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Brand Personality in Sports | Digital Payment and Indian Economy | Gender Differences in Investment | Sustainable Environmental Performance and Green HR |

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Dimensions of Brand Personality in Sports: A Review

Anees Ahmad*

Abstract

The importance of brand personality has long been recognized by researchers and practitioners for the successful management of brands. Aaker's (1997) seminal work paved the way for the application of brand personality to various contexts such as events, destinations, cities and nations. Researchers have also applied the concept of brand personality to the context of sports. Despite the availability of a large number of studies on brand personality in sports management literature, there is a lack of agreement on the dimensions used to measure sports brand personality. This study presents a review of brand personality research in sports across four categories: Sports Team Personality, Sports Club Personality, Sporting Event Personality, and Athlete Brand Personality. The analysis of the reviewed research suggests that conceptualization of brand personality, selection of sports brands, and the studies conducted in different countries can be the reasons for the differences in personality dimensions identified by researchers.

Keywords: Brand Personality, Sports Brands, Sports Team Personality, Sports Club Personality, Sporting Event Personality, Athlete Brand Personality

1. Introduction

Marketers have long explored marketing techniques to distinguish their brands from competitors beyond utilitarian or functional features (Aaker, 1997). The brands with symbolic or emotional characteristics can provide a differentiation advantage in the long term. In this context, brand personality has been identified as an important branding construct that helps marketers to position a brand with symbolic features. Studies suggest that brand personality can lead to positive behavioural outcomes such as brand trust, brand attachment, brand commitment, and brand loyalty (Alexandris, 2016; Bairrada *et al.*, 2019; Ahmad *et al.*, 2021). The origin of brand personality can be traced to the theory of animism (Gilmore, 1919), which states that consumers attribute human traits to inanimate objects such as brands. For example, consumers may view the brand personality of NIKE to be "innovative," "athletic," "competitive," and "sportsmanlike," but

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Harley-Davidson may be perceived as "rebellious," "tough," "individualistic," and "brave" by them (Keller, 2008). Consumers express their ideal or actual self by relating their personality with the personality of the brand, which can affect their choice. A brand's personality can influence how people feel about it (Das, 2013). Brand personality facilitates the consumer's interaction with the brand and a relationship is formed between the consumer and the brand akin to the relationship between two persons, and this relationship is shaped by the personality characteristics of both the partners (Fournier, 1998).

Aaker (1997) defines brand personality as "human characteristics associated with a brand". Drawing from the Big Five human personality framework, Aaker (1997) created a valid and reliable brand personality scale consisting of five dimensions: sincerity, excitement, competence, sophistication and ruggedness. Aaker's (1997) brand personality framework is a seminal work that has led to the use of personality in different contexts such as tourism destinations (Hosany *et al.*, 2006), cities (Kaplan *et al.*, 2010), nations (Kim *et al.*, 2013), and events (Rai & Nayak, 2018). Researchers have also focused on applying the brand personality concept to the domain of sports (Ross, 2008; Braunstein & Ross, 2010; Lee & Cho, 2012; Tsiotsou, 2012).

The application of Aaker's (1997) brand personality scale to sports brands can be broadly categorized into the brand personality of sports teams, the brand personality of sports organizations, and the brand personality of sports events. Some researchers have attempted to extend the brand personality concept to individual athletes or sports persons treating them as human brands. Studies reveal that various brand personality scales have been developed and validated in the sports context. Thus, it would be interesting to know the similarities and differences between the dimensions of brand personality identified in the sports context. This paper presents a review and analysis of the brand personality research in four categories of sports brands namely sports teams, sports clubs, sports events and sports persons or athletes.

2. Brand Personality of Sports Teams

A sports team is a brand that, like any other brand, has a personality. Blank *et al.* (2018) defined sports team personality as the "set of human characteristics associated with a sport team". A sports team's brand personality captures the attention of key stakeholders such as sponsors and spectators (Tsiotsou, 2012). According to Basu (2015), the positive attitude of a sports fan towards a sport leads to enhanced consumption of the sports-related products. A sports team with a distinct personality generates trust among fans and they are more likely to watch the games, buy merchandise related to the team and increase team revenue. Sponsors make use of sports brand personality to choose teams that exhibit personalities similar to their brands (Tsiotsou, 2012). Additionally, the team's brand personality sets them apart from their rivals (Schade *et al.*, 2014).

