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***JOURNAL OF ECONOMIC DEVELOPMENT***

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Themes and Future Research Agenda

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Bhautik Patel  
Sanjay Ajmeri

## **Department of Economics (UGC CAS Phase II) Sardar Patel University, Vallabh Vidyanagar**

Post Graduate Department of Economics, Sardar Patel University was established in 1958. The Department is the first & the only Department of Economics in the state of Gujarat to have been awarded the status of Centre of Advanced Studies in Economics (CAS – Phase two) in January 2018 by the UGC. Prior to that the Department has been a recipient of SAP (Special Assistance Program) Phase 1, 2, & 3; a generous ASIHSS grant, & CAS (Centre of Advanced Studies) Phase 1. The Department undertakes multidimensional *teaching, research & extension activities*, with one benefitting the other.

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As for the *research*, the department building houses the only Agro-Economic Research Centre, & Cost of Cultivation Scheme in the state of Gujarat, research wings of Ministry of Agriculture & Farmers' Welfare, New Delhi, & the Department has collaborated for more than 140 research projects. Projects have been undertaken for Ministry of Animal Husbandry, Dairying & Fishing, Ministry of Rural Development, National Dairy Development Board, other department of the university, among others to undertake multidisciplinary research. The inception of Artha-Vikas, a national research journal by the Department dates back to 1965 & has published more than 55 volumes including the golden jubilee issue. It is a bi-annual refereed journal with ISSN number 0004-3567 & is also listed in the ABDC list of journals. Since 1958 till date the Department has awarded more than 50 Ph.D. degrees & 50 M.Phil. degrees. Department has published more than 20 working papers, two District Human Development Reports, & more than 100 research projects & village surveys. Department has been continuously involved in organizing seminars, conferences, refresher courses, students' competitions, & memorial lecture series of great economic relevance. Faculties present research papers in national & international seminars & conferences & publish research papers in national & international journals & books.

The Department has been involved in undertaking various *extension activities* related to creating positive impact on raising the productivity of livestock farming, eco-friendly disposal of unused & expired medicines, preparing a statistical outline of the data of Sardar Patel University for two decades, preparing a standard tabulation format for data collection for various universities, charity for old age homes & orphanages, & tree plantation, among others.

However, the Department aspires to ascend knowledge, wisdom, & fulfilment of shared responsibilities by & for the various stakeholders associated with the Department & the larger sections of the society. As we endeavor on this journey, we seek to join hands & collaborate with like-minded & similarly inspired individuals & organizations.

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# CENTRAL BANK DIGITAL CURRENCY: CONCEPTS, THEMES AND FUTURE RESEARCH AGENDA

Punit Moris Ekka\*, Mohit Verma\*\*, Kushagra Sharan\*\*\*

## Abstract

*In this ever-changing world, a shift from fintech to crypto currency and finally to central bank digital currency depicts a rapid change in the digital finance landscape. The current paper aims to highlight the present state of knowledge about the concepts of central bank digital currency and its themes and provides future research directions by reviewing the most relevant research articles published on this topic. A systematic literature review process has been rigorously performed from a set of 46 articles extracted from the Scopus database. This paper discusses the motivation and the advantages of using central bank digital currency (CBDC) for digital payments, leading towards financial inclusion. Through the synthesis of the extant available literature on CBDC, the current study gives an overview to future scholars, managers and, policymakers on CBDC, which will have some significant value. The study reveals that several central banks across the world are considering to circulate their own CBDC due to its potential benefits over an existing currency. There is substantial opportunity to undertake theoretical development, contextual coverage, and empirical contributions. No other paper has focused extensively on summarizing previous research works of practical relevance that could assist policymakers in formulating policies. This investigation can serve as a theoretical foundation for future researchers.*

## Keywords

*Central bank digital currency, digital currency, central bank, financial inclusion, literature review*

## Introduction

The current study tries to provide an overview of the central bank digital currency (CBDC) through a systematic investigation of secondary research on this topic. It is vital to note the emergence of CBDC, its growth and development and ultimately, the significance of its implementation. Albayati et al. (2020) mention that blockchain as a technology has gained importance worldwide, providing diverse solutions towards transparent and secure transactions. Blockchain as a technology has gained popularity due to its wider appeal, with an immense potential of becoming a solid disruptive energy in the current technological world, which will ultimately benefit not only individuals but also organizations for securing their online data, monitoring the exchange of information as well as to provide a much simpler and easier transaction facility (Schaupp & Festa 2018). CBDC is based on blockchain technology, and due to its potential capabilities and the restricted supply of a cryptocurrency, there has been a significant rise in the availability of several cryptocurrencies and similar types of crypto-backed assets (Katsiampa et al., 2019).

The humongous growth of cryptocurrency during the recent past few years attracted several private players providing cryptocurrencies, which became popular. Bitcoin and Ethereum being the most popular cryptocurrencies across the world, have become an alternate form of investment asset, sometimes even used as a medium of exchange. Although cryptocurrency has an inherent risk of high volatility, a growing number of individuals are involved in trading this asset from across the world. Few countries, through their central banks, put a ban on cryptocurrency trading, while few others warned their people about the associated risk of trading in crypto assets. In recent years, the potential economic impact of issuing CBDC and the future of money in cash

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form has been the subject of debate, as it encounters the question of whether cash should be eliminated. Due to its popularity and increasing interest among people in crypto assets offered by private players, many central banks are now thinking about launching their own CBDC in their respective economies.

With the issuance of CBDC into the economy as one of the payment modes for users for their fund transfer across periods and across places, some users will opt to use CBDC, and some will not. Even non-relocated users may choose to utilize CBDC if they wish to operate on their bank. There is an abundance of literature discussing the potential effects of CBDC on financial institutions, banks, economic systems, and the global economy as a whole. The majority of the existing research work discusses the impact of CBDC during stable economic conditions (Williamson, 2022; Keister & Monnet, 2022).

Innovations in digital finance and payment systems due to the growth of crypto-based distributed ledger have facilitated an abrupt increase in CBDC-related research projects. This study intends to emphasize the dominant research themes in the CBDC literature. To provide valuable insights to future researchers, administrators, and policymakers. Our study attempts to identify CBDC debate points. Terracciano & Somoza (2020) contend with their concern over the successful implementation of CBDC, whereas Williamson (2022) supports the potential positive outcomes that could result from the successful implementation of CBDC. Financial inclusion, reduced transaction costs, and greater transparency in the financial system are the positive outcomes of CBDC. On the other hand, a two-tier currency structure, privacy and security concerns, and disintermediation of commercial banks with CBDC can impact financial stability.

This current study is arranged into various sections; it starts defining the study's overall objective, then discusses country-wise CBDC-related research work, followed by an overview of a conceptual framework. This is subsequently followed by the thematic analysis of the existing literature. The following section discusses the future research agenda and then concludes with acknowledging the limitations.

### **Research objective**

This paper aims to offer a comprehensive summary of available concepts of CBDC, its definitions, motivation, themes, advantages, and future directions for further research on this topic. Through this review, we want to accomplish these research objectives:

- To understand the current state of knowledge on CBDC
- To identify the various themes associated with CBDC which need attention
- To provide future directions of research on the successful implementation of CBDC

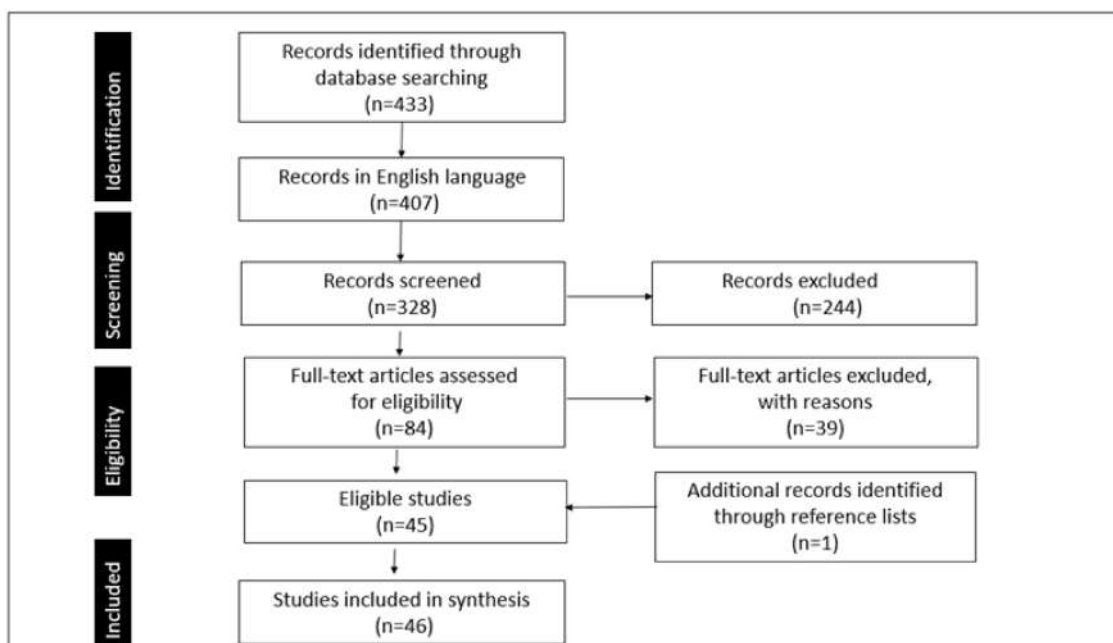
### **Methodology**

The main aim of conducting this study is to systematically analyze the secondary data available in the form of article literature only in the English language. One of the significant online database "Scopus" has been used to extract the data, with the keyword as either CBDC OR central bank digital currency. We have followed the systematic literature review (SLR) method for conducting our study. A systematic review summarizes the empirical evidence, identifies research gaps in existing literature, and provides a background for further research activities (Keele, 2007). As per Talwar et al. (2020), the systematic review has greater acceptance in management literature due to its ability to provide evidence-based and testable research work. Seth et al. (2022) state that the SLR ensures an audit trail of the process involved, producing unbiased, straight, and clear outcomes with the least biases. We followed a PRISMA flowchart (Moher et al. 2009) to show the number of identified, screened, eligible and, finally, the total number of included articles. The PRISMA framework offered an organized and rigorous approach to performing a systematic literature review, improving the study's transparency and reliability. As shown in picture 1, we used a four-step procedure to identify relevant literature for further analysis. We

followed a systematic process which defines the research question, sets inclusion and exclusion criteria, determines searching databases, applies criteria, synthesizes relevant literature, and finally reports the findings.

Firstly, the frequently used keywords in CBDC literature were identified through a birds-eye approach followed by a comprehensive search of the Scopus database using keywords. The initial search gives 433 records, and then we further limit the records published in English. In the second stage, we filter out the records not published in the ABDC journal quality list. After that, two authors independently screened the records using titles and abstracts based on predefined research objectives. The records of two authors were matched, and discrepancies were solved after discussion; a total of 45 articles were finally selected and downloaded for full-text analysis. Further, a detailed analysis of references in the downloaded articles was done, and one relevant article was included.

Picture 1. PRISMA Flowchart



Source: Moher et al. (2009)

We also performed a content analysis study to uncover the relevant findings from the final identified literature. As per Tranfield et al. (2003), a content analysis-based study is widely an acceptable review method "to map and assess the existing intellectual territory, and to specify a research question to develop the existing body of knowledge further". It is the most commonly used technique in the social sciences for obtaining perspectives, examining the reliability of research, and laying out information more comprehensively (Williamson et al., 2013). In line with this, the extracted data has been combined using an approach of narrative synthesis. The results of individual investigations have been summarized and exhibited in tables and figures.

**Conceptual framework**

The current section brings the various existing definitions of CBDC. This section also discusses the underlying motivation and the advantages of using CBDC for digital payments, ultimately leading to financial inclusion. Taking the economic and the financial perspective, a conceptual framework has also been provided in this section.

CBDC, as the name identifies it, is a central bank digital currency. It is a digital form of currency issued by the central bank. The CBDC works as a liability in the balance sheet of an issuing bank.



**Table 1. Various definitions of CBDC**

Definition	Reference
A digital form of central bank money which is distinct from the balances in traditional reserves of settlement accounts	Ward & Rochemont (2019)
A potentially interest-bearing, centrally issued, account-based, digital type of central bank liability which is accessible to the public	Bitter (2020)
An electronic central bank money which can be assessed more broadly than reserves has much greater functionality for retail transactions than cash and has a separate operational structure compared to other forms of central bank money	Kumhof & Noone (2018)
A digital representation of the sovereign currency issued by and is a liability of a jurisdiction's central bank or other monetary authority.	Kiff et al. (2020)
A monetary value stored electronically which represents a liability of the central bank and can be used to make payments	Engert & Fung (2017)
A fiat digital money issued by a central bank	Ozilli (2021b)

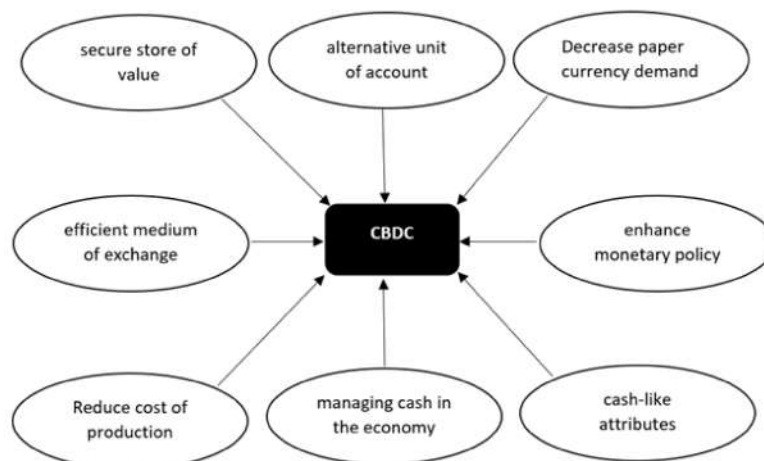
The above definitions (see Table 2) clearly highlight that the CBDC acts as a liability for the issuing central bank. It is distinctly dissimilar from the cash form of physical money, but at the same time, it has similar attributes for making payments and other transactional needs.

**Table 2. List of motivations to issue CBDC**

Motivation to issue CBDC	Reference
Need to support distinct monetary policy	Bord & Levin (2017)
Need to preserve financial stability, increase the contestability of payments, and inhibit criminal activity	Engert & Fung (2017)
Need to increase the level of financial inclusion	Ozili (2021a)
Need to issue CBDC as a counter-reaction to private cryptocurrency such as bitcoins	Ozili (2021b)

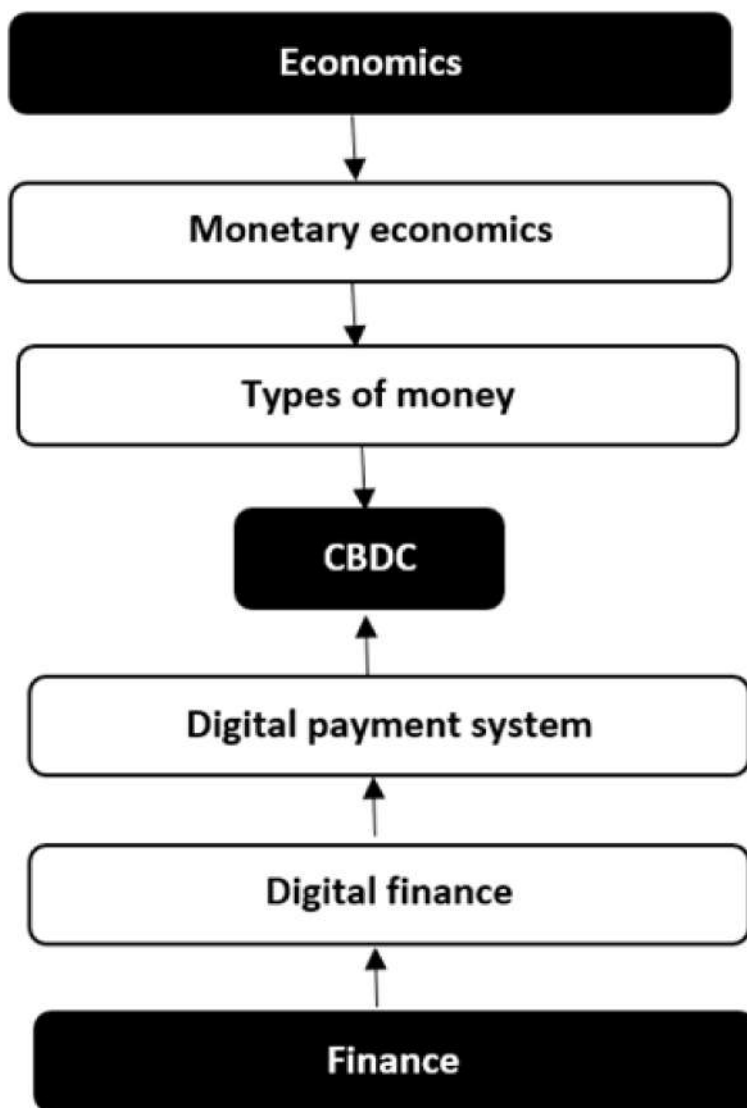
The existing literature highlights numerous motivations (see Table 3) and the advantages of using CBDC. There are many advantages of CBDC over a traditional paper currency (see Picture 2). The investigation of existing literature clearly states that CBDC has better and more efficient usage value than traditional paper currency, although it enjoys cash-like attributes (Agur et al., 2022).

**Picture 2. Advantages of CBDC**



There is a debate among researchers trying to fit CBDC under either economics or finance. The available literature suggests the CBDC encompasses both the economics and finance areas. Under the subject matter of economics, the CBDC may be categorized within monetary economics (Davoodalhosseini, 2022), as it observes, characterizes, and accepts its operations as money in an economic network. Hence, from a monetary economics perspective, CBDC is taken as a form of money. Similarly, from the financial perspective, CBDC may be categorized within an area of digital finance as it involves digital transactions using internet technology (Ozili, 2018). The proposed framework of the positioning of CBDC can be understood through Picture 3.

**Picture 3. Proposed framework: Positioning of CBDC in economics and finance**



**Thematic analysis**

The current section presents the major themes of CBDC-related research works. These themes (see Table 1) comprise growth and adoption, financial inclusion, operational efficiency, designing, welfare impacts, financial stability, privacy concerns and competition related to the CBDC.

A study conducted by Ozili (2022c) shows that African countries are open to adopting CBDC. In comparison, the findings of Boar & Wehrli (2021) suggested that central banks are interested and prepared to launch their own CBDC. The study conducted by Nañez Alonso et al. (2021) reveals that some countries are already advancing in their launch of the CBDC. Ozili (2022a) argues that the CBDC provides a supportive hand

towards financial inclusion. The use of CBDC can increase the pace of financial inclusion since it provides digital currency (Foster et al., 2021; Maniff, 2020). Andolfatto (2021) states that CBDC carrying an interest as other financial instruments may enhance financial inclusion among people. Even without opening a bank account may help financial inclusion, which can be achieved through CBDC (Ozili, 2022b). Emerging economies focus on implementing CBDC as it helps financial inclusion (Engert & Fung, 2017; Didenko & Buckley, 2021). Making CBDC an alternative form of money will pull financial inclusion on the upper side (Mancini-Griffoli et al., 2018; Barontini & Holden, 2019).

**Table 3. List of dominant themes associated with CBDC**

Dominant themes	Reference
Adoption	Boar & Wehrli (2021); Ozili (2022c)
Development	Nañez Alonso et al. (2021)
Financial inclusion	Ozili (2022a); Foster et al. (2021); Andolfatto (2021); Engert & Fung (2017); Mancini-Griffoli et al. (2018); Barontini & Holden (2019); Maniff (2020); Didenko & Buckley (2021)
Operational efficiency	Cukierman (2019); Bordo & Levin (2017); Boar et al. (2020); Fernandez-Villaverde et al. (2020); Bjerg (2017); Barontini & Holden (2019)
Design	Lee et al. (2021); Bossu et al. (2020); Auer et al. (2020); Engert & Fung (2017)
Welfare impacts	Auer & Böhme (2020); Davoodalhosseini (2022); Söilen & Benhayoun (2021); Ward & Rochemont (2019)
Financial stability	Yao (2018); Williamson (2022); Kim & Kwon (2019); Ferrari et al. (2020)
Privacy concerns	Rennie & Steele (2021); Grothoff & Moser (2021); Darbha & Arora (2020); Minwalla (2020)
Competition	Chiu et al. (2019); Andolfatto (2021); Agur et al. (2022); Grym et al. (2017)

To maintain operational efficiency and competition from private players, central banks need to circulate their own CBDC (Cukierman, 2019; Bordo & Levin, 2017; Boar et al., 2020). Higher operational efficiency can be achieved simultaneously by introducing the CBDC (Fernandez-Villaverde et al., 2020; Bjerg, 2017; Barontini & Holden, 2019). A distributed ledger technology provides a competitive edge in introducing the CBDC (Lee et al., 2021; Bossu et al., 2020). Either token-based or account-based will be decided by the design characteristic of the CBDC (Engert & Fung, 2017; Auer et al., 2020).

The usage of CBDC offers unmatched safety and convenience to its users (Auer & Böhme, 2020); Davoodalhosseini, 2022). The social recommendations and potential benefits are the driving forces among people interested in using the CBDC (Söilen & Benhayoun, 2021; Ward & Rochemont, 2019). CBDC gives more stable value to the currency, which is vital for any economy (Yao, 2018; Williamson, 2022). CBDC can solve the challenges faced during cash shortages when sudden demand for cash payment requests arises (Kim & Kwon, 2019; Ferrari et al., 2020).

Interest-providing CBDC can demand higher attraction from its potential users than other banks' offerings under free decision-making (Chiu et al., 2019; Andolfatto, 2021). Widespread usage of CBDC can potentially make the traditional currency obsolete (Agur et al., 2022; Grym et al., 2017). CBDC is not immune to the consequences of any potential breach of privacy (Chiu et al., 2019); hence, legal norms must be set (Andolfatto, 2021). Technology can be leveraged (Darbha & Arora, 2020) to ensure privacy and security while designing and throughout the making process of CBCD (Minwalla, 2020).

### Analysis of region-specific study on CBDC

The present section provides region-specific contextual research work on CBDC. Existing research works have been analyzed in Table 4.

**Table 4. List of region-specific analysis on CBDC**

Context	Methodology	Objective	Outcome/Result	Reference
Asian	Discourse study	Analyzing theoretical challenges in the issuance of an Indian CBDC	Growth and sovereignty will be the prime focus factor while issuing CBDC in India.	Priyadarshini & Kar (2021)
	Discourse study	Analyzing various features and vitality of Chinese CBDC	The success of fintech companies and the acceptance of cryptocurrency in China has started a debate to introduce the Chinese CBDC. The Chinese CBDC is based upon the two-tier distributed ledger technology.	Kim (2020)
	Exploratory research	Examining China's digital fiat currency's nature and its nuances	By nature, it is an algorithm-based cryptocurrency. And from a utilization standpoint, it is truly a smart currency.	Yao (2018)
African	Exploratory research	Analyzing the characteristics and challenges of issuing a Nigerian CBDC	Potential cyber-attacks, breach of privacy and ignorance of digital payment and the major challenges in the introduction of CBDC in Nigeria.	Ozili (2022b)
	Survey method	Analyzing the acceptance of CBDC within the African continent	Lack of interest and the required infrastructure to implement CBDC within the African continent.	Ozili (2022c)
Oceania	Discourse study	Analyzing the capabilities of New Payments Platform (NPP) in an Australian context	NPP is efficient enough to satisfy the payment requirements of Australian users.	Emery (2019)
	Discourse study	Analyzing the advantages and disadvantages of issuing CBDC in New Zealand	Issuance of CBDC in New Zealand comes with advantages and disadvantages.	Wadsworth (2018)

Most of the research works are discourse studies and exploratory (see Table 4). The absence of relevant literature indicates a lack of concrete studies on CBDC, possibly due to CBDC being comparatively at a nascent stage. It also reveals that only a handful of region-specific research has been conducted on CBDC until now, expecting more research in this area as more countries start introducing CBDC in their economy.

