14.8	54.0	23.2	55.8	21.7	34.4	33.5
	36 to 54 Years	87.5	6.9	80.6	9.7	54.2	18.1	34.7	25.0
	55 to 64 Years	98.2	2.1	96.2	5.2	66.7	33.3	66.7	33.3
	65 Years or more	73.7	10.5	57.9	26.3	57.9	26.3	40.4	40.4
Gender	Male	87.0	5.6	74.0	10.0	63.4	16.0	37.8	24.2
	Female	62.2	19.9	44.8	32.0	53.5	27.4	33.3	41.5

Employment Status	Employed	80.8	12.0	57.1	21.4	53.8	22.9	35.0	32.7
	Self-Employed	66.7	13.0	64.8	16.7	57.4	18.5	38.2	29.6
	Employed and Self Employed	75.0	11.0	70.0	10.0	65.0	9.0	30.0	10.0
	Unemployed	55.1	21.7	56.5	23.2	52.2	23.2	23.2	39.1
	Retired	71.4	11.1	61.9	25.4	65.1	25.4	42.9	38.1
Working in Finance	Yes	82.8	4.7	67.2	13.3	60.9	10.9	37.5	21.9
	No	71.2	16.0	56.1	24.1	54.1	25.9	34.9	37.2
Education	Less than 10 Years	33.4	42.0	42.2	33.0	10.7	65.0	18.0	72.3
	10 Years	45.0	50.0	51.0	50.0	50.0	75.2	38.0	63.4
	12 Years	55.0	48.0	40.0	43.0	30.0	50.0	40.0	60.0
	14 Years	78.5	24.2	47.0	24.2	43.9	16.7	31.8	37.9
	16 Years	85.6	10.2	77.4	19.8	50.3	21.3	48.6	34.0
	18 Years or Above	86.9	7.1	77.2	16.9	68.9	20.8	53.3	27.3
Income	Less than Rs. 15,000	54.9	23.9	52.1	32.4	59.2	18.3	26.8	39.4
	Rs. 15,001 to 50000	70.1	12.4	50.3	20.3	53.7	18.6	33.9	31.1
	Rs. 50,001 to 100,000	83.5	7.9	68.5	15.8	57.5	17.3	48.0	25.2
	Rs. 100,001 to 150,000	82.8	12.1	69.0	13.8	56.9	34.5	27.6	37.9
	Above Rs. 150,000	91.4	8.6	68.6	31.4	54.3	37.1	34.3	42.9
Savings	No Savings and Investment	32.3	67.2	45.3	46.4	23.1	44.6	33.3	54.4
	Savings	46.8	52.7	44.2	39.0	35.2	51.8	41.5	54.2
	Investment	54.4	43.1	51.3	42.2	41.6	49.6	44.3	48.9
	Both savings and investment	72.2	32.7	72.8	22.9	44.5	45.2	54.2	32.6

Note: *DK stands for don't know and TVM stands for the time value of money.*

Table 3 presents the distribution of responses to the financial literacy questions across various demographics of the sample. Respondents who fall in the age bracket of 24-35 years had the lowest proportion of correct answers to both compound interest and inflation questions. The proportion of correct answers rises as the age bracket increases in the respondents. The respondents who fall in the age bracket 55 to 64 were found more financially literate than the other brackets of age used in the study. Similarly, 55-64 age brackets gave the highest correct answers. In addition, only 33% of this age bracket chose greater than two do not know the answer. In Pakistan, adults are more financially literate than the younger lot. The second demographics which give very useful result are gender-based results. Males performed better than females on all the questions related to financial literacy. Only 37% of males gave all the correct answers related to the financial literacy questions. About 87% of males gave the correct answer of the compound interest; only 62% of the female population knew the correct answer of compound interest. 19.9% of females opt for the do not know option in the compound interest question. Only 74% of male respondents chose the correct option of the inflation question. However, 44% of female respondents could only choose the right answer to the inflation question. However, the risk diversification question has received less percentage from both males and females. The correct answer to the risk diversification question was given by 63% males and 53% by females. In addition, female respondents also chose more 'do not know' option in comparison to male respondents.

Respondents having more experience performed best in answering the question related to financial literacy. Employed respondents had the highest proportion of correct answers to all the questions of financial literacy, followed by those respondents who were employed and had their own business as well. Retired respondents gave the highest percentage of the correct answer to the risk diversification question. Interestingly, 42% of the retired respondents gave correct all three financial literacy questions. Unemployed respondents gave the least correct three answers related t the financial literacy questions. Similarly, employed respondents had the highest percentage of do not know option than the rest of the respondents. The respondents working in the financial sector performed better than the respondents' working in the non-financial sector. 82% of the respondents working in the financial sector gave the correct answer of the compound interest. 67% gave correct inflation questions, while 60% answered the risk diversification question correctly. Only 21% of respondents working in the financial sector opted for the do not know option. The respondents working in the non-financial sector had an overall 37% do not option.

Different education levels also respond differently to answering FL questions. The respondents with higher education levels were found more financially literate as compared with low education levels. The same is the situation with the income level. Respondents with more income level were found more financially literate than the respondents with less income levels. Respondents having both investments and savings perform best in answering the questions. They also performed best in answering all the correct answers to three questions. 54% was the total percentage of correct answers for all three questions.

5.3 Determinants of Retirement Planning

The results of our regression analysis are reported in Table 4. The coefficients are presented in the table. Robust standard errors are given in parenthesis.

Table 4: Determinants of Retirement Planning

Independent Variables	Logit	Probit	OLS
Financial Literacy	0.32*** (0.08)	0.47 (0.13)	0.10*** (0.02)
Age	0.37 * (0.20)	0.42** (0.17)	0.18*** (0.07)
Gender	0.42*** (0.09)	0.01 (0.10)	0.13*** (0.03)
Employment Status	0.46** (0.23)	0.73** (0.37)	0.14* (0.08)
Working in Financial Sector	0.23** (0.12)	0.23 (0.15)	0.08** (0.03)
Education	0.22** (0.11)	0.35** (0.16)	0.027 (0.03)
Income per Month	3.52*** (0.28)		0.51** (0.08)
LR/ Wald chi^2	265.63***	27.17***	
Pseudo R^2	0.22	0.17	0.52
No. of observations	472	472	472

Note: Retirement Planning is the dependent variable. The independent variable is financial literacy and other relevant socio-demographic variables used in the study are gender, employment status, working in financial sector, education, and income per month. Coefficients are given in the columns followed by a robust error in parenthesis. *, **, *** presents the significant level at the 1%, 5%, and 10% respectively.

In this study, retirement planning is calculated by individuals having any voluntary savings or investments. Following the study of Biosclair and Lusardi (2016) and Lusardi (2019), we restrict our sample to the respondents having ages starting from 24. The estimated coefficient of financial literacy reveals a positive and significant relationship with retirement planning. The result implies that FL motivates the individual to plan for retirement. The increase in retirement planning may eventually help boost the economy as a large population of Pakistan is working in the private sector. Our findings proved that awareness about financial education or financial training might help individuals to create awareness for more savings. More savings help individuals to have a peaceful retirement life.

Further, the estimated coefficient of age indicates that age is significantly and statistically related to retirement planning. The result implies that older individuals tend to save more in comparison with the young individuals in Pakistan. There is also an interesting finding in our study. In Pakistan, males are more concerned about retirement planning in comparison with females. The result depicts the culture prevailing in Pakistan that males being head of the house, has all the responsibilities of the house, including retirement planning. Another important finding of the study is that a higher education level in the country may help to increase retirement planning in the country. Higher education gives a sense of responsibility to an individual, and he starts thinking about peaceful retirement life.

Similarly, the estimated coefficient of working in the financial sector proves that people working in the financial sector are more concerned about their retirement planning in comparison with the people working in the non-financial sector. The income per month is also positively and significantly related to retirement planning. The result implies that people having a higher income urge to save more than the individuals having less income level.

4. Conclusion

This study aims to assess the level of FL in the working population of Pakistan. We also determine the impact of financial literacy and other socio-demographic variables on the retirement planning of the population of Pakistan. The findings suggest that males save more than the female population of Pakistan. This finding implies that more financial literacy programs may be conducted to improve FL and access to financial services to the females of Pakistan. The findings further suggest that self-employed individuals in Pakistan are found more financially literate and care more for retirement planning as compared to the individuals working in organizations.

Moreover, the findings reveal that people working in the financial sector are more financially literate than the people working in other sectors. The findings also prove that as the experience increases, the individual urges to save more and start thinking about retirement planning. The results also provide theoretical and practical implications for improving the FL of individuals in Pakistan. Engaging industry champions and intellectuals may also enhance financial literacy, creating a virtuous cycle, thereby addressing the issue of low savings rate and asset creation. Additionally, these findings may influence policymakers in Pakistan to enhance their efforts in improving financial literacy among individuals. This may help to improve the savings rate thus, resulting in more participation of households in the financial markets, which subsequently enhances the well-being of the general population and decreases the level of poverty (Lusardi, 2019). Improving financial literacy may help the individual to make more rational financial decisions. Our findings suggest that FL levels are relatively low in Pakistan, and great efforts are required to enhance the FL within the country. A future study can be done to investigate whether business education helps the students to start saving at a relatively young age or not in Pakistan.

References

Agarwal, S., Amromin, G., Ben-David, I., Chomsisengphet, S., & Evanoff, D. D. (2015). Financial literacy and financial planning: Evidence from India. *Journal of Housing Economics*, *27(1)*, 4-21.

Agnew, J. R., Bateman, H., & Thorp, S. (2012). Financial literacy and retirement planning in Australian. *UNSW Australian School of Business Research Paper*, (2012ACTL16).

Ahunov, M., & Van Hove, L. (2020). National culture and financial literacy: international evidence. *Applied Economics*, *52*(21), 2261-2279.

Al-Bahrani, A., Buser, W., & Patel, D. (2020). Early Causes of Financial Disquiet and the Gender Gap in Financial Literacy: Evidence from College Students in the Southeastern United States. Journal of Family and Economic Issues, 41(3), 558-571.

Alkan, O., Oktay, E., Unver, S., & Gerni, E. (2020). Determination of factors affecting the financial literacy of university students in Eastern Anatolia using ordered regression models. *Asian Economic and Financial Review, 10*(5), 536-548

Almenberg, J., & Säve-Söderbergh, J. (2011). Financial literacy and retirement planning in Sweden. *Journal of Pension Economics & Finance*, *10*(4), 585-598.
Anderson, A., Baker, F., & Robinson, D. T. (2017). Precautionary savings, retirement planning and misperceptions of financial literacy. *Journal of Financial Economics*, *126*(2), 383-398.
Arpana, M. S. D., & Naidu, G. (2019). A study on financial literacy and its impact on investment decision of professionals. *ZENITH International Journal of Multidisciplinary Research*, *9*(11), 49-54.
Aubram, T., Kovarova-Simecek, M., & Wanzenried, G. (2016). *Financial Literacy, Pension Planning, and Investment Behavior*. Working Paper, UAS St. Pölten.
Beal, D. J., & Delpachitra, S. B. (2003). Financial literacy among Australian university students. *Economic Papers: A journal of Applied Economics and Policy*, *22*(1), 65-78.
Boisclair, D., Lusardi, A., & Michaud, P. C. (2017). Financial literacy and retirement planning in Canada. *Journal of Pension Economics & Finance*, *16*(3), 277-296.
Bucher-Koenen, T., & Lusardi, A. (2011). Financial literacy and retirement planning in Germany. *Journal of Pension Economics & Finance*, *10*(4), 565-584.
Çera, G., Khan, K. A., Belas, J., & Ribeiro, H. N. R. (2020). The role of financial capability and culture in financial satisfaction. *Economic Papers: A journal of applied economics and policy*, *39*(4), 389-406.
Clark, R., Lusardi, A., & Mitchell, O. S. (2017). Employee financial literacy and retirement plan behavior: a case study. *Economic Inquiry*, *55*(1), 248-259.
Cyert, R. M., & March, J. G. (1963). A behavioral theory of the firm. *Englewood Cliffs, NJ*, *2*(4), 169-187.
Fachrudin, K. R., & Fachrudin, K. A. (2016). The influence of education and experience toward investment decision with moderated by financial literacy. *Polish Journal of Management Studies*, *14(2) 63-78*.
Fornero, E., & Monticone, C. (2011). Financial literacy and pension plan participation in Italy. *Journal of Pension Economics & Finance*, *10*(4), 547-564.
Gale, W. G., Harris, B. H., & Levine, R. (2012). Raising household saving: Does financial education work. *Soc. Sec. Bull.*, *72(1)*, 39-49.
Gallery, N., Newton, C., & Palm, C. (2011). Framework for assessing financial literacy and superannuation investment choice decisions. *Australian Accounting, Business and Finance Journal*, *5*(2), 3-22.
Goyal, K., & Kumar, S. (2021). Financial literacy: A systematic review and bibliometric analysis. *International Journal of Consumer Studies*, *45*(1), 80-105.
Grohmann, A., Klühs, T., & Menkhoff, L. (2018). Does financial literacy improve financial inclusion? Cross country evidence. *World Development*, *111(3)*, 84-96.
Gustafsson, C., & Omark, L. (2015). Financial literacy's effect on financial risk tolerance. *Umea School of Business and Economics*,6(1), 17-18.
Hamid, F. S., & Loke, Y. J. (2021). Financial literacy, money management skill and credit card repayments. *International Journal of Consumer Studies*, *45*(2), 235-247.
Hassan Al-Tamimi, H. A., & Anood Bin Kalli, A. (2009). Financial literacy and investment decisions of UAE investors. *The Journal of Risk Finance*, *10*(5), 500-516.

Hsiao, Y. J., & Tsai, W. C. (2018). Financial literacy and participation in the derivatives markets. *Journal of Banking & Finance*, *88(1)*, 15-29.

Janor, H., Yakob, R., Hashim, N. A., Zanariah, Z., & Wel, C. A. C. (2017). Financial literacy and investment decisions in Malaysia and United Kingdom: A comparative analysis. *Geografia-Malaysian Journal of Society and Space*, *12*(2) 24-35.

Kalmi, P., & Ruuskanen, O. P. (2018). Financial literacy and retirement planning in Finland. *Journal of Pension Economics & Finance*, *17*(3), 335-362.

Kebede, M., & Kuar, J. (2015). Financial Literacy and Management of Personal Finance: A Review of Recent Literatures. *Research Journal of Finance and Accounting*, *6*(13), 92-106.

Klapper, L., & Panos, G. A. (2011). Financial literacy and retirement planning: the Russian case. *Journal of Pension Economics & Finance*, *10*(4), 599-618.

Kumari, D. A. T., SM, F. A., & Khalidah, S. (2020). The impact of financial literacy on women's economic empowerment in developing countries: A study among the rural poor women in Sri Lanka. *Asian Social Science*, *16*(2). 31-44

Lusardi, A. (2019). Financial literacy and the need for financial education: evidence and implications. *Swiss Journal of Economics and Statistics*, *155*(1), 1-8.

Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: how do women fare?. *American Economic Review*, *98*(2), 413-17.

Lusardi, A., & Mitchell, O. S. (2017). How ordinary consumers make complex economic decisions: Financial literacy and retirement readiness. *Quarterly Journal of Finance*, *7*(03), 1750008.

Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *Journal of consumer affairs*, *44*(2), 358-380.

Møller, A. P., Fincher, C. L., & Thornhill, R. (2009). Why men have shorter lives than women: effects of resource availability, infectious disease, and senescence. *American Journal of Human Biology: The Official Journal of the Human Biology Association*, *21*(3), 357-364.

Morgan, P. J., & Long, T. Q. (2020). Financial literacy, financial inclusion, and savings behavior in Laos. *Journal of Asian Economics, 68*(2), 101197.

Moure, N. G. (2016). Financial literacy and retirement planning in Chile. *Journal of Pension Economics & Finance*, *15*(2), 203-223.

Nicolescu, L., Tudorache, F. G., & Androniceanu, A. (2020). Performance risk analysis on mutual funds versus stock exchanges in young financial markets. *Journal of International Studies*, *13*(1),279-294

Niu, G., & Zhou, Y. (2018). Financial literacy and retirement planning: evidence from China. *Applied Economics Letters*, *25*(9), 619-623

Niu, G., Zhou, Y., & Gan, H. (2020). Financial literacy and retirement preparation in China. *Pacific-Basin Finance Journal*, 59(2), 101262.

Perry, V. G., & Morris, M. D. (2005). Who is in control? The role of self-perception, knowledge, and income in explaining consumer financial Behavior. *Journal of Consumer Affairs*, *39*(2), 299-313.

Petit, T. A. (1967). A behavioral theory of management. *Academy of Management Journal*, *10*(4), 341-350.

Sachitra, V., & Wijesinghe, D. (2018). What determine money management behaviour of undergraduates? An examination in an emerging economy. *Journal of Education, Society and Behavioural Science*, (33(1), 1-14.

Schmidt, L., & Sevak, P. (2006). Gender, marriage, and asset accumulation in the United States. *Feminist Economics*, *12*(1-2), 139-166.

Seay, M., Kim, K. T., & Heckman, S. (2016). Exploring the demand for retirement planning advice: The role of financial literacy. *Financial Services Review*, *25*(4), 331-350.

Sekita, S. (2011). Financial literacy and retirement planning in Japan. *Journal of Pension Economics & Finance*, *10*(4), 637-656.

Shimizutani, S., & Yamada, H. (2020). Financial literacy of middle-aged and older Individuals: Comparison of Japan and the United States. *The Journal of the Economics of Ageing, 16*(1), 100214.

Sohn, S. H., Joo, S. H., Grable, J. E., Lee, S., & Kim, M. (2012). Adolescents' financial literacy: The role of financial socialization agents, financial experiences, and money attitudes in shaping financial literacy among South Korean youth. *Journal of adolescence*, *35*(4), 969-980.

Stango, V., & Zinman, J. (2009). Exponential growth bias and household finance. *The Journal of Finance*, *64*(6), 2807-2849.

Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics*, *101*(2), 449-472.

Worthington, A. C. (2006). Predicting financial literacy in Australia. University of Wollongong

Xue, R., Gepp, A., O'Neill, T. J., Stern, S., & Vanstone, B. J. (2018). Financial literacy amongst elderly Australians. *Accounting & Finance 59(4) 887-918*.

Yoong, J. (2011). Financial illiteracy and stock market participation: Evidence from the RAND American Life Panel. *Financial literacy: Implications for retirement security and the financial marketplace*, *76(2), 54-63*.

MIXED METHOD APPROACH FOR NEW VENTURE CREATION

[1]Dr Sajjad Dino Shah, [2] Dr Naimutullah Shah, [3] Dr Nanik Ram

Abstract:

Entrepreneurship is only authentic way for economic prosperity in society. Through, entrepreneurship economic development and social wellbeing can achieve. This study aimed to investigate the behavioral and contextual approach for new venture creation among university students of Pakistan. The researchers proposed a hypothetical model on bases of relation among variables. This study employed deductive approach and quantitative method to investigate the relations of defined variables. Research instrument were adapted from existing literature. Survey base method used for collection of primary data. The results of study illustrate that the entrepreneurial intentions are initial phase for new venture creation among students. Such type of intentions can develop through behavioral and contextual approaches. The first three hypotheses from behavioral approach attitude towards behavior, perceived behavioral control and subjective norms accepted at significance level and last two hypotheses from contextual support educational support accepted and structural support rejected. Therefore, policy makers, curriculum designers, parents, teachers and stakeholder may promote entrepreneurial culture among educational institutes.

KEY WORDS: Behavioral, Contextual, New venture creation, Entrepreneurial intentions, Students.

1. Introduction

The entrepreneurship brings economic prosperity in society. It is way of wealth creation and production of economic values. Economists agreed on that point entrepreneurship is authentic and most effective way for poverty eradication from vulnerable communities. After technological advancement and globalization entrepreneurship becomes more important and essential component for economies. As Adam smith (1776) states that entrepreneurship is process of wealth creation and entrepreneur is organizer or producer. Previous researchers discussed that many factors are involved for an individual to be an entrepreneur.

[1]Department of Economics, University of Sindh Jamshoro sajjad.shah@scholars.usindh.edu.pk
[2]Alyamama University KSA syednbshah@gmail.com.
[3]Department of Economics, University of Sindh Jamshoro nanik.ram@usindh.edu.pk.