There is still no universally acknowledged scale to measure the brand personality of sports teams. While researchers such as Ross (2008) have applied Aaker's (1997) brand personality scale to measure sports team personality, Braunstein and Ross (2010) adapted existing brand personality scales to develop a new measure of brand personality in sports. They developed a sports team personality scale comprising of six dimensions, namely, successful, community driven, classic, sophisticated, sincere and rugged.

Several other researchers questioned the applicability of Aaker's (1997) dimensions to measure sports team personality and they developed new sport-specific scales to measure brand personality. For example, Tsiotsou (2012) created a new sports team personality scale. This scale comprises of five dimensions, namely, competitiveness, prestige, morality, authenticity and credibility.

Blank *et al.* (2018) conducted studies in USA and UK to find a new sports team personality scale. They targeted fans of the sports teams across different sports leagues of baseball, basketball, football and hockey intending to increase scale generalizability and to do cross-team comparisons. An exploratory factor analysis revealed a scale with eighteen items and six dimensions, namely, success, talent, entertainment, dedication, admiration and care. Further, they compared the newly developed scale with the sports team personality scales of Braunstein and Ross (2010), Tsiotsou (2012), and Schade *et al.* (2014) on three levels including testing psychometric properties, examining second-order factor structure and establishing predictive validity. The sports team personality scale of Blank *et al.* (2018) proves to be a better version that is compact in terms of personality items. Papadimitriou *et al.* (2019) replicated the sports team personality scale of Blank *et al.* (2018) in Greece. The findings of this study indicated a two-factor sports team personality structure, namely, performance and popularity with ten and five items respectively. They attribute this stark difference between the two scales to the cultural differences as well as the dissimilarity between the sports leagues. Further, they advocate the need to replicate the scale of Blank *et al.* (2018) in different countries.

Table 1 summarizes the sports team personality dimensions identified in the scale development studies.

A review of the studies suggest that there is a lack of agreement on what dimensions constitute the sports team personality. Therefore, a universal measure for brand personality applicable to sports teams across all sports needs to be developed.

3. Sport Club Brand Personality

The concept of brand personality in sports can be applied at the organizational level and the

Table 1: Sports Team Personality Dimensions

Author (s)	Sports Team Personality Dimensions
Braunstein & Ross (2010)	Successful, Community-Driven, Classic, Sophisticated, Sincere, and Rugged
Tsiotsou (2012)	Competitiveness, Prestige, Morality, Authenticity and Credibility
Blank *et al*. (2018)	Success, Talent, Entertainment, Dedication, Admiration and Care
Papadimitriou *et al*. (2019)	Performance and Popularity

Source: Author

personality characteristics perceived by its members can be used to devise marketing strategies. Researchers have developed the instruments to measure the personality of sports organizations such as clubs. Sports club personality can be referred to as human characteristics associated with a sports club that organizes and manages one or more sports teams. In this context, Smith *et al*. (2006), examined the brand personality of Netball Victoria, a sports organization in Australia. They used Aaker's (1997) dimensions to assess the personality of Netball Victoria. The results indicated an additional factor, 'innovation' deviating from the Aaker's (1997) scale. The personality dimensions identified were competence, sincerity, innovation, excitement, sophistication and ruggedness in the order of strong to weak association with the Netball Victoria brand personality. Smith *et al*. (2006) attribute the difference between Netball Victoria personality dimensions and Aaker's (1997) dimensions to the study being conducted in Australia and specific attributes of the netball sport.