### Future research agenda

At present, it is challenging to achieve all the desired outcomes related to CBDC. A lot of empirical research is needed in the coming future. The relationship between CBDC and the cost of credit, adoption of

CBDC, financial health and stability, the effect of deposited amount on bank total deposits, required KYC norms, money laundering activity, and optimal design of CBDC are some of the areas which need to be explored further. CBDC being a new financial asset, allow future research scholars to add new knowledge to this topic. Some of the probable future research trends and questions are mentioned in Table 5.

**Table 5. Future research trends and research questions**

<b>Future Research Trends</b>	<b>Research Questions</b>
Acceptance of CBDC	What is the level of acceptance and usage of CBDC among users?
Adoption of CBDC	What are the roles of demographic and cultural differences towards the adoption of CBDC?
Role of regulatory support	To what extent the regulatory norms affect the usage of CBDC?
Importance of privacy and transparency	What role an ethical principle plays towards the adoption of CBDC?

Future research may also explore an optimum balance between users' capacity to hold CBDC, and the total number of accounts users may have. A comparative study between CBDCs of different economies can be conducted in future.

**Conclusion**

The current study provided an overview of CBDC and its various definitions through the current research work. Previous research shows that CBDC is considered a liability of an issuing central bank, which is considered to have cash-like value among its users. The study also provided several motivational aspects of CBDC, and the numerous advantages associated with it. The study highlighted that several central banks are in favour of issuing their own CBDC due to the advantages that it offers. Although CBDC is a contemporary topic of research that needs to be explored deeper, it requires caution due to its design challenges and, at present, unable to generate specific results. The current study also provided future research trends and questions, showing a need for comparative analysis of CBDC-related topics among different economies.

As a practical implication of the current study, central banks may need to design their CBDC in accordance with the objectives they wish to accomplish through the issuance of CBDC. It is vital for central banks to always ensure the highest security to maintain data privacy related to their CBDC; though it may not be very cost-effective at this moment, such an investment in data security will pay off with time. In conclusion, CBDC is at its nascent stage where its complete advantage and benefits are yet to be realized, and so are its associated costs and consequences. This current study is not free from its limitations. Since this study is purely based on secondary data, there is a need for conducting a survey-based study. While identifying the most relevant articles, it is quite possible that a few articles from less ranked journals or published in non-English language might have been missed out. Therefore, the scope of a more comprehensive study still exists.

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# ADDRESSING CSR REQUIREMENTS IN THE CONTEMPORARY ERA: A STUDY OF PUBLIC SECTOR BANKS IN UTTARAKHAND

Priyanka Pandey\*

## Abstract

*Corporate Social Responsibility (CSR) has gained significant importance since 2014 in India. As per section 135 of the Indian Companies Act, 2013, Companies must pay an additional 2% of their profits on CSR. The stakeholders (customers, government, employees, the general public, etc.) have diverse expectations from the businesses. While exploring past literature regarding the research problem under study, it was found that very few studies have been conducted within the Uttarakhand region, and no research has been conducted taking public sector banks into consideration, which happens to be one of the main stakeholders in terms of banking sector within Uttarakhand. The study is centered around CSR and the extent to which the bank complies with the increasing demands arising from various stakeholders (employees and customers) for social responsibility. The paper concludes with some findings and recommendations that the public sector banks can adopt to enhance their CSR perspective. The paper encounters some limitations and highlights implications for future research.*

**Keywords:** CSR, Covid-19 Pandemic, Stakeholders.

## Introduction

In the modern era of cut-throat competition, Corporate Social Responsibility has become an essential tool for the company by acting as a link between the rising expectations of the general public and the company's social performance. The concept of CSR was first highlighted in 1953 in the publication of "Social responsibilities of a businessman" by Howard Bowen. This concept gained importance in the 1990s. Corporate Social Responsibility implies the voluntary contribution made by companies by indulging in activities that enhance societal and environmental goals. In India, the concept of corporate social responsibility has been in vogue for decades, as the companies like the Tata Group, Wipro, etc., have been serving the community. Over the years, it has been established that CSR encompasses all those elements that govern the relationship between business and society. Covid-19 has posed challenges to various organizations concerning ethical conduct and CSR; however, banks are not exempt. Various CSR services must be implemented to assist their stakeholders, which include staff, consumers, population, and government among others, during this crisis era. Stakeholders are increasingly seeking more from the banking industry's CSR initiatives. Stakeholders influence the public relations and reputation of the companies. Therefore, companies must maintain their relationship with stakeholders by straightforwardly presenting information to gain their support (Moneva et al., 2007).

The pressure of mandatory CSR spending as per "Companies act 2013" has forced companies to spend more and in line with "institutional theory" has positive impact on value of the firm consequently help them in gaining competitive advantage. (Aggarwal, 2013; Nair & Bhattacharya, 2019)

## *Need of the Study*

As the world is suffering from the Covid-19 pandemic, there is a need to conduct a study given CSR obligations and changing expectations of stakeholders from the companies. In the light of Covid 19 pandemic,

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the study attempts to understand the trends of CSR practices of public sector banks and the extent to which the bank complies with increasing demands arising from stakeholders because of Covid-19.

### ***Research Objectives***

***The research objectives are as follows:***

- a. To find out the compliance of public sector banks in Uttarakhand with the social responsibility demands of Employees.
- b. To find out the compliance of public sector banks in Uttarakhand with the social responsibility demands of Customers.

### ***Profile of Public Sector Banks under Study:***

The public sector banks in Uttarakhand are the major source of leading Credit Institutions, providing valuable services to the people of Uttarakhand. Public sector banks focus on inclusive and sustainable services in unbanked areas, which are substantially directed toward Rural Development. The main objective of the public sector banks is to contribute to the development of the rural economy of the state by providing loans at marginal rates. All public sector banks located in Dehradun were taken up for this study.

### **Literature Review**

***CSR and Banks:*** "Corporate Social Responsibility, Sustainable Development, and Non-Financial Reporting- Role of Banks". CSR programs, sustainable growth objectives, and non-financial institutions reporting became key issues included in the reporting mandated by RBI in 2007 through a notification later modified in 2013. The Basel Committee, which met in 1999, developed a framework for corporate governance in the banking industry. To maintain public safety and soundness of the financial system, banks and supervisors should work together to ensure rigorous and consistent risk control and decision-making

***Stakeholder Theory and CSR:*** Dr. F. Edward Freeman, in his revered book, "Strategic Management: A Stakeholder Approach." coined the Stakeholder Theory. The theory states that not only the shareholders are regarded as stakeholders of the company; rather the stakeholder ecosystem includes any person who has invested in the stocks of the company or is taking part in the affairs of the company, or is impacted by the performance of the company. As a result, stakeholders include shareholders and staff, as well as consumers, the community, environmentalists near the company's plants, vendors, and others. The true measure of a company's performance is how satisfied all of its stakeholders are, not just those that stand to benefit from its stock.

***CSR and Employees:*** The literature review around CSR and HRM interaction studies highlights that workers employed in organizations participating in numerous CSR programs exhibit a variety of positive attitudes, including improved corporate pride, attention to work, career satisfaction, and organizational identity (Rupp and Mallory, 2015). Socially Responsible companies are regarded as attractive workplaces because:

- (i) People feel proud in being affiliated with companies committed to CSR,
- (ii) They may recognize that their values are in tune with the organization's values, and
- (iii) They may expect that such companies will treat them fairly (Jones et al., 2014).

During the COVID-19 pandemic, millions of part-time and full-time workers have been estimated to have lost their jobs. The prospect of job reduction is the most serious obstacle, but employees can overcome it by leveraging the philanthropic efforts of their employers and colleagues (Bapuji et al., 2020). As a result, all managers and staff should work together to build a closer bond than ever before through this trying period. To run a successful company, companies must implement employee protection policies. Around the same time,

workers must work together to carry out the firm's numerous humanitarian programs to defeat Covid-19. As such, companies' response to customers during the ongoing pandemic is one of the emerging CSR demands and an opportunity to build a strong employer-employee relationship.

### **CSR and Customers Institutional Theory:**

Consumer is not just an economic entity; Company's activities also impact the consumer as a member of a family, society, and nation (Handelman and Arnold 1999). Therefore, the company must cater to the diverse needs of customers. Customers must have a fair and reliable image of the banks, and it increases the need of customer oriented organizational policies (Alrubaiee, 2017; Liu and Wu, 2007; Roy and Shekhar, 2010). Due to a shortage of essential commodities like food, Personal Protective Equipment (PPE), masks, hospital bedrooms, and adequate oxygen supply/ventilators, customers have been affected badly worldwide. Companies are struggling in maintaining a loyal relationship with their customers, as they need to reach every customer to satisfy his/her daily needs. As a result, companies' responses to stakeholders are now a major CSR demand as well as an incentive to create long-term consumer loyalty.

### **Hypotheses Formulation and Research Model**

The model identifies the connection between Public sector Bank's CSR initiatives and the satisfaction level of its employees and customers (Figure.1). It primarily considers four Constructs, viz., Corporate Social Responsibility Initiatives for Employees; Corporate Social Responsibility Initiatives for Customers; Satisfaction of Employees and Satisfaction of Customers.

### **Formulation of Research Hypotheses:**

The hypotheses are as follows developed from literature to determine the associations between the various structures.

H1: CSR initiatives of the Public sector banks for Employees are positively associated with Employee Satisfaction.

H2: CSR initiatives of the public sector banks for Customers are positively associated with Customer Satisfaction.

### **Research Methodology**

**Scale Development:** Duygu Turker's CSR Scale was used. The items were measured through a 16 items structured questionnaire using a five point scale. The scale is depicted in Table 1.

Table 1: CSR Scale

Dimension	Items Measurement	Literature Sources
<b>Employees</b>	CSR-E1. A reasonable amount of salary is given to bank employees to maintain an acceptable quality of life.	Turker D (2009)
	CSR-E2. A variety of indirect incentives are provided by the bank to improve the standard of living of its employees.	Turker D (2009)
	CSR-E3. Health and safety related work procedure.	Turker D (2009)
	CSR-E4. The employees are allowed to work from home because of the Covid19 pandemic.	Authors' own
<b>Customer</b>	CSR-C1. Customer satisfaction is given top priority by the bank.	Turker D (2009)
	CSR-C2. The bank addresses the complaints of its customers.	Turker D (2009)
	CSR-C3. Extension in the repayment period of loans for customers because of the Covid-19 pandemic.	Authors' own
	CSR-C4. Uninterrupted Online services for customers reduce the need to visit bank branches because of the Covid-19 pandemic.	Authors' own
<b>Employee Satisfaction</b>	SAT-E1. Satisfied with salary.	Turker D (2009)
	SAT-E2. Satisfied with other incentives provided by the bank.	Turker D (2009)
	SAT-E3. Satisfied with safety provisions provided by the bank because of Covid19.	Turker D (2009)
	SAT-E4. Satisfied with working from home facility given by the bank.	Authors' own
<b>Customer Satisfaction</b>	SAT-C1. Satisfied with the products & services offered by the bank.	Turker D (2009)
	SAT-C2. Satisfied by the quick complaint redressal mechanism of the bank.	Turker D (2009)
	SAT-C3. Satisfied by the extension in the repayment period of loans because of Covid-19.	Authors' own
	SAT-C4. Satisfied by the uninterrupted online services of the bank	Authors' own

**Design of Research:**

A sample size of 320 respondents was taken and the Judgment sampling method was used. Data was collected cross-sectionally. Structured questionnaires were used for obtaining information from employees and customers of the public sector banks in Uttarakhand. The responses were collected during Covid-19, September to November 2020

**Table 2: Profile of the Respondents**

S. N.		Employees(n=160)	Customers (n=160)
<b>1.</b>	<b>Gender</b>		
	Female	40	42
	Male	120	118
<b>2.</b>	<b>Age</b>		
	20-30	45	34
	31-40	62	78
	41-50	53	48
	More than 50		
<b>3.</b>	<b>Education Level</b>		
	Intermediate	13	32
	Graduation	79	73
	Post Graduate	39	31
	Above Post Graduation	29	24
<b>4.</b>	<b>Income Group</b>		
	Less than 5 Lakh	22	78
	More than 5 Lakh	138	82
<b>5.</b>	<b>Level of Job</b>		
	Lower Level	42	NA
	Middle level	95	NA
	Higher Level	23	NA

**Sampling Adequacy:**

The KMO statistic was used to determine sampling adequacy. It has a range of 0 to 1, with values closest to 1 being higher. The value is 0.795, which lies within acceptable range.

The other metric is Bartlett's test of sphericity, which has a value of 3866.303 and a p-value of less than 0.05. The KMO measure means that the sample size is adequate.

**Testing Statistical Assumptions:** Certain assumptions were tested which are essential for analyzing data such as Normality, Linearity, Multicollinearity, and Homoscedasticity. All the assumptions favored the data analysis as their values came well within the prescribed limit.

**Data Analysis and Interpretation**

**Exploratory Factor Analysis:** Factor analysis was based on criteria established by Hair et al., (2006). The four components were identified that includes 76.539 percent of the total items.

**Table 3: TVE**

Factors	"Initial Eigenvalues"			"Extraction Sums of Squared Loadings"			"Rotation Sums of Squared Loadings"		
	T	Variance %	Cum %	T	Variance %	Cum %	T	Variance %	Cum %
1	5.119	31.992	31.992	5.119	31.992	31.992	3.344	20.897	20.897
2	3.125	19.532	51.524	3.125	19.532	51.524	3.112	19.450	40.347
3	2.837	17.733	69.257	2.837	17.733	69.257	3.085	19.280	59.627
4	1.165	7.282	76.539	1.165	7.282	76.539	2.706	16.912	76.539

**Extraction Method: Principal Component Analysis**

**4.1.1 Construct Grouping & Naming**

Based on the above factor analysis results shown by the present study, a newly modified Technology Acceptance Model based on four factors was derived. This table shows the component loadings, weight of each factor and association between the variables.

**4.2 Structural Equation Modelling**

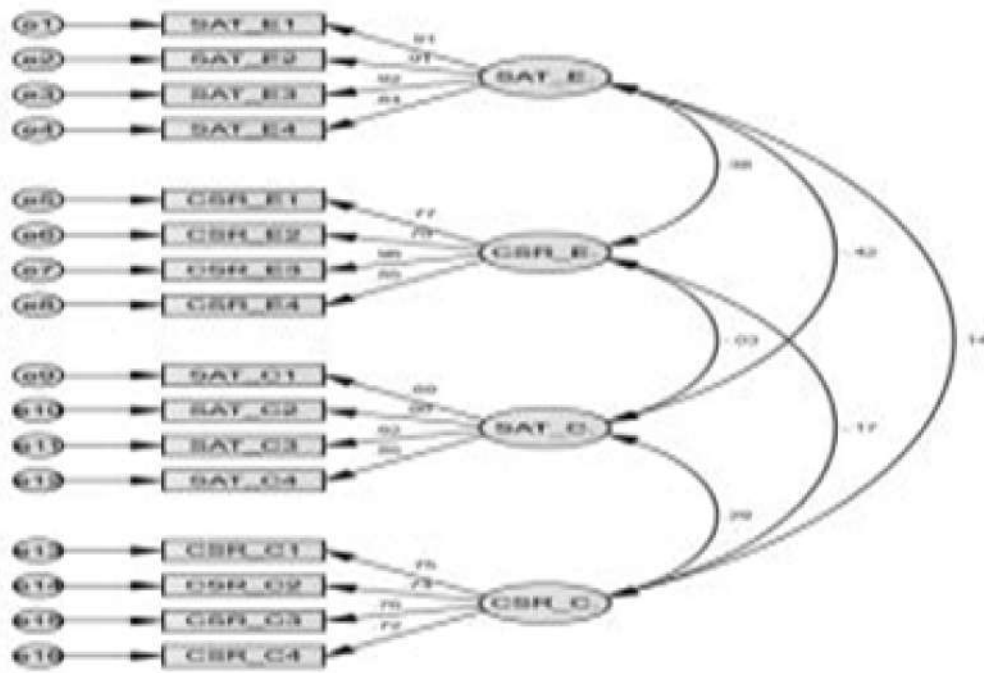
After completing EFA, we used SEM to establish the validity, reliability, and hypotheses testing. The first step in SEM is CFA (confirmatory Factor Analysis), which was conducted on four constructs obtained after EFA analysis.

**4.2.1 Measurement Model**

The measurement model (Figure 2) was obtained after performing CFA using AMOS 23.0. The model structure allows the factors to correlate with every other factor. The fit indices for the measurement (covariate) model structure show a moderate fit as:

"CMIN/D.F = 2.5"; "GFI = 0.891"; "CFI = 0.913"; "NFI = 0.880" and "RMSEA = 0.07".

**Figure 1: Measurement Model**



Source: Author's Calculation

**Table 4: Rotated Component Matrix**

		Component		
CSR_E1		.846		
CSR_E1		.766		
CSR_E1		.904		
CSR_E1		.870		
CSR_C1				.794
CSR_C2				.771
CSR_C3				.834
CSR_C4				.812
SAT_E1	.883			
SAT_E2	.896			
SAT_E3	.869			
SAT_E4	.851			
SAT_C1				.794
SAT_C2				.863
SAT_C3				.875
SAT_C4				.821

1. "Extraction Method: Principal Component Analysis";
2. "Rotation Method: Varimax with Kaiser Normalization".
3. "Rotation converged in 6 iterations".

Note 1: Factor 1 was formed of four items (coded from CSR-E1 to CSR-E4) which showed higher coefficients for it. Based on the theme they cover and the past literature review, the factor was labeled as "CSR Initiatives for Employees" Factor 2 has higher coefficients for four items (coded from CSR-C1 to CSR-C4), and was labeled as "CSR Initiatives for Customers". Factor 3 has higher loadings for four items (coded from SAT-E1 to SAT-E4) and was labeled as "Employee Satisfaction". Factor 4 was named "Customer Satisfaction" with four items (coded from SAT-C1 to SAT-C4) showing higher loadings for the said factor.

### ***Validity & Reliability Analysis***

The AVE method was used to measure convergent validity. AVE was found to be greater than an acceptable average of 0.50 for all constructs (Malhotra & Dash, 2011; Fornell & Larcker, 1981). The reliability of the questionnaire was found to be 0.729 using Cronbach's Alpha method.

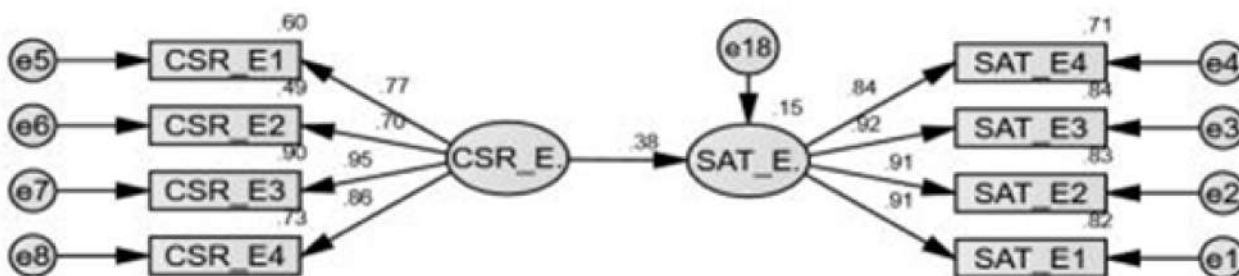
### ***Results from Hypotheses Testing***

After testing the reliability and validity, we analyzed the study relationships using Structural Equation Modelling (SEM). The results are presented below in detail:

### ***Structural Model***

The structural model in the present study includes 'CSR Initiatives for Employees' and 'CSR Initiatives for Customers' as Independent variables or exogenous variables; 'Employee Satisfaction' and 'Customer Satisfaction' as Dependent variables or endogenous variables.

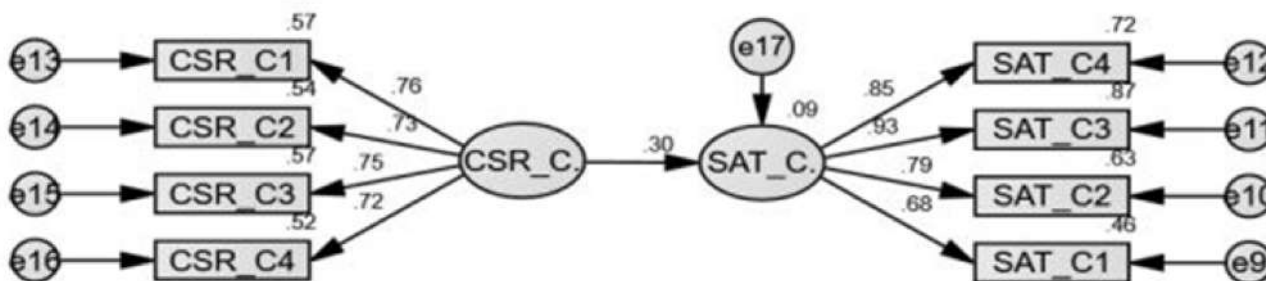
Figure 2: Structural Model 1



Source: Author's Calculation

Figure 2 depicts the relationship between CSR initiatives for Employees and Employee Satisfaction. The relationships among the study variables were tested using SEM. The Structural model exhibits a significantly positive impact of CSR initiatives for employees on employee satisfaction ( $\beta = 0.385, p < 0.001$ ), supporting H1.

Figure 3: Structural Model 2



Source: Author's Calculation

Figure 3 depicts the relationship between CSR initiatives for Customers and Customer Satisfaction. The structural model exhibits a significant positive of CSR initiatives on customer satisfaction ( $\beta = 0.301$ ).

Table 5: Model Paths

“Hypothesised Path(s)”	“Unstandardized Parameter Estimate”	“Standardized Parameter Estimate”	“t-value”	“Sig”
CSR_E --->SAT_E	0.471	0.385	6.532	.000
CSR_C --->SAT_C	0.313	0.301	4.535	.000

Note 1: CSR-E means

Note 2:  $p < 0.001$

**Discussion**

The study shows a strong positive impact of CSR activities on Customer and employee satisfaction. These results were corroboration by the literature (e.g., Rupp & Mallory, 2015; Jones et al., 2014; Sen and Bhattacharya 2001; Handelman and Arnold, 1999). Such impact can be enhanced when perception of CSR culture is high (Chen, 2018 et al.) and employees are more engaged (Ferreira & Oliveira (2014). Our study results reveal that the CSR initiatives aimed at the welfare of employees and customers result in the satisfaction of employees and customers, respectively. The bank employees were highly satisfied with the healthy and safe working conditions provided by the said bank because of the Covid-19 pandemic. In this way, CSR initiatives act as a bond between employers and (a) employees, and (b) customers.



## Conclusion & Suggestions

It can be concluded that the present study contributes to the existing body of literature by collecting insights from employees and customers of Public sector banks of Uttarakhand.

Our study provides evidence of the influence of the Bank's CSR practices on a critical group of stakeholders, namely, employees and customers, in the post-pandemic scenario.

Therefore, firms need to adopt employee-oriented policies to conduct business operations smoothly; at the same time, employees should cooperate to carry out various humanitarian initiatives of the firm to win the battle against Covid-19.

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# DOES INCREASED ENTREPRENEURIAL ACTIVITY CAUSE ECONOMIC GROWTH: AN INDIAN EXPERIENCE ?