The involved factors are: financial, social, cultural, contextual, economic, political, legal, institutional, behavioral and psychological. As Ajzen (1991) argued that behavioral factors are main determinant for new venture creation. Trucker and Seluck (2009) argued in favor of contextual factors. So, the difference between entrepreneur and non-entrepreneur is important issue in domain. Lot of researchers argued that new venture creation process is starts from psychological cognitions (Soutirs Zerbiniati & Al-Laham, 2007; Linan & Chen 2009; Kikely, 2016; Mujahid et al., 2020). They believed that inclination towards to perform any type of certain behavior involves human behavior and cognitive psychology. Further, external factors like, country environments, macroeconomic environment, structural support, educational support, structural support, globalization, technological advancement, and many more factors directly impacts on entrepreneurial intentions of individuals (Segal Borgia & Schonenfeld, 2005; Pittway et al., 2007; Amofah et al 2020). Previous scholars confirm that intention is actual and most important stage to perform certain behavior (Bird; 1988; Sutton, 1998; Ramoglou et al., 2016; Anjum et al, 2020). According to Bird (1989) "intentions are the entrepreneur's states of mind that direct attention, experience, and actions toward a business concept". Fayolle kyro & Ulijin (2005), states that intentions are primary or initial phase for new venture creation. In this way, scholars believes that to impact on individual's intentions regarding decision about to be entrepreneurs or not involve many factors but most important are behavioral and contextual. In (1991) Ajzen presents a theory named with theory of planned behavior (TPB). Theory describes about which factors impacts on to perform any particular behavior. Intention's development is process of three main determinants. Include factors are: perceived behavioral control, attitude to behavior and subjective norms. The theory of planned behavior argued that intentions can develop through cognitive inclination and external factors. In this way, other researcher believed that entrepreneurial intentions can develop through contextual factors like, educational support, structural, formal network and informal network. Therefore, this study investigates mixed approach for new venture creation through behavioral and contextual approach. For this purpose, quantitative investigation and university students of Pakistan, Sindh were chosen as respondents.

2. Literature review

Entrepreneurship is most important factor for poverty alleviation and sustainable human development in any economy (Nabi & Liñán, 2011; Sesen, 2013; Gast *et al.*, 2017). According to

Schumpeter (1942) entrepreneurship is base of innovation and new market creation. It is way of sustainability, economic growth, economic development and social wellbeing in society (Thomas & Henley, 2006; Baker & Nelson, 2005; Sata, 2013). Previous studies confirm that strong intentions are guarantee of become self-employed (Thaler & Sunstein, 2008; Ramoglou *et al.*, 2016, Farukh et al., 2019). The entrepreneurial intentions development is necessary step for cultivation of entrepreneurship culture among society. It is way out to compete with international market. There are many factors involved in entrepreneurial process. As entrepreneurship research has been diverged from act to actor (Davidson, 1995; Autio *et al.*, 2001; Fayolle, 2006). In the 19th century mostly, studies focus on what is entrepreneurship what is entrepreneurial process. But now researchers more focused on what is entrepreneur what are the basic qualities of an entrepreneur. In this relation, there are many arguments were presented in literature in favor of different internal and external factors impact on individual intentions (Krueger *et al.*, 2000; Kyro & Carrier, 2005; Segal Borgia & Schoenfeld, 2005). According to Thaler (2016) the individual economic decisions connect with psychological process. The psychological factors like, self-confidence, ambiguity, need for achievement, innovativeness, risk taking, locus of control and big five personality traits directly impact on economic decisions of individuals (McCelland 1996; Hisrich & Peters, 1989; Norashidah & Hussain, 2015). Whereas Ajzen (1991) argued that perceived behavioral control, subjective norms and attitude towards behaviors results to perform certain behavior. Another Scholar Schumpeter (1934) argued that innovation is basic determinant or characteristic of entrepreneur. Many other scholars argued that innovativeness and risk taking is primary factor for to be an entrepreneur. On other hand external factors also occupied very important position in entrepreneurship domain. The contextual factors like, educational support, structural support, formal network, informal network, macroeconomic environment, financial availability, capital availability, enough knowledge, rules regulations and globalization impact on individual economic decisions. In this way, cultural factors like, religion, social norms, traditions, dogmas and personal beliefs have powerful influence on decisions making process (Sajjad & Shafi, 2012; Karimi, *et al*., 2012; Sánchez & Sánchez, 2014; Touzani *et al*, 2015). Further, hereditary, demographic characteristics, educational background, geographical situations and legal frame work impact on entrepreneurial intentions development. The tendency towards any particular behavior is cognitive process and includes many factors (Linan *et al.*, 2013; Kirkley, 2016, Farrukh et al., 2018). Many previous studies proved that intentions as a strong factor for new venture creation (Segal Borgia

& Schonenfeld, 2005; Pittaway *et al.*, 2007; Anjum et al, 2020). Previous studies confirmed the role of psychological cognition and behavior for entrepreneurial process (McMullen & Shepherd, 2006; Gurol & Atsan, 2006; Dej, 2007). It is very crystal clear from literature that new venture creation is multidimensional process. The entrepreneurial intentions are mixed method approach. The central question of current study is to investigate behavioral and contextual approaches towards entrepreneurial intentions among Pakistan universities students.

3. Model and Hypotheses

Entrepreneurial intentions are mixed approach through behavioral and contextual elements. The theory of planned behavior (TPB) introduced by Ajzen (1991). The basic argument of theory is about how an individual inclined towards any behavior or any individual perform certain behavior. Ajzen (1991) argued that three main factors involved in intentions development of any individual like, perceived behavioral control, attitude towards behavior and subjective norms. Mentioned factors are main determinant for intentions development. Entrepreneurship is type of human behavior. Therefore, researchers used three factors of theory of planned behavior as independent variable and entrepreneurial intentions as dependent variable. Further two independent variables educational support and structural support were used as contextual approach. For knowing the inclination of students towards entrepreneurial intentions the researchers proposed conceptual model.

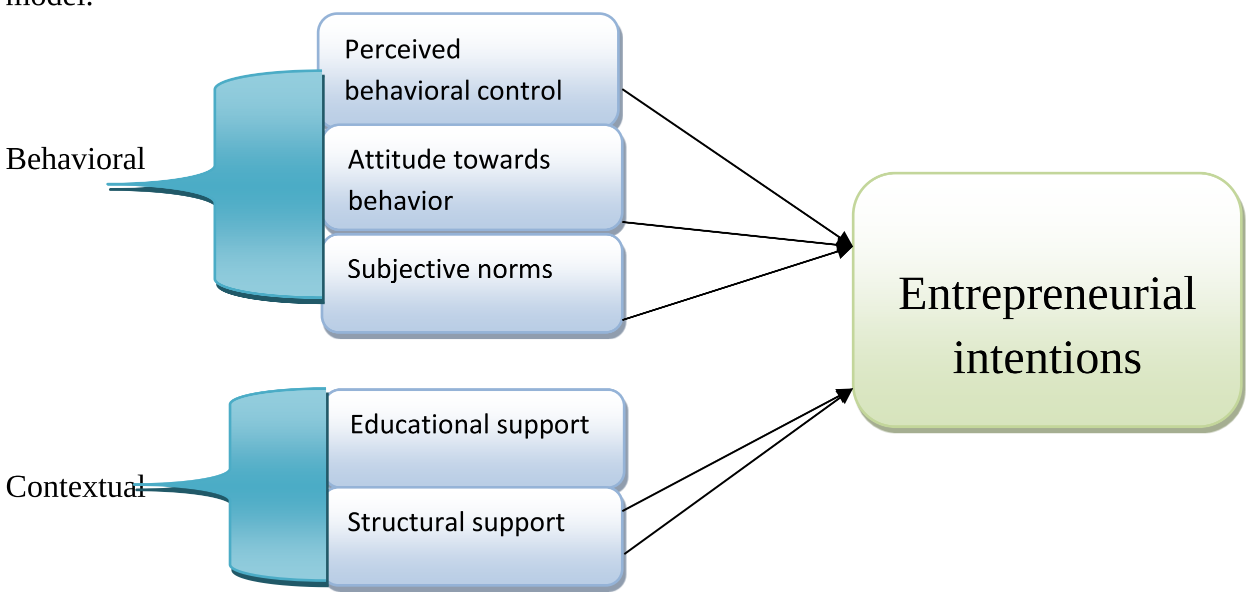


Fig: 1 Conceptual model

Hypotheses

H1: There is a positive relationship between perceived behavior control and entrepreneurial intentions of students.

H2: There is a positive relationship between attitude towards behavior and entrepreneurial intentions of students.

H3: There is a positive relationship between subjective norms and entrepreneurial intentions of students.

H4: There is a positive relationship between educational support and entrepreneurial intentions of students.

H5: There is a positive relationship between structural support and entrepreneurial intentions of students.

4. Research methods

Researchers used positivism approach and deductive method for investigation of problem. It is most appropriate method to know relations of defined variables. Therefore, this investigation employed quantitative technique through primary data. The adapted research instruments were used after minor modification due to cultural variances.

4.1 Research instrument

This study used survey base method for collection of data. Therefore, a survey questionnaire was adapted from existing literature. The adapted research instrument is already validated and reliable. The items of behavioral approach were adapted from Kennedy et al., (2003) and contextual approach items from Trucker and Saluck (2009). Same items also used by many other researchers in domain of entrepreneurship (Linan et al., 2009; Shah & Shah 2017).

4.2 Sample

The unit of analysis of study is university students from Pakistan. Provincial university of Sindh, Pakistan was selected. University of Sindh business and economics students were contacted. The logic behind selections of students as respondents are many: firstly, the one variable of model educational support directly connects with students. Secondly students are main asset in economy. Thirdly students of universities are more curious about career selection. Therefore, students were taken as respondents. For data collection survey base method were employed. For determination of sample size Krejuice and Morgan (1978) sample size formula were used.

5. Results

At initial stage survey base method was employed for collection of data. The researchers collected all data through personal visit**.** Total 350 questionnaires were distributed by personal visit. Received answers were 284. Due to personal visit of researcher response rate was very high. Total response rate was 81.14%. Total 13 questionnaires were removed from main analysis due to issues of missing and outliers. For further analysis 271 sample were used.

5.1 Screening of data

There are many types errors occur during social science surveys. Therefore, the researchers used screening process for further analysis of data. Statistician suggest that it is necessary to screen and clean data in right manner. The researcher employed two well-known methods for screening of data are as 1) Missing analysis 2) Outlier's detections method.

5.2 Missing analysis

Missing analysis is a statistical technique used for knowing and detects the missed values from the data. For this purpose, missing values imputation method were used. The result of missing analysis shows that only eight cases have extreme missing values. The rate or percentages of values were extreme. According to Hair (2006) if missing values is more than 5% should be removed from data. Case numbers (252, 219, 76, 116, 63, 3, 21 and 51) were detected as extreme missing cases. All eight cases were removed from data set.

5.3 Outlier detection

Outliers' detection is another method of screening of data. Outlier refers unique score from rest of data. There are two methods of outliers' detection 1) Univariate outliers 2) Multivariate outliers. This study employed both methods through SPSS. The results show that five cases have extreme type of outliers. Case number (ATB 22, SN 46, 89, ES, 7, and 217) were detected as extreme outlier's cases. Five cases were removed from data set.

5.4 Demographic detail

This study used control variables for demographic information of participants. Include demographic variables are: Age, gender, education, and subject.

Table 1: Demographic detail

Variables	Frequency	Percentage
	Gender	
Male	189	69.7
Female	82	30.3
Total	271	100.0
	Age	
20-29	271	100.0
	Education	
Bachelor	170	62.7
Master	101	37.3
Total	271	100.0
	Subject	
Economics	124	45.7
BBA+ MBA	147	54.3
Total	271	100.0

5.5 Linearity of data

Linearity of data is showing the relationship among defined variables. For this purpose, the researchers used Pearson correlation test. Pearson correlation is widely used and accepted statistical test. The ranges suggested by statisticians 1 to 10. The value 0 is indicating there is no any relationship among variables. The values – are showing negative relation. The value ranges 3 to 7 showing good relation. Below given table are shows that all variables are interconnected with each other.

Table 2 Correlation

	EI	PBC	ATB	SN	ES	SS
EI	*1*					
PBC	.598**	1				
ATB	.403**	.319**	1			
SN	.318**	.212**	.391**	1		
ES	.245**	.174**	.386**	.215**	1	
SS	.147*	.097	.058	.022	.001	1

5.6 Reliability

Reliability is a statistical test usually statisticians employing for knowing the internal consistency among items. The research instrument was adapted from existing literature. Therefore, it is necessary to conduct reliability test. According Nunnaly (2006) if the Cronbach Alpha values more than .60 is acceptable. The result of test shows that all values are above .60. The research instrument is highly applicable and reliable.

5.7 Descriptive statistic

The descriptive statistics are showing general trend of data. It is describing about frequency of collected data. The descriptive statistic talks about mean, median and mode of data. The below givens table is showing maximum and minimum values of data.

Table 3: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
EI	271	24.33	35.56	30.9680	1.88617
PBC	271	17.67	22.83	20.8629	1.33855
ATB	271	9.40	17.40	13.7380	1.63390
SN	271	6.25	13.25	10.7196	1.33983
ES	271	8.00	16.00	10.7815	1.81780
SS	271	11.80	17.00	14.1166	1.14878
Valid N (listwise)	271				

5.8 Hypotheses testing

For knowing the variables relation hypothesis were tested by employing linear regression analysis. The regression analysis is a statistical test used for knowing the hypothetical relations among defined variables in linear way. This model has linear relationship among dependent and independent measure. Therefore, this study employed linear regression analysis tests for testing the hypothetical relations among variables. Hypotheses were tested on suggested values of previous researchers through β, t and significance p value. The determination of coefficient R^2 and F statistic were done. Below givens tables are showing relationship among variables. The results indicate that except educational support all hypotheses accepted at significance level. The R^2 value shows at the (.43) which considered as overall fitness of model is good.

Table: 4 Anova

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	421.310	5	84.262	41.408	.000[b]
Residual	539.252	265	2.035		
Total	960.562	270			

a. Dependent Variable: EI
b. Predictors: (Constant), SS, ES, PBC, SN, ATB

Table: 5 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.662[a]	.439	.428	1.42650

a. Predictors: (Constant), SS, ES, PBC, SN, ATB

Table: 6 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	(Constant) PBC	B	Std. Error	Beta		
	ATB	8.540	1.730		4.937	.000
1	SN	.695	.069	.493	10.026	.000
	ES	.205	.063	.177	3.234	.001
	SS	.181	.071	.128	2.545	.011

	.065	.052	.063	1.256	.210
	.175	.076	.107	2.293	.023
a. Dependent Variable: EI					

6. Discussion

Entrepreneurship is basic element for economic prosperity in society. The researchers developed a mixed method approach for new venture creation. Therefore, researchers developed a conceptual model to know student's inclinations and intentions towards creation of new venture. In this relation, well known social cognitive theory of Planned Behavior TPB (1991) given by Ajzen were used as behavioral approach. Total three variables include (perceived control behavior, attitude towards behavior and subjective norms) were used as independent measure. Further, contextual approach with structural support and educational support were used. Entrepreneurial intentions were tested as dependent variable. Five tentative statements were framed. The quantitative techniques with survey base method were employed. Students of universities were chosen as respondents. The results of linear regression analysis show that all hypotheses accepted at significance level except educational support. The first hypothesis was: *there is positive relationship between perceived behavior control and entrepreneurial intentions of students*. Results shows that PBC -> EI (β=.493 t=10.026 p=.000) and it is also support previous studies of (Fayolle *et al.,* 2006; Souitaris *et al.,* 2007). On the bases of results first hypothesis accepted at significance level. The second hypothesis was; *there is positive relationship between attitude towards behavior and entrepreneurial intentions of students***.** Results shows that ATB -> EI (β=.177 t=3.234 p=.001) and it is also support previous studies of (Peterman & Kennedy, 2003; Fayolle *et al.,* 2006; Souitaris *et al.,* 2007; Fayolle & Gailly, 2009). On the bases of results second hypothesis accepted at significance level. The third hypothesis was; *there is positive relationship between subjective norms and entrepreneurial intentions of students***.** Results shows that SN -> EI (β=.128 t=2.545 p=.011) and it is also support previous studies of (Paço *et al.*, 2011; Zhang *et al.*, 2013; Utami, 2017). On the bases of results third hypothesis accepted at significance level. The fourth hypothesis was; *there is positive relationship between educational support and entrepreneurial intentions of students*. Results shows that ES -> EI (β=.063 t=1.256 p=.210) and it is also support previous studies of (Walter *et al.,* 2011). On the bases of results fourth hypothesis rejected. The fifth hypothesis was; *there is positive relationship between structural support and* *entrepreneurial intentions of students* and results shows that SS -> EI (β=.107 t=2.293 p=.023) and it is also support previous studies of (Storey, 2008; Stephan, 2010). On the bases of results third hypothesis accepted at significance level.

7. Conclusions

Entrepreneurship is basic ingredient for economic development and growth. It is only way and key for under developing countries to achieve highly sustainable economic growth. Under developing countries like, Pakistan is facing big challenge of unemployment. Millions of graduates are facing worst conditions of unemployment. Entrepreneurship is engine of job creation. So, student’s inclination towards entrepreneurship is necessary element. The results of study indicate that entrepreneurship intentions can emerge among students. It is recommended to parents, friends, family and society for creation of such type of environment where students feel free and relax to develop their business ideas. The entrepreneurial intentions are initial phase for new venture creation. Also, it is suggested to authorities make feasible rules and regulation for new venture creation. Findings of study indicate that entrepreneurial intentions can develop through mixed method approach.

8. Limitations

This study used only quantitative technique. Further this study tested only students of university. Ahead this study only used sample of n= 271. The sample of this study only was chosen from provincial university of Sindh.

9. Future direction

In future mixed method can employ for strengthening of framed model. The number of samples can increase. Same model can test on other sectors like, health, engineering. Also, model can be extending with other different approaches like, financial, loaning, psychological, and political.

References

Anjum, T., Farrukh, M., Heidler, P., & Tautiva, J. A. D. (2020). Entrepreneurial Intention: Creativity, Entrepreneurship, and University Support. *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(1), 1-13.

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211.

Autio, E., H. Keeley, R., Klofsten, M., GC Parker, G., & Hay, M. (2001). Entrepreneurial intent among students in Scandinavia and in the USA. *Enterprise and Innovation Management Studies*, *2*(2), 145-160.

Baker, T., & Nelson, R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative science quarterly*, *50*(3), 329-366.

Béchard, J. P., Grégoire, D., Kyrö, P., & Carrier, C. (2005). *Understanding teaching models in entrepreneurship for higher education*. HEC Montréal, Chaire d'entrepreneuriat Rogers-J.-A.-Bombardier.

Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of management Review*, *13*(3), 442-453.

Davidson, P., & McCelland, A. (1996). Superannuation: Options for Reform. *Superannuation Savings and Taxation*, 83-94.

Davidsson, P. (1995). Determinants of entrepreneurial intentions.

Davidsson, P. (2017). Entrepreneurial opportunities as propensities: Do Ramoglou & Tsang move the field forward?. *Journal of Business Venturing Insights*, *7*, 82-85.

Dej, D. (2007). Motivation to become entrepreneur. In *Psychology of entrepreneurship: research and education* (pp. 57-63). Libreria de la UNED.

Do Paco, A., Ferreira, J., Raposo, M., Rodrigues, R. G., & Dinis, A. (2011). Entrepreneurial intention among secondary students: findings from Portugal. *International Journal of Entrepreneurship and Small Business*, *13*(1), 92-106.

Fayolle, A., & Gailly, B. (2009). Assessing the impact of entrepreneurship education: a methodology and three experiments from French engineering schools. *Handbook of University-Wide Entrepreneurship Education*, *203*.

Farrukh, M., Alzubi, Y., Shahzad, I. A., Waheed, A., & Kanwal, N. (2018). Entrepreneurial intentions. *Asia Pacific Journal of Innovation and Entrepreneurship*.

Farrukh, M., Lee, J. W. C., Sajid, M., & Waheed, A. (2019). Entrepreneurial intentions. *Education+ Training*.

Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: a new methodology. *Journal of European industrial training*, *30*(9), 701-720.

Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Effect and counter-effect of entrepreneurship education and social context on student's intentions. *Estudios de economía aplicada*, *24*(2).

Fayolle, A., Kyrö, P., & Ulijin, J. (2005). The entrepreneurship debate in Europe: a matter of history and culture?–Teoksessa Entrepreneurship Research in Europe.

Fuller-Love, N., Midmore, P., Thomas, D., & Henley, A. (2006). Entrepreneurship and rural economic development: a scenario analysis approach. *International Journal of Entrepreneurial Behavior & Research*, *12*(5), 289-305.

Gast, J., Gundolf, K., & Cesinger, B. (2017). Doing business in a green way: A systematic review of the ecological sustainability entrepreneurship literature and future research directions. *Journal of Cleaner Production, 147*, 44-56.

Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education+ Training*, *48*(1), 25-38.

Hemmasi, M., & Hoelscher, M. (2005). Entrepreneurship research: Using students as proxies for actual entrepreneurs. *Journal of Entrepreneurship Education*, *8*, 49.

Hisrich, R. D., & Peters, M. P. (1989). Entrepreneurship: Starting. *Developing, And Managing A New Enterprise, Homewood, IL: BPI, IrwinMcGraw-Hill*.

Hussain, A., & Norashidah, D. (2015). Impact of entrepreneurial education on entrepreneurial intentions of Pakistani Students. *Journal of Entrepreneurship and Business Innovation*, *2*(1), 43-53.

Karimi, S., Biemans, H. J., Chizari, M., Mulder, M., & Zaefarian, R. (2011). The Influence of Perceived Contextual and Cultural Factors on Entrepreneurial Intentions among Iranian College Students.

Kirkley, W. W. (2016). Entrepreneurial behaviour: the role of values. *International Journal of Entrepreneurial Behavior & Research*, *22*(3), 290-328.

Kirkley, W. W. (2016). Entrepreneurial behaviour: the role of values. *International Journal of Entrepreneurial Behavior & Research*, *22*(3), 290-328.

Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of business venturing*, *15*(5-6), 411-432.

Krueger, N., Liñán, F., & Nabi, G. (2013). Cultural values and entrepreneurship.

Leonard, T. C. (2008). Richard H. Thaler, Cass R. Sunstein, Nudge: Improving decisions about health, wealth, and happiness.

Liñán, F., & Chen, Y. W. (2009). Development and cross–cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship theory and practice*, *33*(3), 593-617.

Liñán, F., & Chen, Y. W. (2009). Development and cross–cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship theory and practice*, *33*(3), 593-617.

McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management review*, *31*(1), 132-152.

Nabi, G., & Liñán, F. (2011). Graduate entrepreneurship in the developing world: intentions, education and development. *Education+ training*, *53*(5), 325-334.

Peterman, N. E., & Kennedy, J. (2003). Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship theory and practice*, *28*(2), 129-144.

Pittaway, L.& Cope, J. (2007). Entrepreneurship Education A Systematic Review of the Evidence. *International Small Business Journal*, 25 (5), 479-510.

Sajjad, S. I., Shafi, H., & Dad, A. M. (2012). Impact of culture on entrepreneur intention. *Information Management and Business Review*, *4*(1), 30.

Sama-Ae, T. (2009). *An Examination on the Entrepreneurial Intention among Thai Students at Universiti Utara Malaysia (UUM)* (Doctoral dissertation, Universiti Utara Malaysia).

Schumpeter, J. (1942). Creative destruction. *Capitalism, socialism and democracy*, *825*, 82-85.

Mujahid, S., Mubarik, M. S., & Naghavi, N. (2020). Developing entrepreneurial intentions: what matters?. *Middle East Journal of Management*, *7*(1), 41-59.

Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International journal of Entrepreneurial Behavior & research*, *11*(1), 42-57.

Sesen, H. (2013). Personality or environment? A comprehensive study on the entrepreneurial intentions of university students. *Education+ Training*, *55*(7), 624-640.

Smith, A. (1776). The wealth ofnations. *New York: The Modern Library*.

Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business venturing*, *22*(4), 566-591.

Stephan, P. E., & Levin, S. G. (1996). Property rights and entrepreneurship in science. *Small Business Economics*, *8*(3), 177-188.

Storey, D.J. (2000). Six Steps to Heaven Evaluating the Impact of Public Policies to Support Small Business in Developed Economies, in Sexton, D.L.Landstrom, H.(Eds.). *The Blackwell Handbook of Entrepreneurship. Blackwell, Oxford,* 176-193.

Sutton, S. (1998). Predicting and explaining intentions and behavior: How well are we doing?. *Journal of applied social psychology*, *28*(15), 1317-1338.

Shah, S. D., & Shah, N. (2017). The Role of Psychological and Contextual Factors to Entrepreneurial Intentions. *Asia Pacific-Annual Research Journal of Far East & South East Asia*, *35*.

Thaler, R. H. (2016). Behavioral economics: past, present, and future. *American Economic Review*, *106*(7), 1577-1600.

Touzani, M., Jlassi, F., Maalaoui, A., & Bel Haj Hassine, R. (2015). Contextual and cultural determinants of entrepreneurship in pre-and post-revolutionary Tunisia: Analysing the discourse of young potential and actual entrepreneurs. *Journal of Small Business and Enterprise Development*, *22*(1), 160-179.

Turker, D., & Sonmez Selçuk, S. (2009). Which factors affect entrepreneurial intention of university students?. *Journal of European industrial training*, *33*(2), 142-159.

Utami, C. W. (2017). Attitude, Subjective Norm, Perceived Behaviour, Entrepreneurship Education and Self Efficacy Toward Entrepreneurial Intention University Student In Indonesia.

Walter, S. G., Parboteeah, K. P., & Walter, A. (2013). University departments and self-employment intentions of business students: a cross-level analysis. *Entrepreneurship Theory and Practice*, *37*(2), 175-200.

Yusoff, A., Ahmad, N. H., & Halim, H. A. (2016). Entrepreneurial orientation and agropreneurial intention among Malaysian agricultural students: The impact of agropreneurship education. *Advances in Business-Related Scientific Research Journal*, *7*(1), 77-92.

Zhang, Y., Duysters, G., & Cloodt, M. (2013). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International entrepreneurship and management journal*, *10*(3), 623-641.

Evidence from the Banking Industry in Pakistan to investigate the impact of Customer Service Quality on Customer Satisfaction

[1]Jawad Khan, [2]Dr. Amna Ali, [3]Hena Gul Nisar, [4]Amanullah Khan

Abstract:

Providing high-quality service is always noteworthy. Customer satisfaction is critical in both situations. Some firms focus on maintaining existing clients, while others want to expand their customer base. Customers can be satisfied if businesses provide high-quality services that fulfil their demands. 200 clients of four private-sector banks in Peshawar were surveyed using structured questionnaires. A convenience sampling approach was used to get the sample. Multiple regression approaches were utilised to explain the combined influence of each variable on customer satisfaction in this study. Regression analysis was used to identify the connection between variables, as well as multiple regression techniques to find the link between variables. Customer service efficiency, as well as its dimensions, are positively connected to client happiness, according to the research. As a consequence, we conclude that in private banks, consistency in customer care is important for developing client loyalty.

Keywords: Customer Service Quality, Customer Satisfaction, SPSS, Banking Sector

1. Introduction

In the 21st century, the world has become a global village and business activities, commercialization and market competition is at their peak. The market has become extremely competitive in today's world. Meeting customer need wants and demand are essential for organizations and companies.

[1]Ph.D Scholar-Iqra National University Peshawar, Pakistan

[2]Associate Professor-Iqra National University Peshawar, Pakistan

[3]Lecturer IBMS-The University of Agriculture Peshawar, Pakistan

[4]MS Scholar- IBMS-The University of Agriculture Peshawar, Pakistan

The main idea of the marketing concept is that attracting, retaining and satisfying customers by enhancing and strengthening organizational performance. Nowadays competition has become intensified in the global marketplace (Sivadas and Baker-Prewitt, 2000**).** Industries in numerous sectors have already accomplished reorganization of budgets related to marketing activities to allocate more resources for defensive marketing, specifically retention of the customer (Patterson and Spreng, 1998). Customers' roles are changing all the time in today's fast-paced business environment (Prahalad and Ramaswamy, 2000). In the changing business paradigm, service quality has risen to the top of the priority list for organisations. To retain customers and gain new ones in the market, every business must work on customer quality strategies (El-Adly, 2019). It is broadly acknowledged that service quality is a metric of how often services are delivered to meet customers' standards (Santos, 2003). Customer service quality is an essential factor in deciding a company's competitive position. Customer satisfaction, according to Cronin and Taylor (1992), is a measure of an organization's service productivity. Customer expectations should be met by the organization's service delivery. (Parasuraman and colleagues, 1988). To gain efficiency and effectiveness in business activities or operational processes, the quality of services/goods must be regarded as key factors (Anderson and Zeithaml, 1984). Service providers must deliver exceptional service quality to keep up with the market competition (Rita et al., 2019).

The customer service quality indicators ('tangibility, credibility, dependability, customer response, kindness, skill; communication, trustworthiness, safety, access and understanding') were presented by Leninkumar (2017). The SERVQUAL scale, which comprised these 10 criteria, was developed as a result of previous research with provider firms. The SERVQUAL scale was then broken down into five major variables that affect customer service quality. Some examples are tangibility, dependability, responsiveness, assurance, and empathy (Leninkumar, 2017). Quality of service allows them not only to fulfil current requirements but also to predict potential future demands. When client services are intangible, the level of customer service supplied by a business becomes exceedingly difficult to detect and obtain (Afthanorhan et al., 2019). Several academics are aware of the connection between excellent customer service and client devotion (Pakurár et al., 2019). Exceptional customer quality offers are followed by customer loyalty. For services, there are beneficial correlations between service quality and client happiness (e.g. responsive service providers) (Anderson and Sullivan, 1993). Customer satisfaction is a crucial component of corporate strategy for most businesses (Rust and Zahorik, 1993). The main indicator used to assess customer satisfaction is the customer's someone else's view of the quality of service (Zeithamal and Bitner, 1996). Customer loyalty is perhaps the most important characteristic of any service organisation, and it is unswervingly related to the level of the service rendered (Gera et al., 2017). Customer satisfaction leads to better individual behaviours such as dedication, loyalty, and the creation of a mutually beneficial arrangement (bond) between both the service provider and the client (Newman, 2001).

To expand and stand ahead of the competition in the services industry, financial and bank operations are dependent on increasing customer satisfaction (Mishkin, 2001). The banking sector's contribution has undergone numerous changes to contest international standards (Yavas et al., 1997). Within the banking system, substantial linkages have been discovered between service quality and customer satisfaction (Alabboodi, 2019). In a revolutionary globalized and competitive banking environment, banks have noticed that offering quality services is crucial for progress and survival (Wang et al., 2003).

A significant proportion of research had already concentrated on customer service quality in developed nations' banking industry; moreover, many types of research are now striving to focus (Angur et al., 1999). In the competitive world of today, long-term effectiveness and quality improvement in service quality are important (Waqar and Bakhtiar, 2012). This study will focus on a model that supports customer satisfaction into all strategy formulation and is structured according to worldwide service quality standards.

In today's competitive and moderate market remarkable efforts are made by marketers to retain their customers and also gain new customers. Marketers and organizations are adopting different types of new, innovative, and creative ideas to gain a competitive advantage over competitors. Customer service quality has drawn a lot of deliberation from researchers from the past few decades cause of its remarkable impingement on the performance of the business, customer satisfaction, and success. In the services sector, customer service quality is one among many tools used in the banking sector to create a competitive advantage. Quality of service is considered as an antecedent of the satisfaction of the customer. The research focused on the retention of customers with services sectors determinants, which is explaining the direction of customer satisfaction. Maximum customer retention is predominantly evoked by high customer satisfaction. Customer satisfaction has a relevant impact on retention and considered as a direct antecedent that results in the generation of loyalty therefore deeply influencing customer repurchase intention. Enhancing customer service quality can drive the customer's transaction in banking with customer satisfaction. In such a situation service quality can create a bond between customers and banking services. The research has exposed the effect of customer service quality on customer satisfaction in the banking sector in the jurisdiction of Peshawar.

2. Literature Review

2.1 Customer Service Quality

Business is any lawful activity conducted to generate revenues and profit. Competition has become enormous nowadays worldwide (Sivadas and Baker-Prewitt, 2000)**.** The main idea of the marketing concept is the objective to enhance the performance of the organizations by attracting, captivating, and retaining satisfied customers. Services are practices that usually generate an intangible product such as education, entertainment, food and lodging, transportation, insurance, trade, government, financial, real estate, medical repair and maintenance like occupations (Heizer and Render, 1999).

Quality service is the main factor to differentiate the organization from another service provider organization (Steven, 1989). Vast numbers of study have been carried out to measure the effect on the intended levels of service by personnel in different areas of a service organisation (Afthanorhan, 2019). Quality of customer service is often characterised as overall client satisfaction with the services offered (Rita, 2019). Customer service is viewed as a measure of how well a service firm meets the expectations of its customers (Santos, 2003). the result of an assessment procedure in which clients analyse their views on the service they have given to clients (Kumar, 2017). Customer service quality is the global picture of the deliverable measurements of the company when it made the original purchase choice compared to customer expectations (Kumar, 2017). Quality customer service refers to an innate consumer evaluation of the quality of service that they want to be compared to what they receive (Oh & Kim, 2017).

2.2 Customer Satisfaction

From the past few years, marketers of the services industry have encountered that facing tough competition in the market can be the best handle by providing quality services that are different from what competitors are offering. Customer service is considered as the backbone of the entire system of service-related organizations; which is resulted through the collective efforts of the entire functions of the organization (Steven, 1989). Customer service is managed as an intermediary rendering effect and observed as a collection of personal service aspects which influence can be different from organization to organization. A lot of work and researches has taken place to investigate the impact of employee traits on service procedures (Oliva and Sterman, 2001).

According to Pakurár et al. (2019), customer satisfaction is defined as attaining the satisfaction the consumer anticipates from buying something. The opinion of customers regarding purchase develops when they utilize those services and become satisfied, this satisfaction level makes them a permanent buyer of that brand/company in the future, and always prefer those products who have given them satisfaction (Loudon et al., 1993). Companies and companies depend on client satisfaction to acquire a competitive advantage (Anderson et al., 1994). The measurement of services or products meeting client criteria, requirements and expectations according to the customer's customer satisfaction (Zeithaml and Bitner 2003). Previous research argued that expectations are the only source of satisfaction that customers have from the serviced provider (Oh & Kim, 2017). Satisfaction is an emotional reaction created by an appraisal approach according to the theory of value perception; (Parker and Mathews, 2001). It was previously said that pleasure is related to performance expectations, whereas discontent arises when performance fails (Zeithaml and Bitner, 2003).

2.3 Customer Service Quality and Customer satisfaction

Quality of services and the satisfaction of customers are intimately associated and directly proportionate (Wei and Ramalu, 2011). Measuring items and services with the desired quality and wishes to be achieved after purchase is described as satisfaction (Kant & Jaiswal, 2017). Since this level of client service is visible as a criterion to satisfy customers, most researchers think that a substantial effect on the quality of customer service should be offered to reach a high degree of customer satisfaction (Famiyeh et al., 2018). Quality is among others, one of the most important criteria on which satisfaction is built. Satisfaction may influence future expectations of customers (Khoo et al., 2017). The most effective measure of customer happiness is customer service efficiency (Hazlina et al., 2011). While the real working capital for the service environment has not been significantly linked to customer satisfaction, customer satisfaction is often described as the goodwill of any company with the ability to grow or to attract more customers into the future (Huang et al., 2019). Several researchers have argued that the quality of customer service determines consumer content (Kasiri et al., 2017). The basis for assessment of whether a client is fulfilled or not are standards and expectations (Huang et al., 2019). In addition, consumer expectations contain information about repurchase possibility and future quality that affect customer satisfaction (Nunkoo et al., 2020). Customer satisfaction before purchase is a question mark, purchase with high quality of service may affect their satisfaction level (Nunkoo et al., 2020). Consistency of customer service has a beneficial effect on customer satisfaction, according to prior studies (Khoo et al., 2017). Customer pleasure is seen as a measure of the quality of customer service (Kant & Jaiswal, 2017). Although a recent study found that the expectations of customers can indeed be put into question and reviewed by the services provider that the customer is not always correct, totally contrary to the age-old claim that the customer is always true and that the customer is not even aware of its needs and has to be informed of what it needs compared to what it is (Huang et al., 2019). Better quality of service delivery leads to customer retention and satisfaction, they start trusting your services with the blind view and even take those products even the customer doesn’t ask for that product. In other words, when trust builds among customers, the service provider modifies their taste and standards to other products (Oh & Kim, 2017).

3. Methodology

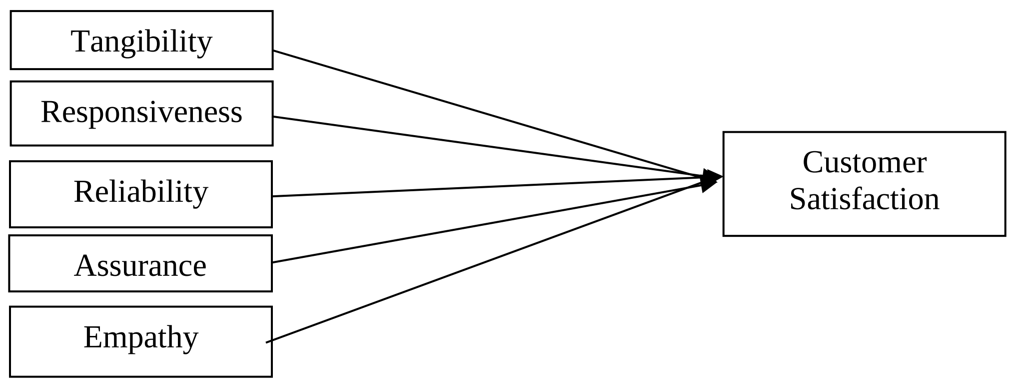
3.1 Data Collection

The population of this study comprised Peshawar's private banks. Using a simple random method, the data sample was chosen from the overall population. Allied Bank Limited, Habib Bank Limited, MCB Bank Limited, and United Bank Limited were chosen. The convenience sampling approach was used to pick an equal percentage of 50 respondents from each of the four private sector banks as the unit of analysis.

Theoretical Framework

Figure: 1

(Customer Service Quality)



3.2 Variables and their measures

The following section describes the variables and their measures. All variables were measured by adopting standardized scales validated by prior research.

3.2.1 Customer Service Quality

In this research study, customer service quality was measured by using a 5-point Likert scale. The survey instrument was a modified version of SERVQUAL as proposed by Parasuraman et al. (1988) having 20 items.

3.2.2 Tangibility

Tangibility is the demonstration of physical facilities such as equipment and tools used by workers to offer services and the facilitation in routine (Looye et al., 2003; Zeithamal et al., 2006).

3.2.3 Reliability

Reliability is the capability of organizations to provide up to date record of customers and deliver the services consistently and specifically as promised by the service provider (Looy et al., 2003).

3.2.4 Responsiveness

Responsiveness means prompt and quick services by the service provider to sustain the customer and help quickness in service delivery. (Looy et al., 2003; Zeithaml et al., 2006).

3.2.5 Assurance

Assurance meant staff thoughtful capability of security, in time deliverance to arouse reliance and assurance among customers, offering safe dealing in services delivery (Looy et al., 2003; Zeithamal et al., 2006).

3.2.6 Empathy

Empathy is known as personnel individualized deliberation of customer service quality to concern and has the customer's greatest curiosity at heart (Looy et al., 2003). Empathy is the unique care of customers and giving personalized services to enchant their demand on the spot Zeithaml et al., (2006).

3.3 Customer Satisfaction

Customer satisfaction was measured by four items established by Gremler and Gwinner (2000).

3.4 Data Collection Tools

The data for this study was collected using questionnaires. Structured questionnaires were administered, which were then subdivided into two groups. Customers' age, education, gender, and employment were all addressed in the demographic section.