Heere (2010) applies a different approach to measuring the personality of netball clubs in New Zealand. He mentions that managers of clubs use associations to generate the personality of their clubs. These associations can be evaluated among the spectators to identify the personality instead of creating a new factor scale. This study yielded ten personality traits, namely, competitive, exciting, professional, dynamic, passionate, proud, accessible, warm, cool and attractive. According to Heere (2010), this new method takes into account the sports club's capability to denote personality associations other than determining the relative importance of these associations among the spectators. However, Schade *et al*. (2014) questioned this scale for two reasons, first, the study of Heere (2010) is not based on literature analysis, second, Heere (2010), validates his scale using exploratory factor analysis (EFA) only and he did not use confirmatory factor analysis (CFA) resulting in deficient statistical validity.

To manage the shortcomings of previous sports club personality scales, Schade *et al.* (2014) conducted a study in Germany. They identified a 17 item personality scale comprising four factors, namely, extraversion, rebellious, open-mindedness, and conscientiousness. These dimensions vary in content from previous generic brand personality scales such as Aaker (1997). However, two dimensions extraversion and conscientiousness correspond to the Big Five scale of human personality.

Kang *et al.* (2016), used a restricted definition of brand personality to develop a new sports-specific personality scale. In this restricted definition, the non-human personality characteristics were excluded. They conducted the study with the participants who were familiar with National Football League (NFL) which is a major gridiron football organization in the USA. They developed a personality scale with five dimensions, namely, agreeableness, extraversion/emotionality, openness, conscientiousness and honesty. These dimensions closely resemble the Big Five model and the HEXACO[1] model of human personality.

Table 2 summarizes the sports club personality dimensions identified in the literature.

The extant research on sports club personality provides measurement scales developed in specific cultural and sports contexts. Future research could focus on replicating these personality structures in different cultures. A

Table 2: Sports Club Personality Dimensions

Author(s)	Sports Club Personality Dimensions/Traits
Smith *et al.* (2006)	Competence, Sincerity, Innovation, Excitement, Sophistication and Ruggedness
Heere (2010)	Competitive, Exciting, Professional, Dynamic, Passionate, Proud, Accessible, Warm, Cool and Attractive
Schade *et al.* (2014)	Extraversion, Rebellious, Open Mindedness and Conscientiousness
Kang *et al.* (2016)	Agreeableness, Extraversion/Emotionality, Openness, Conscientiousness and Honesty.

Source: Author

[1]The HEXACO model of personality structure summarizes human personality characteristics in terms of six dimensions, or factors: Honesty-Humility (H), Emotionality (E), Extraversion (X), Agreeableness (A), Conscientiousness (C) and Openness to Experience (O).

comparative study of the club and franchise systems of sports organizations could be conducted to identify the similarities and differences in personality dimensions.

4. Sporting Event Personality

The concept of brand personality is also applied to sporting events by the researchers. Similar to the association of brands with human characteristics, a sporting event can also be described through personality dimensions. A sporting event personality affects sponsorship as marketers believe that sponsoring an event with a personality similar to the personality of their brand can produce better results in comparison to sponsoring unrelated events (Lee & Cho, 2012). Various researchers have studied the personality aspects of sporting events. For example, Lee and Cho (2012), developed a sporting event personality scale comprising five personality dimensions viz. diligence, uninhibitedness, fit, tradition and amusement. Further, they found that the personality of a sporting event leads to favourable evaluations of the sponsor brands. Walsh *et al*. (2013), studied sporting event personality from the perspectives of social media users and non-users. They examined the dissimilarities in personality characteristics of the NCAA championship event among users and non-users of the event's Facebook page. Nine personality items viz., exciting, passionate, entertaining, intense, competitive, fan-friendly, skilled, elite and fast-paced were rated by the participants on a scale of 1-7(1= poor fit, 7=strong fit). The mean values for personality items were higher for the event's Facebook page followers than for non-followers. These results indicate that the use of social media for sports events can be a factor affecting their personality. Wang *et al*. (2016), explored the personality fit between sponsor brands and sporting events and they developed a brand-event personality fit scale (BEPF) based on Geuens *et al*. (2009) brand personality dimensions. The BEPF scale comprised five dimensions with twelve items viz. responsibility fit, activity fit, aggressiveness fit, simplicity fit, and emotionality fit.