Udai Lal Paliwal\*, Ashutosh Pandey\*\* and Nitin Kishore Saxena\*\*\*

## Abstract

*The present paper analyses whether a significant relationship exists between entrepreneurial activities and economic growth in India.*

### *Design/methodology/approach*

*Following Toda and Yamamoto (1995), we investigate whether a significant statistical relationship exists between new firm registration and Gross Domestic Product of India and new firm registration and Gross Capital Formation in India using a VAR based Johansen Cointegration Test. To find the direction of causality between entrepreneurial activity and economic growth, we further estimate the Granger Non-Causality Test. Then we use the Fully Modified Ordinary Least Squares Method (FMOLS) to estimate the regression model linking the three variables.*

### *Findings*

*GDP and entrepreneurial activities in India are found to be significantly related. Also, the new firm registration in India leads to an increase in the Gross Capital Formation in the country. However, there is a lack of evidence supporting the argument that the country's GDP also increases with the increase in the registration of New Firms.*

### *Originality*

*None of the available studies investigated the role of entrepreneurship in India's economic growth by considering the new firm creation as a measure of entrepreneurial activity. This research paper, thus, fills a gap in the existing literature and adds to the existing body of knowledge in the field.*

### *Implications*

*The lack of evidence supporting a significant contribution of the increased firm registrations in India's GDP shows that government policies should increasingly focus on facilitating the firms' operations by providing an enabling environment and reducing the barriers to business sustainability and growth.*

**Keywords:** *Entrepreneurial Activities, Entrepreneurship, GDP, Economic Growth, Firm Registration*

## Introduction

The growing interest of policymakers, researchers and economists in entrepreneurship coincides with a revival of entrepreneurship rates (Wennekers, 1999). Also, improving business regulations increases entrepreneurial activities (Divanbeigi & Ramalho, 2015). Whether the countries that focus on entrepreneurship enjoy higher growth has perplexed policymakers. Though the classical theories of development did not recognise entrepreneurship as an essential contributor to economic growth, modern literature vastly recognises the role entrepreneurial activities play in any nation's economic growth. Several studies (van Stel, Carree & Thurik, 2004; Paliwal, 2008; Valliere & Peterson, 2009; Divanbeigi & Ramalho, 2015) have attempted to prove the apparent link between the two.

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Varying levels of economic attainment across nations have been attributed to different entrepreneurial activity levels, which mainly portray the risk appetite of entrepreneurs. There seems to be an agreement among researchers that it is the quality of entrepreneurs, which optimises the use of other factors of production for innovation and enhanced economic well-being of those involved in the process (Harbison, 1956; Wennekers & Thurik, 1999; van Stel, Carree & Thurik, 2004; Valliere & Peterson, 2009; Divanbeigi & Ramalho, 2015). Over the years, economic growth has been linked to various factors such as capital formation, innovation, resource availability, level of education, human capital and entrepreneurship. Entrepreneurship's contribution to economic growth is increasingly recognised these days (Divanbeigi & Ramalho, 2015). Like many other variables, its effect varies across jurisdictions (Pradhan et al., 2020; van Stel, Carree & Thurik, 2004).

Society considers entrepreneurs as agents of economic growth. These economic growth agents start new businesses, expand existing ones, create jobs, and improve economic indicators such as GDP growth rate of exports, standard of living, skills development, and community development. Since entrepreneurship development is receiving increased attention from policymakers (Valliere & Peterson, 2009), it motivates us to investigate whether increased entrepreneurial activities in India lead to an increase in the nation's economic growth. The paper further aims to guide policymakers in developing a growth-centred entrepreneurship policy.

In recent years the policymakers in India have shown renewed interest in entrepreneurship development. The significant improvement in four areas of business regulation, namely, resolving insolvency, dealing with construction permits, cross border trade, and ease of starting a business, enabled India to jump 79 ranks in the Ease of Doing Business Rankings 2019. India's ranking improved from 134th position in 2014 to 63rd position in 2019. The greater the ease of doing business, the higher is the entrepreneurial activity, which is presumed to have generated more employment opportunities, resulted in an increased collection of government tax revenues, and enhanced personal incomes (World Bank, 2019). The Government of India (GOI) introduced "a major fiscal policy reform in 2017 by merging more than ten types of indirect taxes into one unified tax" collected at one source (Paliwal, et al., 2019) to ease the tax administration and compliance, especially by new businesses. Due to the ease of doing business reforms in India, there is a noticeable change in the average number of registered companies, as shown in Table 1.

**Table 1: Average Number of New Companies Annually Registered in India**

Period	Average of Registered Companies
1989-1993	24787
1994-1998	42377
1999-2003	26770
2004-2008	54320
2009-2013	87956
2014-2018	95223

Source: Author's Compilation

For the period 2014-18, the average number of companies annually registered in India significantly increased. During the study period, i.e., 2014 - 2018, the average increase in GDP was 11 percent in India. Thus, in this study, we investigate whether increased entrepreneurial activities lead to economic growth in India.

### Review of Related Literature

This section discusses the literature debating entrepreneurship, economic growth, and the link between the two. On detailed examination of these studies, we divide them into three groups: 1) studies measuring entrepreneurial activity, 2) studies measuring economic growth, and 3) studies linking entrepreneurship with economic growth. A detailed examination of the related literature helped us decide on appropriate variables to measure entrepreneurship and economic growth.

The existing literature on entrepreneurship employ several measures for measuring entrepreneurial activity. Among these measures, the number of self-employed individuals and the creation of new organisations or business startups is a popular approach to determine entrepreneurial activity (Gartner, 1989; Gartner, Evans, & Leighton, 1990; W. B., & Shane, S. A., 1995; Hoffmann, 2007). The 'Organization for Economic Cooperation and Development (OECD), the World Bank Group Entrepreneurship Survey and the 'Global Entrepreneurship Monitor (GEM)', measure entrepreneurial activity differently. The OECD's "entrepreneurship measure is based on the self-employment rate across the member countries" (OECD, 2008). Global Entrepreneurship Monitor (GEM), carrying out survey-based research on entrepreneurship globally, measures entrepreneurial activity by Total Early Stage Entrepreneurial Activity (TEA). "TEA captures the proportion of the 'working-age' adult population actively engaged in starting or running a new business". Comparing the GEM and the World Bank measure of entrepreneurship, we find that the GEM's measure reports significantly greater early-stage entrepreneurship levels. In contrast, the World Bank measures entrepreneurial activity based on the formal registration of businesses and also provides national-level data on the number of newly registered businesses (Acs et al., 2008). In this study, we use the third approach suggested by the World Bank to measure entrepreneurial activity.

The studies linking entrepreneurship with economic growth opine that new venture creation significantly links entrepreneurship to economic growth (Hebert and Link, 1989; Van Praag, 1996; Wennekers & Thurik, 1999). The new venture creation involves creating, organising, and operating a new business firm (Baumol, 1993b; Lumpkin and Dess, 1996 and; Audretsch, 1995). The classical endogenous growth theory models emphasise the importance of knowledge and its potential to create spillovers as a critical driver of economic growth (Solow, 1956; Romer, 1986, 1990). Audretsch and Keilbach (2007) argue that entrepreneurship facilitates the spillover of knowledge. "It is the missing link between investments in new knowledge such as skill development, training and education of the workforce and economic growth" (Audretsch, 2007; Zoltan, 2012; Joshua, 2015). Thus, entrepreneurship investment is necessary for long-run economic growth (Hoselitz, 1952; Ghani and O'Connell, 2011). It impacts economic growth by increasing the risk-taking capabilities, diversification and supply of labour and technology (Khilstrom and Laffont, 1979).

Some studies opine that the role of entrepreneurship in economic growth varies from country to country. It depends on the stage of economic growth to which the country under study belongs. Valliere and Peterson (2009) determine the effect of various entrepreneurial activities on GDP growth in developed and emerging countries. They further argue that entrepreneurs have helped developed countries enhance their economic growth by appropriately using national investments in knowledge creation and a conducive regulatory framework. However, they do not find a similar effect in emerging countries. Stel et al. (2004) investigated how Total Entrepreneurial Activity influences GDP growth and whether it depends upon the level of economic development. They found that "entrepreneurship plays a different role in different countries depending upon their stage of economic development". On similar lines, Almodóvar-González et al. (2020) also concluded that the role of entrepreneurial activity in economic well-being or growth is contingent upon the stage of economic development of the country in question.

With a population of more than 1.3 billion, India has evolved as a global player, accompanied by rapid economic growth in the past decade. There are few studies investigating the evidence of a relationship between economic growth and entrepreneurship in India. Gupta (2008) investigates the characteristics of entrepreneurship in India and challenges the assumption that entrepreneurship is not supported by Indian culture. Koster and Rai (2008) studied the link between entrepreneurship and economic development in India, hypothesising a decline in entrepreneurship rate with economic development. They argue that economic development leads to increased employment opportunities, which reduces the number of entrepreneurial activities. However, they did not find this valid for the Indian economy and concluded that entrepreneurship is an essential driver of India's economic growth. Contractor and Kundu (2004) studied export-driven entrepreneurship's role in economic development

in India, among other countries. They did not find conclusive evidence that the boom in entrepreneurial activities in the software industry has led to India's economic growth. A recent study shows a significant linkage between the number of new firms established in an area and the Gross Domestic Product of the given area (Economic Survey 2019-20, 2020).

Based on the extensive literature review, we conclude that 1) The majority of the studies investigating the nexus between entrepreneurship and economic growth find that entrepreneurship leads to economic growth in developed economies. However, the same is not valid for developing nations. 2) New firm creation is used to measure entrepreneurial activity (Gartner, 1989; Gartner, Evans, & Leighton, 1990; W. B., & Shane, S. A., 1995; Hoffmann, 2007). 3) None of the available studies investigated the role of entrepreneurship in India's economic growth by considering the new firm creation as a measure of entrepreneurial activity. Our study, thus, bridges the gap between the existing literature and the empirical relationship between entrepreneurial activity by adding to the existing body of knowledge in the field.

### Theoretical Framework and Methodology

As per the macroeconomic model of economic growth, a nation's Gross Domestic Product depends on four crucial factors: consumption, government expenditure, investment, and net exports. Since investment comprises private domestic investment, an increase in the number of entrepreneurial activities would increase private domestic investment and hence economic growth.

The study considers only formal businesses to measure entrepreneurial activity in India and uses the number of new firm registration to measure it. Though it may be a significant contributor to economic growth, informal businesses have not been included in the study due to the absence of reliable data.

To find whether India's increased entrepreneurial activities lead to economic growth, following Toda and Yamamoto (1995), we investigate the presence or otherwise of a long-run statistical relationship between new firm registration and Gross Domestic Product of India and new firm registration and Gross Capital Formation in India. We divide our study into three steps. In the first step, we test for the stationarity of the variables using the Phillips-Perron Unit Root Test and ADF Unit Root Test. In the second step, "we investigate the long-run relationship between the variables using a VAR based Johansen Cointegration Test". In the last step, we estimate the Granger Non-Causality Test to find the direction of causality.

Then, we estimate the regression model discussed in equation (1) using the Fully Modified Ordinary Least Squares Method (FMOLS). FMOLS is used in the presence of a cointegrating relationship among the variables.

$$GDP_t = \alpha + \beta_1 GCF_t + \beta_2 Firm_t + \varepsilon \quad (1)$$

Where, GDP is the Gross Domestic Product, GCF is the Gross Fixed Capital Formation, Firm is the number of new firms registered,  $\alpha$  is the intercept parameter,  $\beta_1$  is the coefficient of GCF and  $\beta_2$  is the coefficient of the variable Firm, and  $t$  is the time period of the study. A detailed description of these variables is presented in the next section.

### Data Sources and Description

Based on the literature review, we identified the Gross Domestic Product (GDP), Gross Fixed Capital Formation (GCF) and the number of new firms registered (Firm) as the variables relevant to our study. The time-series data of GDP and GCF in current prices, measured in Rupees Billion, was obtained from the "Ministry of Statistics and Programme Implementation website, Government of India". The Firm data was obtained from the Ministry of Corporate Affairs, Government of India database and World Bank ease of Doing Business Data. Ministry of Corporate Affairs, Government of India database, includes the list of businesses registered under the

"Indian Companies Act, 2013'or under any previous company law or a limited liability partnerships firm registered under the 'Limited liability partnership Act, 2008". The study covers the period from 1981 to 2018. Table 2 provides a snapshot of the important statistics of the variables used in the study.

**Table 2: Summary of descriptive statistics**

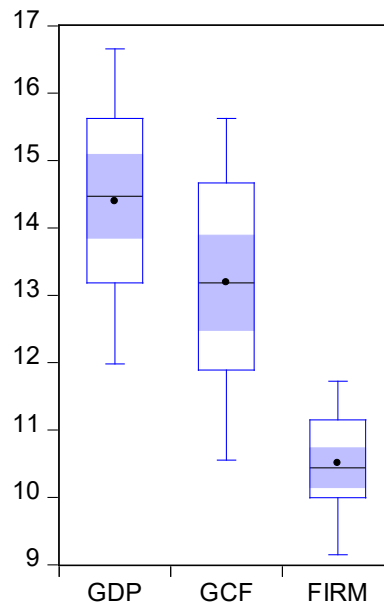
	<b>GDP</b>	<b>GCF</b>	<b>Number of Firms</b>
<b>Mean</b>	4084118	1460873	46611
<b>Median</b>	1929474	533880	34361
<b>Maximum</b>	17199815	6108582	123942
<b>Minimum</b>	160214	38403	9418
<b>Std. Dev.</b>	4836523	1811075	31957
<b>Skewness</b>	1	1.227653	1
<b>Kurtosis</b>	4	3.220996	2
<b>Jarque-Bera</b>	11	9.622492	5
<b>Probability</b>	0	0.008138	0
<b>Observations</b>	38	38	38

Source: Authors' computation based on collected data

**Empirical Results**

A graphical plot of all the variables discussed in Table 2 shows exponential data series. Since a log transformation of the data series makes it linear (Gujarati, 2012). We used logarithmically transformed data series for further analysis. A boxplot of the logarithmically transformed variables is given in Fig 1. The box plot shows no outliers in our data, and the data series is normal.

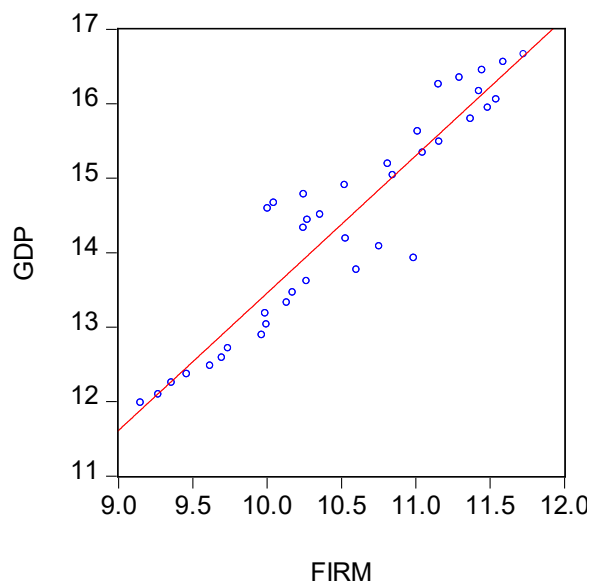
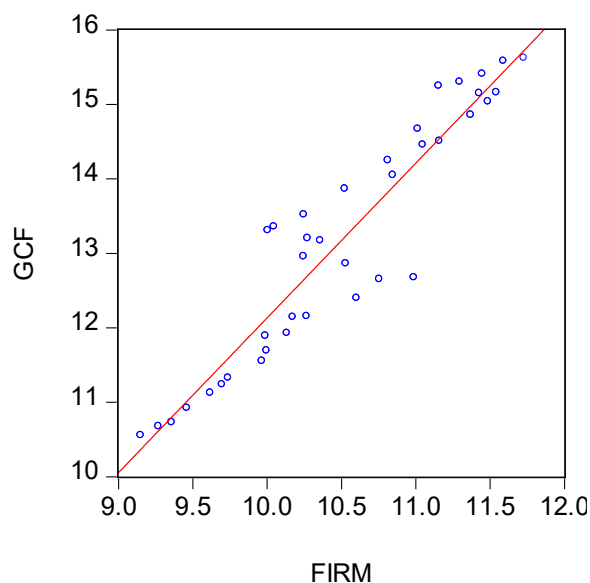
**Figure 1: Box-plot of the variables**



Source: Based on data compiled by authors

The scatter plot of the variables presented in Figure 2 shows a positive correlation between GDP and the number of new firms registered in India and GCF and new firms. It further motivates us to investigate the existence of the long-run relationship between the identified variables.

**Figure 2: Scatterplot of the variables**



Source: Based on data compiled by authors

Next, we tested for a unit root in the variables using the "Phillips-Perron Unit Root Test and ADF Unit Root Test". We found the presence of no autocorrelation in the first differences of all the variables. Thus we conclude that all the data variables are integrated of order one,  $I(1)$ . The results of the tests are shown in Table 3. If the variables are integrated of the same order, we can check for the presence of a long-run relationship between them using the Johansen Cointegration Test.



**Table 3: Unit Root Test Results of GDP (Current Prices) and New Firms Registered**

Test for Unit Root in	Phillips-Perron Unit Root Test			ADF Unit Root Test		
	$GDP_t$	$GCF_t$	$Firm_t$	$GDP_t$	$GCF_t$	$Firm_t$
	Adjusted t-statistic	Adjusted t-statistic	Adjusted t-statistic	t- statistic		t- statistic
<b>Level</b>	-1.13 (0.69)		-1.06 (0.71)	-1.35 (0.59)		-1.01 (0.73)
<b>1st Difference</b>	-2.87** (0.05)		-4.68*** (0.00)	-2.83* (0.06)		-4.74*** (0.00)

- Note: 1. Figures in parentheses indicate the respective p-values.  
 2. \*, \*\*, \*\*\* indicates the rejection of the null hypothesis of unit root at 10%, 5% and 1% level of significance respectively.  
 3. Automatic selection of lags using Schwarz Info Criterion (SIC) in ADF Unit Root Test  
 4. Individual intercept in the test equation.  
 5. Newey-West bandwidth selection using a Bartlett Kernel in Phillips

Source: Authors' computation based on collected data

In the next step, we grouped two variables at a time 1) GDP and firm registrations and 2) GCF and firm registrations. To investigate the presence of a long-run relationship between these two groups of variables, we determined the appropriate lag length, in a Vector Auto Regression (VAR) specification. The Akaike information criterion and Hannan-Quinn information criterion indicate the lag length  $p$  to be 5 for the VAR specification involving GDP and Firms. For the variables GCF and Firms, the appropriate lag length was found to be 6. After estimating the VAR models, we checked for serial correlation in the residuals using the LM test. We found no serial correlation in the case of both these groups of variables. Then we apply the Johansen Cointegration Test to check for the presence of a long-run relationship between the variables. We assumed no trend in the series and no intercept in VAR. The result of the Johansen Cointegration Test is shown in Table 4.

**Table 4: Results of the Johansen Cointegration Test**

Model	Null Hypothesis	Eigenvalue	Trace Statistics	5% Critical value	Max-Eigen Statistic	5% Critical value
<b>GDP and Firm registration</b>	None	0.34	21.90	15.49***	13.71	14.26**
	At most 1	0.22	8.19	3.84***	8.19	3.84***
<b>GCF and Firms registration</b>	None	0.41	18.16	15.50***	16.47	14.26***
	At most 1	0.05	1.70	3.84	1.70	3.84

\*\*\* Statistically significant at 1% level of significance, \*\* Statistically significant at 5%

Source: Authors' computation based on collected data

Based on Johansen's Cointegration Test results, we reject the null hypothesis of no cointegration between GDP and firm registration. Thus, we conclude that there exists a cointegration between GDP and firm registrations. A similar conclusion was reached in the case of the variables GCF and firm registrations; we reject the null hypothesis of no relationship between these two variables. The presence of the cointegrating relationship means that the two series move together over time with a stable distance between them, reflecting that a long-run statistical relationship exists between the study variables.

Since GDP and Firms and GCF and Firms are found to have a significant association, it becomes relevant to investigate 1) whether an increase in the number of firms is causing an increase in GDP in India and 2) whether increased firm registrations are causing an increase in GCF. Thus, in the next step, we apply Granger

non-causality test. It tests for the presence of causality from GDP to Firms and Firms to GDP and similarly in the direction of GCF to Firms and Firms to GCF. The results of the Granger non-causality test are given in Table 5.

**Table 5: Results of the Granger Non-Causality Test**

Direction of Causality	Chi-sq	Prob
Firms to GDP	5.92	0.31
GDP to Firms	11.04	0.05**
Firms to GCF	11.50	0.07**
GCF to Firms	19.11	0.004***

\*\* Statistically significant at 5% level of significance.,  
Source: Authors' computation based on collected data

We reject the null hypothesis that GDP does not Granger cause registration of new firms at a 5% level of significance, while we fail to reject the null hypothesis that new firms' registration does not cause GDP growth. Thus, we can conclude that due to the increase in GDP, there is an increase in the registration of new firms in India, while the reverse is not valid. In India's case, there is a lack of evidence supporting the argument that with the increase in the registration of New Firms, the country's GDP also increases.

When we tested for the causality between GCF and Firm, we rejected the null hypothesis that Firm does not Granger cause GCF at a 5% significance level. In the direction of GCF to Firm, we rejected the null hypothesis at a 1% significance level. Thus, we found the presence of causality in both directions. We can conclude that new firm registration in India leads to an increase in the GCF in the country.

Since we found a cointegrating relationship between 1) Firm and GDP and 2) GCF and Firm, we estimated the regression equation (1) using the fully modified ordinary least squares method (FMOLS). The estimation results are presented in Table 6.

**Table 6: FMOLS Estimation Results**

Dependent Variable: GDP				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
GCF	0.87***	0.04	21.24	0.00
FIRM	0.04	0.09	0.42	0.67
C	2.51***	0.50	4.99	0.00
<b>R-squared</b>	0.996	<b>Mean dependent var</b>	14.46	
<b>Adjusted R-squared</b>	0.995	<b>S.D. dependent var</b>	1.39	
<b>S.E. of regression</b>	0.095	<b>Sum squared resid</b>	0.31	
<b>Long-run variance</b>	0.019			

\*\* Statistically significant at 1% level of significance.,  
Source: Authors' computation based on collected data

The FMOLS estimation result shows that a one-unit increase in GCF leads to a 0.87-unit increase in the GDP. The GCF coefficient is statically significant at a 1 percent level of significance. However, we did not find any significant relationship between GDP and Firm. Our estimated model is a Good Fit model with a value of R-squared close to 1. Thus, we cannot say that new firm registration in India increases the country's economic growth or GDP growth rate. This result confirms our findings in the Granger non-causality tests conducted above.

## Conclusion and Policy Implications

The recent surge in new firm creation in India's formal sector shows that entrepreneurs have welcomed the current government's steps to ease the business regulations to provide a conducive business environment. It is expected that as entrepreneurial activities increase, the GDP of the nation will also increase. The current study investigated the nexus between the economic growth measured by GDP and entrepreneurial activities measured by the number of registered firms. Our study finds that a long-run relationship exists between GDP and entrepreneurial activities in India. This long-run relationship is attributed to the significant evidence supporting a cointegrating relationship between GDP and New Firms registration in India. However, the study does not find significant evidence that increased entrepreneurial activities are leading to economic growth.

Based on our findings, we argue that the registration of new firms does not necessarily mean that the firms are operational in the long run and contribute to the economy's GDP. To contribute to the GDP, the firms must start operations after registrations and continue doing business in the short and long run. The lack of evidence supporting a significant contribution of the increased firm registrations in India's GDP shows that the government policies should increasingly focus on facilitating the firms' operations by providing an enabling environment and reducing the barriers to business sustainability and growth.

Since most of the new business registration falls in micro, small and medium enterprises (Paliwal, 2008), the government should provide hand-holding to these firms to graduate into successful ventures in the long run. Sustainable growth of newly registered businesses will help speedup economic growth. Mentoring newly registered businesses and support in various functional areas will help them overcome difficulties encountered at the initial stage. Provision of support services such as regulatory filings, handling legal and compliance matters, and record-keeping shall help the new entrepreneurs to focus on their core competencies and business growth, resulting in increased economic growth. As evidenced by a significant number of India's economic activities in the informal sector, the government policies should target to formalise the informal economy so that their contribution to the national economic development can be recognised. The migration from the informal to the formal economy will help the government increase the tax revenue, which will lead to an improvement in India's tax buoyancy.