3.5 Data Analysis Tools

The following regression model was used to find out the relationship between variables.

$$CS = \beta o + \beta iCSQ + \varepsilon \quad (3.1)$$

$$CS = \beta o + \beta iTAN + \beta 2REL + \beta 3RES + \beta 4ASU + \beta 5EMP + \varepsilon \quad (3.2)$$

Where,

CS=Customer Satisfaction.

CSQ= Customer Service Quality.

TAN=Tangibility.

REL=Reliability.

RES=Responsiveness.

ASU=Assurance.

EMP=Empathy.

Bo and βi are described as model parameters and will be estimated from the sample data by using data analysis.

4. Results and Discussion

4.1 Demographic Figures

In this research study, Table 4.1 shows that 81 per cent of clients were male and 19 per cent were female. Customers aged between 36-40 years range was (22%) expressed satisfaction from bank services, customers aged between 31-35 years (30.5%) and 26-30 years were (40%), customers in this age range are more likely to interact with bank services or deal with them. 8% of the population is employed, while 59% are self-employed. Students made up 24.5 per cent of those who took part in the survey, while others made up 8.5 per cent. A bachelor's degree was held by 8.5 per cent of individuals. The research included 73 per cent of those with a master's degree, employees having MS/M.Phill degree was18.5 per cent.

Table 4.1

Features	Class	n	% Ratio
	Male	162	81.0
Gender	Female	38	19.0
	Total	**200**	**100**
	20 or Below	5	2.5
	21-25	6	3.0
Age (years)	26-30	84	42
	31-35	61	30.5
	36-40	44	22

	41 or Above	0	0
	Total	**200**	**100**
	Employed	16	8.0
	Self-employed	118	59.0
Occupation	Student	49	24.5
	Other	17	8.5
	Total	**200**	**100**
	Bachelors	17	8.5
	Masters	146	73.0
Education	MS/ M.Phill	37	18.5
	PHD	0	0
	Total	**200**	**100**

4.2 Reliability Valuation

When using an adapted scale in a research project, internal consistency is a big problem. According to Streiner (2003), one of the fundamental concepts of classical test theory having parameter should have a high level of internal stability, as shown by Cronbach's alpha. If the range is computed above or equal to 0.7, Pallant, (2007) recommends using Cronbach's alpha value.

Table 4.2

Constructs	**Items**	**Cronach'sAlpha**
Reliability	5	0.70
Assurance	4	0.83
Tangibility	4	0.79
Empathy	4	0.83
Responsiveness	3	0.73
Customer Service Quality	20	0.85
Customer Satisfaction	4	0.76

4.3 Mean Scores

Table 4.3.1: Customer Service Quality mean score resulted from its Dimensions

Dimension	**Over All Mean**	**Mean of Customer Service Quality**
Tangibility	3.69	
Reliability	3.79	
Responsiveness	3.96	3.84
Assurance	3.88	
Empathy	3.91	

Table 4.3.1 is demonstrating the overall average score of Customer Service Quality attained from a mean score of each selected construct of the Customer Service Quality. It was accomplished that the perceptual rating of these dimensions was according to customers' responses. Responsiveness was perceived as a high rater and considered vital in customer service quality appraisal as responsiveness average score was higher than other constructs means. Followed by an average score of empathy construct which featured customer perception was desperately based on the staff's attention towards customers. Almost the same was concluded about assurance and reliability. Tangibility rating was also in agreement with the bank's staff dress code and technological equipment need to be up to date etc but a lot of participants remained silenced.

Table 4.3.2: Customer Satisfaction mean score resulted from its dimensions

Dimension	**Mean**	**Mean of Customer Satisfaction**
My choice to become a customer of the bank was a wise one	3.77	**3.89**
I am always delighted with the bank service	3.93	
Encourage friends and relatives to do business with bank	3.89	
Qintend to continue business with bank	4.00	

Table 4.3.2 is describing how the mean average of customer satisfaction dimension was retrieved from the mean score of its scale.

4.4 Simple Linear Regression

Table 4.4 illustrates the relationship between customer service quality and customer satisfaction aspects. R = 0.81, suggesting that there is a substantial connection between customer satisfaction and customer service quality components. R2=0.65 indicates that the independent variable accurately describes 65 per cent of the variance in the dependent variable.

Table 4.4

Model	R	R Square	Adjt. R square	Std. error
1	0.81	0.65	0.656	0.295

4.4.1 The model's coefficient values

Table 4.4.1 describes the results of the Customer Service Quality Analysis, which shows that Customer Satisfaction is generated from Quality Customer Service. The constant and customer service quality has a substantial impact on the model's p.000 value, which was <.05. Customer service quality was a significant translator of the customer satisfaction concept(t =19.70 p=.000). The relationship between the dependent and independent variables was exactly proportionate to each other, as shown by the customer service quality coefficient. The coefficient indicates a positive link between the relationship and the independent variables.

Table 4.4.1

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	0.250	0.1930	---	1.30	0.197
Customer Service Quality	0.970	0.0512	0.805	19.70	0.000

Table 4.4.1 shows that the coefficient of customer service quality is positive, gives a strong/actual link between variables. The t-ratio for customer service quality has a P-value of less than 0.05, indicating that customer service quality has a substantial influence on customer satisfaction.

4.5 Multiple Regression Analysis

According to the R2 value, a multiple regression model reveals a 66 percent variance in Customer Satisfaction has been expanded by independent variables i.e Assurance, Responsiveness, Tangibility, Reliability, and Empathy.

Table 4.5

Model estimate	R	R Sqr	Adj R Square	Std. Error of
1	0.817^a	0.66	0.650	0.29640

4.5.1Coefficient analysis of variables from the regression model

Table 4.5.1 shows the positive value of each variable as well as the significance value of each variable separately.

Table 4.5.1

Model	Unstandardized Coefficients		Standardized Coefficients	t-ratio	P-v.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.280	0.199	-----	1.501	0.161	-----	----
Reliability	0.210	0.042	0.270	5.030	0.000	0.631	1.590
Responsiveness	0.170	0.034	0.208	4.907	0.000	0.905	1.107
Empathy	0.230	0.050	0.260	4.680	0.000	0.614	1.632
Tangibility	0.190	0.050	0.216	4.450	0.000	0.767	1.302
Assurance	0.181	0.051	0.197	3.334	0.001	0.520	1.917

The coefficients of several characteristics of customer service excellence are shown in Table 4.5.1. It demonstrates that customer satisfaction is connected to each component of customer service quality in a positive and significant (p 0.05) way. Furthermore, major improvements in each of the customer service quality characteristics will greatly boost customer satisfaction. Furthermore, the tolerance and VIF values indicate that there is no concern with multicollinearity in the independent variable studied.

4.6 Hypothesis Assessments

Table 4.6

Hypothesis	β value ,	sig.	Comments
H_1: Customer satisfaction is influenced by customer service quality	0.805,	.000	Accepted
H_2: Customer satisfaction is influenced by tangibility in a favourable and substantial way	0.215,	.000	Accepted
H_3: Customer service is influenced by reliability in a good and substantial way	0.269,	.000	Accepted
H_4: Customer satisfaction is influenced by responsiveness.	0.219,	.000	Accepted
H_5: Customer satisfaction is influenced by assurance in a significantly positive way.	0.196,	.001	Accepted
H_6: Customer satisfaction is linked to empathy in a meaningful and substantial way.	0.254,	.000	Accepted

5 .Discussion, Conclusion and Recommendation

5.1 Discussion

Marketing now a day has become a corporate-level strategy and involves a lot of research and analysis. In the corporate sector organizations are developing marketing departments or outsourcing marketing firms to make effective and efficient marketing plans for their organizations. Through marketing, organizations can create a bond between customers and the organization which leads to long-term relationships. Marketing is applicable both in products and services. Services in today's world have more share than products. The services sector needs a lot of attention in improving quality, innovation, and meet the standards that others are delivering. An increase in the Quality of services will increase the level of satisfaction in customers and vice versa. Customers are important for the organizations but satisfied customers are known as assets of the organizations. Satisfied customers play the role of the marketer in the market for the organization and attract more potential customer which leads to high turnover.

Banking is an important part of the services industry and having a lot of potential customers. In today's world majority of the population intentionally or unintentionally interact with banks. Service Quality is an essential part of the banking industry. The banking industry is facing massive competition in the market and requires a lot of attention and extraordinary steps to meet the competition. In developed countries banking industry constantly adopting new, innovative, and creative ideas with technology up to date to enhance the quality of the service to satisfy and retain the customers. In the past few decades after the privatization of commercial banks, a lot of new banks have entered the market and competition has become intensified in Pakistan. The banking industry has faced a lot of structural and technological changes in Pakistan.

The study was conducted to find the effect of customer service quality and its dimensions on customer satisfaction evidence from the banking industry in the jurisdiction of Peshawar Pakistan. Customer service quality was measured following the five dimensions i.e. Tangibility, Reliability, Responsiveness, Assurance, and Empathy. Tangibility meant the tangible aspect involved in services such as environment and premises, technological up to date and employees dress code of employees of the bank. Reliability shows the services in accordance to what is promised by the bank, problem handling procedures of the bank, in-time delivery of services, and providing of up-to-date record. The responsiveness dimension explains promptness in services and the helpful nature of the employees. Assurance described security of the bank, knowledge of the employees, and services of the bank are in promised timings. Empathy means the employees pay individual attention to customers and providing services with heart. Customer satisfaction was measured as overall satisfaction and four-point scales was used to measure customer satisfaction of customers confirming the results of (Khoo et al., 2017; Huang et al., 2019; Kasiri et al., 2017).

The internal consistency of Customer service quality and its dimensions, as well as customer satisfaction, was found consistent according to the data collected from respondents. Responsiveness and Empathy received a lot of agreement. Both dimensions are related to customer and employee interaction. Data narrate that bank customers in Peshawar want personalized services, the willingness of staff to help and to have the maximum level of interaction with the bank staff. Capable front-line staffs that have a better understanding of the specific needs of customers are the source of attraction for customers. Assurance also showed a positive relationship with satisfaction showed that bank manages their customers professionally and proficiently and also instil the feeling of confidence and reliance in its customers. Reliability also showed positive relation but banks in Peshawar need to improve their services and deliver services what they have promised. It will create a sense of satisfaction and relish among the customers which in result will create favourable word of mouth and will recommend their bank to others. Thus banks need to illustrate a sense of competence in services they are offering and provide services errorless and on time. Tangibility showed a lot of neutrality which means customers want more and banks need to improve the tangible aspects of services such as sound and safe environment and technological up-to-date equipment. Overall customers showed satisfaction and they were happy to recommend their bank to others and they were pleased with their decision of bank selection, as studied by (Nunkoo et al., 2020; Kant & Jaiswal, 2017). The results from the data are clearly stating that customers received high satisfaction whenever service quality is increased and they value the quality of services delivered by the banks. The research study is elaborating that there is a significant affiliation between Customer service quality and its dimensions with customer satisfaction.

5.2 Conclusion

The purpose of this research was to obtain a better understanding of how various private sector banks in Peshawar use Customer Service Quality to achieve customer satisfaction. The study began with a review of the literature, which led to the creation of a frame of reference and the collecting of previous findings. The purpose of this research is to uncover significant features in the banking environment that can be utilized to analyze bank attributes as viewed by consumers. The two traits most closely connected to consumer satisfaction are responsiveness and empathy. The most basic and essential impression of responsiveness and empathy is the communication between employees and customers with attention. Frontline employees have an increasingly important role in satisfying consumers since they have direct contact with them. Employees should be aware of the importance of their work in the delivery of services. Authorities should ensure that human resources are well-managed by personnel to provide excellent service. Moreover, The tangibility component had a lot of neutrality, which meant that the consumer didn't feel overwhelmed by the surroundings. Banks should focus on the physical parts of their business and provide a nice environment for their clients. Customers were generally satisfied with their banks, with a positive connection between all customer service quality attributes and customer contentment.

5.2 Recommendation

Customer service quality is a broad notion, according to previous research, and several sorts of dimensions are utilised to assess the terminology's nature. In the Peshawar domain, the influence of customer service quality should be investigated in conjunction with other factors including as customer loyalty, positive marketing, and customer retention, because customer service quality is a major component of customer happiness. The primary goal of a Pakistani financial institution's business plan should be to provide the finest possible services. SERVQUAL should be used by bank management to evaluate customer service excellence in Pakistani banks. To provide workers with an awareness of service traditions and service dominance, the banking industry must set aside funds and establish plans for staff training and development. Employee training and development programmes should be arranged regarding face-to-face or interpersonal interaction with customers, as well as customer care services in order to fulfil the client's desire for personalized services in a better way.

References

Alabboodi, A. S. (2019). The effect of customer satisfaction on service quality: The case of Iraqi banks. International Journal of Applied Research, 5(1), 146-152.

Afthanorhan, A., Awang, Z., Rashid, N., Foziah, H., & Ghazali, P. (2019). Assessing the effects of service quality on customer satisfaction. Management Science Letters, 9(1), 13-24.

Anderson, C. and C.P. Zeithaml (1984). Stage of the Product Life Cycle, Business Strategy and Business Performance. Academy of Management Journal, 27, 5-24

Anderson, E.W., C. Fornell and D.R. Lehmann. (1994). Customer satisfaction, market share, and profitability: findings from Sweden , Journal of Marketing, 58, 53-66.

Angur, M.G., R. Nataraajan and J.S. Jaheera. Jr. (1999). Service quality in the banking industry: an assessment in a developing economy. International Journal of Bank Marketing, 13 (3):116-23.

Beerli, A., J.D. Martin and A. Quintana. (2004). A model of customer loyalty in the retail banking market. European Journal of Marketing, 38(1/2):253-275.

Blodgett, J. and K. Wakefield. (1999). Customer response to intangible and tangible service factors. Psychology and Marketing, 16(1): 51.

Chau, V.S. and Y.Kao. (2009). Bridge over troubled water or long and winding road: Gap 5 in airline service quality performance measures', Managing Service Quality, 19(1):106-134.

Cronin, J. J. and S.A. Taylor. (1992). Measuring service quality: A Reexamination and extension. Journal of Marketing, 56, 55-68.

El-Adly, M. I. (2019). Modelling the relationship between hotel perceived value, customer satisfaction, and customer loyalty. Journal of Retailing and Consumer Services, 50, 322-332.

Famiyeh, S., Asante-Darko, D., & Kwarteng, A. (2018). Service quality, customer satisfaction, and loyalty in the banking sector. International Journal of Quality & Reliability Management.

Gera, R., Mittal, S., Batra, D. K., & Prasad, B. (2017). Evaluating the effects of service quality, customer satisfaction, and service value on behavioral intentions with life insurance customers in India. International Journal of Service Science, Management, Engineering, and Technology (IJSSMET), 8(3), 1-20.

Hazlina, T. et al (2011). Impacts of service quality on customer satisfaction: study of online banking and atm services in Malaysia. International Journal of Trade, Economics and Finance, 2(1), 10-23.

Huang, P. L., Lee, B. C., & Chen, C. C. (2019). The influence of service quality on customer satisfaction and loyalty in B2B technology service industry. Total Quality Management & Business Excellence, 30(13-14), 1449-1465.

Kasiri, L. A., Cheng, K. T. G., Sambasivan, M., & Sidin, S. M. (2017). Integration of standardization and customization: Impact on service quality, customer satisfaction, and loyalty. Journal of Retailing and Consumer Services, 35, 91-97.

Kant, R., & Jaiswal, D. (2017). The impact of perceived service quality dimensions on customer satisfaction. International Journal of Bank Marketing.

Khoo, S., Ha, H., & McGregor, S. L. (2017). Service quality and student/customer satisfaction in the private tertiary education sector in Singapore. International Journal of Educational Management.

Kumar, A. (2017). Effect of service quality on customer loyalty and the mediating role of customer satisfaction: an empirical investigation for the telecom service industry. Journal of Management Research and Analysis, 4(4), 159-166.

Leninkumar, V. (2017). The relationship between customer satisfaction and customer trust on customer loyalty. International Journal of Academic Research in Business and Social Sciences, 7(4), 450-465.

Loudon, D., D. Bitta and J. Albert. (1993). Consumer Behaviour, McGraw-Hill, Singapore.

Mishkin, F.S. (2001). The economics of money, banking and financial markets, 6th ed., Addison-Wesley, Reading, MA.

Munteanu, C., Ceobanu, C., Bobalca, C. and Anton, O. (2010).An analysis of customer satisfaction in a higher education context", International Journal of Public Sector Management, 23(2):124–140.

Newman, K. (2001). Interrogating SERVQUAL: a critical assessment of service quality measurement in a high street retail bank", International Journal of Bank Marketing,19(3):126-39.

Nunkoo, R., Teeroovengadum, V., Ringle, C. M., & Sunnassee, V. (2020). Service quality and customer satisfaction: The moderating effects of hotel star rating. International Journal of Hospitality Management, 91, 102414.

Oh, H., & Kim, K. (2017). Customer satisfaction, service quality, and customer value: years 2000-2015. International Journal of Contemporary Hospitality Management.

Oliver, R. L. (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions," Journal of Marketing Research, 17, 46-49.

Pallant, J. (2007). SPSS survival manual: A step by step guide to data analysis using SPSS for Windows.

Parasuraman, A., Zeithaml, V.A. and Berry, L. (1988) 'SERVQUAL: a multiple-item scale for

measuring customer perceptions of service quality', Journal of Retailing, Spring, Vol. 64, No. 1, pp.12–40.

Pakurár, M., Haddad, H., Nagy, J., Popp, J., & Oláh, J. (2019). The service quality dimensions that affect customer satisfaction in the Jordanian banking sector. Sustainability, 11(4), 1113.

Parker, C. and B. Mathews. (2001). Customer satisfaction: contrasting academic and consumer interpretations, Marketing Intelligence and Planning, 19(1):38–44.

Prahalad, C.K. and V.Ramaswamy. (2000). Co-opting customer competencies. Harvard Business

Review, 79-87.

Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. Heliyon, 5(10), e02690.

Rust, R., and A.J. Zahorik. (1993). Customer Satisfaction, Customer Retention, and Market Share. Journal of Retailing, 69(2):193–215.

Santos, J. (2003). E-service quality: a model of virtual service quality dimensions, Managing Service Quality, 13(3):233-46.

Stevens. C. Graham. (1989). Integrating the Supply Chains, International Journal of Physical Distribution and Materials Management, 8,(8):3-8.

Streiner, D. L. (2003). Being inconsistent about consistency: When coefficient alpha does and doesn't matter. Journal of Personality Assessment, 80(3):217-222.

Wang, Y., H. Lo. and Y.V. Hui. (2003). The antecedents of service quality and product quality and their influences on bank reputation: evidence from banking industry in China. Managing Service Quality, 13 (1):72-83.

Waqar, H. and M. Bakhtair. (2012). Customer Satisfaction: A Comparison of Public and Private Banks Of Pakistan. Journal of Business and Management (IOSRJBM), 1(5): 01-05.

Wei, C. C. and S.S. Ramalu. (2011). Students Satisfaction towards the University: Does Service Quality Matters. International Journal of Education, 3(2): 15.

Wisniewski, M. (2001). Using SERVQUAL to assess customer satisfaction with public sector services. Managing Service Quality, 11(6): 380-388.

Yavas, U., Z. Bilgin and D.J. Shemwell. (1997). Service quality in the banking sector in an emerging economy: a consumer survey", International Journal of Bank Marketing,15(6):217-23.

Zeithamal, V. A. and M.J. Bitner. (1996). Services marketing. New York: McGraw-Hill.

Zeithaml, V.A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. Journal of Marketing, 52(3):2-22.

Zeithaml, V.A. and M.J.Bitner. (2003). Service Marketing: Integrating customer focus across the firm, McGraw-Hill, New York.

In the pursuit of Competitive Advantage through Leadership: Role of Human Capital

Adnan Bashir[1], Dr. Samra Javed [2]

Abstract:

The major objective of the study is to investigate the role of human capital and leadership in competitive advantage. The data was collected using a close ended questionnaire. We applied partial least square structural equation modeling to analyze the relationships extracted from the literature review. The results, negating the conventional wisdom, showed an insignificant impact of strategic leadership on competitive advantage. Whereas the study's findings confirmed the indirect effect of strategic leadership on competitive advantage, through human capital. These findings construe the full mediating role of human capital in the association between strategic leadership and competitive advantage. The findings imply the use of strategic leadership for human capital development to further attain competitive advantage. The use of cross-sectional data is one of the major limitations of the study.