Most of the studies on sporting event personality focus on single events. Future research could examine the personality structure across different sporting events. Further, the congruence between sporting event personality and sports fan personality can be explored to predict behavioural outcomes such as loyalty.

5. Athlete Brand Personality

The concept of brand personality can be applied at an individual level in sports as athletes can be treated as brands (Thomson, 2006). There are studies conducted by researchers to measure athlete brand personality. For example, Carlson and Donavan (2013), considered athletes as human brands and identified five attributes of athlete brand personality viz. wholesome, imaginative, successful, charming and tough. Further, they found athletes' prestige and distinctiveness have a significant influence on an athlete's identity. Hence, spectators or fans are more likely to identify with athletes whom they perceive to be prestigious and distinctive. Mitsis and Leckie (2016) extended the sports team personality scale of Tsiotsou (2012) to individual athletes. They found that five dimensions of Tsiotsou's (2012) scale were intact when applied to individual athletes. Hence, the dimensions viz. competitiveness, prestige, morality, authenticity and credibility can be used to measure the brand personality in sports both at the team level and at the individual athlete level.

There is a dearth of research to measure brand personality at the level of individual athletes. Hence, more investigations are required. A comparative study of the brand personality of athletes from team sports versus non-team sports could be conducted. Future research could also investigate the athlete brand personality with a large number of athletes from multiple sports to increase generalizability.

6. Conclusion

This paper classifies brand personality research in sports into four categories: Sports Team Personality, Sports Club Personality, Sporting Event Personality and Athlete brand personality. The analysis reveals differences in the dimensions of brand personality identified by the researchers in all four categories. Though the concept of brand personality is increasingly popular in sports, there is still a lack of agreement on its conceptualization and measurement in sports. For example, researchers such as Blank *et al.* (2018) conceptualize brand personality through Aaker's (1997) definition of brand personality incorporating all human characteristics associated with a sports brand, while researchers like Kang *et al.* (2016) adhere to a restricted definition of brand personality excluding non-human personality traits such as successful, triumphant, honorary and wealthy. These differences in the conceptualization of brand personality are reflected in the dimensions identified in the sports context. Another reason for the disagreement is that some researchers have directly applied Aaker's (1997) brand personality dimensions to measure sports-specific personality (Ross, 2008; Smith *et al.*, 2006), while others have developed new scales (Tsiotsou, 2012; Schade *et al.*, 2014; Blank *et al.*, 2018). Furthermore, the differences among the dimensions can also be attributed to studies conducted in different countries and the selection of sports brands such as sports teams, sports leagues and sports organizations.

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Digital India - Augmenting Digital Payments in the Indian Economy

Soumadip Sen* and Sourojyoti Ghosh**

Abstract

The article highlights the extremely progressive Digital India programme launched by the Indian Government. It discusses some of the vital policies and programmes that the government has undertaken or is planning to undertake to empower India both economically and socially into a digitally empowered knowledge economy. The main focus of the article is on the adoption, encouragement and infrastructural development required for catalysing digital payments and transactions within the Indian economy. It also highlights some of the prevailing challenges that should be dealt with properly to make India a digitally enabled cashless economy.

Keywords: Digital India, Digital Payments, Cashless Economy.

1. Introduction

Over the last two decades, the rapid adoption and use of digital infrastructure, as well as the application of ICT (Information and Communication Technologies) services, has resulted in waves of transformation. The world has witnessed different technology-enabled services in every field and industry. The widespread adoption of digitisation has a significant beneficial influence on both economy and society, from enhancing the quality of life to increasing information accessibility to many more. The digitisation process is characterised by cost effectiveness which reduces the costs involved in different knowledge factors linked to the creation, organisation and sharing of information that ultimately leads to increased economic growth.