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# EVALUATING THE INFLUENCE OF LEADERSHIP STYLES ON EMPLOYEE WORK BEHAVIOUR: THE COVID-19 IMPACT

Soujata Rughoobur-Seetah\*

## Abstract

*This study assessed the effects of leadership styles on employee work behaviors during the COVID-19 pandemic. Leadership styles under this pandemic has proven to be a very important factor amongst others to be influencing employee behaviour. During the COVID-19 pandemic, employees appeared to lose trust in the employers as a matter of a lot of uncertainty revolving around their work. Therefore, assessing the influence of leadership styles on employee work responses deemed important. Transactional and transformational leadership style were analyzed. Factors like job satisfaction, motivation, trust and organizational culture were evaluated. 84 employees participated in the online survey and the Partial Least Square Structural Equation Modeling (PLS-SEM) was used to analyze the data. Transactional leadership was reported to have a positive relationship with organizational culture and transformational leadership was reported to positively influence organizational culture and trust. Neither transactional leadership nor transformational leadership was reported to influence job satisfaction and motivation. Social Exchange Theory (SET) and Psychological Contract Theory (PCT) were used as theoretical foundation. Both theories are expected to further contribute in explaining the cause and effect relationships among the proposed variables. The findings are discussed and the limitations are highlighted.*

**Keywords:** *COVID-19 pandemic, transactional leadership, transformational leadership, trust, job satisfaction, motivation*

## Introduction

The COVID-19 pandemic has indeed disturbed the day to day lives of individuals and also how organisations perform their daily activities. Overnight, a lot of work-related activities has been disturbed and organisations had to relook at their strategies so as work can be continued despite the world is facing unprecedented circumstances. Employees faced a lot of difficulties in adapting to this swift shift in the work systems where all activities were transferred online. Work from home and balancing both personal and professional lives became the new normal. In all these hassles, managing the employees became one of the fundamental concerns for a lot of companies which have their human capital at center of their activities. Leadership of managers have longtime been recognized as essential for long term sustainability of any organisations. Scholars (eg. Bangert, 2019; Emery et al., 2019) acknowledged the importance of good leaders as a driving force in organisations and believed that good leaders help employees to achieve their greatest potential.

Recent studies have re-assessed leadership with the impact of COVID-19 pandemic (eg. Al Saidi et al., 2020; Rosa, Schlak and Rushton, 2020; Stoller, 2020) and these studies acknowledged that having a good leader in organisations help employees to manage their level of stress, apprehension and be more efficient and effective during difficult times. Studies have assessed the relationship between transformational leadership and job satisfaction (Almohtaseb et al., 2021) during the pandemic. Wolor et al. (2020) evaluated the relationship between e-leadership and employees work motivation. Ahern and Loh (2020) evaluated leadership traits and its effects on employee trust in the COVID-19 pandemic. Each of these studies made a unique contribution to the

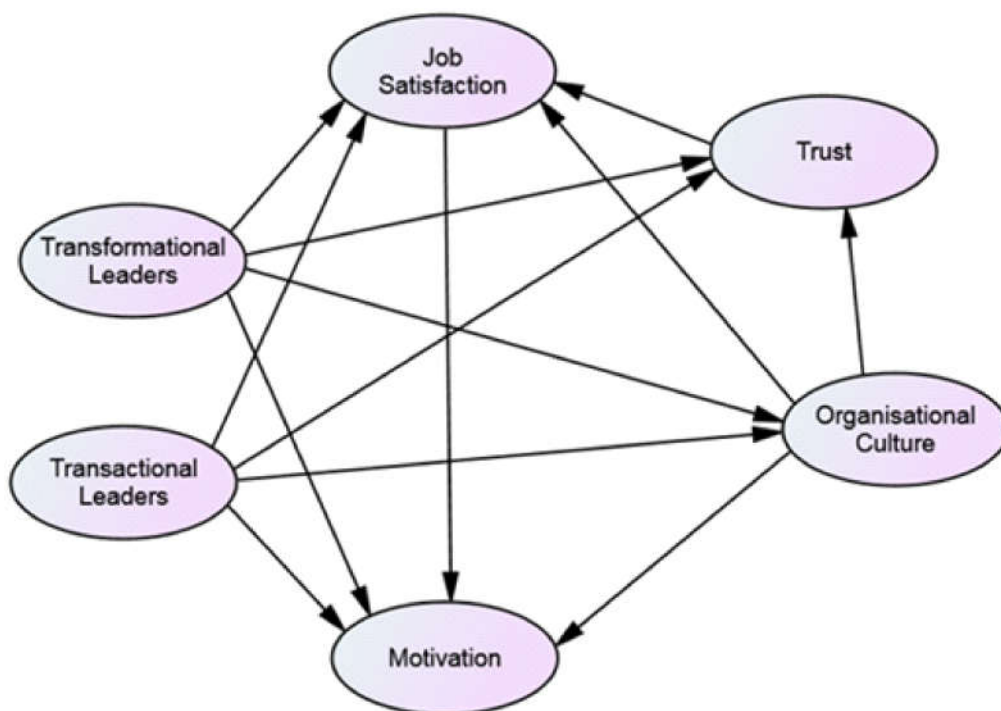
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body of literature, nevertheless, studies englobing factors like job satisfaction, motivation, trust, organizational culture alongside with transformational and transactional leadership styles in an integrative framework during the pandemic has been found to be quite scarce.

This study assessed leadership through two dimensions; namely transactional and transformational leadership. The main aim was to evaluate which leadership style contributed to higher level of job satisfaction, motivation and building higher level of trust among employees. The leadership styles adopted also reflects much on the organizational culture that prevails in the organisations. Therefore, this study will evaluate the outcomes of leadership styles on employees' level of job satisfaction, trust, motivation and the organizational culture. This study has a robust theoretical foundation where employees' perception on leadership styles is being analyzed through two theoretical lenses: SET and PCT. These theories have been purposefully chosen as this study is dealing with evaluation and effects of leadership styles on employees' work behaviours. SET enables the researcher to have a better view on the exchange mechanism between the employer and employee and between leader and employee. PCT allows the researcher to probe in the minds of the employees so as to better understand their work behaviours under certain leadership style. Figure 1 is the proposed framework for this study.

**Figure 1: Proposed Framework**



**Theoretical Support**

**Social Exchange Theory (SET)**

SET is being vastly used in social science research (eg. Cortez and Johnston, 2020; Kim and Qu,2020) and more so in human resources studies (eg. Wang, J., Fu, Wang, Y. and Wei, 2021). SET fundamentally involves two partners where each one of them find certain benefit in that process (Emerson, 1981). Researchers are of opinion that SET incorporates both social (Blau, 1964) and economic exchange (Organ, 1988). According to Homans (1961), the social exchanges relate to certain activities that involves rewards and costs. In the exchange process the partners are dependent on each other and if they feel the value attached to the outcome of the exchange process is positive, they will tend to contribute more to the exchange process. In deeper analysis, we will notice that the exchange process is all about a cost and benefit analysis. Nevertheless, according to

Whitener et al. (1998), the social exchange process is very uncertain especially at the start where the partners involved are not aware whether they will benefit for the exchanges or not. Blau (1964) believed that the partners expect certain future return based on their involvement in the exchange process. SET has received many criticisms as it lacks theoretical accuracy and is a complex theory which is based on a lot of assumptions which are questionable. The way that the return value (positive or negative) is being evaluated as well remain doubtful (Cropanzano et al., 2017). Therefore, it becomes important for SET to be accompanied by various other theories so as to have more predictive power while testing and interpreting the results from the proposed framework. PCT has been identified as one such theory which complements SET and also will help in better exploring the proposed framework.

### **Psychological Contract Theory (PCT)**

Argyris (1960) introduced and defined PCT which is based on the evaluation of employment relationship. PCT has as basis SET where the employees' perceptions of their work, employer and other work related facets are being evaluated based on the exchange processes (Robinson and Morrison, 1995). According to Taylor et al. (2006), the process of psychological contracts is about the set of expectations that an employee expects from his/her employer and the employee believes that the employer has an obligation to fulfil their expectations. If the employees feel that their employers are fulfilling these obligations, they will continue working in the company and they might be more satisfied and committed to the organisations. Nevertheless, if the employees have the perception that the employer is not fulfilling their obligations, this can cause a psychological contract breach where the employees feel that their employers have violated their psychological contracts (Robinson and Wolfe Morrison, 2000). Zhao et al. (2007) argued that violation of psychological contracts often leads to employees adopting organisationally undesired work behaviours like high rate of absenteeism and employee turnover amongst others. Therefore, it becomes very important for psychological contracts of employees are well nurtured.

### **Development of Hypotheses**

#### **Transactional Leadership**

Burns (1978) defined transactional leadership as those leaders who acquire the position legitimately in an organisation and exert authority when managing people. They are often task-oriented and rely immensely on rewards and punishment to get the work done. Kuhnert and Lewis (1987) believed that transactional leaders deal a lot in terms of exchanges between them and their subordinates. They will provide their subordinates with something which can be in terms of rise in remuneration, or other rewards provided their subordinates complete the tasks given by the transactional leaders. Therefore, we can say that this relationship between the superiors and their subordinates will operate properly as long as their subordinates are fulfilling the required tasks and vice-versa. According to Landy (1985), there are two level of exchanges (low-quality and high-quality). The low quality exchanges is basically involves the contractual agreement to work for certain number of hours for a pay whereas the high quality exchanges involves the interpersonal relationship between the transactional leaders and the subordinates. Nevertheless, Bass (1985) argued that most transactional leaders are mostly concerned with task-oriented goal completion and not much on the emotional exchanges.

Various studies reported a positive relationship between transactional leadership and job satisfaction(eg.Chen, 2005; Riaz and Haider, 2010;Nazim Ali, Ali and Tariq, 2014). This demonstrates that despite transactional leadership can be depicted as not always to be the preferred leadership style among the employees, nevertheless because the reward factor is integrated in that process which leads to job satisfaction. Additionally, studies like Chaudhry, Javed and Sabir, (2012), Chaudhry and Javed (2012) and Wahyuni, Christiananta and Eliyana (2014) reported a positive relationship between transactional leadership and motivation due to the reward exchange mechanisms. Employees are somehow motivated to work because of the rewards that is attached to their work. Organisational culture has always been considered as a very essential component in businesses. It can be defined as a set of values and beliefs which helps employees/individuals to understand

the overall functioning of an institutions and at the same time it guides employees towards acceptable values, norms and behaviours within that setting (Ramachandran, Chongand Ismail, 2011). Various studies have been conducted where leadership styles and organizational culture were studied and analyzed (eg. Tuan, 2010; Dartey-Baah, Amponsah-Tawiah and Sekyere-Abankwa, 2011), nevertheless studies analyzing the relationship between transactional leadership and organizational culture are scarce. Additionally, studies like Ismail et al. (2010) reported a positive relationship between transactional leader and employees' level of trust.

From a theoretical point of view, it can be said that both SET and PCT helps in better understanding the relationship amongst the proposed hypotheses. The transactional leaders provide that exchange mechanism between them and their employees which is mostly guided by the economic exchange (rewards attached to performance) (Blau, 1964; Organ, 1988). Once the employees feel that the level of exchange is satisfactory, they will experience positive psychological contracts (Naidoo, Abarantyne, and Rugimbana, 2019; Coyle-Shapiroand Parzefall,2008). Thus, their level of performance will be better as they will be satisfied, motivated, valuing the company's culture and also increase in their level of trust. Based on the above, the below hypotheses are proposed:

- H1: There is a positive relationship between transactional leaders and job satisfaction
- H0: There is not a positive relationship between transactional leaders and job satisfaction
- H2: There is a positive relationship between transactional leaders and motivation
- H0: There is not a positive relationship between transactional leaders and motivation
- H3: There is a positive relationship between transactional leaders and organisational culture
- H0: There is not a positive relationship between transactional leaders and organizational culture
- H4: There is a positive relationship between transactional leaders and trust
- H0: There is not a positive relationship between transactional leaders and trust

### **Transformational Leadership**

Burns (1978) defined transformational leadership as the ability to motivate others with great values at the core of all activities. Transformational leaders are categorized to be great visionary who employees or individuals in general tend to look up to. Bass and Avolio (1994) summarized the qualities of a transformational leader as idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Transformational leadership has been positively associated with job satisfaction (eg. Bernarto et al., 2020; Jameel and Ahmad, 2019). More so, researchers believed that a transformational leader is one who can motivate his/her employees to work and achieve extraordinary things in the workplace (Bastari, Eliyanaand Wijayanti, 2020). A transformational leader should motivate his/her employees towards having a sustainable career path in the organization. Various studies believe that transformational leaders in organisations symbolize the company's culture (Al Issa, 2019; Akanji et al., 2019). Having transformational leaders reflect the organizational culture where day to day matters is important, but the abilities to have great values and to be a role model for the employees are significantly important. Studies like Podsakoff et al. (1990) and McGuire and Hutchings (2007) confirmed a positive relationship between transformational leaders and employee trust in organisations. Employees tend to trust a leader with a vision and with great values more.

From a theoretical point of view, the transformational leaders appear to be fulfilling the exchange process established between the employer and the employees. The social exchanges appear to contribute fully in creating satisfaction in the workplace, employees are motivated under the leadership of the transformational leader. More so, having transformational leaders is a symbol of a healthy organizational culture which then leads to employees trusting their leaders and ultimately the organization. These exchanges definitely contribute in



creating positive psychological contracts among the employees, thus having a healthy work life and leading to greater performance.

H5: There is a positive relationship between transformational leaders and job satisfaction

H0: There is not a positive relationship between transformational leaders and job satisfaction

H6: There is a positive relationship between transformational leaders and motivation

H0: There is not a positive relationship between transformational leaders and motivation

H7: There is a positive relationship between transformational leaders and organisational culture

H0: There is not a positive relationship between transformational leaders and organizational culture

H8: There is a positive relationship between transformational leaders and trust

H0: There is not a positive relationship between transformational leaders and trust

### **Organisational Culture**

The importance of having a good organizational culture has been recognized and commended by various scholars (eg. Odor, 2018; Dirisu et al., 2018). Organisational culture has been reported to contribute significantly to increasing the level of employee satisfaction in the workplace (Dirisu et al., 2018; Habba et al., 2017). Organisational culture has also been positively associated with employees' motivation (Sokro, 2012; Evangeline and Ragavan, 2016). Studies analyzing the relationship between organizational culture and employee level of trust has been quite scarce. It is expected that organizational culture will foster an atmosphere of trust in organizational and a positive relationship can be proposed between these two variables. Theoretically speaking, organizational culture is a representative of the employers' exchanges towards the employees. Encouraging a good corporate culture is fundamentally based on the management style of the organization. Having credible people at the top management will somehow encourage proper socio-economic exchange between the employers and the employees. Thus, a proper socio-economic exchange will result in creating positive psychological contracts among employees, and better performances can be obtained. Hence, based on the above the below hypotheses are proposed:

H9: There is a positive relationship between organisational culture and job satisfaction

H0: There is not a positive relationship between organizational culture and job satisfaction

H10: There is a positive relationship between organisational culture and motivation

H0: There is not a positive relationship between organizational culture and motivation

H11: There is a positive relationship between organisational culture and trust

H0: There is not a positive relationship between organizational culture and trust

### **Job Satisfaction**

Many studies proposed a positive relationship between job satisfaction and motivation (eg. Danish and Usman, 2010; Shah et al., 2012; Van Scheers and Botha, 2014). Once the employees feel satisfied with their jobs and feel that the working environment is positive and having the support of their respective managers, they will be very much motivated to work. A job during especially difficult times like the COVID-19 pandemic, employees tend to search for both intrinsic and extrinsic motivation to work and sustain in the workplace. Satisfied and motivated employees is a symbol of a proper social and economic exchange in the workplace which gives rise to positive psychological contracts among employees.

Having employees to trust their organisations and managers (Wong, Y.T, Wong, C.S. and Ngo, 2012) is very important, especially during COVID-19 pandemic where there is a lot of uncertainties prevailing in terms

of job insecurities. Employees being able to trust their organisations and managers is a way to contribute towards their level of job satisfaction. Trust is expected to contribute significantly to increasing the employees' level of job satisfaction in the workplace (Callaway, 2007; Asencio, 2016). The presence of trust demonstrates the presence of proper social exchange processes in the workplace. It means that the relationship between the employer and the employee is fair and it must be taken into consideration that SET is based on the notion of trust (Blau, 1964). More so, trusting the employers will help in building positive psychological contracts among employees. Hence based on the above, the below hypotheses are proposed:

H12: There is a positive relationship between job satisfaction and motivation

H0: There is not a positive relationship between job satisfaction and motivation

H13: There is a positive relationship between trust and job satisfaction

H0: There is not a positive relationship between trust and job satisfaction

### Methods

This study adopted a purely positivist methodology. The proposed model and the hypotheses were tested using the data obtained after the administration of the designed questionnaire. The target population for the survey was basically people working in Mauritius during the confinement period. The questionnaire was sent using online platforms like social media, emails, and whatsapp so as to have a maximum number of respondents. It has to be taken into consideration that during the confinement period, a lot of employees were not working online which reduced the sample size of the target population. For this reason, around 200 employees were targeted. The simple random sampling was used for the purpose of data collection where questionnaires were sent to any working employee and asking them to fill the questionnaire if they are working online. The response rate obtained for the survey was (N=84) which is rather a low response despite using the online method. This low response rate can be due to huge amount of both the personal and professional commitment of employees when it comes to working from home and dealing with a pandemic. Therefore, it can be said that despite in the confinement period the online method deemed most appropriate for data collection, a rather low response was obtained as the employees had a lot to juggle.

All the constructs were evaluated as follows: for transformational leader the construct was evaluated by making use of the Podsakoff et al. (1984) scale, for transactional leader this study made use of the scale proposed by Avolio and Bass (1988) and Bass (1985), for motivation the measures were partly borrowed from Tremblay et al. (2009) and few items were added after discussion with few employees, for job satisfaction, the scale was partly borrowed from Macdonald and MacIntyre (1997), that is the first two items and the third item was borrowed from Cammann, Fichman, Jenkins and Klesh (1979). Trust was evaluated by partly using the scale items proposed by Shockley-Zalabak and Ellis (2000) and finally organizational culture was evaluated through the scale items proposed by Vadi, Allik and Realo (2002).

The five-point Likert Scale approach was used to capture the respondents' perception of the study where 1 indicates 'strongly disagree', 2 for 'disagree', 3 for 'neutral', 4 for 'agree' and 5 for 'strongly agree'. It is very important to note that the Likert Scale methodology is a pre-established that is being heavily used in management and human resources management studies (eg. Joshi, Kathuria and Porth, 2003; Fard and Amiri, 2018; Masri and Jaaron, 2017; Aboramadan et al., 2020). Given that for this study the sample size obtained was quite small, the Smart PLS 3.0 was used to analyze the data. The two-step approach proposed by Anderson and Gerbing (1988) was used, that is, firstly the measurement model was evaluated using the Confirmatory Factor Analysis (CFA) followed the discriminant validity and finally the structural model was assessed using the Partial Least Square Structural Equation Modeling (PLS-SEM). PLS-SEM has been recognized to be such a methodology that caters for small sample size data set. Various researchers supported this view (eg. Kock and

Hadaya, 2018; Kock, 2018; Hair et al., 2019) were the robustness, validity and reliability of the results were deemed appropriate. Therefore, for this study using PLS-SEM was the best method so as to have a proper evaluation of both the proposed model and hypotheses.

**Analysis**

**Demographic Profile of the Respondents**

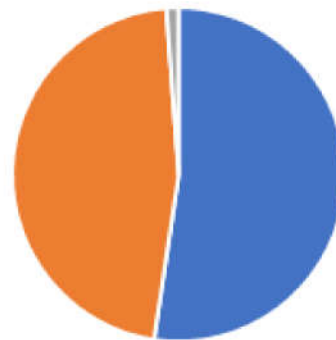
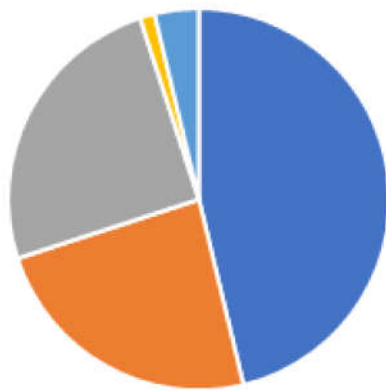
The below charts demonstrate the profile of the respondents.

**Chart-1: Age of the respondents**

**Chart-2: Level of Occupation**

Age

Level of Occupation



- 18-25
- First Line Management
- 26-35
- Middle Management
- 36-45
- Top Management
- 46-55

**Age distribution for the respondents is as follows:**

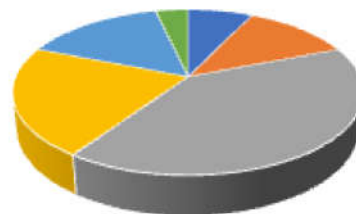
37 respondents were within the age range of 18-25 years, 19 respondents were between 26-35 years old, 20 respondents were between the age range of 36-45 years, 1 respondent was between the age range 46-55 years and 3 respondents were between the age range 56-65 years.

**Level of occupation:**

44 respondents were first-line employees, 39 employees were from the middle management and 1 employee were from top management.

**Chart-3: Salary**

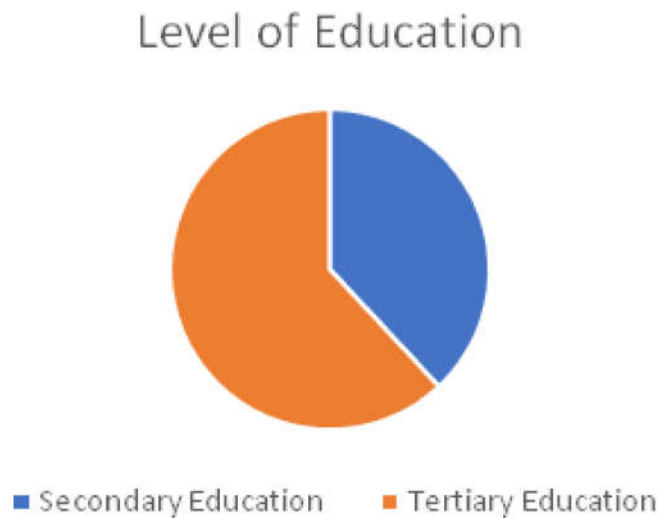
Salary



- Above Rs 75,000
- Less than Rs 10,000
- Rs10,000-Rs20,000
- Rs 20,000- Rs30,000
- Rs30,000-Rs40,000
- Rs 50,000-Rs75,000

6 employees salary scale were above Rs 75,000, 3 employees received a salary range between Rs51,000-Rs 75,000, 13 employees received a salary range between Rs 31,000 to Rs 50,000, 18 employees received a salary range between Rs 21,000-Rs 30,000. 34 employees received a salary range between Rs 10,000 to Rs 20,000. 10 employees received a salary range lesser than Rs 10,000.

**Chart-4: Level of Education**



The educational level of the employees was as follows:

32 employees completed their secondary school education and 52 employees completed their tertiary education.

### Confirmatory Factor Analysis

PLS-SEM can be categorized to one of the most preferred methodology that various researchers in diverse fields like medical, information technology and education are making use of (eg. Soroya et al., 2020; Al-Emran, Mezhuyev and Kamaludin, 2018; Ghasemy et al., 2020). This method has been recognized to provide reliable, valid and robust results (Ringle et al., 2009) which leads to enable the researchers to have a broader range of how the results can be interpreted which results in more theory development as mentioned by Hair et al. (2011). The reliability of the proposed framework was evaluated through the Cronbach alpha value where a score of greater than 0.70 was obtained (Nunnally, 1978). The composite values obtained was as per the guidelines proposed by Bagozzi and Yi (2012) where all the scores obtained fall within the range of 0.70 to 0.90. The Average Variance Extracted (AVE) scores also were above 0.50 as prescribed by Hair et al. (2017). Since the results obtained from the measurement model was accurate, the researcher carried out the discriminant validity followed by the PLS-SEM. Table 1 represents the results obtained from the CFA.