Keywords: human capital; strategic Leadership; Competitive Advantage; PLS-SEM

1. Introduction

Due to increasing competition among the organization globally, new and innovative methods are being adopted to ensure competitive advantages (Afiouni, 2007). Thus, customer satisfaction turns out to be a key of success to safeguard survival and competitiveness. Globalization is increasing competition between organizations. As a result, organizations become more attentive toward their customers. For this purpose, investments are being shared based on cost among the organization within the market (Bartlett & Ghoshal, 2000). “Individual Technocratic Entrepreneurs” are also managed in a better way than their competitor by the successful organization (Ojeda, Simpson, Koh, & Padmore, 2007). All types of organizations are involved in emerging competitive environments for gaining competitive advantages. Therefore, they need the veracious, honest and visionary type of leadership capabilities. Only effective leaders can create innovative environments, wisely identify challenges, and try to sustain high performance of the organization (Vardiman et al., 2006). However, different scholars define leadership by different ways. According to Propper and Lipshitz (1993) “leadership is an art of motivating people to act by non-coercive means”. Likewise, Alas et al. (2007) “explain leadership by the way of leader behavior, traits, relationship pattern, influence over follower, follower perception, way to perform task, control over the organizational environment, and firm culture”. Similarly, Vardiman et al. (2006) and Yulk (2006) posit “leadership is a process of influence toward the completion of goals”.

On the other hand, Vardiman et al. (2006) explain that such type of leadership generally emphasizes the dyadic relationships between a follower and leader but does not focus on what settings need to be in place for an effective leader to emerge to be developed. Organizational

[1] Ph D Scholar, Management Sciences, SZABIST, Karachi, addi.briliant@gmail.com
[2]Assistant Professor, Head of Office of Research Innovation and Commercialization,IoBM, samra.javed@iobm.edu.pk

performance and competitive advantages depend upon the selection and development of leadership (Amagoh, 2009). The word strategy emerged from Greek word “Strategos” which means a general in command of the army. The word strategy explains a roadmap/plan of certain activities. It is an ability used for rival to defeat, through which a systematic, unidirectional, unified, and comprehensive plan of system is defined. Therefore, strategic leadership can be defined as the capability/ability to influence others, take a routine decision for long organizational sustainability. They transform a critical situation into meaningful opportunities. They try to safeguard an organization’s profit from risk with their comprehensive strategies and thinking. They understand market risk and emerging strategic processes. They control and monitor organizational performance as well as employee performance (Gupta, 2018). In the literature, the alignment of business strategy and organizational strategy recognized as a critical antecedent of organizational success (Chan, Sabherwal, & Thatcher, 2006; Chen, Sun, Helms, & Jih, 2008; Huerta, Thompson, Ford, & Ford, 2013; Yayla & Hu, 2012). Formulation of organizational strategy and business strategy, in favor of corporate success, is a big challenge for top management and leaders (Johnson & Lederer, 2010; Lee, Koo, & Nam, 2010; Yun, Choi, & Armstrong, 2018). However, theory related to strategic leadership explains that leadership and upper manager’s demographics play a critical and significant role in formulating and implementing strategy. Effective implementation of strategy required sound knowledge, strong skills, and leadership styles of main decision-makers (Elenkov, Judge, & Wright, 2005). Despite lots of studies, it had established the substantial role of upper leadership in completing organizational goals and alignment of strategies, but, still, the research gap is excited in the study of strategic leadership competencies. This is because most of studies focus on management engagement, involvement/participation, and strategic knowledge (Kearns & Sabherwal, 2007). According to the theory of contingence, there is no preeminent rule through which organizations are lead because leader’s efficiency is contingent and it depends upon the social, institutional and organizational context (Shao, 2019).

Human Capital (HC) has emerged as a new, innovative, and modern concept to understand business's competitive advantages in knowledge-intensive with the rapid growth in the global knowledge economy and rapidly changing in the business environment (Perrott, 2007; Kavida & Sivakoumar, 2010). Notwithstanding, the expanding knowledge in the field of human capitak is, nevertheless, more than a few absences in the past literature have to be addressed. We cannot ignore the importance of HC because most of the organizations, institutes and managers are researching this field. It had been claimed by the Organization for Economic Cooperation and Development (OECD), most of the organizations are investing in Research & Develop (R&D), employee training, computer and administrative system and customer relation (OECD, 2008). However, these investments are growing employee capability and help to gain competitive advantages. As per the Resource-Base view (RBV), a firm can achieve long-term competitive advantages by analyzing past and present firm performance, achieving organizational goals, and implementing successful strategies. For Wernerfelt (1984), competitive advantages and financial performance assets are vital for organizations. Both types of resources, intangible and tangible, are used as potential strategic assets. The importance of both resources is accounted in the field of strategic management, accounting, and economics. However, results showing positive correlation between organizational performance and strategic management (Canibano, Garcia, and Sanchez, 2000). The intangible asset is derived from the ability to keep the entire characteristic of strategic assets (Godfrey and Hill, 1995).

On the other hand, most of organizations do not consider intangible assets as strategic assets. While, human capital is generally measured as strategic assets within the organizations (Mouritsen, 1988). Giving to HC means that the valuable and specific knowledge that's belongs to the firm. For this purpose, new and innovative tactics are adopted by the organization. Competitive advantages may be derived from the economic, strategic, knowledge, and psychological side. Different theories were introduced in strategic management to gain competitive advantages; it said that the roots of these theories were derived from the three factors; economic, sociology, and psychology (Wang, 2014). The following theories, like transaction cost theory, agency theory, and resource-based theory, were derived from the economic root of discipline, while resource dependence theory and organization ecology were derived from the sociological roots (Wang, 2014). More, organizational behavior theory was derived from psychology. However, the central purposes of all thoughts are to gain competitive advantages.

1.2 Research Problem

It has been recognized that human capital is one of the essential source which helps to gain competitive advantages. Some researchers proclaimed that only those organizations can gain competitive advantages if and only if the organization has the ability to make constant innovations in the form of new business processes (Tidd, Bessant and Pavitt, 2005; Rodrigues, Pedro, and Carlos, 2010). Further, the organization's survival depends on its capabilities to learn and innovate, which are abstracted from the HC in the form of organizational intelligence, competencies, and customer satisfaction (Chahal, and Bakshi, 2015). Moreover, HC is considered a primary source that impacts competitive organizational advantages (Kavida, and Sivakoumar, 2009).

On the other hand, the role of strategic leadership cannot be ignored in 21st century. Social capital and Human capital are considered as major resources of an organization. Such resources cannot be derived without proper planning, direction, and strategy. Therefore, competitive organizational advantages cannot be gained without SL. So, it needs to develop a theoretical research framework of Organizational Resources, SL and Organizational Knowledge (Mahdi, & Almsafir, 2014). To be more specific, it has been observed that competitive advantages are only gained by those organizations which succeed in mobilizing strategies, intellectual assets in the form of knowledge, and technological skills. According to Resource-Based View (1984) and Knowledge-Based View (1991), there is no clear explanation of how competitive advantages can be gained (Mahdi, Nassar, & Almsafir, 2019). Therefore, if an organization has no strategy and intellectual assets, competitive advantages will be suffered (Ling, 2013). So, to gain the competitive advantages, organizations need to enhance leadership skills, and human capital. Therefore, it is needed to know how various factors affect the competitive organizational advantages. Further, how knowledge management impact on human capital and competitive advantages (Chahal, and Bakshi, 2015).

Against this backdrop, this study aims to examine the relationship between strategic leadership, human capital, and competitive advantage. The study has the following specific objectives:

- *to find the direct impact of Strategic Leadership on Competitive Advantages.*
- *to find the direct impact of Strategic Leadership on human capital*
- *to find the role of human capital between SL and Competitive Advantages.*

The study has some limitations. First, is this study composing different limitations. First, this study is being conducted only in the region of Karachi and Lahore. Second, this study covers only private sector not public organizations. Third, only few dimensions are selected for this study.

2. Literature Review

2.1 Strategic Leadership Capability (SL) and Competitive Advantage

Almost every organization is being faced central issue in strategic management is why some organizations perform better than others. However, some researchers argued, only those firms are performing better in which SL is being exercised (Ireland, Hitt, & Vaidyanath, 2002; Miller, 2002). Leaders at all levels of the company, firm, or organization should develop such type of abilities, indicating that SL may be exercised from lower management to top management level (Hitt, & Duane, 2002).

Strategic Leadership is a complex multidimensional competency with many shades and gradations that make it difficult (Sorcher, & Brant, 2002). There is no doubt creating strategic leadership qualities are complex and multi-shaded activity. Davies, (2004) identifies two types of strategic leadership abilities associated with strategic leaders i.e. abilities to undertake organizational activities and personal characteristics/individual abilities. Strategic leaders have the following organizational skills to develop strategic competencies, to be strategically oriented. This ability involves considering both long & short-term organizational futures and translating strategy into action. Strategic leaders convert strategy into action by converting into operational terms (Lin and McDonough (2011). Further, they investigated strategic leadership directly impacts on knowledge sharing culture.

Sadeli, (2015) examines three dimensions of leadership behaviors on employee engagement mediating by intangible organizational factors like organizational culture, perceived organizational support, and talent management practices. Sadeli, (2015) considered the behavioral leadership dimensions which were transformational, transactional, and interactional. This study showed that three leadership behavior have significant influence on three mediating variables such as organizational culture, perceived organizational support, and talent management practices. In addition, these mediating variables also influence on employee engagement. Competitive advantages/sustainable competitive advantages are related to firm/organization efforts in establishing and maintaining long- or short-term advantages. Short or long-term advantages ultimately reflect organizational performance. Therefore, organizations can achieve/ensure competitive advantages by giving preference to customer demand and product/services quality as compared to their competitors (Lev, 2017). Sustainable competitive advantages can only gain by an organization when it is in a position to implement value-creating/innovative strategies which cannot be copied or duplicated by its competitors (Delery, & Roumpi, 2017). Therefore, Leadership Strategies are required commitment, decision and action to achieve strategic competitiveness. Organizational Competitive Strategies are concerned with how an organization can gain competitive advantages by applying a distinctive approach (Kumar, & Pansari, 2016).

Proposition 1: Strategic leadership improve the competitive advantage of a firm

2.2 Role of Human Capital: Strategic Leadership and Competitive Advantage

The research on human capital can be traced back to the seminal work of Penrose (1958), Schultz (1961), and Becker (1962). These researchers highlighted knowledge skills and abilities as the major differentiator in productivity and income. Human capital can be considered an employee of the organization who provides skills and expertise to solve business problems. Therefore, the organization uses human capital to gain competitive advantages. Human capital knowledge, skills, and expertise cannot be listed in the balance sheet. Moreover, human capital knowledge is that knowledge that is present in the mind of an employee. It means organizations cannot save such type of knowledge. In other words, it can be said that human capital knowledge remains in the employee and cannot be kept on an organization when they go home (Halim, 2010). Halim (2010), further explain that human capital is what employee brings into the value adding processes and contains leadership style, professional competencies and employee motivation. In short, human capital is a precious asset for an organization which observed as how organization gain competitive advantages by using employee knowledge, expertise, learning and skills, creativity and education to create organizational value. Moreover, how organizations gain competitive advantages by using human capital (Chahal, et.al. 2015). Competitive advantages:

Proposition 2: Strategic Leadership develops human capital

Nthini, (2013) conducted research on the performance of commercial and financial corporations in Kenya. He explored the effect of strategic leadership practices on the performance of those organizations. He discussed different strategic leadership practices which affect organizational performance. He found that strategic leadership practices determine corporate strategic direction, balance organizational control, emphasize ethical practices, emphasizes effective organizational culture, effective management of resources, and effective control on corporate resource portfolio. Furthermore, he examined, these practices are highly correlated with net profit margin, employee turnover, return on investment, and customer satisfaction. Further, balanced strategic leadership practices give a better understanding of organizational performance, net profit, annual turnover, etc. According to Sotarauta (2016), a true leader has the following qualities: leading, teaching, influencing, and guiding.

Proposition 3: Human capital improve competitive advantage if a firm

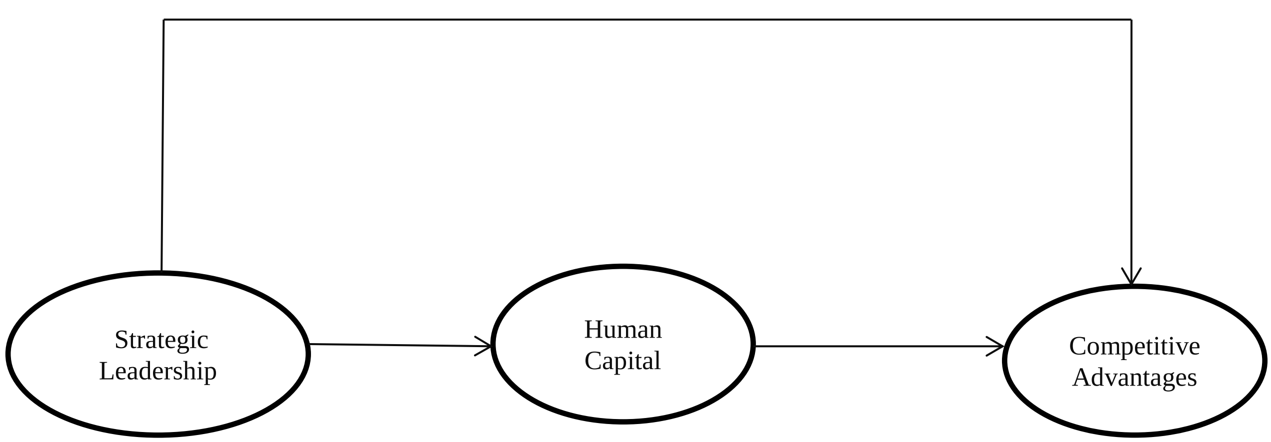


Figure 1: Conceptual Model

3. Methodology

3.1 Sampling Technique

A convenient sampling technique was used to conduct data from the respondent. Convenient sampling is a non-probability technique where the subject is selected b/c of its easy accessibility. So, in this study, we collect data by using convenient sampling.

3.2 Data collection techniques

The individual was selected as the unit of analysis for this study. Only organizational employee was selected as a respondent. Different techniques are used for the collection of data, such as interviews, surveys, observation, etc. This quantitative study approach is being used, so the survey method will be used to collect data from the banking sector by using different methods like internet, email, etc. Different questions will be adopted for selected variables. Five-point Likert scales were used to conduct a survey from the employee.

3.3 Data Analysis Technique

Quantitative techniques will be used to analyze the data. For data analysis, different techniques are used such as regression analysis, correlation, factor analysis etc. to verify results. However, in this study PLS used by using Structural Modeling Equation (SME) to verify results. Cronbach alpha used to measure the internal consistency and reliability between the items of the variables. Kurtosis and Skewness used to measure the validity and normality of the data.

4. Data Analysis

In this section we are going to explain results of our study. Results were obtained by using the software of SmartPLS and SPSS 21. Two different techniques, PLS Algorithm and Bootstrapping, were used for obtaining results. PLS Algorithm was used to identify quality criteria of the model and Bootstrapping to find standard error, t-value, and to test significance of path relationship between constructs. The descriptive statistic was obtained by using SPSS. Obtained results are mentioned below in detail. The estimated model contains various latent variables (Strategic Leadership, Human Capital, Competitive Advantages) which are connected by arrows.

Descriptive statistics calculate by using SPSS software. Table#1 shows the Descriptive Statistics of the indicator of construct that include total number of respondents (98), mean, Standard Deviation, Skewness, and Kurtosis.

Table#1

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
SL1	98	1	5	2.2959	0.9866	0.489	-0.18
SL2	98	1	5	2.3163	0.96961	0.639	0.022
SL3	98	1	5	2.551	1.0064	0.26	-0.353
SL4	98	1	5	2.602	0.93874	0.194	-0.305
SL5	98	1	5	2.2143	1.15097	0.811	-0.116

SL6	98	1	5	2.1633	0.95996	0.949	0.954
SL7	98	1	5	2.2551	1.13348	0.954	0.222
SL8	98	1	5	2.5408	1.07616	0.247	-0.706
SL9	98	1	5	2.1429	1.07454	1.083	0.584
SL10	98	1	5	2.2245	1.13547	1.011	0.478
HC1	98	1	5	2.4286	0.83728	0.984	0.871
HC2	98	1	5	2.2959	0.89913	0.678	0.154
HC3	98	1	4	2.3878	0.85714	0.257	-0.502
HC4	98	1	5	2.3265	0.96084	0.864	0.848
CA1	98	1	5	2.4184	0.96242	0.272	-0.551
CA2	98	1	5	2.5408	0.93244	0.268	-0.195
CA3	98	1	5	2.5612	0.90891	0.151	-0.432
CA4	98	1	5	2.5816	0.95165	0.127	-0.645

Reliability and Validity

For every researcher, the collection of data is a challenging and very tough process. Once the data is collected, in addressing the degree of measurement of error in data the reliability and validity of data is calculated by using different statistical techniques. For this purpose, Internal Reliability, Convergent Validity and Discriminant Validity are calculated. Below reliability and validity is described in detail.

Internal consistency reliability measures reliability between the items of constructs. Generally, internal consistency between the items is measured by Cronbach Alpha. As per standard value of Cronbach alpha should be lie 0.65 to 0.90. If Cronbach Alpha value is lie between the range of 0.65 to 0.90 then internal consistency between the items are considered as appropriate. As shown in the **table#2** value of Alpha is fall in the range of 0.65 and 0.90. Therefore, it is clearly indicating that there is no issue regarding internal consistency reliability between the items.Alternatively, internal consistency reliability can be measured by Composite reliability. Composite reliability also considered as alternative method of Cronbach's Alpha. Measurement criteria for Composite reliability are same as Cronbach's Alpha. The value of Composite reliability should be lying in the range of 0.65 to 0.90. In the **Table#2** indicating that values are falling in the range of 0.65 and 0.90 which means that there is no issue regarding internal consistency reliability.

Further, Convergent Validity is used to measure the degree to which two constructs are theoretically related or not. It is commonly used in sociology, and behavioral sciences. Convergent validity is established if two constructs correspond with one another. Convergent validity is measured by factor loading and also known as outer loading which is indicating in **Table#2.** As per rule, the value of factor loading for each indicator should be higher 0.708 (Hailr, 2012). In **Table#2** the value of factor loading for each indicator is higher than 0.70 which means that there is no issue regarding convergent validity.

Similarly, Average Variance Extracted (AVE) is a measure to assess convergent validity. AVE measures the level of variance captured by a construct versus the level due to measurement error. As per rule, if the values of AVE are above 0.708 that is considered as very good. If the values are higher than 0.50 that is consider as acceptable. **Table#2** indicating the values AVE for each construct which is higher than 0.50. Therefore, there is no concern regarding convergent validity in the collected data.