The Indian Government's vision through its Digital India programme is very precise and definite. The aim is to transform India both economically as well as socially into a digitally empowered society and knowledge economy. Digital payment/transaction systems are the first thing any digital economy demands. The Government of India, along with its central bank, the Reserve Bank of India (RBI), the Ministry of Electronics and Information Technology (MeitY) and other stakeholders are working at their fastest pace to make India a digitally enabled cashless economy. Digital

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payments have a number of advantages in comparison to currency in terms of convenience, mobility, safety, accountability, transparency and a lower likelihood of corruption (Capgemini, 2018)[1]. In simple words, a digital transaction refers to a payment transaction which is done via some digital or electronic mode without the need for cash. It is done in order to send or receive money between an originator and a beneficiary.

2. Digital Payment Scenario in India

With Digital India, the government aims to provide better governance along with on-demand, online, real-time services to citizens with digital platforms enabled for electronic and cashless financial transactions. As per the estimations and reports on the current population of the world by the U.S. Census Bureau (2021)[2], India ranks second in the list of most populous countries in the world, after China at present. As per the World Bank (2018)[3] and the World Bank: IBRD-IDA (2022)[4] reports, the world population has increased from 3 billion in 1960 to 7.762 billion in 2020. And going by that number, today India homes around 17.78 per cent of the world's population. The population is one of the crucial paraments, that is required for framing policies by understanding the unique demographics of a country. Starting from local health, education to understanding the income-wise demographic segregation, population paraments are always taken into consideration for effectively implementing programmes or schemes for the citizens. Post 1949, the Government of India took an initiative for developing a mechanism for the systematic collection of population statistics. Since then, the Office of the Registrar General and Census Commissioner of India under the Ministry of Home Affairs, Government of India has been responsible for conducting the decennial census in India. The 2018 reports from the office of the Ministry of Statistics and Programme Implementation (MOSPI) show that the population of India in 2001 was around 102.8 crores and later in 2011, it grew to 121 crores (Census of India-MHA, 2011)[5]. Based on previous census statistics, the Office of Registrar General of India has also provided a projected total of the Indian population (Figure1) from 2014 to 2022 which has been made available to the

[1]Capgemini (2018). World Payments Report, *BNP Paribas*. Retrieved from: https://cutt.ly/LJ1qM99

[2]U.S. Census Bureau (2021). Current Population List, July 2021. Retrieved from: https://cutt.ly/NJ1q4bC

[3]The World Bank (2018). A Changing World Population. Retrieved from: https://cutt.ly/5J1wrUK

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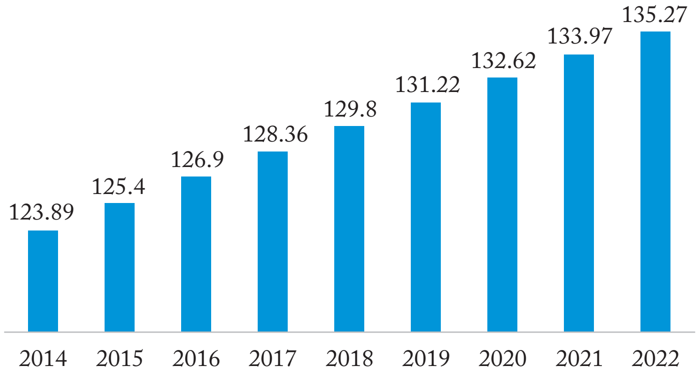
[5]Census of India-MHA (2011). Census of India 2011 - Rural Urban Distribution of Population (Provisional Population Totals), *Registrar General & Census Commissioner of India, Ministry of Home Affairs New Delhi* . Retrieved from: https://cutt.ly/bJ1elk2

Figure 1: Projected Total Population in India (in Crores)



Source: Office of Registrar General of India, Ministry of Home Affairs, Ministry of Statistics and Programme Implementation (MOSPI).

public by MOSPI in their "Projected Population, Area and Population - Statistical Year Book India 2018"[6]. As per the figures in this report, the population of India in 2020 was around 132.6 crores and in 2022 it will be approximately 135 crores.