**Table 1 : Outcomes of the Measurement Model**

<b>Construct measured using a reflective scale</b>	<b>FL</b>	<b>CA</b>	<b>CR</b>	<b>AVE</b>
<b>Transformational leader</b>		<b>0.95</b>	<b>0.957</b>	<b>0.668</b>
A1. My manager a clear understanding of where we are going.	0.803			
A2. My manager paints an interesting picture of the future for our group.	0.757			
A3. My manager is always seeking new opportunities for the organization.	0.794			
A4. My manager inspires others with his/her plans for the future.	0.799			
A5. My manager leads by “doing”, rather than simply by “telling”.	0.856			
A6. My manager provides a good model for me to follow.	0.863			
A7. My manager leads by example.	0.856			
A8. My manager fosters collaboration among work groups.	0.864			
A9. My manager gets the group to work together for the same goal.	0.802			
A10. My manager shows respect for my personal feelings.	0.798			
A11. My manager behaves in a manner thoughtful of my personal needs.	0.793			
<b>Transactional leader</b>		<b>0.926</b>	<b>0.953</b>	<b>0.87</b>
B1. My manager always gives me positive feedback when I perform well.	0.926			
B2. My manager gives me special recognition when my work us very good.	0.938			
B3. My manager commends me when I do better than average job.	0.935			
<b>Motivation</b>		<b>0.857</b>	<b>0.903</b>	<b>0.701</b>
C4. I work because it has become a fundamental part of who I am.	0.763			
C5. I work because I chose this type of work to attain my career goals.	0.876			
C8. I work because it is the type of work I have chosen to attain certain important objectives.	0.873			
C9. I work for the satisfaction I experience when I am successful at doing difficult tasks.	0.832			
<b>Job satisfaction</b>		<b>0.929</b>	<b>0.955</b>	<b>0.876</b>
D1. I feel good about working at this company	0.927			
D2. I feel good about my job	0.933			
D3. All in all, I am satisfied with my job.	0.947			
<b>Trust</b>		<b>0.91</b>	<b>0.929</b>	<b>0.654</b>
E1. I can tell my immediate manager when things are going wrong	0.77			
E2. My immediate manager listens to me.	0.785			
E3. Top management is sincere in their efforts to communicate with employees.	0.865			
E4. My immediate manager is sincere in his/her efforts to communicate with team members.	0.723			
E5. Top management listens to employees’ concerns.	0.89			
E6. Top management is concerned about employees’ well-being.	0.877			
E11. Top management keeps its commitments to employees.	0.735			

<b>Organisational Culture</b>		<b>0.9</b>	<b>0.918</b>	<b>0.532</b>
F1. In our organization, people are proud of their organization	0.78			
F2. People are rewarded for their good work	0.738			
F3. Everyone has a big freedom of activity	0.772			
F5. Positive changes constantly take place	0.786			
F6. Differences between subordinates and superiors are not accentuated	0.494			
F8. People's well-being is important	0.681			
F9. Employees know one another	0.785			
F10. In tough situations there is a strong feeling of togetherness	0.734			
F11. People help each other in job-related problems	0.658			
F12. All important matters are discussed with each other	0.811			

### Discriminant Validity

The proposed model being a multi-dimensional one, the assessment of the discriminant validity was important. Discriminant validity has been acknowledged to help the researchers in identifying any multicollinearity issues that might occur when handling complex data and frameworks. For the purpose of this study, the Heterotrait-Monotrait (HTMT) ratio was used to evaluate the discriminant validity. A threshold not greater than 0.85 was used (Kline, 2011). Based on the results from Table 2, no multi-collinearity issues were noted.

**Table 2 : Discriminant Validity**

	<b>Job Satisfaction</b>	<b>Motivation</b>	<b>Organisational Culture</b>	<b>Transactional Leaders</b>	<b>Transformational Leaders</b>	<b>Trust</b>
<b>Job Satisfaction</b>						
<b>Motivation</b>	<b>0.837</b>					
<b>Organisational Culture</b>	0.604	<b>0.593</b>				
<b>Transactional Leaders</b>	0.546	0.527	<b>0.628</b>			
<b>Transformational Leaders</b>	0.553	0.496	0.625	<b>0.81</b>		
<b>Trust</b>	0.682	0.599	0.807	0.703	<b>0.73</b>	

### Structural Model

The structural model has been described by Nunkoo and Ramkissoon (2012) as a representation of both the measurement model and the path model. According to Cheng (2001), the path coefficients establish the link among the proposed the hypotheses. For this study, the bootstrapping (5000 samples) was also used to evaluate the framework. Table 3 is the results obtained after carrying out the PLS-SEM.

**Table 3: Outcomes of the Structural Model**

Path Relationships	$\beta$	t-value	P-Value	$f^2$	$R^2$	Outcomes
<b>Transactional Leaders</b>						
H1: Transactional Leaders and Job Satisfaction	0.081	0.584	0.559	<b>0.004</b>		Rejected
H2: Transactional Leaders and Motivation	0.108	1.092	0.275	<b>0.013</b>		Rejected
H3: Transactional Leaders and Organisational Culture	0.353	2.154	0.031	<b>0.076</b>		Supported
H4: Transactional Leaders and Trust	0.133	1.001	0.317	<b>0.022</b>		Rejected
<b>Transformational Leaders</b>						
H5: Transformational Leaders and Job Satisfaction	0.057	0.374	0.708	<b>0.002</b>		Rejected
H6: Transformational Leaders and Motivation	-0.084	0.785	0.433	<b>0.008</b>		Rejected
H7: Transformational Leaders and Organisational Culture	0.339	2.207	0.027	<b>0.07</b>		Supported
H8: Transformational Leaders and Trust	0.279	2.429	0.015	<b>0.096</b>		Supported
<b>Organisational Culture</b>					<b>0.434</b>	
H9: Organisational Culture and Job Satisfaction	0.136	0.86	0.39	0.012		Rejected
H10: Organisational Culture and Motivation	0.124	1.537	0.124	0.027		Rejected
H11: Organisational Culture and Trust	0.549	6.476	0	0.656		Supported
<b>Job satisfaction</b>					<b>0.481</b>	
H12: Job Satisfaction and Motivation	0.75	11.287	0	1.147		Supported
<b>Motivation</b>					<b>0.717</b>	
<b>Trust</b>					<b>0.74</b>	
H13: Trust and Job Satisfaction	0.474	2.827	0.005	0.112		Supported

## Discussion

### Transactional Leader

From the findings, it can be reported that transactional leadership positively influences organizational culture ( $\beta=0.353$ ,  $t\text{-value}=2.154$ ,  $p\text{-value}=0.031$ ), that is H3 was supported. This can be related to the fact that as a transactional leader during the pandemic, this leadership style tends to be more practical and make sure that work is being completed in a given time. This enhances the culture of the organization as the organization is able to achieve its target despite uncertainties which build employee trust in the organization. Nevertheless, this study did not find any significant relationship between transactional leaders and job satisfaction (H1:  $\beta=0.081$ ,  $t\text{-value}=0.584$ ,  $p\text{-value}=0.559$ ), between transactional leaders and motivation (H2:  $\beta=0.108$ ,  $t\text{-value}=1.092$ ,  $p\text{-value}=0.275$ ) and between transactional leaders and trust (H4:  $\beta=0.133$ ,  $t\text{-value}=1.001$ ,  $p\text{-value}=0.317$ ). That is, H1, H2 and H4 has been rejected which is not in line with the studies of Nazim Ali, Ali and Tariq (2014), Wahyuni, Christiananta and Eliyana (2014) and Ismail et al. (2010). Through these results it appears that the employees' expectations from their transactional managers during the COVID-19 pandemic were high as the transactional leadership style did not contribute to increasing the level of job satisfaction, motivation and trust of employees. The exchange relationship between the transactional leader and the employee was not adequate may be in both from a social and economic perspective. The results demonstrate that the employees might believe of a breach in the level of psychological contracts which reduces their level of satisfaction, motivation and trust.

### Transformational leader

The findings revealed a positive relationship between transformational leader and organizational culture and between transformational leader and trust; (H7:  $\beta=0.339$ ,  $t\text{-value}=2.207$ ,  $p\text{-value}=0.027$ ; H8:  $\beta=0.279$ ,  $t\text{-value}=2.429$ ,  $p\text{-value}=0.015$ ).

value=2.429, p-value=0.015). It can be depicted those transformational leaders bring a new dimension to the culture prevailing in the organization with their futuristic view of the company (Al Issa, 2019). Having foresightedness, trying to reorganize work and facilitating work from home are qualities that transformational leaders demonstrate which increase the level of trust of employees (McGuire and Hutchings, 2007). The results also demonstrate that the exchange process between the transformational leaders and the employees during the pandemic have helped in building positive psychological contracts among employees. On the other side, the relationship between transformational leader and job satisfaction and between transformational leader and motivation were rejected (H5:  $\beta=0.057$ , t-value=0.374, p-value=0.708; H6:  $\beta= -0.084$ , t-value=0.785, p-value=0.433). The results can be explained with the fact that during the pandemic, employees were more concerned with the completion of work rather than inculcating emotions like job satisfaction and motivation. It can also be argued that transformational leaders may be in a certain have failed to provide ample support during the pandemic as everything shifted online. They were not having that face-to-face interaction with their employees and few communications taking place which did not help in increasing the employees' level of job satisfaction and motivation. The exchanges between leader and employees can be questioned during the pandemic The transformational leaders were not able to contribute to creating positive psychological contracts among the employees; else a positive impact would have been recorded for job satisfaction and motivation.

### Organisational Culture

The findings obtained with regards to organizational culture is quite contradicting with past research. The relationship between organizational culture and job satisfaction (H9:  $\beta= 0.136$ , t-value=0.86, p-value=0.39) and between organizational culture and motivation (H10:  $\beta= 0.124$ , t-value= 1.537, p-value=0.124) was rejected which is in contradiction with past research (eg. Habba et al., 2017; Evangeline and Ragavan, 2016). Working remotely can be said to disconnect employees from their organisations. Organisational culture can be said to be mostly lived and experienced when being physically present in the workplace. From an exchange perspective, a poor exchange has been noted from the employers' side because of the non-significant relationship between the variables. Job satisfaction and motivation were absent from the employee's side. It can be perceived that the employees were mostly concerned with the economic exchange (Organ, 1988) during the pandemic to meet their ends. Positive psychological contracts were absent, and employees were working mechanistically, very few emotions with regards to their employers. Nevertheless, a positive relationship was supported between organizational culture and trust (H11:  $\beta= 0.549$ , t-value=6.476, p-value=0.000). This result demonstrates that despite organizational culture could not aid in increasing the level of job satisfaction and motivation of employees, the employees somehow trust the functioning of the organization. They trust the values and the work systems put in place during the pandemic. This also paints the picture of a robust foundation from the employer side as building employee trust is viewed to be not an easy task for many. Trusting the organization also shows the employees' level of psychological contracts; that is they remain emotionally connected to their organisations.

More so, job satisfaction has been reported to be positively influencing employee motivation (H12:  $\beta= 0.75$ , t-value=11.287, p-value=0.000). This result is in line with the studies of Van Scheers and Botha (2014). Employees being satisfied will increase their level of motivation during the pandemic. Employers need to identify factors triggering and increasing employees' level of job satisfaction so as their level of motivation as well will be increased. A positive relationship was also recorded between trust and job satisfaction (H13:  $\beta= 0.474$ , t-value= 2.827, p-value=0.005). Trust is a fundamental factor in this study. Transformational leader increases the level of trust of employees and trust positively impacts on the employee level of job satisfaction. Building trust, especially in the COVID-19 pandemic can be found to be an essential factor and trusting the employer also establishes the relationship between employer and employee and to which extent the employees trust the exchange mechanism in their organisations. An adequate exchange process also contributes in increasing positive psychological contracts among the employees.



## Practical and Theoretical Implication

From this study, it can be depicted that compared to transactional leadership, transformational leadership had a positive influence on employees' level of trust and organizational culture. Nevertheless, transformational leadership fail to have a significant impact on job satisfaction and motivation. From a practical point of view, this shows that transformational leaders in organisations in a certain way could not reassure and juggle in their leadership style during the pandemic. Working remotely has left transformational leaders aside and their proximity and ability to motivate employees can be questioned. Managing and motivating employees online appears to be a daunting task because of the missing face to face contact. It is important for practitioners to help leaders to reinvent themselves as working from home is a reality and it will stay from more years because of the pandemic. More and more virtual teams will exist, and employers have to make sure that leaders are there supporting and motivating their employees. Better coaching should be provided to all managers as managing employees virtually appears to be quite demanding and employees might feel a bit detached from the company which employers would not like.

From a theoretical perspective, both SET and PCT contributed enormously to understanding the cause-and-effect relationship among the variables. The researcher could better understand the exchange mechanism through SET and how both transactional and transformational leaders should have reinvented themselves at that particular time. PCT allowed the researcher to better probe in the minds of the employees as job satisfaction and motivation appeared not to be influenced by any leadership style. These consequences are better understood and discussed. PCT appears to be built on more essential components like trust. Trust emerges a strong variable which keep employees going and maintaining their level of psychological contracts.

## Limitations of the research

As any other research, this study as well has few limitations. The sample size is quite small, that is why the researcher made use of PLS-SEM as scholars believed that PLS-SEM provides good results despite of small sample size (Kock and Hadaya, 2018). This study has been conducted at a specific point in time. Other studies can aim at analyzing impact of leadership styles over a certain period of time. More so, more variables (eg. Flexibility, career growth) can be included in the framework to better understand the consequences of leadership styles. More theories can be used so as to better the cause-and-effect relationship among the variables.

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# CHALLENGES FACED BY WOMEN ENTREPRENEURS- A SYSTEMATIC REVIEW

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## Abstract

*Women-owned enterprises are the new economic agents of change and result in social upgrading, promoting economic regeneration, growth, and job creation. Lack of degree of recognition and insufficient strategic support often leads to hindrances for women to grow their enterprises. Women face unique challenges in their career pursuits. The present paper carried out a systematic review of the available literature on the SCOPUS database using PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analysis) guidelines. The inclusion criteria were i) publication between 1990 and 2022; ii) being a quantitative study; iii) open-access; iv) subject areas; v) written in the English language; vi) research articles only; vii) conducted a review on challenges impacting women entrepreneurship. Following the inclusion and exclusion criterion, 16 empirical studies were included that depicted various challenges such as personal, financial, social, cultural, career, marketing, and production challenges that women entrepreneurs faced which have a direct impact on their firm performance. Complexity of loan payment process by banks and financial institutions and sustainable policies by the government could improve the financial position of women entrepreneurs.*

**KEYWORDS:** PRISMA, Systematic Review, Women Entrepreneurship, Challenges, SCOPUS

## Introduction

The development of the status of women entrepreneurs is now seen as an issue of growth and development of the economy rather than an issue of social justice (Shastri & Shastri, 2019). Any form of oppression and discrimination are considered injustice, and the popularity of feminism has paved a way for women for fighting against gender inequality but the lack of access to production resources and the dominance of males in the families are still pushing them behind and making them vulnerable (Afza & Rashid, 2009). {(Aidis, Estrin, & Mickiewicz, 2008), (Jennings & Brush, 2013), (Zimmerman & Chu, 2013)} elaborated on the growth and development of women entrepreneurs through government policies and programs but difficulties are still faced by them in operating their enterprises.

Women entrepreneurs can be defined as "a woman who initiates, creates, organizes, and runs a new business" by grabbing economic opportunity (Rudhumbu & Plessis, 2020); Manerkar, 2015; Sharma, 2013; Lall & Shahi, 2008; Shou & Nigam, 2018) and owns a minimum of 50 percent of business operation for at least one year (Ahmad et al., 2011). The Government of India has defined women's enterprises as an enterprise owned, controlled, and managed by women with a financial interest of at least 51 percent of capital and a minimum of 51 percent of employment provided to women (Sharma, 2013; Garg & Agarwal, 2017). Women entrepreneurs in developing countries are facing impediments to the growth and firm performance of their enterprises due to the lack of access to economic opportunities, production resources, market information, infrastructure technology, human capital, and adequate network {(Bardasi, Sabarwal, & Terrell, 2011), (Ahmad, 2011), (Ravi? & Nikitovi?, 2014), (Adom & Asare, 2016). {(Vinay & Singh, 2015), and (Shou & Nigam, 2018)} explained that challenges faced by women entrepreneurs are quite unlike those of male entrepreneurs due to the gender roles and stereotypes as balancing social and family life and being less itinerant are impediments faced by female entrepreneurs. {

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(Allen & Truman, 1993), and (Roomi & Harrison, 2010)} highlighted the need for management skills to tackle day-to-day risk in businesses and manage the challenges faced by women-owned enterprises.

PRISMA was developed in 2009, comprising 27 checklist items to meet the gap of poor addressing of the systematic review done by the reviewers. It was specifically meant to evaluate healthcare interventions but it is applicable for evaluating social or educational interventions too (Page, McKenzie, Bossuyt, & Boutron, 2021). In the present study, PRISMA is conducted for addressing the challenges faced by women entrepreneurs while setting their enterprises while comprehensive resources for the above are not available according to the author's knowledge. Consequently, the present paper synthesizes the available literature using PRISMA.

All the research studies mainly highlight the challenges faced by the women entrepreneurs while running their businesses which differs from study to study but the present paper aims to highlight the different challenges along with their dimensions and systemize them using a systematic literature review (SLR) so that future readers, authors, and review makers could identify all the challenges, not only a few.

In the previous studies, research questions were framed on the basis of assessed review studies. Identifying the types of papers published, country, research design, publication quantity, and frequency (Harizan & Mustafa, 2020); and identification of industry, country, and technology used (Niroo & Crompton, 2022). The research questions for the present study are as follows:

- RQ1. What are the sample and study characteristics, risk of biases, and country of the literature used in the present study?
- RQ 2. What are the main challenges faced by women entrepreneurs while setting up their enterprises derived from the present literature?
- RQ 3. What is the instrument and sample size used in the present study?

## Methods

For identifying, evaluating, interpreting, and comparing the research works as per the relevant research questions, the Systematic Literature Review (SLR) is conducted (Z. Heidari, 2018; Harizan & Mustafa, 2020). Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) is guided using Preferred Reporting Systems (Moher, 2009; Ahmad, 2019; and (Azmi, Mohamad, Hasan, & Deraman, 2020) which is a published standard for performing SLR (Harizan & Mustafa, 2020) and gives scientific summary within an explicit knowledge area (Alianga-Isla, 2013; and (Pugalia & Cetindamar, 2022). PRISMA gives heterogeneity (Shaheen, Ahmad, & Hussain, 2021; Moher & Altman, 2014) reduces bias (Contreras-Barraza, Espinosa-Cristia, Salazar-Sepulveda, & al., 2021; Liberati, 2009, Urrutia, 2010; Niroo & Crompton, 2022), transparency (Kelly, 2016; Tricco, 2015), traceability and clarity (García-Madurga, Grilló-Méndez, & Morte-Nadal, 2021; Hartling, 2015) comprehensiveness in multiple disciplines (Janjua, Krishnapillai, & Rahman, 2021), consistency (Pahlevan-Sharif, 2019) and time-saving for searching the related articles (Azmi, Mohamad, Hasan, & Deraman, 2020).

## Study Selection

In the first stage, 640 studies were identified in the SCOPUS database via the initial search process. After the screening of studies on the basis of title and abstract, 612 studies were excluded due to unsuitability for the present review. Consequently, a total of 28 studies were selected for the eligibility phase, out of which 12 studies were excluded for qualitative study (N=1), challenges not explained objectively (N=9), inaccessibility (N=1), and review papers (N=1). 16 eligible empirical studies were included in the present review after following the procedures.

Methods include items from PRISMA 2020 checklist numbering from 5 to 15 (Page, McKenzie, Bossuyt, & Boutron, 2021).



***Eligibility Criteria***

A critique analysis of the studies related to the challenges affecting women's entrepreneurship while growing their businesses was taken into consideration for eligibility and was competent for eligibility. The inclusion criteria were a) open-access; b) subject areas: Business, Management, and Accounting, Social sciences, Economics, Econometrics and Finance, and Arts and Humanities; c) Articles only; d) Final publication stage; e) written in the English language; f) conducted an assessment of challenges and women entrepreneurship objectively. Studies were excluded if they were a) other than a subject area; b)) other than open access; c) unpublished articles in press; d) other than articles.

***Information Sources and Search***

Literature was carried out through the SCOPUS database using key terms ("challenges" AND "women entrepreneurship") during the month of May 2022.

***Study Collection and Data Collection Process***

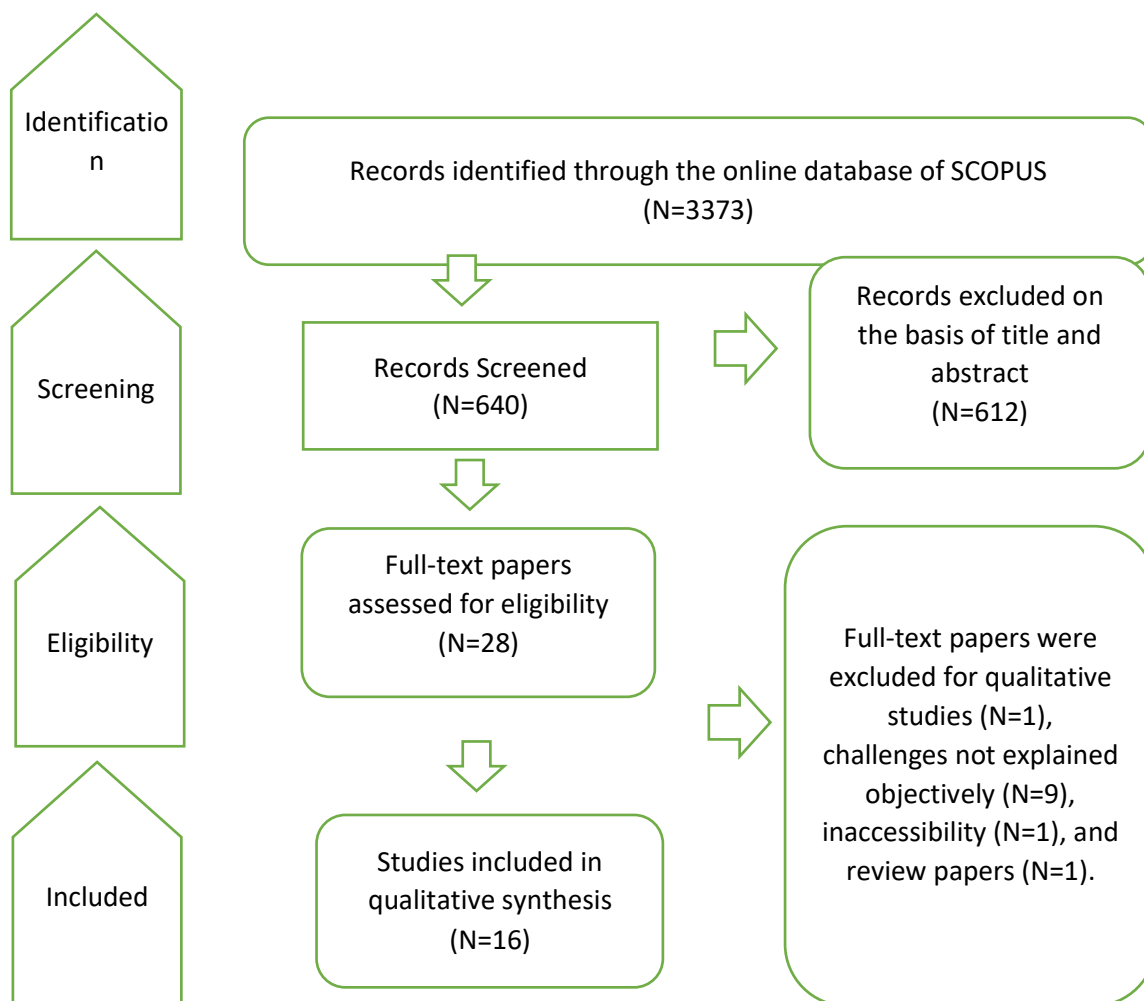
The initial literature search started with the screening of each study on the basis of title and abstract and after that potentially relevant studies were assessed for eligibility. During the scrutinization, sample and study characteristics, sample size, and sample characteristics of each study were identified. The detailed information about the study selection process is provided in the PRISMA flow diagram (Figure 1) and the detailed data collection process is provided in Table 1, Table 2, Table 3, and Table 4.