Table#2
Internal Consistency Reliability and Convergent Validity

Construct	Average Variance Extracted	Cornbach Alpha	Composite Reliability	Indicators	Factor Loading
SL	0.540	0.903	0.920	SL1	0.758
				SL2	0.765
				SL3	0.752
				SL4	0.650
				SL5	0.814
				SL6	0.806
				SL7	0.739
				SL8	0.477
				SL9	0.728
				SL10	0.795
Human Capital	0.521	0.689	0.812	HC1	0.772
				HC2	0.780
				HC3	0.603
				HC4	0.719
Competitive Advantages	0.586	0.764	0.849	CA1	0.741
				CA2	0.758
				CA3	0.747
				CA4	0.813

Discriminant Validity

Discriminant validity is used to identify how constructs are different from other constructs by empirical standards. Cross Loading is used for checking discriminant validity. As per rule, values of factor loading for each construct must be greater than the loading of other constructs. **Table#3** is showing the value of each construct. It shows that factor loading of associated construct is greater than other constructs. For example, the value of factor loading for SL1 is 0.758 which is greater than the factor loading of all other constructs. Similarly, the value of factor loading for associated construct is greater than the value of factor loading of all other constructs as shown in the **Table#3.**

Table 3: Cross Loadings

	SL	HC	CA
SL1	**0.758**	0.509	0.514
SL2	**0.765**	0.639	0.509
SL3	**0.752**	0.587	0.578

SL4	**0.650**	0.533	0.485
SL5	**0.814**	0.469	0.408
SL6	**0.806**	0.461	0.404
SL7	**0.739**	0.305	0.426
SL8	**0.477**	0.253	0.290
SL9	**0.728**	0.289	0.327
SL10	**0.795**	0.419	0.466
HC1	0.426	**0.772**	0.406
HC2	0.464	**0.780**	0.445
HC3	0.372	**0.603**	0.349
HC4	0.535	**0.705**	0.306
CA1	0.480	0.440	**0.741**
CA2	0.431	0.358	**0.758**
CA3	0.423	0.461	**0.747**
CA4	0.524	0.343	**0.813**

Another approach through which discriminant validity assess is Fornell-Larcker criteria. It compares the values of Square Root of Average Variance Extracted (AVE) with other latent variables. According to the rule, root square value of AVE must be greater than correlation with other latent variables. **Table#4 is** showing the comparison between the values of square root of AVE and correlation with other variables. According to **Table#4** diagonal values are showing that square root of AVE is greater than the corresponding correlation values. For example, square root of AVE of HC is 0.722 which is greater than the corresponding correlation value.

Table 4: Discriminant Validity (FL criteria)

	SL	**HC**	**CA**
SL	**0.73**		
HC	0.626	**0.72**	
CA	0.610	0.524	**0.76**

Multicollinearity Test

At high correlation between two indicators is referred as collinearity. Multicollinearity means that two or more indicators are defining about same construct. According to rule of thumb, if value of VIF is greater than 5 then there is multicollinearity. **Table#5** is showing the values of outer VIF which is less than 5. It means that there is no issue related to multicollinearity.

Table#5

Outer VIF

Constructs	Tolerance	VIF
SL1		2.712
SL2		2.431
SL3		2.327
SL4		2.162

SL5	2.983
SL6	2.734
SL7	2.752
SL8	1.616
SL9	3.044
SL10	2.654
HC1	1.475
HC2	1.426
HC3	1.161
HC4	1.316
CA1	1.343
CA2	1.533
CA3	1.482
CA4	1.675

Similarly, values of inner VIF should also less than the 5. **Table#6** is showing the values of Inner VIF which is less than 5. It means that there is no problem regarding multicollinearity between indicators.

	SL	**HC**	**CA**
SL	-	2.125	2.719
HC	-	-	2.027

Path Analysis:

In the previous section we have examined reliability and validity of data. In this section we try to estimate the relationship between constructs. This section describes that the significance of relationship between the constructs. To check significance relationship Bootstrapping technique was used. Bootstrapping calculate t-value and p-value. If p-value is less than 0.05 then relation considered as significance otherwise non-significance.

Detail results are shown in **Table#7** after running bootstrapping. The first proposition of the study modelling affect of SL on competitive advantage has not been supported by findings (0.13, p>0.10). Whereas the second and third propositions are supported by the findings showing a significant impact of strategic leadership on the development of human capital and also a significant impact of human capital on competitive advantage. It shows the indirect role of leadership in attaining the competitive advantage. Likewise, results confirm the full mediating role of human capital in the relationship between SL and competitive advantage.

Table#7

Path Analysis

		SD	**t-value**	**P value**	**Decision**
Strategic Leadership àCompetitive Advantage	0.13	0.142	0.915	0.362	Not Supported
Strategic Leadership àHuman Capital	0.328	0.103	3.182	0.002	Supported

Human Capital à Competitive Advantage	0.376	0.136	2.77	0.007	Supported

Coefficient of Determination (R-Square value)

Value of R-square shows that authenticity of model. There are no particular criteria for evaluating R-square. The Value of R-square lies in the range of 0-1. If the value of coefficient of determination falls within the range of 0.25 and 0.50 then model predicative power is week, if it is above 0.50 and below 0.75 then moderate, and if above 0.75 then substantial. Below Table#8 showing the value of R-square and adjusted R-square. Some values fall in the range of 0.25 and 0.50 which there is week predictive power of model. Few values are lie in the range of 0.50 and 0.75. It means that there is moderate predictive power of model.

Table#8

R-Square and Adjusted R-Square

Constructs	R Square	R Square Adjusted
SL	0.529	0.524
HC	0.465	0.454
CA	0.544	0.519

Effect of Size (f-square)

In statistics, f-square is used to measure effect of size. It is a quantitative measure which is used to measure the magnitude of particular phenomenon. Effect size measures the correlation between two variables. It measures the Standard Average effect in population across all level of Independent variable. If population means are equal then value of f-square is zero. If value of f-square is 0.10, 0.25, and 0.40 then effect size will be small, medium and large respectively. Table#9 is showing the value of f-square which shows small effect of size on independent variables.

	SL	HC	CA
SL	-	0.098	0.012
HC	-	-	0.001

Results of Hypothesis

Table#10 is showing the results of supposed hypothesis. These results are rejected on the basis of PLS statics. However, none of hypothesis is accepted.

Table#10

PLS Base Results Analysis

Sr. No.	Hypothesis	Remarks
1	SL contributes to the competitive advantages.	Not Supported
2	SL improves human capital	Supported

3	Human capital contributes to competitive advantage	Supported

5. Discussion

In this study, we try to identify the relationship between SL, Human capital (HC), and competitive advantage (CA). Further, this study has following limitations like data collection was limited, demographic limitation, and limited organizations were approached. However, SL was considered as an independent variable, while, human capital was considered as mediating variable, and competitive advantages supposed as dependent variables. Three dimensions were considered for SL to estimate results. In this study we assume that SL is based on organizational capabilities, operational capabilities, and individual capabilities. These constructs were assumed on the basis of past literature.

Strategic leadership is an act or ability to influence other. Strategic leaders always try to safeguard organizational competitive advantages by adopting new, innovative, and different strategies. They try to mitigate risk after key analyses. They are expert in designing strategies after analyzing market strength and operational capabilities. They try to align strategies according to organizational mission and vision. Past studies indicate that SL has significant effect on CA (Kearns & Sabherwal, 2007). According to contingence theory SL cannot be confined because leadership itself contingent with situation (Shao, 2019).

However, core purpose of every organization is to protect organizational goals, mission and vision. For this purpose, new and innovative techniques and methods are adopted to counter its competitor. In this study we try ensure CA by adopting three major variables SL, IC, and KM. we try to find its impact on CA. This study has certain limitations like this study is being conducted only in region of Karachi and Lahore. This study covers only private sector not public organizations. Only few dimensions are selected for this study. Further, it needs to analyze implementation of SL within the organizations and its impact on organizational performance.

6. Conclusion

In this study we try to explore relationship between SL, Human capital (HC) and Competitive Advantages (CA). The objective of this study is to find direct impact of Strategic Leadership on Competitive Advantages. Another objective of this research is to find the relationship between SL and mediating role of HC on Competitive Advantages. For finding relationship three constructs of SL was identified from the past studies which was Organizational capabilities, operational capabilities, and individual capabilities. Post-positivism philosophical technique was used to find the relationship between SL, HC and CA by using resource-based view (RBV), knowledge-based view (KBV), human capital theory, and market-based view theory. Sample size was 98 for this study. We try to explore direct impact of SL on CA and indirect impact of SL by using mediating role of HC on CA.

References

Ahmed, S. S., Guozhu, J., Mubarik, S., Khan, M., & Khan, E. (2019). Intellectual capital and business performance: The role of dimensions of absorptive capacity. *Journal of Intellectual Capital*.

Alas, R., Tafel, K. and Tuulik, K. (2007), "Leadership style during transition in society: case of Estonia", Problems and Perspectives in Management, Vol. 5 No. 1, pp. 50-60.

Alavi, M., & Leidner, D. E. (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS quarterly*, 107-136.

Barney, J. B. (2000). Firm resources and sustained competitive advantage. In *Economics Meets Sociology in Strategic Management* (pp. 203-227). Emerald Group Publishing Limited.

Bontis, N. (2000), "Assessing knowledge assets: a review of the models used to measure human capitak", pp. 1-23, available at: www.business.mcmaster.ca/mktg/nbontis/ic/publications/bontisijmr.pdf

Burgleman, R. A. & Grove, A. S. (1996) Strategic dissonance, Californian Management Review, 38, 8–28

Canibano, L., Garcia-Ayuso, M. and Sanchez, P. (2000), "Accounting for intangibles: a literature review", Journal of Accounting Literature, Vol. 19, pp. 102-30.

Chahal, H., & Bakshi, P. (2015). Examining human capitak and competitive advantage relationship: role of innovation and organizational learning. *International Journal of Bank Marketing*, *33*(3), 376-399.

Chan, Y. E., Sabherwal, R., & Thatcher, J. B. (2006). Antecedents and outcomes of strategic IS alignment: an empirical investigation. *IEEE Transactions on engineering management*, *53*(1), 27-47.

Chen, R. S., Sun, C. M., Helms, M. M., & Jih, W. J. K. (2008). Aligning information technology and business strategy with a dynamic capabilities perspective: A longitudinal study of a Taiwanese Semiconductor Company. *International Journal of Information Management*, *28*(5), 366-378.

Chen, Y. (2008), "The positive effect of green human capitak on competitive advantages of firms", Journal of Business Ethics, Vol. 77 No. 3, pp. 271-286.

Chiucchi, M. S., & Dumay, J. (2015). Unlocking human capitak. *Journal of Human capitak*, *16*(2), 305-330.

Conner, K. R. (1991). A historical comparison of resource-based theory and five schools of thought within industrial organization economics: do we have a new theory of the firm?. *Journal of management*, *17*(1), 121-154.

Cuganesan, S. and Dumay, J. (2009), “Reflecting on the production of human capitak visualisations”,Accounting,Auditing&AccountabilityJournal,Vol.22No.8,pp.1161-1186.
Davies, B. J., & Davies*, B. (2004). Strategic leadership. *School leadership & management*, *24*(1), 29-38.

Delery, J. E. & Roumpi, D. (2017). Strategic human resource management, human capital and competitive advantage: is the field going in circles? Human Resource Management Journal, 27(1), 1-21.
Demarest, M. (1997). Understanding knowledge management. *Long range planning*, *30*(3), 321374-322384.

Dumay, J. and Garanina, T. (2013), “Human capitak research: a critical examination of the third stage”, Journal of Human capitak, Vol. 14 No. 1, pp. 10-25.

Dzinkowski, R. (2000), “The measurement and management of human capitak: an introduction”, Management Accounting, Vol. 78 No. 2, pp. 32-36.

Edvinson, L. (1997), “Developing human capitak at Skandia”, Long Range Planning, Vol. 30 No. 3, pp. 366-373.

Elenkov, D. S., Judge, W., & Wright, P. (2005). Strategic leadership and executive innovation influence: an international multi-cluster comparative study. *Strategic Management Journal*, *26*(7), 665-682.

Godfrey, P.C. and Hill, C.W.L. (1995), “The problem with unobservables in strategic management research”, Strategic management Journal, Vol. 13 No. 2, pp. 135-44.

Guthrie, J., Ricceri, F. and Dumay, J. (2012), “Reflections and projections: a decade of human capitak accounting research”, The British Accounting Review, Vol. 44 No. 2, pp. 68-92.

Halim, S. (2010), “Statistical analysis on the human capitak statement”, Journal of Human capitak, Vol. 11 No. 1, pp. 61-73.

Hitt, M. A., & Duane, R. (2002). The essence of strategic leadership: Managing human and social capital. *Journal of Leadership & Organizational Studies*, *9*(1), 3-14.

Huerta, T. R., Thompson, M. A., Ford, E. W., & Ford, W. F. (2013). Implementing electronic lab order entry management in hospitals: incremental strategies lead to better productivity outcomes. *International Journal of Information Management*, *33*(1), 40-47.

Ireland, R. D., Hitt, M. A., & Vaidyanath, D. (2002). Managing strategic alliances to achieve a competitive advantage. *Journal of management*, *28*(3), 413-446.

Johnson, A. M., & Lederer, A. L. (2010). CEO/CIO mutual understanding, strategic alignment, and the contribution of IS to the organization. *Information & Management*, *47*(3), 138-149.

Kavida, V. and Sivakoumar, N. (2009), "Human capitak: a strategic management perspective", The IUP Journal of Knowledge Management, Vol. 7 Nos 5/6, pp. 55-69.

Kavida, V. and Sivakoumar, N. (2009), "Human capitak: a strategic management perspective", The IUP Journal of Knowledge Management, Vol. 7 Nos 5/6, pp. 55-69

Kearns, G. S., & Sabherwal, R. (2006). Strategic alignment between business and information technology: a knowledge-based view of behaviors, outcome, and consequences. *Journal of management information systems*, *23*(3), 129-162.

Kim, T., Yoo, J. and Lee, G. (2011), "The HONICAP scale: measuring human capitak in the hotel industry", Service Industries Journal, Vol. 3 No. 13, pp. 2243-2272.

Kumar, V. & Pansari, A. (2016). Competitive advantage through engagement. Journal of Marketing Research, 53(4), 497-514.

Lee, S. G., Koo, C., & Nam, K. (2010). Cumulative strategic capability and performance of early movers and followers in the cyber market. *International Journal of Information Management, 30*(3), 239-255.

Lev, B. (2017). Evaluating Sustainable Competitive Advantage. Journal of Applied Corporate Finance, 29(2), 70-75.

Li, Q. and Chang, C. (2010), "The customer lifetime value in Taiwanese credit card market", African Journal of Business Management, Vol. 4 No. 5, pp. 702-710.

Lin, H. E., & McDonough III, E. F. (2011). Investigating the role of leadership and organizational culture in fostering innovation ambidexterity. *IEEE Transactions on engineering management*, *58*(3), 497-509.

Ling, Y. H. (2013). The influence of human capitak on organizational performance—Knowledge management as moderator. *Asia Pacific Journal of Management*, *30*(3), 937-964.

Mahdi, O. R., & Almsafir, M. K. (2014). The role of strategic leadership in building sustainable competitive advantage in the academic environment. *Procedia-Social and Behavioral Sciences*, *129*, 289-296.

Meihami, B., & Meihami, H. (2014). Knowledge Management a way to gain a competitive advantage in firms (evidence of manufacturing companies). *International Letters of Social and Humanistic Sciences*, *3*, 80-91.

Miller, K. D. (2002). Competitive strategies of religious organizations. *Strategic management journal*, *23*(5), 435-456.

Moon, Y. J., Choi, M., & Armstrong, D. J. (2018). The impact of relational leadership and social alignment on information security system effectiveness in Korean governmental organizations. *International Journal of Information Management*, *40*, 54-66.

Mouritsen, J. (1988), "Driving growth: economic value added versus human capitak", Management Accounting Research, Vol. 8 No. 6, pp. 15-23.

Mubarik, M. S. (2015). *Human capital and performance of small & medium manufacturing enterprises: a study of Pakistan* (Doctoral dissertation, University of Malaya).

Mubarik, M. S., Chandran, V. G. R., & Devadason, E. S. (2018). Measuring human capital in small and medium manufacturing enterprises: What matters? *Social Indicators Research*, *137*(2), 605-623.

Nthini, E. K. (2013). Effect of strategic leadership on the performance of commercial and financial state corporations in Kenya. *Unpublished MBA project*.

OECD (2008), Intellectual Assets and Value Creation – Synthesis Report, OECD, Paris.

Ojeda-Gomez, J., Simpson, M., Koh, S. C. L., & Padmore, J. 2007. Achieving competitive advantage in the Mexican footwear industry. Benchmarking, 14(3): 289–305.

Osman, C. A., & Ngah, R. (2016). Assessing sustainable competitive advantage in relation with human capitak, knowledge management and innovativeness in women-owned SMEs in Malaysia. *Journal of International Business, Economics and Entrepreneurship*, *1*(1), 1-15.

Perrott, B.E.2007. A strategicrisk approach to knowledge management.Business Horizons, 50(6): 523–533. Podsakoff, P. M., & Organ, D. W. 1986. Self-reports in organizational research: Problems and prospects. Journal of Management, 12(4): 69–82.

Phipps, K. A., & Burbach, M. E. (2010). Strategic leadership in the nonprofit sector: Opportunities for research. *Journal of Behavioral and Applied Management*, *11*(2), 137.

Popper, M. and Lipshitz, R. (1993), "Putting leadership theory to work: a conceptual framework for theory-based leadership development", Leadership & Organization Development Journal, Vol. 14 No. 7, pp. 23-7

Pucci, T., Simoni, C., & Zanni, L. (2015). Measuring the relationship between marketing assets, human capitak and firm performance. *Journal of Management & Governance*, *19*(3), 589-616.

Riahi-Belkaoui, A. (2003). Human capitak and firm performance of US multinational firms: a study of the resource-based and stakeholder views. *Journal of Human capitak*, *4*(2), 215-226.

Rodrigues, H., Pedro, D. and Carlos, F. (2010), "The influence of human capital on the innovativeness of firms", International Business & Economics Research Journal, Vol. 9 No. 9, pp. 53-64.

Sadeli, J. (2015). The influence of leadership, talent management, organizational cultureand organizational support on employee engagement. *International Research Journal of Business Studies*, *5*(3).

Shao, Z. (2019). Interaction effect of strategic leadership behaviors and organizational culture on IS-Business strategic alignment and Enterprise Systems assimilation. *International Journal of Information Management*, *44*, 96-108.

Shih, K., Chang, C. and Lin, B. (2010), "Assessing knowledge creation and human capitak in banking industry", Journal of Human capitak, Vol. 11 No. 1, pp. 74-89
Sorcher, M., & Brant, J. (2002). Are you picking the right leaders?. *Harvard Business Review*, *80*(2), 78-87.

Sotarauta, M. (2016). Shared leadership and dynamic capabilities in regional development. In *Regionalism contested* (pp. 63-82). Routledge.

Stahle, P., & Hong, J. 2002. Dynamic human capitak in global rapidly changing industries. Journal of Knowledge Management, 6(2): 177–189.

Sullivan,P.(1999),"Profitingfromintellectualcapital",JournalofKnowledgeManagement,Vol.3 No. 2, pp. 132-142.

Sveiby, K. (1997), The New Organisational Wealth: Managing and Measuring Knowledge-Based Assets, Berrett-Koehler, New York, NY.

Tichy, T. & Sharman, S. (1993) Control your destiny or someone else will (New York, Doubleday).

Tidd,J.,Bessant,J.andPavitt,K.(2005),ManagingInnovation:IntegratingTechnological,Market and Organisational Change, 3rd ed., John Wiley & Sons, Sussex.

Vardiman, P., Houghston, J. and Jinkerson, D. (2006), "Environmental leadership development. Toward a contextual model of leader selection and effectiveness", Leadership & Organization Development Journal, Vol. 27 No. 2, pp. 93-105.

Wang, H. L. (2014). Theories for competitive advantage.
Wang, S., Noe, R. A., & Wang, Z. M. (2014). Motivating knowledge sharing in knowledge management systems: A quasi–field experiment. *Journal of Management*, *40*(4), 978-1009.

Whittington, R. (2001) What is strategy—and does it matter? (2nd edn) (London, Thomson Learning).

Wernerfelt, B. (1984), "A resource-based view of the firm", Strategic Management Journal, Vol. 5 No. 2, pp. 171-80.

Yayla, A. A., & Hu, Q. (2012). The impact of IT-business strategic alignment on firm performance in a developing country setting: exploring moderating roles of environmental uncertainty and strategic orientation. *European Journal of Information Systems*, *21*(4), 373-387.

Yukl, G. (2006), Leadership in Organizations, 6th ed., Prentice-Hall, Upper Saddle River, NJ.

Zeghal, D., & Maaloul, A. (2010). Analysing value added as an indicator of human capitak and its consequences on company performance. *Journal of Human capitak, 11*(1), 39-60.

Zhou, A. and Fink, D. (2003), “The human capitak web: a systematic linking of human capitak and knowledge management”, Journal of Human capitak, Vol. 4 No. 1, pp. 34-48.

Performance Evaluation of Banks in Pakistan Based on Market Value Ratios – An Application of Data Envelopment Analysis

Muhammad Akbar Saeed[1], Akhtiar Ali[2]

[1]PHD Scholar, Bahria University, Karachi Campus, akbarsaeed.bukc@bahria.edu.pk
[2]Associate Professor, Bahria University, Karachi Campus, akhtiarali.bukc@bahria.edu.pk

Abstract

Performance and efficiency evaluation in organizations has gained considerable importance in the past three decades. Different techniques and tools have emerged including the Data Envelopment Analysis (DEA) model. This paper analyses the performance efficiency of listed Pakistani commercial banks based on their market value ratios, namely the Market Price/Earnings (P/E) ratio and the Market Price/Book Value (P/B) ratio and then develop a ranking. The DEA technique is a linear programming methodology which measures the relative performance of similar firms using a variety of identical inputs and a variety of similar outputs. All of the 20 commercial banks that are listed on the Pakistan Stock Exchange are included in the study. The data pertains to 2018. As per the findings, the top five banks that are exhibiting the highest level of relative efficiency based on their market value ratios are Faysal Bank Limited, Bank Islami Pakistan Limited, Habib Metropolitan Bank Limited, Meezan Bank Limited and Habib Bank Limited.

Keywords: Banks, Performance Evaluation, Efficiency, Data Envelopment Analysis (DEA), Financial Ratios.

1. INTRODUCTION

The 4th Pakistan Banking Awards Ceremony was held in Karachi on 10th of January, 2020. In this event Bank Alfalah was declared as the best bank for the year 2019. This idea of evaluating and recognizing performance of banks in Pakistan has been jointly sponsored by the Institute of Bankers Pakistan, DAWN Media Group and A. F. Ferguson & Co (a member firm of the Price Waterhouse Coopers Network). In the earlier first three events of the Pakistan Banking Awards, the best performing banks were; United Bank Limited (2016), Bank Alfalah (2017), and Meezan Bank (2018). As per the media reports an impartial and transparent evaluation process was adopted by the distinguished jury consisting of five experts from economic, banking and financial sectors. Details of the evaluation process are however not publicly available.

Banks provide multifaceted products and services. As such performance evaluation of banks also needs to be multi-dimensional. This is the reason that the Pakistan Banking Awards are granted in several other categories also. The other categories include; best consumer franchise, best investment bank, best bank for SME, best bank for agriculture, and best bank for microfinance. This research evaluates bank performance in Pakistan on selected dimensions based on market value information publicly available. The linear programming mathematical technique known as “Data Envelopment Analysis (DEA)” has been utilized to overcome the problems associated with the multidimensional evaluation.

1.1. History of Banking in Pakistan

The banking sector has witnessed distinct phases in Pakistan. The first spans from 1947 to 1974 and can be termed as the ‘Pre Nationalization’ period. The second could be referred to as the tenure of ‘Nationalized’ time period stretching from 1974 to the late 1980s. The period of ‘Privatization and Deregulation’ started in later part of 1980s and continued till 2004. Current period can be referred to as the period of consolidation. During all these years the total number of banks including the foreign banks in Pakistan peaked to 53 in 1996. Because of mergers and acquisitions, this number has gradually declined and as on December 31, 2019 their strength stands at 34. The total number of foreign banks operating in Pakistan also peaked to 28 in 1996 and has since then shrunk to just 5 by the end of 2019. The State Bank of Pakistan (SBP) uses the term “Scheduled Banks” to collectively refer to all of the different categories of banks. SBP has grouped the banks in four clusters. The name of the clusters and the total strength in each are; Public Sector Banks (5), Domestic Private Banks (20), Specialized Banks (4) and Foreign Banks (5). Out of the five public sector banks, only two are listed on the Pakistan Stock Exchange (PSX). Out of the twenty domestic private banks seventeen are listed on the PSX. None of the specialized banks and none of the foreign banks are listed on the PSX. Thus out of a total 34 banks, currently 20 are listed on the PSX. As the focus of this research is on the market value ratios, the non-listed banks have been excluded from the study.

1.2. Importance of Performance Evaluation

The system of modern banking has evolved and grown to a level whereby it is viewed as playing the most significant role in facilitating economic development and prosperity by channelizing money from the ones who save to the ones who invest to set up and expand businesses (Shyu et al., 2015). This role is referred to as intermediation. Efficient intermediation (performance) is expected to be translated into more rational and effective allocation of scarce resources, which in turn is likely to lead to macroeconomic stability and growth, thereby creating more employment opportunities in a country. Evaluation of bank performance is an on-going activity undertaken by all the stakeholders including; founding shareholders, managers, creditors, public investors, regulators, market analysts and rating agencies.

Performance and efficiency evaluation requires numerical measures of inputs and outputs and their comparison which is called the ‘production function’. In case of manufacturing firms, the inputs and outputs are easily conceptualized (Fletcher and Snee, 1985). In case of firms providing services such as commercial banks, there is multiplicity of outputs as well as inputs. Impounding the figures of these multiple inputs and outputs into a single measure of performance evaluation has always been the challenge (Bos and Bikker, 2008). Evaluation of the performance of banks and financial institutions is regarded as difficult and challenging because of the non-availability of explicit public information for individual banks on interest rates on different inputs such as deposits and outputs such as loans. Terms such as profitability, productivity, efficiency, competition, concentration value creation are used to specify and measure bank performance (Bos and Bikker, 2008).

1.3. Current Performance Evaluation Scenario of Banks in Pakistan

Formal performance evaluation of Banks is undertaken by all of the institutional stakeholders in Pakistan. Such efforts result in production of reports in which information is generated across the board and there is no singular top performer identified. Public access to such evaluation reports is available in at least three instances. The first is generated by the State Bank of Pakistan, second issued by the two rating agencies namely Pakistan Credit Rating Agency (PACRA) and Vital Information Services (VIS), and the third by the Corporate Brokerage Houses. In the following section, brief outline of the dimensions of evaluation adopted by these three categories are presented.

1.3.1. State Bank of Pakistan

Though there are several publications by the Central Bank, however the most comprehensive is the “Financial Statement Analysis of the Financial Sector” published annually covering the entire financial sector based on past five year data (FSA, SBP, 2019). In context of commercial banks, the FSA covers the following five dimensions of performance; i) Efficiency and Profitability, ii) Liquidity, iii) Asset Quality, and iv) Leverage. A total of 28 different financial ratios are computed and reported under the foregoing categories.

1.3.2. Credit Rating Agencies

A detailed “Rating Report” is published by Pakistan Credit Rating Agency every six months on the selected banks included in its scope of entity rating. This report covers the following areas, Profitability, Capital Adequacy, Funding and Liquidity, and Credit Risk. A total of around ten financial ratios are computed and reported under the foregoing categories. Pakistan’s second rating agency Vital Information Services also issues its Rating Report on each of the bank included in its scope of rating portfolio. There is a mix of ratios utilized for the evaluation which cover Capital adequacy, Profitability, and Funding.

1.3.3. Corporate Brokerage Houses

Corporate Brokerage Houses also periodically publish short equity research reports on banks. In several cases, such reports are released via their web portal for public consumption. These reports are focused more on valuation ratios such as P/E ratio and the P/B ratio rather than the ones described above for SBP and credit rating agencies.

2. LITERATURE REVIEW

It is often stated that “If you can measure it, you can manage it”. The question arises what needs to be measured in context of business organizations? The first such answer appears to have been provided by (Drucker, 1954) who proposed a mix of measures which included both objective and subjective items such as productivity and innovation as a possible solution to issues in performance measurement. Since then interest in Performance Evaluation grew significantly and a number of journals came up on the subject of Productivity and Performance Evaluation. An overview of the discipline of Performance Evaluation (Taticchi et al., 2010) for a 40 year period spanning from 1970 to 2008 spells out 24 different models and frameworks for performance evaluation. Another extensive overview by (Keong Choong, 2014) has referred to a vast body of literature on Performance Evaluation. Before 1980s, the conventional evaluation techniques were based on ROI, ROE, ROCE and their derivatives (Simons, 2000). Attraction to develop Performance Evaluation Systems started in 1980s. The ‘Economic Value Added (EVA) Model’(Stewart, 2007), the ‘Activity Based Costing (ABC) Model’ and the ‘Activity Based Management (ABM) Model’ came up during this time period (Cooper and Kaplan, 1988). During the period 1990 to 2007, twenty additional frameworks were developed (Taticchi et al., 2010) including the Balanced Scorecard (BSC) (Kaplan and Norton, 1992). Successful application of the Balanced Scorecard Model in several industries has been reported during the years following its development.

2.1. The DEA Model

Under the domain of Operations Research, DEA methodology was pioneered in 1978 by a team of three researchers; Charnes, Cooper and Rhodes (Charnes et al., 1978). The model created by them was abbreviated after their names as CCR. The application of this model was restricted to manufacturing scenarios in which technology characterized constant returns to scale. The scope of the model was later enlarged by Banker, Charnes and Cooper to cover situations where the technology involved variable returns to scale (Banker et al., 1984). Their methodology has also been abbreviated with the first letters of their names as the ‘BCC DEA Model’. Mathematically, DEA is described as a linear programming technique which can be applied to the observed data in such a manner that enables discovery of relationship amongst inputs and outputs. These steps translate into discoveries of efficient production possibility surfaces which are considered to be building blocks of modern economic theories. The analytical capability of DEA was quickly picked up by the researchers so that it has become a commanding tool for measuring and evaluating performance (Cooper, 2011).

The DEA model builds up on the concept of efficiency, which is described as the ratio of output to input. The four situations that emerge in this context are; (i) single input and single output, (ii) two inputs and single output, (iii) single input with two outputs, and (iv) multiple inputs and multiple outputs. Besides a mathematical solution, the first three situations can also be solved graphically. In the first situation a simple graph is derived as shown in Figure-1(A) representing the conventional production function with the single input plotted on the horizontal axis and the single output on the vertical axis. The shape of the curve exhibits the three phases; increasing returns to scale, constant returns to scale and decreasing returns to scale. Plotted data points may lie on the curve (efficient) and below the curve (inefficient).

For the second situation involving dual inputs and solo output, two ratios are computed. The first ratio is obtained by dividing the single output such as interest revenue by one of the two inputs such as branch floor space. The second ratio is obtained by dividing the same solo output that is interest revenue by the second input such as number of employees. Because of the reasons explained in the later section, the inverse of the two computed ratios are plotted, one on the horizontal axis and the other on the vertical axis as shown in Figure-1(B). The conceptual 'Envelopment Surface' takes the shape of curve which is convex to the origin. The data points closest to the origin are most efficient as opposed to the data points lying farthest from the origin are considered to be comparatively less efficient.

For the third case, the single input and two outputs can be conceptualized considering deposits as the single input with advances (loans) and investments as the two outputs. Ratio of advances/deposits can be charted on the horizontal axis and the ratio of investments/deposits can be plotted on the vertical axis. The resulting envelopment surface takes the shape of a curve concave to the origin as shown in Figure-1(C). Data points lying on the curve are considered to be more efficient than those lying under the curve.

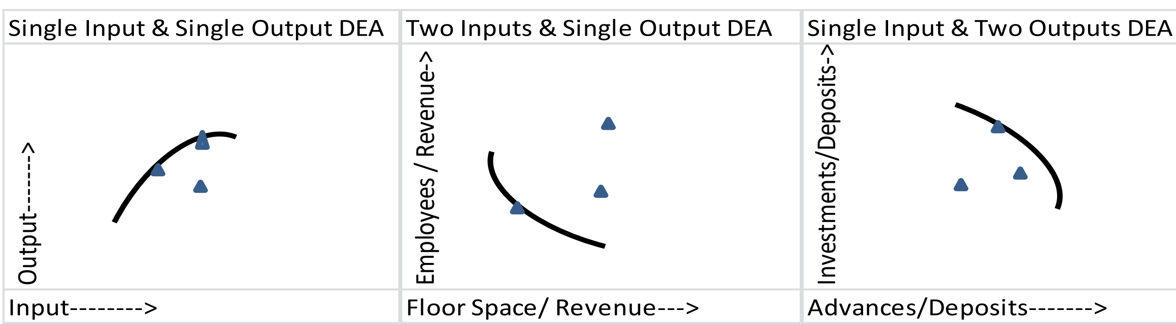


Figure-1(A) Figure-1(B) Figure-1(C)

As regards the fourth category of multiple inputs and multiple outputs, graphical analysis is not possible due to multi-dimensionality of the outputs and the inputs. Thus the analysis is done based on linear programming. Under the Linear Programming methodology efficiency is determined on the basis of weights of the different inputs and the weights of the different outputs. It may be noted that the unit of measurement of various inputs and outputs need not be alike (Cooper et al., 2007). For example consider that there are several different inputs and outputs of any particular bank. Each output is denoted by the symbol *'k'* and each input is denoted by the symbol *'i'*. The examples of inputs could be taken as Number of Employees, Capital, ATMs, Deposits, and so on. Examples of outputs can be considered as Loans, Investments, Customer-Satisfaction etc. For computing the conventional measure of efficiency of any one bank, the following equation would be applicable in which $w_1, w_2, w_3 \dots w_n$ denote weights of the first to the n[th] output, whereas $v_1, v_2, v_3, \dots\dots v_n$ denote weights of the first to the n[th] input. The formulation for efficiency would be as under:

$$E = \frac{k_1 w_1 + k_2 w_2 + k_3 w_3 \dots \dots . + k_n w_n}{i_1 v_1 + i_2 v_2 + i_3 v_3 \dots \dots . + i_n v_n}$$

The DEA methodology evaluates the actual data on the inputs and outputs of the firm and then through mathematical linear programming determines optimal values of weights for both the inputs and outputs with the condition that the outcome is equal to or less than one and with the additional condition that the value of the weights computed is non-negative which means that it is either greater than zero or equal to zero. The result of the applied procedure results in efficiency score for all of the firms which ranges from a smaller fraction such as 0.012 to 1.0. Those banks with a score of 1.0 are considered to be 100% efficient and lie on the envelopment frontier. Those banks with a score of less than 1.0 lie below the efficiency frontier and are therefore considered inefficient (Cooper, 2011).

When efficiency is analyzed through input and output orientation, the result is obtained in a single measure which simultaneously captures all of the considered inputs as well as the outputs. It is therefore possible for an analyst to investigate the efficiency of a bank taking into account its loan portfolio, deposits, investments, and even bad loans. If the analyst undertakes the efficiency analysis through the use of financial ratios, then there might be conflicting results. For example Bank-A has the best efficiency in terms of ROA, but it is Bank-B which more efficient in terms of ROE. As such the input-output efficiency analysis technique seems to offer an advantage over the conventional analysis undertaken through financial ratio analysis (Pasiouras, 2013). It is also accepted in the literature (Berger et al., 1997) that efficiency measures derived both from parametric and non-parametric approaches have advantages over accounting ratios.

As described in the previous section, banking performance needs to be evaluated from many different dimensions. Each dimension has its own significance as well as importance. No particular dimension can be ignored or substituted for another. Evaluation of a bank's performance can be accomplished through accounting as well as market measures. For example, Return on Assets (ROA), Return on Equity (ROE) and Net Interest Margin (NIM) are the accounting based measures. These measures are molded in accordance with accounting principles. The accounting principles conform to legal and regulatory compliance frame work (Combs et al., 2005). Market measures include the Price/Earnings Ratio and the Price/Book Ratio. The market based ratios are shaped by sentiments of the investors (Haslam et al., 2010). They can also be impacted by behaviors and beliefs and also be affected by views of analysts on future earnings potential of the firms. Accounting variables take into account the past data so they are not considered to be forward looking as compared to market based ratios which are inherently forward looking (Brinkhuis and Scholtens, 2018).

3. Methodology

For the purpose of this study, the focus is on the creation of value and specifically the market value. In this context the two market value ratios are intended to be applied. The first is the Price/Earnings Ratio and the second is the Price/Book Ratio. The P/E ratio is computed by dividing the market price per share with the earnings per share. The P/E ratio measures the amount that investors are willing to pay for each unit of currency (Rupee, Dollar, Euro, etc.) earned by the firm. The level of this ratio indicates the degree of confidence that investors have in the company's future performance. It is generally considered that higher the P/E ratio, the greater the investor confidence (Gitman, 2014)

The Price/Book ratio is computed by dividing the market price with the book value per share. A higher P/B ratio is attributed to firms that are expected to perform well. Typically, firms that are expected to earn high returns relative to their risk are also expected to have a higher P/B ratio. If the ratio exceeds one (1.0) then this means that investors are willing to pay more for the firm's accounting book value. A company's book value of its share is culmination of its past performance. The book value also indicates the amassed amount that stock holders have invested on per share basis. This could have been a direct investment by way of purchase of shares or an indirect manner by way of the retention of earnings by the company (Brigham and Ehrhardt, 2017).

The following Table-1 presents three separate rankings of the 19 listed commercial banks; on the basis of Earnings Per Share (EPS), on the basis of Book Value Per Share (BVPS) and then finally on the basis of market price. The data pertains for the year ended 2018.

TABLE-1
RANKING OF LISTED COMMERCIAL BANKS IN PAKISTAN
EARNINGS PER SHARE, BOOK VALUE PER SHARE & MARKET PRICE

RANKING - EPS		
	Bank	**EPS**
1	MCB	18.02
2	UBL	12.44
3	ABL	11.25
4	NBP	9.41
5	HBL	8.04
6	MEZN	7.67
7	BAHL	7.57
8	ALFB	5.72
9	ASKRI	3.52
10	SCBPL	2.90
11	BOP	2.89
12	SONR	1.62
13	HMBL	1.20
14	SAMBA	0.68
15	SILK	0.57
16	JSBL	0.56
17	FAYSL	0.49
18	BOK	0.47
19	BISPL	0.21
20	SUMIT	(0.43)

RANKING – BVPS		
	Bank	**BVPS**
1	MCB	117.74
2	HBL	112.14
3	UBL	110.02
4	ABL	73.56
5	NBP	69.04
6	BAHL	41.64
7	ALFB	38.47
8	MEZN	34.54
9	ASKRI	25.28
10	JSBL	16.46
11	SCBPL	15.94
12	BOK	13.81
13	BOP	13.17
14	SAMBA	13.06
15	BISPL	12.66
16	SONR	12.41
17	HMBL	8.29
18	SILK	6.17
19	FAYSL	3.90
20	SUMIT	3.62

RANKING - MKT. PRICE		
	Bank	**MP**
1	MCB	195.67
2	UBL	145.81
3	HBL	143.45
4	ABL	105.31
5	MEZN	87.06
6	BAHL	73.81
7	ALFB	46.44
8	NBP	44.70
9	HMBL	44.58
10	FAYSL	25.04
11	SCBPL	24.05
12	ASKRI	22.90
13	BOK	13.30
14	SONR	12.82
15	BOP	12.02
16	BISPL	11.98
17	JSBL	7.86
18	SAMBA	7.85
19	SUMIT	1.49
20	SILK	1.31

Source: Author’s tabulation based on public data for the year ended 2018

4. Results and Findings

As can be seen, that in all of the three categories, the top five positions are shared by the big five banks of the country. These banks in terms of their decreasing order of market share in total assets are; Habib Bank (HBL), National Bank of Pakistan (NBP), United Bank (UBL), MCB Bank (MCB) and Allied Bank (ABL). In the third category (market price) however, NBP has slipped to the 8^{th} position.

The following Table-2 presents the ranking of the 19 listed commercial banks on the two market value ratios, that is, the P/E Ratio and the P/B Ratio. The two rankings indicate different hierarchy when compared with one another and when compared with the rankings in Table-1 above. Since the focus of this research is on Market Value Ratios, an attempt is being made to uncover the combined effect of these two ratios and develop a ranking accordingly. The table also shows the computed reciprocal of the P/E Ratio and reciprocal of the P/B Ratio designated as ‘X’ and ‘Y’ respectively. The reason for computation of the reciprocals is provided in the next section.