**Table 1: The inclusion and exclusion criteria**

Criterion	Inclusion	Exclusion	N= number of research articles
Search using keywords: "challenges" AND "women entrepreneurship"			3373
Access	Open access	Gold, Hybrid, Gold bronze, Green	901
Subject Area	Business, Management, and Accounting; Social sciences; Economics, Econometrics, and Finance; and Arts and Humanities.	Environmental Science; Energy; Computer Science; Decision Science; Psychology and Engineering.	798
Document Type	Article	Review; Book chapter; Editorial and conference paper	706
Publication stage	Final	Articles in press	663
Language	English	Spanish, Portuguese, Russian, and Bosman	640

Source(s): Authors' own compilation

Figure 1: Flow chart of the literature selection process based on the PRISMA approach

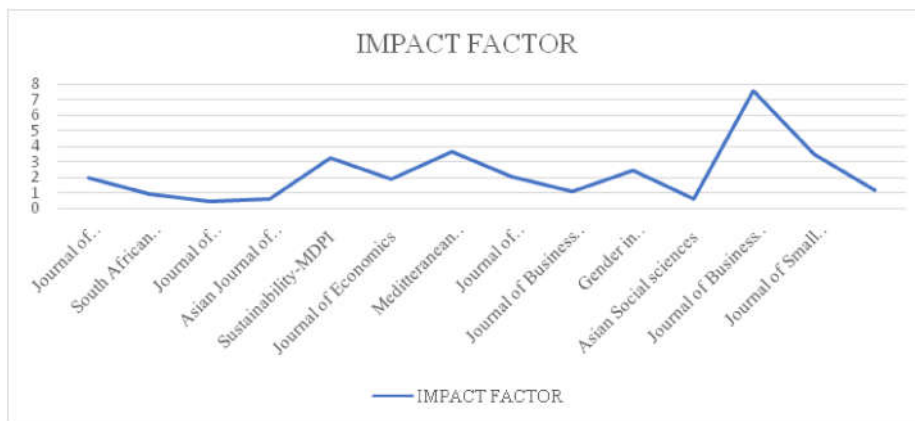


Source(s): Authors' own compilation

**Results**

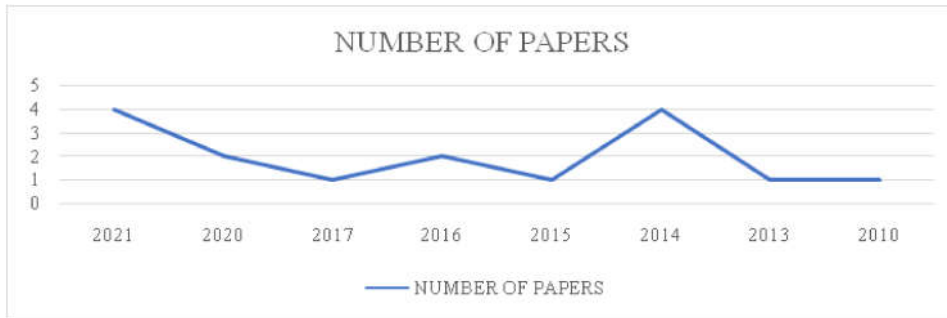
Methods include items from PRISMA 2020 checklist numbering from 16 to 22 (Page, McKenzie, Bossuyt, & Boutron, 2021).

Figure 2: Journal and Impact factor of selected 16 assessed studies



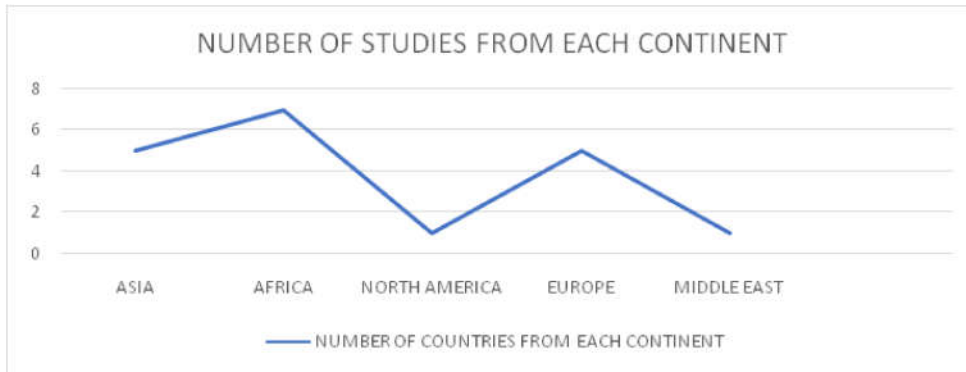
Source(s): Authors' own compilation

**Figure 3: Distribution of Articles by years of assessed 16 studies**



Source(s): Authors' own compilation

**Figure 4: Continents from which the data were collected**



Source(s): Authors' own compilation

**Study Characteristics**

Information about the general and methodological characteristics of all the 16 studies can be found in Table 2 and Table 3.

*Country in which data were collected*

**Table 2: Geographical Characteristics**

Continents	Number of studies	Studies
Europe	3	(Kézai, 2021), (Rinaldi & Tagliazucchi, 2021) and (Ramadani, Rexhepi, Alili, Beqiri, & Thaçi, 2015)
Asia	5	(Meng, Qamruzzaman, & Adow, 2021), (Mukit, Nabila, Islam, & Razzaq, 2020), (Tanusia, Marthandan, & Subramaniam, 2016), (WELSH, KIM, MEMILI, & KACIAK, 2014) and (Welsh, Memili, Kaciak, & Ochi, 2014).
European and Asian countries	1	(Lueg & Ni, 2020)
Seven countries from four continents: Europe, America, the Middle East, South Asia	1	(Welsh, Kaciak, & Thongpapanl, 2016)

Source(s): Authors' own compilation

*Participants*

The reviewed studies included a total of 3544 participants. The vast majority of the included studies recruited more female participants (N=3400, 96%) than male participants (N=144, 4%). Most of the studies included the data from the women respondents only except for three studies which included both male and female participants.

*Risk of Biases assessed*

For improving the quality of the present study measurement and sampling bias were identified in the assessed study (Contreras-Barraza, Espinosa-Cristia, Salazar-Sepulveda, & al.,2021; ?alvarl? & Griffiths,2021). All studies have sampling bias except a few studies which reported measurement bias too { (Beriso, 2021), and (Mukit, Nabila, Islam, & Razzaq, 2020) due to reporting of self-framed questionnaire without validating it. Sampling biases were reported due to the small sample size, geographical limitation, reliability of one report only for adopting instruments, and collection of data from a specific sector.

*Methodological features of the Studies*

All the assessed studies were empirical and quantitative in nature. Widely held of the studies employed non-probability sampling technique (10 studies): seven studies used convenience sampling { (Kézai, 2021), (Ramadani, Rexhepi, Alili, Beqiri, & Thaçi, 2015), (WELSH, KIM, MEMILI, & KACIAK, 2014), (Welsh, Kaciak, & Thongpapanl, 2016), (Welsh, Memili, Kaciak, & Ochi, 2014), (MEMILI, KACIAK, & AHMED, 2013), and (Doubell & Struwig, 2014)}, one study used judgemental sampling technique { (Mukit, Nabila, Islam, & Razzaq, 2020)}, one study used purposive sampling technique { (Nsengimana, Tengeh, & Iwu , 2017)}, one study used both judgemental and convenience sampling technique { (Tanusia, Marthandan, & Subramaniam, 2016)} while remaining studies used probability sampling technique: two studies used simple random sampling technique { (Beriso, 2021) and (Phillips, Moos, & Nieman, 2014)}, two studies used stratified sampling technique { (Meng, Qamruzzaman, & Adow, 2021) and (Lueg & Ni, 2020)}, one study used random and stratified sampling technique { (Chima Mordi, Simpson, & Singh, 2010)}, one study used Cluster analysis sampling technique { (Rinaldi & Tagliazucchi, 2021)}. The majority of the study used primary methodology: five studies used survey methodology based on a Structured Questionnaire { (Chima Mordi, Simpson, & Singh, 2010), (Mukit, Nabila, Islam, & Razzaq, 2020), (Tanusia, Marthandan, & Subramaniam, 2016), (Ramadani, Rexhepi, Alili, Beqiri, & Thaçi, 2015) and (Nsengimana, Tengeh, & Iwu , 2017)}, five studies used survey methodology (both online and offline) based on Structured Questionnaire { (Lueg & Ni, 2020), (Welsh, Kaciak, & Thongpapanl, 2016), (MEMILI, KACIAK, & AHMED, 2013), (Welsh, Memili, Kaciak, & Ochi, 2014) and (WELSH, KIM, MEMILI, & KACIAK, 2014)}, three studies used online survey methodology based on Structured Questionnaire { (Meng, Qamruzzaman, & Adow, 2021), (Doubell & Struwig, 2014) and (Phillips, Moos, & Nieman, 2014)}, and one study used survey methodology using self-reported Questionnaire { (Kézai, 2021)}.

**Table 3: Sample Size, Instrument, and Sample Characteristics**

<u>STUDY</u>	<u>SAMPLE SIZE</u>	<u>INSTRUMENT</u>	<u>SAMPLE CHARACTERISTICS</u>
(Kézai, 2021)	113 respondents (95 female and 18 male)	Structured Questionnaire (Babbie, 2021)	84% of the respondents were women, 53% of the respondents belonged to the (23-38) age group and 60% of the respondents were self-employed.
(Beriso, 2021)	698 women entrepreneur respondents	ESD (Ethiopian Enterprise Survey Data) collected by the World Bank in 2014	41% of the respondents were married, 52% of the respondents were running businesses in rural areas and 54% of the respondents were untrained
(Meng, Qamruzzaman, & Adow, 2021)	375 women entrepreneurs	Structured Questionnaire (Vrande, Jong, Vanhaverbeke, & Rochemont, 2009)	20% of the respondents belong to the business services in (the 10-50) personnel group and 27% of the respondents belonged to the other services in the (51-100) personnel group.
(Rinaldi & Tagliacruzchi, 2021)	80 women entrepreneurs	Biographies of individuals awarded "Cavaliere del Lavoro".	33% of the respondents were women entrepreneurs, and 40% of the women entrepreneurs were graduates out of which 12.5% belonged to the Economics and Business administration. 62.5% of the women respondents belonged to the manufacturing sector.
(Mukit, Nabila, Islam, & Razzaq, 2020)	100 random entrepreneurs (60 women and 40 men entrepreneurs)	Self-structured Questionnaire	60% of the respondents were female, 27% of the respondents were married, 30% of the respondents belonged to the (41-5) years age group and 32% of the respondents have basic education.
(Lueg & Ni, 2020)	210 entrepreneurs (124 female entrepreneurs and 86 male entrepreneurs)	Structured Questionnaire { (Saeid Abbasian & Yazdanfar, 2013), and (Basu & Parker, 2001)}	59% of the respondents are females in Denmark and 50% in Indonesia. All of the enterprises are registered businesses.
(Ramadani, Rexhepi, Alili, Beqiri, & Thaçi, 2015)	70 female respondents	Structured Questionnaire (Hisrich & Brush, 1986)	48% of the respondents belonged to the (36-40) years age group, 68% of the respondents have post-graduation degrees, and 57% of the respondents operate in the trading sector.

(Tanusia, Marthandan, & Subramaniam, 2016)	130 women entrepreneurs	Structured Questionnaire (Somerville, 2007)	60% of the respondents are married, 36.9% of the respondents belonged to the (40-40) years age group, 69.2% of the respondents belonged to the service industry and 68.5% of the respondents completed higher school education.
(Welsh, Kaciak, & Thongpapanl, 2016)	934 respondents	Structured Questionnaire (Hisrich, Bowser, & Smarsh, 2006)	20%, 16.5%, 16%, 12.5%, 12.4%, 12.3%, and 11% of the respondents are from Poland, Canada, Turkey, Morocco, Egypt, China, and South Korea respectively.
(Welsh, Memili, Kaciak, & Ochi, 2014)	101 female respondents	Structured Questionnaire (Hisrich, Bowser, & Smarsh, 2006)	39% of the respondents belonged to the (40-49) years age group, 24% of the respondents have family businesses, and 98% of the respondents have domestic businesses.
(Doubell & Struwig, 2014)	300 South African women respondents	Structured Questionnaire { (Sherer, et al., 1982), (Chen, Gully, & Eden, 2001), (Spector, 1988), (Jackson, 1989), (Dorfman & Howell, 1988), (Yoo, Donthu, & Lenartowicz, 2011), (Tepper, Shaffer, & Tepper, 1996)}	Most of the respondents are married and are between (35-49) years of age group, and 35% of the respondents have post-graduate qualifications.
(MEMILI, KACIAK, & AHMED, 2013)	90 female respondents	Structured Questionnaire (Hisrich, Bowser, & Smarsh, 2006)	99% of the respondents were from the capital Khartoum, 40% of the respondents belonged to the (40-49) years of age group, 69% of the respondents were married and 32% of the respondents were indulged in the trading activities.
(Phillips, Moos, & Nieman, 2014)	111 female entrepreneurs	Structured Questionnaire (Finn, White, & Walton, 2000)	50% of the respondents were aware of the government schemes.
(Chima Mordi, Simpson, & Singh, 2010)	274 female entrepreneurs	Self-structured Questionnaire	75% of the respondents were under the age of 35 years, 64% of the respondents were married and 83.2% of the respondents were sole

(WELSH, KIM, MEMILI, & KACIAK, 2014)	100 South Korean women entrepreneurs	Structured Questionnaire (Hisrich, Bowser, & Smarsh, 2006)	35% of the respondents belonged to the (30-39) years of age group, 62% of the respondents were married, and 81% of the business owners have 50% of the equity in their business.
(Nsengimana, Tengeh, & Iwu, 2017)	398 women entrepreneurs	Structured Questionnaire { (Maree, 2007), and (Iwu & Nxopo, 2014)}	79.1% of the respondents were married, 87.3% have primary school education, 60.2% of the respondents belonged to the (29-43) years of age group and 67.8% of the respondents belonged to the service industry.

Source(s): Authors, 2022

**Table 4: Country and Study Characteristics**

<u>STUDY</u>	<u>COUNTRY</u>	<u>STUDY CHARACTERISTICS</u>
(Kézai, 2021)	Hungary	Convenience sampling technique followed by Online Survey methodology based on Questionnaire.
(Beriso, 2021)	Ethiopia	Simple random sampling technique followed by secondary data.
(Meng, Qamruzzaman, & Adow, 2021)	Bangladesh	Stratified sampling technique followed by online Survey methodology based on Structured Questionnaire.
(Rinaldi & Tagliazucchi, 2021)	Italy	Cluster random sampling technique followed by secondary data.
(Mukit, Nabila, Islam, & Razzaq, 2020)	Bangladesh	Judgement sampling technique followed by Survey methodology based on Structured Questionnaire.
(Lueg & Ni, 2020)	Denmark and Indonesia	Stratified sampling technique followed by Survey methodology (both online and offline) followed by Structured Questionnaire.
(Ramadani, Rexhepi, Alili, Beqiri, & Thaçi, 2015)	Kosovo	Convenience sampling technique followed by Survey methodology based on Structured Questionnaire.
(Tanusia, Marthandan, & Subramaniam, 2016)	Malaysia	Convenience and Judgement sampling technique followed by Survey methodology using a Structured Questionnaire.

(Welsh, Kaciak, & Thongpapanl, 2016)	7 countries	Convenience sampling technique followed by Survey methodology (both online and offline) based on Structured Questionnaire.
(Welsh, Memili, Kaciak, & Ochi, 2014)	Japan	Convenience sampling technique followed by Survey methodology (both online and offline) based on Structured Questionnaire.
(Doubell & Struwig, 2014)	South Africa	Convenience sampling technique followed by online Survey methodology based on Structured Questionnaire.
(MEMILI, KACIAK, & AHMED, 2013)	Sudan	Convenience sampling technique followed by Survey methodology (both online and offline) based on Structured Questionnaire.
(Phillips, Moos, & Nieman, 2014)	Tshwane, South Africa	Random sampling technique followed by online Survey methodology based on Structured Questionnaire.
(Chima Mordi, Simpson, & Singh, 2010)	Nigeria	Random and Stratified sampling method followed by Survey methodology using Structured Questionnaire.
(WELSH, KIM, MEMILI, & KACIAK, 2014)	South Korea	Convenience sampling technique followed by Survey methodology (both online and offline) based on Structured Questionnaire.
(Nsengimana, Tengeh, & Iwu, 2017)	Kigali, Rwanda	Purposive sampling method followed by Survey methodology using Structured Questionnaire.

Source(s): Authors, 2022

**Table 5: Risk of Biases, Conclusion**

<b>STUDY</b>	<b>RISK OF BIASES</b>	<b>CONCLUSION</b>
(Kézai, 2021)	Sampling Bias is due to self-selection of the sample size and geographical limitation due to the selection of one country only.	Inadequate health care structure and tension between care and work were some of the challenges that obstruct the life choices of the women entrepreneurs.
(Beriso, 2021)	Sampling bias is due to the reliability of one report only that is World Bank to determine the demographic profile and geographic limitation due to the selection of one country only. Measurement bias occurred due to reporting of the self-framed questionnaire.	The study determined the challenges faced by the women entrepreneurs which were the livelihood condition of entrepreneurs, raising initial finance, lack of supporting institutions, access to market, access to raw materials, and lack of business information



(Meng, Qamruzzaman, & Adow, 2021)	Sampling bias due to self-selection of samples, research on only manufacturing-based SMEs, and geographical limitation due to selection of one country only.	The study concluded that venture production, external involvement, and R&D outsourcing are the major blockages for women entrepreneurs for open innovation practices.
(Rinaldi & Tagliazucchi, 2021)	Sampling bias due to the selection of one country only leads to geographical limitations.	The study reported the following challenges which obstruct their career and growth that are access to education, gender stereotypes, glass ceiling, access to a managerial career, and training abroad.
(Mukit, Nabila, Islam, & Razzaq, 2020)	Sampling bias due to self-selection of samples, selection of only one sector that is SME sector, and selection of only one country which leads to the geographical limitation. Measurement bias occurred due to reporting of the self-framed questionnaire.	The study analyzed the encounters faced by the women entrepreneurs in accessing financial capital which are complex loans, initial capital collection, higher interest, family obstacles, business experiences, and legal documents. The study highlighted the need of contracting the interest rate of banks for the growth and development of women entrepreneurs.
(Lueg & Ni, 2020)	Sampling bias occurred due to the selection of the MSME sector only, self-selection of samples, and the exclusion of business owners from other nationalities in these two countries.	The study concluded that in both the countries women faced the obstacles of external financing due to which they have to rely on self-financing from personal sources for developing their enterprises, resulting in that financial and democratic development could pave the way for reducing gender inequality.
(Ramadani, Rexhepi, Alili, Beqiri, & Thaçi, 2015)	Sampling bias has been found which is due to the self-selected samples, small sample size, and selection of one country which causes geographical limitations.	The study stated the three major barriers that women entrepreneurs face which are lack of confidence and balance between work and family. To overcome their barriers, the study suggested women have adequate education, knowledge, and skills.
(Tanusia, Marthandan, & Subramaniam, 2016)	Sampling bias occurred due to the self-selection of samples and geographical limitation occurred due to the selection of one country only.	The study extracted eight major barriers which were knowledge, skills, abilities, and other attributes; legalities and regulations and procedures; lack of business support and network; business constraints; powerlessness; discrimination; security; gender stereotype, and stress.

<p>(Welsh, Kaciak, &amp; Thongpapanl, 2016)</p>	<p>Only selected countries were taken into consideration which resulted in sampling bias.</p>	<p>The study concluded that due to personal problems faced by women entrepreneurs they often move from efficiency to innovation-driven stages and often face uncertainty in the transition stage, which creates barriers to growing up of their businesses.</p>
<p>(Welsh, Memili, Kaciak, &amp; Ochi, 2014)</p>	<p>Sampling bias due to self-selected samples, collection of online data, non-probability sampling technique (convenience sampling), and geographical limitation occurred due to the selection of one country online that is Japan.</p>	<p>The study identified that personal problems do impact the firm performance of the women entrepreneurs (emotional stress, family stress, loneliness, the influence of business on family relationships, etc) and the research has highlighted that moral and financial support could uplift the performance of women-owned enterprises.</p>
<p>(Doubell &amp; Struwig, 2014)</p>	<p>Sampling bias due to self-selected samples, collection of online data, non-probability sampling technique (convenience sampling), and geographical limitation occurred due to the selection of one country online that is South Africa.</p>	<p>The study highlighted the dimensions of barriers that significantly affect the success of women entrepreneurs. They are power distance, uncertainty avoidance, masculinity femininity under cultural barriers, gender stereotyping, and lack of role models and mentors under career barriers.</p>
<p>(MEMILI, KACIAK, &amp; AHMED, 2013)</p>	<p>Sampling bias occurred due to the self-selection of samples and geographical limitation occurred due to the selection of one country only.</p>	<p>The study concluded that women who have higher school education and younger women entrepreneurs have experienced personal problems. The highlighted personal problems were emotional stress, family stress, loneliness, the influence of business on family relationships, influence of business on personal relationships; lack of support, loneliness, time management, and dealing with males.</p>
<p>(Phillips, Moos, &amp; Nieman, 2014)</p>	<p>Sampling bias due to self-selected samples, collection of online data, and geographical limitations occurred due to the selection of one country.</p>	<p>The study concluded that women entrepreneurs did not receive any financial assistance from the government and financial institutions for growing their business which indicates that women entrepreneurs are not aware of the government launched schemes for them.</p>

(Chima Mordi, Simpson, & Singh, 2010)	Geographical limitation occurred due to the selection of only three cities in Nigeria and the selection of self-selected samples lead to sampling bias.	The study concluded the challenges faced by the women entrepreneurs in their entrepreneurial careers in which family responsibilities emerged as the main obstacle followed by the lack of access to finance, sexual harassment, lack of support, and assistance.
(WELSH, KIM, MEMILI, & KACIAK, 2014)	Geographical limitation occurred due to the selection of one country only that is South Korea, and the selection of self-selected samples led to sampling bias	The study concluded that personal problems have negative effects on the firm performance but when personal problems such as stress, and loneliness come in contact with family support then it comes a positive effect on the firm performance of the women entrepreneurs.
(Nsengimana, Tengeh, & Iwu , 2017)	Geographical limitations occurred due to the selection of only one city in Rwanda and the use of the non-probability technique (purposive sampling).	The study concluded that collateral to obtain a loan, higher taxes, lack of Information Technology skills, High-interest rate, and high transport cost are some of the challenges that women entrepreneurs face while running their businesses.