TABLE-2
RANKING OF LISTED COMMERCIAL BANKS IN PAKISTAN
MARKET PRICE/EARNINGS PER SHARE AND MARKET PRICE/BOOK VALUE PER SHARE

RANKING: PRICE / EARNINGS			
	Bank	**MP/EPS**	**X**
1	BISPL	57.048	0.018
2	FAYSL	51.102	0.020
3	HMBL	37.15	0.027
4	HBL	17.842	0.056
5	JSBL	14.036	0.071
6	UBL	11.721	0.085
7	SAMBA	11.544	0.087
8	MEZN	11.351	0.088
9	MCB	10.858	0.092
10	BAHL	9.7503	0.103
11	ABL	9.3609	0.107
12	SCBPL	8.2931	0.121
13	ALFB	8.1189	0.123
14	SONR	7.9136	0.126
15	ASKRI	6.5057	0.154
16	NBP	4.7503	0.211
17	BOP	4.1592	0.24
18	SILK	2.2982	0.435
19	SUMIT	-3.465	-0.29

RANKING PRICE / BOOK			
	Bank	**MP/BVPS**	**Y**
1	FAYSL	6.421	0.156
2	HMBL	5.378	0.186
3	MEZN	2.521	0.397
4	BAHL	1.773	0.564
5	MCB	1.662	0.602
6	SCBPL	1.509	0.663
7	ABL	1.432	0.699
8	UBL	1.325	0.755
9	HBL	1.279	0.782
10	ALFB	1.207	0.828
11	SONR	1.033	0.968
12	BISPL	0.946	1.057
13	BOP	0.913	1.096
14	ASKRI	0.906	1.104
15	NBP	0.647	1.545
16	SAMBA	0.601	1.664
17	JSBL	0.478	2.094
18	SUMIT	0.412	2.43
19	SILK	0.212	4.71

Source: Author’s Tabulation based on public data

4.1. Application of the DEA Model on the Market Value Ratios – Graphical Solution

The DEA model is based on the concepts of inputs and outputs. There are several versions of the model; single input and single output, two inputs and single output, single input and two outputs, and multiple inputs and multiple outputs. In the present case, EPS and BVPS would be considered as inputs and the market price would be considered as output. Hence this research would fall in the category of two inputs and single output. The efficiency is computed as output divided by input. The P/E Ratio is therefore a measure of efficiency as the market price (output) is being divided by the earnings per share (input). The second ratio P/B is also a measure of efficiency as market price (output) is being divided by the book value (input).

The inverse of the two ratios are also referred to in the finance literature. The inverse of the P/E Ratio is written as EPS/P and is technically referred to as earnings yield. Similarly the inverse of the P/B Ratio is written as BVPS/P and is technically referred to as a variant to the valuation methodology. The inversion of the two ratios provides a common comparison ground in terms of one unit of the common denominator which is one unit of the currency in which the market price is being considered. Thus the inversion of the P/E Ratio results in a figure per single unit of Rupee (PKR) and the inversion of the P/B Ratio also results in a figure per one unit of the denominator which is again per single unit of PKR (Saeed et al., 2017).

The reciprocal of the two ratios have already been computed in Table-2 above. As the two ratios have a common denominator, they can easily be plotted, and meaningful inferences can be drawn from the graph. The inverse of the P/E Ratio is plotted on the X-axis, and the inverse of the P/B Ratio is plotted on the Y-axis. The resulting graph is shown in the following figure-1.

Data Envelopment Analysis – Two Inputs and One Output

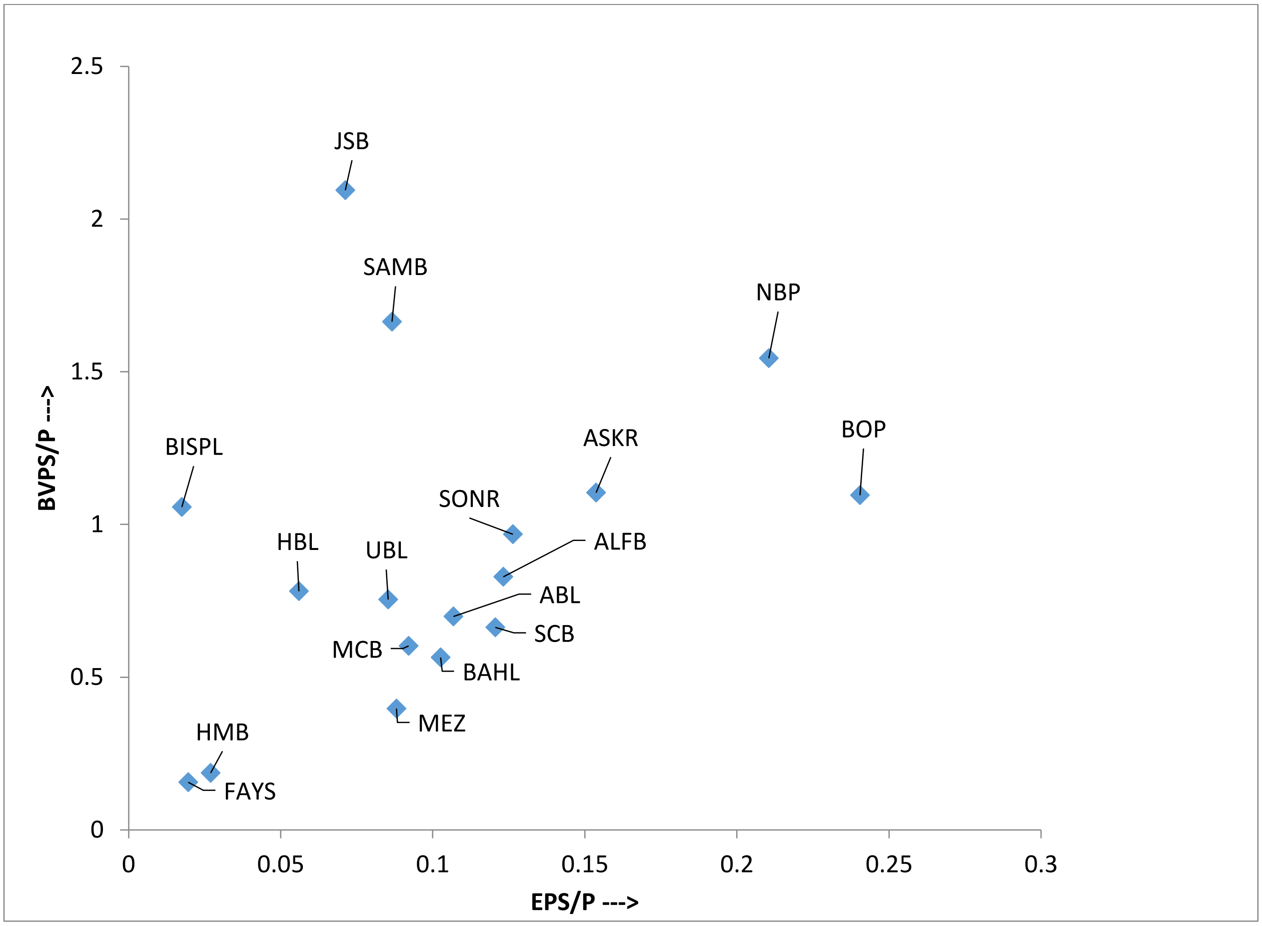


Figure-1
Source: Author's estimation using Microsoft Excel

In the above graph, a conceptual efficiency frontier results which is convex to the origin. The data points represent the relevant positions of each of the banks with reference to each other. Points which lie on the frontier and are also close to the origin are considered to be more efficient than the points which are farther from the origin which are comparatively less efficient. The data points lying on the conceptual curve convex to the origin represent Faysal Bank and Bank Islami Pakistan placing them in the first second positions respectively in context of highest relative efficiency among the 19 listed banks in Pakistan. Due to their outlier effect, two banks were excluded from the above graph namely Summit Bank and Silk Bank. More precise efficiency ranking for the remaining banks is presented in the next section

4.2. Application of the DEA Model on the Market Value Ratios – Linear Programming Solution

Spread sheet software as well as dedicated DEA software are available to undertake the efficiency calculations for any of the four scenarios described earlier. In the present case the DEA Solver software

(LV 8.0) written by Cooper, Seiford and Tone has been used. The efficiency scores and the ranking as derived through the software are as under:

TABLE-3
Efficiency Ranking of Listed Banks in Pakistan

Rank	1	1	3	4	5	6	7	8	9
Bank	FAYSL	BISPL	HMBL	MEZN	HBL	BAHL	JSBL	MCB	SCBPL
Score	1	1	0.838	0.393	0.345	0.276	0.262	0.259	0.235

Rank	10	11	12	13	14	15	16	17	18
Bank	UBL	ABL	SAMBA	ALFB	SONR	BOP	ASKRI	NBP	SILK
Score	0.229	0.223	0.22	0.188	0.161	0.142	0.141	0.101	0.045

Source: DEA Solver LV 8.0 Estimation (CCR Input Oriented Model)

The software generated ranking has placed Faysal Bank and Bank Islami in the top category with equal ranking and 100% efficiency score followed by Habib Metropolitan Bank, Meezan Bank and Habib Bank in the 3rd, 4th and 5th places respectively. Technically, Summit bank is in the last position because of having a negative EPS. It has been excluded from the above table because of distortions created by the negative value of EPS.

5. Conclusions

Performance evaluation of organizations such as banks is both important as well as challenging. It is important because banks provide a number of different products and services. Nearly all of these products and services have a critical role in the economic development and financial stability of the economy. The challenge lies in the public access to sensitive data. This study has determined the performance ranking of the 20 listed commercial banks in Pakistan based on their market value ratios. Two ratios were used, Price/Earnings and Price/Book. The data pertained to the year ended 2018. These ratios were used because they are considered to be forward looking. Data Envelopment Analysis (DEA) methodology was used to overcome the problems associated with multidimensional analysis. DEA employs linear programming to identify the best performance from among a group of similar firms which are using identical inputs and identical outputs. Over the last few decades DEA has become a popular tool for performance and efficiency analysis. A graphical analysis was undertaken together with a mathematical solution through DEA Solver LV 8.0 software. Based on the findings, Faysal Bank Limited and Bank Islami Pakistan Limited were determined to be in the top position. Whereas Habib Metropolitan Bank Limited, Meezan Bank Limited, and Habib Bank Limited were found to be in the 3rd, 4th and 5th positions respectively.

Banking performance can be evaluated from many different dimensions. This study focused on two dimensions to facilitate graphical representation of the DEA methodology. More detailed multidimensional evaluation can be undertaken with the help of DEA Solver software. Such efforts would also open up a new spectrum of the challenges that are associated with multidimensional analysis.

REFERENCES

Banker, R. D., Charnes, A., and Cooper, W. W. 1984. Some Models for Estimating Technical and Scale Efficiencies in DEA, *Management Science*, Advance Access published 1984

Berger, A. N., Leusner, J. H., and Mingo, J. J. 1997. The efficiency of bank branches, *Journal of Monetary Economics*, 22

Bos, J. and Bikker, J. 2008. *Bank Performance: A Theoretical and Empirical Framework for the Analysis of Profitability, Competition and Efficiency*, Routledge International Studies in Money and Banking, Routledge

Brigham, E. F. and Ehrhardt, M. C. 2017. *Financial Management - Theory and Practice*

Brinkhuis, E. and Scholtens, B. 2018. Investor response to appointment of female CEOs and CFOs, *The Leadership Quarterly*, vol. 29, no. 3, 423–41

Charnes, A., Cooper, W. W., and Rhodes, E. 1978. Measuring the Efficiency of Decision Making Units, *European Journal of Operational Research*, Advance Access published 1978

Combs, J. G., Russell Crook, T., and Shook, C. L. 2005. The Dimensionality of Organizational Performance and its Implications for Strategic Management Research, pp. 259–86, in J. Ketchen, D. and D. Bergh, D. (eds.), *Research Methodology in Strategy and Management*, Emerald Group Publishing Limited

Cooper, W. W. (ed.). 2011. *Handbook on data envelopment analysis*, International series in operations research & management science, New York, Springer

Cooper, R. and Kaplan, R. S. 1988. Measure costs right: make right decisions, *Harvard Business Review*, Advance Access published 1988

Cooper, W. W., Seiford, L. M., and Tone, K. 2007. *Data Envelopment Analysis - A comprehensive Text with Models, Applications, References and DEA - Solver Software*, New York, NY, Springer

Drucker, P. 1954. *The Practice of Management*, New York, Harper

Fletcher, J. and Snee, H. 1985. The Need for Output Measurements in the Service Industries: A Comment, *The Service Industries Journal*, vol. 5, no. 1, 73–78

Gitman, L. J. 2014. *Principles of Managerial Finance*, Pearson

Haslam, S. A., Ryan, M. K., Kulich, C., Trojanowski, G., and Atkins, C. 2010. Investing with Prejudice: the Relationship Between Women's Presence on Company Boards and Objective and Subjective Measures of Company Performance, *British Journal of Management*, vol. 21, no. 2, 484–97

Kaplan, R. S. and Norton, D. P. 1992. The Balanced Scorecard: measures that drive performance, *Harvard Business Review*, no. January-February, 71–79

Keong Choong, K. 2014. The fundamentals of performance measurement systems: A systematic approach to theory and a research agenda, *International Journal of Productivity and Performance Management*, vol. 63, no. 7, 879–922

Pasiouras, F. 2013. *Efficiency and productivity growth: modelling in the financial services industry*, Chichester, West Sussex, John Wiley & Sons

Saeed, M. A., Siddiqui, F. A., and Ali, H. 2017. Efficiency Analysis of Commercial Banks using the Data Envelopment (DEA) Model, vol. 1, no. 1, 11

Shyu, J., Lieu, P.-T., and Chang, W. 2015. How the environment determines banking efficiency: a comparison of banking firms in Taiwan, Hong Kong, and Mainland China, *International Transactions in Operational Research*, vol. 22, no. 4, 757–70

Simons, R. 2000. *Performance Management and Control Systems for Implementing Strategy*, Englewood Cliffs, NJ, Prentice Hall

State Bank of Pakistan. 2019. Financial Statement Analysis of Financial Sector 2014-2018

Stewart, B. 2007. What is EVA, *What is EVA*

Taticchi, P., Tonelli, F., and Cagnazzo, L. 2010. Performance measurement and management: a literature review and a research agenda, *Measuring Business Excellence*, vol. 14, no. 1, 4–18

Guidelines for Authors

Submission

Articles submitted to GMJACS can be in all areas of Management and Business (given under call for papers) both theoretical, applied manuscripts in English and should be electronically submitted at:

gmjacs@gmail.com

Manuscripts should be submitted as a single Word file including all materials. Any opinions expressed in articles are only those of authors and not necessarily those of the editors, or the publisher. Authors are personally responsible to obtain permission for reprint of previously published material in other sources. Further details related to call for papers and previous issues of journal are available at:

http://gmjacs.bahria.edu.pk/

Article structure

- **Text types and Subdivision- Numbered sections The main text;** type font size:
  - **Paper Title –** Arial 12 Bold, 1.5 line-spacing
  - **Headings –** Arial 10 Bold, 1.5 line-spacing numbered as 1, 2, 3;
  - **Subheadings –** Arial 10 pts Bold, numbered as 1.1, 1.2, 1.3;

General Style:

- The suggested limit for the paper is 4000 to 8000 words. Figures and tables should be captioned and numbered clearly. Font style and size should be Arial 10. Please be sure that your paper is 1.5 line-spacing including references and uses 1-inch margins on all sides. Your text including title of sections must be justified, start a new paragraph by indenting it from the left margin; for the figures and tables, use Arial 9 bold with single line spacing. Some flexibility of the presentation will be allowed but authors are urged to arrange the subject matter clearly under such headings as: Introduction, Methodology, Results, Discussions/Conclusions;

- **Illustrations** must be placed as close as possible to where they are mentioned in the main text. They must be numbered consecutively (e.g. Fig.1. Fig.2….) Bold, Centered with caption on top and source should be placed below figure.

- **Tables** must be numbered consecutively (e.g. Table. 1). Table headings should be placed above the table;

Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, …), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

A typical article might include the following main sections.

1. Abstract

A concise and factual abstract is required consisting 150-200 words. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article so it must be able to stand alone. Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

2. Keywords

Immediately after the abstract, provide a minimum of 5 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

3. Introduction

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or summary of the results. The introduction should also justify why the topic of the paper is important and that the content is original. The summary of results should have been dealt with in the abstract.

4. Literature Review, Conceptual Framework, Hypotheses etc.

This section should extend (but not repeat) the background to the article already dealt with in the introduction and lay the foundation for the work being reported. It should identify the most relevant previous literature on the topic (but not in excessive detail) in order to position the paper and demonstrate how it will make a significant contribution. It (or a separate section) should set out (and justify) the theoretical or conceptual framework adopted in the paper. It may identify a number of hypotheses to be tested or research questions to be explored. In short, this section (or sections) should explain what the motivation for the paper is and why its contribution is original and significant.

5. Materials and Methods

Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described. The reader needs to know that the empirical data and/or other material are relevant, reliable and capable of supporting robust conclusions, and that the methodology is appropriate, systematic and rigorous.

6. Results

Results should be clear and concise.

7. Discussion

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussions section is often appropriate. Avoid extensive citations and discussion of published literature.

8. Conclusions

The main conclusions of the study be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section. This section should also may make clear what is the original contribution of the paper, discuss the policy or management implications of the findings, provide a critical assessment of the limitations of study, and outline possible fruitful lines for further research.

9. Article length

GMJACS has a strong preference for the articles to be no more 8,000 words including references.

10. Essential title page information

- Title. Concise and informative. Titles are often used in information- retrieval systems. Avoid abbreviations and formulae where possible.

- Author names and affiliations. Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, the e-mail address of each other.

- Corresponding author. Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. Ensure that contact number and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. Contact details must be kept up to date by the corresponding author.

- Present/permanent address. If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must retain as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

- Maximum number of authors for a paper is three.

11. Abbreviations

Any word or words to be abbreviated should be written in full when first mentioned followed by the abbreviation in parenthesis.

12. Tables and Supplementary Material

Data must be kept to a minimum. Tables should be numbered and headed with short titles. As with illustrations, they should not be inserted in the manuscript but supplied either after the main body of the text or uploaded as separate files.

13. References

References to the literature should be mentioned in the main text by writing the author and year in brackets. List these at the very end of your paper (under the heading **'References'**); the references should follow the **APA- style** (see details on http://www.apastyle.org; also you can find details in the *Publication Manual of the American Psychological Association*).

14. Copyright

Submission of a paper to GMJACS will be taken to imply that it presents original unpublished work in any form, not under consideration elsewhere. Authors are themselves responsible for obtaining permission to reproduce copyright material from other sources. Authors are responsible to ensures academic integrity.

CALL FOR PAPERS

ISSN: 2219-6145 (Print), 2305-0756 (Online)

Paper Submission Schedule:

	First Half Yearly Issue (June every year)	**Second Half Yearly Issue (December every year)**
Papers Submission	1st Jan -20th Feb	1st Sept – 1st Oct
Review Process	March to April	October to November
Acceptance/Rejection Notification to Authors	2nd – 20th May	2nd - 20th November
Publication	By 30th June	By 31st December

The primary objective of GMJACS is to provide opportunities for Academicians and Corporate leaders from business related fields in global realm to publish their paper in one source.

Doctoral students are encouraged to submit papers to GMJACS for publication. Quality research papers and corporate case studies on various management disciplines are invited covering following areas:

- Financial Management & Accounting
- International Economics and Finance
- Challenges in Corporate Governance
- International Business Management
- Global Human Resource Management
- Contemporary Research in e-Learning
- Global Business Ethics & Global Cultural Issues
- Motivation across Cultures
- Leadership & Modern Management Styles
- Global Outsourcing and Management
- Global Organizational Issues in Management
- Management of Information Systems & Security
- Operations Management & Project Management
- Modern Marketing Trends
- Strategic Management & Quality Management (Issues & Practices)
- Technology Management and Innovation
- Any other general topic in Global Business & Management

All manuscripts should be professionally proofread as per **guidelines for authors**. The GMJACS reserves the rights to amend or modify the paper as per reviewers' report. The editorial board reserves the right to accept or reject the papers.

Manuscripts should be submitted to Editor, GMJACS with the undertaking that they are original, unpublished works not being submitted elsewhere, at:

gmjacs@gmail.com

Dr. Aamir Firoz Shamsi
Editor
Global Management Journal for Academic & Corporate Studies (GMJACS)
Department of Business Studies
Bahria Business School
Bahria University Karachi Campus
Pakistan

GMJACS is Indexed with