Source(s): Authors, 2022

**Table: 6 Nature of Enterprise, Location and Policy implications of the assessed studies**

Authors	Nature of the enterprise	Location of the enterprise	Policy Implications
Kezai,2021	Sole proprietor	Urban	The government should promote new ideas and features for Startup development.
Beriso,2021	Sole proprietor	Urban	The promotion of women entrepreneurs' education and parents' education play a vital role in their enterprise development.
(Meng, Qamruzzaman, & Adow, 2021)	Sole proprietor	Urban	Open innovation practices to be promoted for SMEs
(Rinaldi & Tagliacruzchi, 2021)	Sole proprietor/ Managers	Urban	Eliminate gender segregation in the employment of enterprises.
(Mukit, Nabila, Islam, & Razzaq, 2020)	Sole proprietors	Rural area	Help the other developing countries to remove the barriers and promote economic development.

(Lueg & Ni, 2020)	Sole proprietors	Urban	Structural disadvantages should be tackled using female-centric approaches.
(Ramadani, Rexhepi, Alili, Beqiri, & Thaçi, 2015)	Owners/ managers	Urban	The government should promote policies to increase women’s participation in the labour market.
(Tanusia, Marthandan, & Subramaniam, 2016)	Sole proprietors/ owners	Urban	Policymakers and practitioners should provide education and training & development to women entrepreneurs.
(Welsh, Kaciak, & Thongpapanl, 2016)	Owners	Urban	Policies should be further developed for economic development through state-funded support, counselling, and training.
(Welsh, Memili, Kaciak, & Ochi, 2014)	Sole proprietors	Urban	The policymakers can provide women’s higher education in business, skills in finance and technology and internship in the form of training programs.
(Doubell&Struwig, 2014)	Students, Professionals, and Owners	Urban	Government should launch necessary steps for the success of career of women entrepreneurs.
(MEMILI, KACIAK, & AHMED, 2013)	Sole proprietors	Urban	The government should launch macroeconomic policies and investment in SMEs for the development of entrepreneurs.
(Phillips, Moos, & Nieman, 2014)	Owners/ Proprietors	Urban	The government should launch policies and programs for the cost effectiveness of support services.

(Chima Mordi, Simpson, & Singh, 2010)	Owners/ Proprietors	Urban	The policymakers along with government should provide training and finance, IT facilities and networking and resourcing.
(WELSH, KIM, MEMILI, & KACIAK, 2014)	Sole proprietors	Urban	Financial institutions and banks should provide financial support by promoting policies and programmes.
(Nsengimana, Tengeh, & Iwu, 2017)	Owners	Urban	Training programmes should be launched to ensure relevance and quality.

Source: Authors own compilation

## Discussion

Discussion includes items of PRISMA 2020 checklist numbering from 23a to 23d (Page, McKenzie, Bossuyt, & Boutron, 2021).

The main objective of the present review was to identify the challenges that women entrepreneurs face while growing their businesses and affect their firm performance. Results demonstrated that their enterprise growth is majorly affected by the personal challenges followed by the financial challenges.

Challenges were discussed along with mentioning their dimensions as explained by (Garg & Agarwal, 2017) like personal challenges, financial challenges, marketing challenges, career challenges etc. in Figure 5.

Personal challenges affect women entrepreneurs at a higher scale which constraints their ability to grow their enterprises (Kézai, 2021) elaborated that inadequate health care structure and balance between work and care mainly affects their firm performance. (Beriso, 2021) determined that livelihood condition of entrepreneurs and lack of supporting institutions affects the progress of the enterprises. (Rinaldi & Tagliazucchi, 2021) reported access to education as a constraint that obstructs their career growth. Lack of confidence and balance between work and family were the majorly stated barriers faced by the women entrepreneurs (Ramadani, Rexhepi, Alili, Beqiri, & Thaçi, 2015). (Tanusia, Marthandan, & Subramaniam, 2016) extracted knowledge, skills, abilities, lack of business support and network, and stress as major personal problems that affects the growth of women entrepreneurs. (WELSH, KIM, MEMILI, & KACIAK, 2014), (Welsh, Memili, Kaciak, & Ochi, 2014), (Welsh, Kaciak, & Thongpapanl, 2016) and (MEMILI, KACIAK, & AHMED, 2013) adopted common variables as challenging factors faced by women entrepreneurs which do impact the growth and performance of firm: emotional stress, family stress, loneliness, influence of business on family relationships, lack of support, time management, influence of business on personal relationships and dealing with males. (Chima Mordi, Simpson, & Singh, 2010) highlighted the family responsibility and lack of support and assistance as the major challenge which obstruct women entrepreneurial careers.

(Welsh, Kaciak, & Thongpapanl, 2016) highlighted the stages of personal barriers that women entrepreneurs face that is they often move from efficiency to innovation driven stages and faces uncertainty in transition stage causing barriers in their career growth. (Nsengimana, Tengeh, & Iwu, 2017) determined the

lack of IT skills as a barrier to women's enterprise performance. (Tanusia, Marthandan, & Subramaniam, 2016) highlighted that lack of business support and network came as a constraint to the firm performance of the women's entrepreneurs.

Social barriers has been reported by (Rinaldi & Tagliazucchi, 2021), (Tanusia, Marthandan, & Subramaniam, 2016), and (Chima Mordi, Simpson, & Singh, 2010) where gender stereotypes, discrimination, security, powerlessness and sexual harassment came as a constraint for women entrepreneurs growth.

(Beriso, 2021) determined raising initial finance as financial challenge that affects the firm performance of women entrepreneurs. Major financial challenges have been reported by (Mukit, Nabila, Islam, & Razzaq, 2020) which are encountered by the women entrepreneurs while assessing financial capital that are complex loans, initial capital collection, higher interest rate, legal documents. Due to obstacles of external financing, women entrepreneurs have to rely on personal sources which led to contraction of growth of women entrepreneurs (Lueg & Ni, 2020). Negligence of government and financial institutions by not providing financial assistance to women entrepreneurs has been highlighted by (Phillips, Moos, & Nieman, 2014). (Chima Mordi, Simpson, & Singh, 2010) concluded that lack of access to finance as a barrier to women's entrepreneurial barrier. Collateral to obtain a loan, higher taxes and higher interest rate are some of the financial challenges highlighted by (Nsengimana, Tengeh, & Iwu, 2017).

Power distance, uncertainty, avoidance, masculinity, femininity were the cultural barriers reported by (Doubell & Struwig, 2014) that significantly affect the success of the women entrepreneurs.

(Beriso, 2021) and (Nsengimana, Tengeh, & Iwu, 2017) reported that lack of access to market, lack of access to raw materials and lack of business information and higher transport cost are the marketing barriers faced by the women entrepreneurs while running the business.

(Meng, Qamruzzaman, & Adow, 2021) concluded that production challenges blockages the growth and performance of the women entrepreneurs which are venture production, external environment and R&D outsourcing.

Career barriers were reported by (Rinaldi & Tagliazucchi, 2021), and (Doubell & Struwig, 2014). They stated that access to managerial career and lack of role models and mentors comes as a constraint and obstructs the firm performance of women entrepreneurs.

With regard of limitations in the reviewed studies, a high risk of sampling bias was identified in all of the studies, although measurement bias was also identified in limited studies. Most of the studies used cross-sectional design and non-probability sampling technique, only few studies used probability sampling technique { (Beriso, 2021), (Meng, Qamruzzaman, & Adow, 2021), (Rinaldi & Tagliazucchi, 2021), (Lueg & Ni, 2020), (Phillips, Moos, & Nieman, 2014), and (Chima Mordi, Simpson, & Singh, 2010)}. All of the above limitations restrict the generalisation of the reviewed studies.

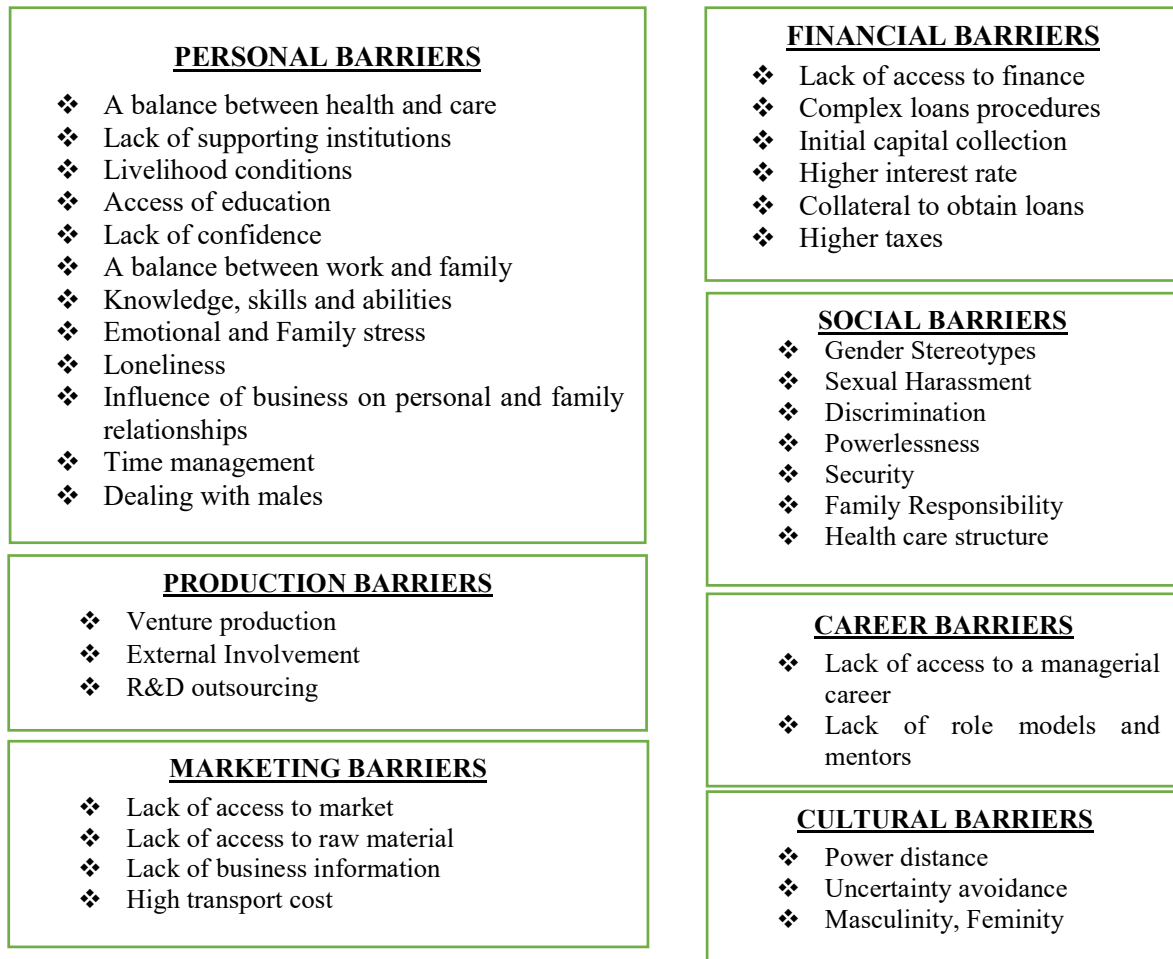
Longitudinal and probability sampling techniques should be used to improve the generalisation of the results and online surveys were used in half of the studies which decreases social desirability and research related costs (Alvarado & Griffiths, 2021).

## Limitations

It is noticed that some papers might be missed from the review process due to the inclusion of only quantitative studies, published in English language only, selected search terms, and selection of only one database and open access research papers. Only selected terms were used as it is recommended by (Petticrew & Roberts, 2006; and Fernández-Bedoya, 2021) that multiple searches for the same phenomenon names should be there in the databases. Only one database named "SCOPUS" was only used in the present study as multiple previous studies has been conducted performing systematic literature review using one database only (Cardella, Hernández-

Sánchez, & Sánchez-García, 2020; Al-Qahtani, Zguir, Al-Fagih, & Koç, 2022; Azmi, Mohamad, Hasan, & Deraman, 2020; Cardella H.-S. & -G., 2020; Razak, Sarif, & Ismail, 2022; and Fernández-Bedoya, 2021). The reason behind using of SCOPUS database is the remarkability among the peer-reviewed journals (Azmi, Mohamad, Hasan, & Deraman, 2020).

**Figure 5: Challenges faced by women entrepreneurs while growing their business.**



Source: Authors, 2022

## Conclusion

Using PRISMA guidelines, Systematic Literature review was implemented in the present study for finding out the major challenges faced by women entrepreneurs using SCOPUS database and following conclusions have emerged from our analysis. The sixteen studies which have been chosen are from urban areas and most women entrepreneurs are either sole proprietors, owners or managers. The review revealed that the maximum papers are assessed from the years 2014 (n=4) and 2021 (n=4). The present study has identified that even in the 21st century women are facing challenges for raising financial capital to start or run their businesses (Beriso, 2021; Ramadani, 2015). Family plays a crucial role in supporting mentally, physically as well as financially (Simpson, 2010) and have a large impact on their firm performance (Welsh, 2016). The study concludes that complexities created in our external environment needs to be eliminated as women entrepreneurs mostly faces financial challenges which they could get rid of, with the help and support of banks and financial institutions. Future research might enhance the understanding of the challenges by providing i) research on qualitative studies, ii) challenges faced by women entrepreneurs while starting their business, iii) inclusion of more databases.

## Suggestions

The following are the suggestion recommended by the author on the basis of the present systematic review:

- a) Complexity or Intricacy of the loan payment process should be minimized by banks and financial institutions (Hasan, Khan, & Nabi, 2017; Mukit,2020; Chowdury ,2013; Sattar, Dewri, & Ananna, 2016; Tanusia.2016).
- b) Sustainable policies by the government should be launched to change the financial position of women entrepreneurs (Mukit,2020) to improve the quality design and cost-effectiveness of support services (Phillips et al.,2014).
- c) Combined efforts of society, family, government researchers, other stakeholders, and women entrepreneurs themselves to overcome the challenges are needed (Nsengimana et al.,2017).
- d) University education system would help them to have specialized social skills and innovation performance (Rinaldi & Tagliazucchi,2021).
- e) NGOs, role models, and mentors can help women entrepreneurs in their early stages of business through accurate guidance (Tanusia,2016).

## Policy Implications

Following policy implications for the betterment of women entrepreneurs are identified which would be helpful for SMEs, researchers, practitioners, and decision-makers. They are listed as follows:

- a) Authorities and policymakers should put some attention on women entrepreneurs' education by launching awareness programs (Kharlamova,2020; Beriso,2021).
- b) Business activities should be increased through awareness creation, financial support, providing entrepreneurship training, and an increase in the availability of raw materials (Beriso,2021).
- c) For promoting the economic growth of women entrepreneurs timely monitoring of the situation is needed for preventing any kind of challenge (Beriso,2021).
- d) Stakeholders of Startup fields should target the audience of Generation X, Y, and Z and facilitation of Startup development and business support programs for persisting male stereotypes (Kezai,2021).
- e) Orientation of girls should be emphasized towards IT, space, and technical subjects (Eddleston et al.,2016; Kezai,2021).
- f) Financial inclusion is required to change women entrepreneurs' lives (Mukit,2021).
- g) Gender equality should be promoted in education achievement and cognitive skills to eliminate the gender gap in employment and entrepreneurship (Rinaldi & Tagliazucchi,2021).

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# AN ASSESSMENT OF IMPACT OF INVESTOR'S INTENTION ON DECISION OF INVESTMENT IN MUTUAL FUNDS OF SOUTH GUJARAT REGION IN INDIA

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## Abstract

*Purpose - This study aims to explore the investment decision-making of investor's intention in investment of mutual funds.*

*Methodology - The data has been collected using the self-administered questionnaire for data collection total 104 respondents from south Gujarat region of India were selected using the convenient sampling method. To analyze the collected data appropriate statistical tools such as descriptive statistics, multiple linear regression analysis, Collinearity Statistics, Cronbach's Alpha, Durbin-Watson etc. are used. To perform all the statistical analysis the SPSS Software is used.*

*Findings: Results indicated a significant effect of four of the predictive variables such as Hassle faced by investor, Subjective literacy of investors, Investor's normative belief and Investors saving motives. The multiple linear regression analysis (R square) showed that the final model could explain 17 per cent of the variance in investors' intention toward investment decision in mutual funds.*

*Practical Implications - Four factors were found to be of significant importance for mutual fund participation: normative belief, saving motives, hassle faced by investors while investing, and subjective literacy. These factors could be used as tactical themes for designing products and educating investors through advertisement and awareness of mutual funds, ultimately leading to an increase in investment in mutual funds.*

**Key words:** *Mutual fund, Investor's Intention, decision, behaviour.*

## INTRODUCTION

Saving has been collected from investors and invested in diversified securities such as shares, government securities, corporate securities, and other securities for financial benefits. So, it is based on principle of "SMALL DROPS OF WATER MAKE A BIG OCEAN".

There are three key players in business set up of mutual fund i.e., the sponsor, the Assets Management Company and the mutual fund trust. The working organizational structure of mutual fund in India is as under:

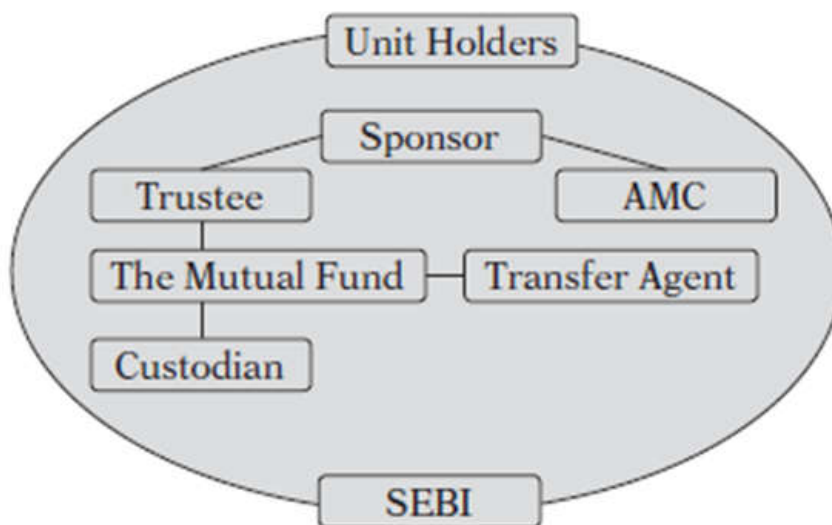
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Figure 1: Organizational Structure of Mutual Fund in India



Source: <https://www.amfiindia.com/>

Investors' choices of investment options vary based on their level of financial literacy and expectations.. Investors' decision of investment varies depending on their earning ability, gender, demographic profiles, and socio-economic status.

The increasing adoption of technology has led investors to divert their surplus money into mutual funds, resulting in a rise in mutual fund investments.

At present, mutual fund investment is a very lucrative avenue for individual investors. The penetration of the mutual fund industry reached an all-time high in December 2021 in India. (Alam Aftab et al., 2022) This paper attempts to know which factors affecting to investor to invest money in mutual funds.

**LITERATURE REVIEW**

Various researchers have studied investors' intentions towards investment in mutual funds. In 2017, Bajaracharya conducted a study in Kathmandu city of Nepal with 398 respondents and found no association between investors' attitude towards mutual funds based on their demographic profiles (age, gender, education, and monthly income) and socio-economic status.

In 2017, Sineni Geetha and Reddy S. Siva conducted a study on investors' perception and satisfaction levels towards mutual funds in the Rayalaseema region of Andhra Pradesh. The study concluded that investors' satisfaction is the most important ingredient for the success of the mutual fund industry. It also investigated mutual fund investments in relation to investors' levels of perception and satisfaction regarding various factors, including schemes, risk and return, services, relationships, claims, grievances, fund management, net asset value updates, security, entry and exit load, offers based on return, existing funds based on asset management companies, promptness in giving information, clarification towards technical doubts, reminding of premium payment, informing of default payment time, and satisfaction with remedial measures.

**Ramanathan and Sundaram (2015)** attempted to identify the factors that affect individual investment decisions and the differences in the perceptions of investors based on gender and age. They conducted their study with 160 bank employees and found that investors are primarily influenced by the inherent qualities of the product, followed by the brand name and fringe benefits. They also revealed that investors are aware of the capital appreciation and high-risk factors involved in investments.



Geethu Gopi et al. (2018) aimed to study the employees' behavioral patterns while making investments in the private sector shipping industry and to identify the factors considered by the employees for suitable investments. The authors selected a total of 30 private shipping industries in Erankulam, out of which 10 were selected based on a convenient random sampling method. The study found a significant relationship between the annual income of employees and the percentage of investment. It concluded that most of the employees' savings are directed towards personal expenses, such as their children's education, marriage, and retirement plans.

**Varsha Virani (2012)** established in her study on savings and investment model of school teachers in Gujarat in which data is collected from 100 school teachers and conducted that a large amount of the school teachers are saving funds as bank deposits and government securities as their investment preference. She has mentioned in her study, the school teachers the main purpose of investment is for children education, marriage and security after retirement.

**Priyanka Sharma and Payal Agrawal (2015)** examined that the preference of mutual funds investors and Performance Evaluation of the preferred schemes by the investors. The survey was undertaken on 50 professional investors of Udaipur city and random sampling method was adopted by authors. The study conducted by the researchers concluded that investors' perceptions are dependent on their socio-economic profiles. They assessed that investors' age, marital status, and occupation have a direct impact on their investment choices. Additionally, factors such as liquidity, flexibility, tax savings, service quality, and transparency have a higher impact on investors' perceptions.

**Jaspal Singh and Subhash Chander (2003)** identified that record and growth prospects influenced the choice of scheme. Investors in mutual funds expected repurchase facility, prompt service, and adequate information. Salaried and retired categories had priority for record and safety in their mutual fund investment decisions.

Gupta Karan et al. (2018) analyzed the study of financial awareness and factors affecting the selection and purpose of investment options in Himachal Pradesh. The majority of the respondents in the study were engaged in agricultural/horticultural activities. The study aimed to measure the awareness of financial products and investment preferences among rural people in Himachal Pradesh. They found that saving as an investment is the most important factor for respondents, followed by their children's future, their children's marriage, retirement, wealth creation, and other factors.

**Geetha and Ramesh (2011)** undertaken a study on People's preferences in investment behaviour, aimed to analyse the investment choice of people in Kurumbalur. The study found that fixed deposits, post office savings, life insurance policies, and public provident funds are the most commonly known investment options among investors. The study also concluded that the perception of respondents is not uniform due to differences in their social life, living patterns, income levels, etc. Moreover, all age groups of respondents placed greater emphasis on investing in insurance, National Savings Certificates, public provident funds, and bank deposits.

## METHODOLOGY

The aim of the study is to determine the impact of investors' intentions on their decision to invest in mutual funds in the South Gujarat region of India.

For this research, an explanatory study using primary data was considered appropriate to evaluate the intention of investment in mutual funds model and examine the relationship between investors' investing intention and its perception of investment in mutual funds (predictive variable). The researchers created a self-administered questionnaire by drawing from previous studies on mutual fund investments. This questionnaire was then distributed to 145 mutual fund investors for their responses. The Cronbach's alpha of all the 10 variables such as Normative Belief, Saving Motives, Investor Knowledge, Hassle Faced by Investor, Subjective Literacy, Past Behaviour, Return, Risk and Information Use While Selecting Mutual Funds, well exceeded 0.6 which has been considered

a good internal consistency and reliability of measurement scales. Data collection for this research was done through a standardized survey design to get the response from the investors using convenience sampling method. The geographical area covers the south region of Gujarat state. Nearly 145 respondents were contacted and over 145 questionnaires were distributed and a total of 104 filled in questionnaires were received.

## RESULT

### *Univariate Analysis*

After screening the data collected from the south region of Gujarat state, demographic profiles of the respondents were obtained and presented in Table 1. 66 per cent of respondents were male, on the other hand, merely 33 per cent were women; 60 per cent had post-graduate degree or less, 31 per cent earned doctorate degree; 42 per cent of respondents were from Surat district, 26 per cent from Valsad district, 17 per cent from Navsari district and 14 per cent from Bharuch district; 73 per cent of respondents were in the age group of 24 - 39 years, 12 per cent of respondents were 23 years or less and 15 per cent of respondents were in the age group of 40-55 years; nearly 60 per cent of respondents were in private services, 15 per cent were professionals, 7 per cent were government employees, 4 per cent were business persons, 14 per cent were others and only 1 per cent were Homemaker; 46 per cent of respondents were having annual family income of Rs. 5,00,001 - Rs. 7,50,000 and 22 per cent of respondents were having annual income between Rs. 2,50,001 - Rs. 5,00,000.

**Table 1: Demographic Profile of Investors ( $n = 104$ )**

<i>Variables</i>	<i>Categories</i>	<i>Frequency</i>	<i>Percent</i>
Gender	Male	69	66.3
	Female	35	33.7
Age in Years	23 years or less	12	11.5
	24-39 years	76	73.1
	40-55 years	16	15.4
Occupation	Government Service	7	6.7
	Private Service	62	59.6
	Business	4	3.8
	Professionals	16	15.4
	Homemaker	1	1.0
	Other	14	13.5
Education	HSC or less	1	1.0
	Graduation or less	9	8.7
	Post-graduation or less	62	59.6
	Doctorate	32	30.8
Annual Family Income	Rs.2,50,000 or less	10	9.6
	Rs.2,50,001 – Rs. 5,00,000	23	22.1
	Rs.5,00,001 – Rs. 7,50,000	48	46.2
	Rs.7,50,001 – Rs. 10,00,000	12	11.5
	Rs.10,00,001 – Rs.12,50,000	3	2.9
	Rs.12,50,001 – Rs.15,00,000	3	2.9

Source (s): Authors' compilation

### Validity Measurement

The overall internal consistency of the constructs is given in Table 2. Scores of Cronbach's alpha (?) are computed to test the reliability of the constructs; the scores range from 0.50 to 0.91 for all the eleven key dimensions of investment in mutual funds and the fit into the internal consistency. The Correlation values of all ten key dimensions are more than 0.50, except a few statements. Hence, it can be said that all eleven key dimensions are internally correlated to each other.

**Table 2: Cronbach's Alpha and Correlation for key dimensions of perception of investors in mutual fund**

<i>Key Dimensions</i>	<i>Cronbach's Alpha</i>	<i>CABSI</i>	<i>SMC</i>	<i>Variance</i>
<b><i>Normative Belief</i></b>	<b>.663</b>	<b>.667</b>		<b>.110</b>
My family or my closest persons think that investment in the mutual funds is a good investment			.611	
My closest friends or my colleagues think that investment in mutual funds is a good investment			.513	
The scientific knowledge, which recommends investing in the mutual funds have an influence on my decisions			.503	
The personnel in my bank have recommended mutual funds as a good investment			.100	
<b><i>Investors intention</i></b>	<b>.847</b>	<b>.855</b>		<b>.004</b>
I will make a mutual fund investment in some mutual funds in the future			.535	
I will encourage my friend and family to invest in mutual fund			.617	
I will invest in mutual fund frequently			.482	
<b><i>Savings Motives</i></b>	<b>.721</b>	<b>.726</b>		<b>.016</b>
I am saving for retirement			.442	
I am saving for future generations			.197	
I am saving for buying a house			.398	
<b><i>Investors Knowledge</i></b>	<b>.826</b>	<b>.833</b>		<b>.052</b>
It is easy to monitor investment with mutual funds			.808	
It is easy to invest in mutual funds			.793	
Mutual funds provide better returns than directly investing in share market			.746	
Mutual funds take care of the risk associated with share market			.512	
Mutual funds are instruments of investment like banks and insurance companies			.645	
Mutual fund investments cannot be liquidated easily as compared to bank and postal deposits			.622	
Mutual funds provide tax benefits			.645	
Only experts can invest in mutual funds			.718	
Fund managers act in their vested interest			.672	
Compared to bank and post office deposits, mutual funds provide less return			.761	
Only large amount can be invested in mutual funds			.618	
Mutual funds provide assured returns			.730	
There is safety of money with mutual funds			.623	
<b><i>Hassle faced by investor</i></b>	<b>.838</b>	<b>.835</b>		<b>.031</b>

I believe that the procedures involved in investing in equities stocks shares and or equity mutual funds are very complex			.351	
I believe that investing in equities stocks shares and or equity mutual funds involves a lot of expense			.759	
I believe that investing in equities stocks shares and or equity Mutual funds requires a lot of my time			.708	
<b>Subjective literacy of investors</b>	<b>.841</b>	<b>.841</b>		<b>.008</b>
Compared to the average person my knowledge about mutual fund is very extensive			.492	
Compared to the average person I know more about how to purchase mutual fund			.597	
I have accessed different aspects of mutual fund information			.548	
I completely understand mutual fund			.394	
<b>Past behavior</b>	<b>.789</b>	<b>.789</b>		<b>.010</b>
Past performance of stock affects present investment decision			.399	
For an investment whose historical performance has been consistently excellent I will treat it 4			.431	
Past behaviour Available information is enough for making the current investment decision			.268	
Investing in the companies with poor earning history should be avoided			.515	
<b>Subjective literacy of investors</b>	<b>.786</b>	<b>.788</b>		<b>.077</b>
Open-end mutual fund must be traded in the stock market			.671	
Mutual fund firms are the same as security investment consulting firms			.694	
Close-ended mutual fund have discount risk			.594	
Mutual fund investors are not shareholders of mutual fund firms			.157	
<b>Investors Perception for Return</b>	<b>.502</b>	<b>.508</b>		<b>.088</b>
Bank fixed deposits			.659	
Post office schemes			.579	
Real estate			.401	
Gold Silver Metals			.545	
Mutual funds			.312	
Shares			.411	
Bonds and debentures			.186	
<b>Investors Perception for Risk</b>	<b>.519</b>	<b>.486</b>		<b>.068</b>
Bank fixed deposits			.289	
Post office schemes			.470	
Real estate			.339	
Gold Silver Metals			.397	
Mutual funds			.343	
Shares			.536	
Bonds and debentures			.137	
<b>Types of information use while selecting mutual funds</b>	<b>.916</b>	<b>.918</b>		<b>.022</b>

Load entry or exit			.615	
Liquidity			.624	
Size of fund			.510	
Age of fund			.805	
Transaction cost			.624	
Better information			.640	
Industry sponsored			.668	
Fund family reputation			.788	
Bank sponsored			.681	
Last year performance			.755	
Long track record			.738	
Fund manager reputation			.481	

Notes: CABSI: Cronbach's Alpha Based on Standardized Items; SMC: Squared Multiple Correlation

**Table 3: Descriptive Statistics**

Constructs	N	Mean	Std. Deviation
Investors normative belief towards mutual fund	104	3.4183	.87053
Investor Intention	104	3.6859	1.06613
Investors saving motives for various purposes	104	3.3045	1.10516
Investors knowledge about mutual fund	104	3.3402	.72158
Hassle faced by investor while investing in mutual funds	104	2.7468	1.07185
Subjective literacy of investors regarding mutual fund	104	3.1635	.86656
Past behaviour of mutual fund and investment decision of investors	104	3.3077	.89241
Investors perception for return from various investment avenues	104	3.0769	.51099
Investors perception for risk in different types of investment	104	2.5701	.54024
types of information use while selecting mutual funds	104	3.4712	.79004
	104		

**Table 4: Collinearity Statistics**

Collinearity Statistics			
Model	Independent Variables	Tolerance	VIF
1	Normative Belief	.298	3.359
	Saving Motives	.424	2.359
	Investor Knowledge	.291	3.437
	Hassle Faced by Investor	.429	2.331
	Subjective Literacy	.258	3.871
	Past Behaviour	.274	3.647
	Return	.743	1.346
	Risk	.743	1.346
	Information Use While Selecting Mutual Funds	.712	1.405

a. Dependent Variable: Investor Intention

The above table shows the coefficients multicollinearity diagnostic test, this test provides the Tolerance and Variance Inflation Factor (VIF) values to know the correlation between independent variables. The independent variables of Return, Risk and Information use while selecting mutual funds VIF values are lower, it means that there is no correlation of these three independent variables. Other hand, reaming independent variables VIF values are between 2 to 3, it means that there is moderate correlation of remaining independent variables. Therefore, it can be said that All VIF values for the independent variables are less than 5, which indicates that multicollinearity will be available in the regression model.

**Multiple Linear Regression Analysis**

**H01: There is no significant impact of perception of investment in mutual funds on investors' intentions.**

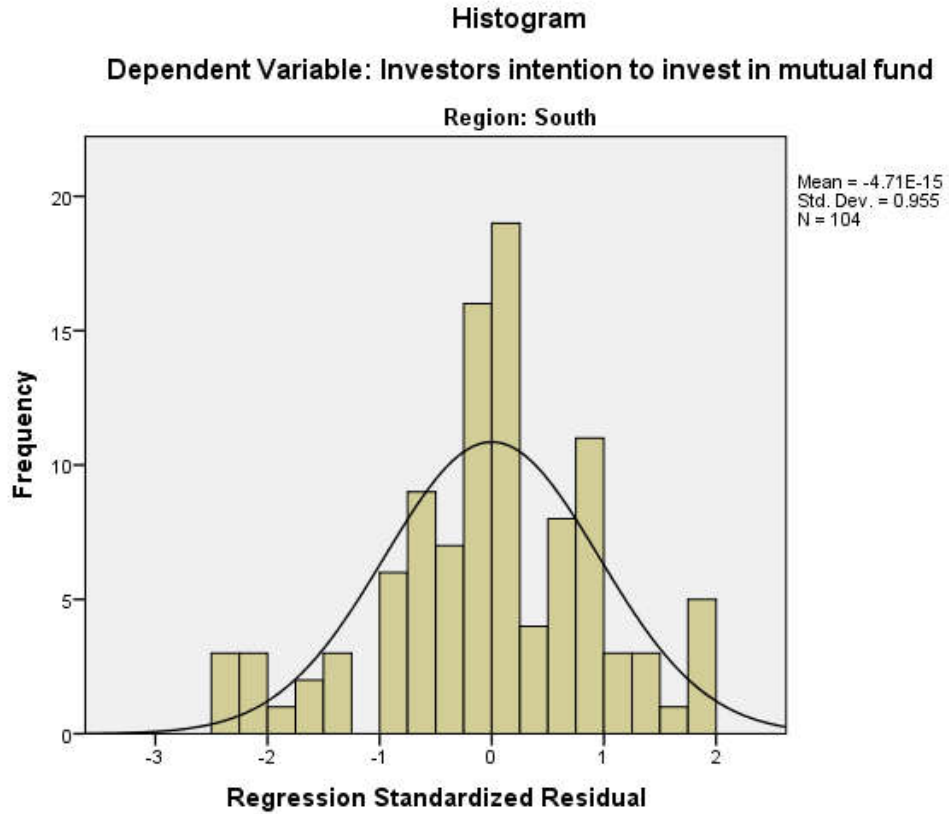
The hypothesis tests whether the perception of investment in mutual funds has a significant impact on investors' intentions. The dependent variable Investor's intention was regressed on predicting variable perception of investment in mutual funds to test the hypothesis H01. Perception of investment in mutual funds significantly predicted investors intention,  $F(9,94) = 49.882, p < 0.000$ , which indicates that perception of investment in mutual funds can play a significant role in shaping investor's intention ( $b = -0.107, p > .050$ ). These results clearly show that there is no direct effect of the perception of investment in mutual funds on investors' intention. Moreover,  $R \text{ square} = .827$  depicts that the model explains 82.7% of the variance in investor's intention. The Durbin-Watson statistic is 1.528, which falls between the range of 1.5 and 2.5. Therefore, the data is not auto correlated.

**Table 5: Model Summary**

Model Summary <sup>a,c</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.909 <sup>b</sup>	.827	.810	.46436	1.528
a. Region = South					
b. Predictors: (Constant), types of information use while selecting mutual funds, Investors knowledge about mutual fund, Investors perception for risk in different types of investment, Investors perception for return from various investment avenues, Investors saving motives for various purposes, Hassle faced by investor while investing in mutual funds, Past behaviour of mutual fund and investment decision of investors, Investors normative belief towards mutual fund, Subjective literacy of investors regarding mutual fund					
c. Dependent Variable: Investors intention to invest in mutual fund					

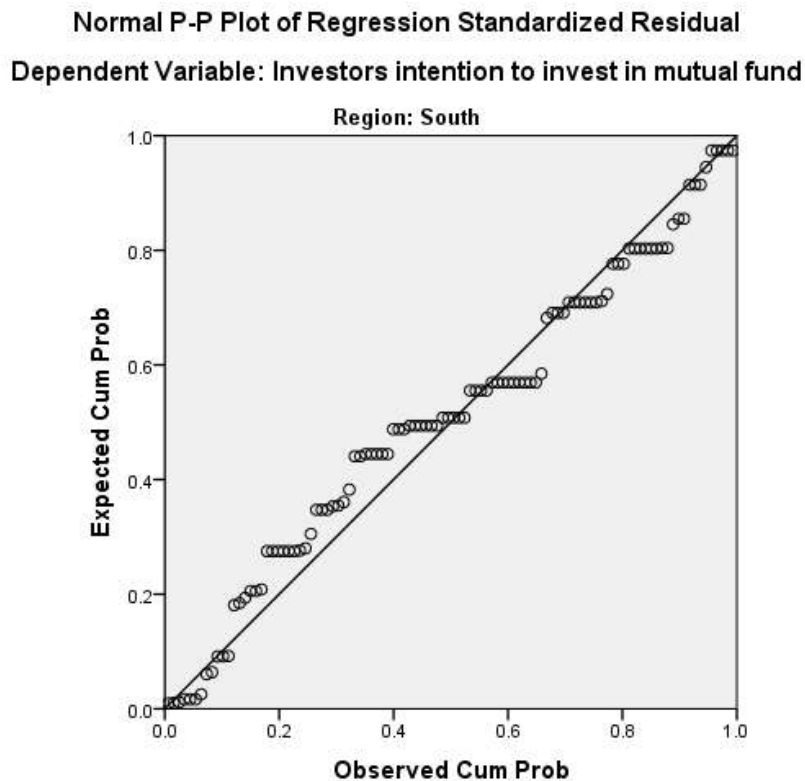
**Table 6: ANOVA**

ANOVA <sup>a,b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	96.804	9	10.756	49.882	.000 <sup>c</sup>
	Residual	20.269	94	.216		
	Total	117.073	103			
a. Region = South						
b. Dependent Variable: Investors intention to invest in mutual fund						
c. Predictors: (Constant), types of information use while selecting mutual funds, Investors knowledge about mutual fund, Investors perception for risk in different types of investment, Investors perception for return from various investment avenues, Investors saving motives for various purposes, Hassle faced by investor while investing in mutual funds, Past behaviour of mutual fund and investment decision of investors, Investors normative belief towards mutual fund, Subjective literacy of investors regarding mutual fund						



The above histogram indicates an approximately normal distribution. The histogram model indicates that the error terms of the fitted model are symmetric.

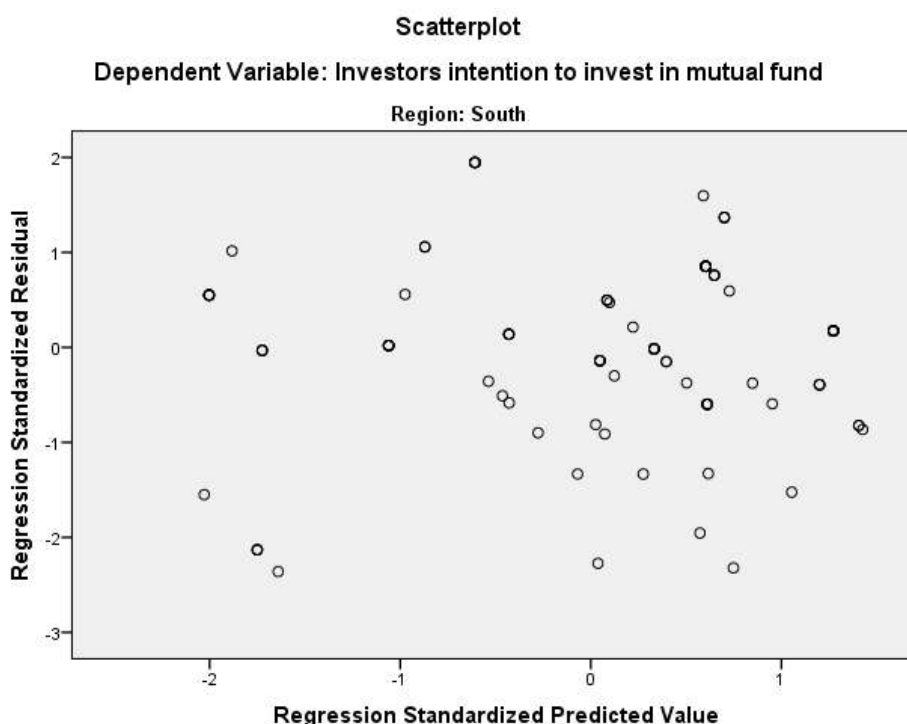
The below normal probability plot indicates that the points fall near or on the diagonal line. Thus, it can be concluded that the residual value is normally distributed so that the regression analysis procedure has been fulfilled.



- H02: There is no significant impact of investors' normative belief towards mutual funds on investors' intentions.
- H03: There is no significant impact of Investors saving motives for various purposes on investors intention.
- H04: There is no significant impact of Investors knowledge about mutual funds on investors' intentions.
- H05: There is no significant impact of hassle faced by investors while investing in mutual funds on investors intention.
- H06: There is no significant impact of subjective literacy of investors regarding mutual funds on investors intention.
- H07: There is no significant impact of Past behaviour of mutual fund and investment decision of investors-on-investors intention.
- H08: There is no significant impact of Investors perception for return from various investment avenues on investors intention.
- H09: There is no significant impact of Investors perception for risk in different types of investment on investors intention.
- H010: There is no significant impact of types of information used while selecting mutual funds on investors intention.

**Table 7: Regression Equation**

Investors Intention	= (-)0.107+ 0.558 Normative Belief + 0.507 Saving Motives + 0.105 Investors knowledge – 0.199 Hassle faced by investors - 0.361 Subjective Literacy + 0.191 Past Behaviour + 0.195 Investors Perception Return + 0.023 Investors Perception Risk + 0.073 Types of Information use Invest
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The above scatter plot represents the no correlation between perception of investment in mutual funds and investors' intention to invest in mutual funds

**Table 8: Coefficient**

Coefficients <sup>a,b</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.107	.367		-.292	.771
	Investors normative belief towards mutual fund	.558	.096	.455	5.790	.000
	Investors saving motives for various purposes	.507	.064	.526	7.980	.000
	Investors knowledge about mutual fund	.105	.118	.071	.892	.375
	Hassle faced by investor while investing in mutual funds	-.199	.065	-.200	-3.047	.003
	Subjective literacy of investors regarding mutual fund	-.361	.104	-.294	-3.478	.001
	Past behaviour of mutual fund and investment decision of investors	.191	.098	.160	1.951	.054
	Investors perception for return from various investment avenues	.195	.104	.094	1.881	.063
	Investors perception for risk in different types of investment	.023	.098	.012	.239	.812
	types of information use while selecting mutual funds	.073	.069	.054	1.065	.290
a. Region = South						
b. Dependent Variable: Investor's intention to invest in mutual fund						

The below table shows the residual statistics of predicted values and residual values. The minimum and maximum predicted values were 1.7197 and 5.0681 respectively along with a mean score of 3.6859. The distance between mean scores in upper and lower sides are 0.96945.

**Table 9: Residuals Statistics**

Residuals Statistics <sup>a,b</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.7197	5.0681	3.6859	.96945	104
Residual	-1.09581	.90376	.00000	.44361	104
Std. Predicted Value	-2.028	1.426	.000	1.000	104
Std. Residual	-2.360	1.946	.000	.955	104
a. Region = South					
b. Dependent Variable: Investor's intention to invest in mutual fund					

Additionally, coefficients were further assessed to ascertain the influence of each of the factors on the criterion variable (Investor's intention to invest in mutual fund). H02 evaluates whether Investors normative belief towards mutual funds significantly and positively affects Investor's intention to invest in mutual funds. The results revealed that Investors' normative belief towards mutual funds has a significant and positive impact on Investors' intention to invest in mutual funds (B = .558, t = 5.790, p = 0.000). Hence, H02 can be rejected. It can be concluded that there is a significantly positive impact of investors' normative belief towards mutual funds on investor's intention.

$H_{03}$  evaluates whether Investors saving motives for various purposes has a significantly positive impact on Investors' intention to invest in mutual funds. The result shows that Investors' saving motives for various purposes has a significantly positive impact on Investor's intention to invest in mutual funds ( $B = 0.507$ ,  $t = 7.980$ ,  $p = .000$ ). Consequently,  $H_{03}$  can be rejected.

$H_{04}$  evaluates whether Investor's knowledge about mutual funds has a significantly positive impact on Investors intention to invest in mutual funds. The result indicates that Investor's knowledge about mutual funds has no significant impact on Investors intention to invest in mutual funds ( $B = 0.105$ ,  $t = 0.892$ ,  $p = .375$ ). Hence,  $H_{04}$  was supported.

$H_{05}$  evaluates whether hassle faced by investors while investing in mutual funds has a significantly positive impact on Investor's intention to invest in mutual funds. The result shows that the hassle faced by investors while investing in mutual funds has a significantly positive impact on Investor's intention to invest in mutual funds ( $B = 0.199$ ,  $t = -3.047$ ,  $p = .003$ ). Hence,  $H_{05}$  can be rejected.

$H_{06}$  evaluates whether subjective literacy of investors regarding mutual funds has a significantly positive impact on Investor's intention to invest in mutual funds. The result shows that subjective literacy of investors regarding mutual funds has a significantly positive effect on Investor's intention to invest in mutual funds ( $B = 0.361$ ,  $t = -3.478$ ,  $p = .001$ ). Hence,  $H_{06}$  can be rejected.

$H_{07}$  evaluates whether Past behaviour of mutual funds and investment decisions of investors has a significantly positive impact on Investor's intention to invest in mutual funds. The result shows that Past behaviour of mutual funds and investment decisions of investors has not impact on Investors intention to invest in mutual funds ( $B = .191$ ,  $t = .098$ ,  $p = .054$ ). Hence,  $H_{07}$  was supported.

$H_{08}$  evaluates whether Investor's perception of return from various investment avenues has a significantly positive impact on Investors intention to invest in mutual funds. The result shows that Investor's perception of return from various investment avenues has no impact on Investors intention to invest in mutual funds ( $B = .195$ ,  $t = 1.881$ ,  $p = .063$ ). Hence,  $H_{08}$  was supported.

$H_{09}$  evaluates whether Investor's perception of risk in different types of investment has a significantly positive impact on Investors intention to invest in mutual funds. The result indicates that Investor's perception of risk in different types of investment has no significant impact on Investors intention to invest in mutual funds ( $B = .023$ ,  $t = .239$ ,  $p = .812$ ). Hence,  $H_{09}$  was supported.

$H_{010}$  evaluates whether types of information used while selecting mutual funds has a significantly positive impact on Investor's intention to invest in mutual funds. The result indicates that types of information used while selecting mutual funds has no significant impact on Investors intention to invest in mutual funds ( $B = .073$ ,  $t = 1.065$ ,  $p = .290$ ). Hence,  $H_{010}$  was supported.

## CONCLUSION

This study highlights the key dimensions of South Gujarat region in Indian investors investing in mutual funds. The findings of this study offer valuable implications for the stakeholders of different parts of the society. The stakeholders should have to focus on investors' intention towards informative belief, saving motives, hassle faced by investors while investing in mutual funds and subjective literacy of investment in mutual funds. However, investor's intention does not impact on Investor's knowledge, past behavior, return, risk and types of information used while investing in mutual funds.

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