As perthe World Bank: IBRD-IDA (2022)[7] data, framed by the United Nations Population Division on World Urbanization Prospects: 2018 Revision, the rural population of India is 65.07 per cent of the total population while the remaining 34.93 per cent frames the urban distribution. This figure poses some challenges for the government as well as the other stakeholders involved in the digital payment revolution. The challenge is to onboard the rural population (which is around 65.07 per cent of the total population) into the digital payment platforms. To accomplish this objective, much importance has been given to the banking sector to enable digital payments for their customers. RBI has already formed a High-Level Committee on Deepening of Digital Payments for framing strategies for accelerating digital payments and streamlining the Indian payment ecosystem. In the latest report by RBI (2019)[8], the Committee has given significant importance to the regional rural banks (RRBs) besides scheduled commercial and cooperative banks. As RRBs are primarily focusing on the rural population hence onboarding the RRBs on the digital platforms would eventually encourage digital payment transactions.

Traditionally the use of digital systems in the Indian economy was very low, which is due to various reasons like awareness, lack of proper

[6]MOSPI (2018). Projected Population, Area and Population - Statistical Year Book India 2018, *Ministry of Statistics and Programme Implementation* . Retrieved from: https://cutt.ly/bJ1qsZC

[7]The World Bank: IBRD-IDA (2022). United Nations Population Division on World Urbanization Prospects: 2018. Retrieved from: https://cutt.ly/RJ1eQPG

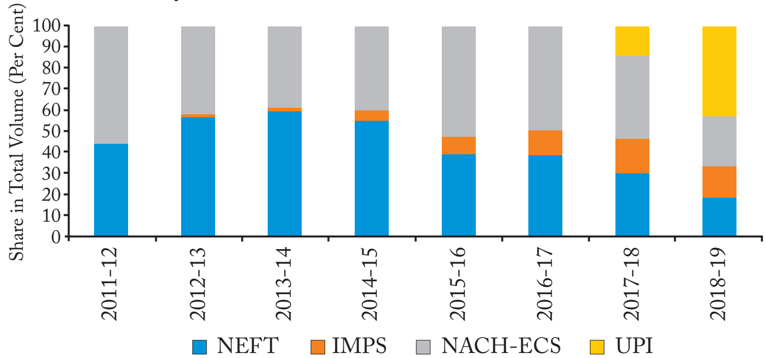
[8]RBI (2019). Report of High-Level Committee on Deepening of Digital Payments, *Reserve Bank of India*. Retrieved from: https://cutt.ly/0J1qAqG

infrastructure along with mechanisms to control and supervise the processes. But in the last few years, India underwent a complete digital revolution. In a bulletin by RBI (2019)[9] titled, "Drivers of Digital Payments: A Cross Country Study, Aug 14, 2019",the Reserve bank has published some interesting figures. With the government's rigid efforts in the introduction, encouragement and promotion of various digital payment instruments, there has been a significant increase in digital payment transactions, especially after demonetisation.

3. Digital Payment Gateways

The RBI bulletin titled, "Drivers of Digital Payments: A Cross Country Study, Aug 14, 2019", also highlights that retail electronic payment modes are becoming popular and there has been a consistent rise in terms of their volume and value since 2011.New modes of retail payments such as Prepaid Payment Instruments (PPI), Immediate Payment Service (IMPS), National Automated Clearing House (NACH) and Unified Payments Interface (UPI), along with existing modes like Real Time Gross Settlement (RTGS), Electronic Clearing Service (ECS), National Electronic Funds Transfer (NEFT) and Clearing Corporation of India Ltd. (CCIL) are plotting vital shares in the current payment system. Since its launch in 2016, UPI developed by the National Payments Corporation of India (NPCI)[10] has become one of the most popular retail e-payment interfaces. With its real-time payment features, inter-bank transaction facilities, robust and user-friendly mobile applications, UPI is currently the most used retail e-payment interface in terms of volume (Figure 2) and a recognized government enabled payment rail (Mitra, 2021). Every month NPCI provides detailed figures for UPI

Figure 2: Share of Various Retail Electronic Payments with Respect to Volume from 2011-12 to 2018-19.



Source: Reserve Bank of India (RBI).

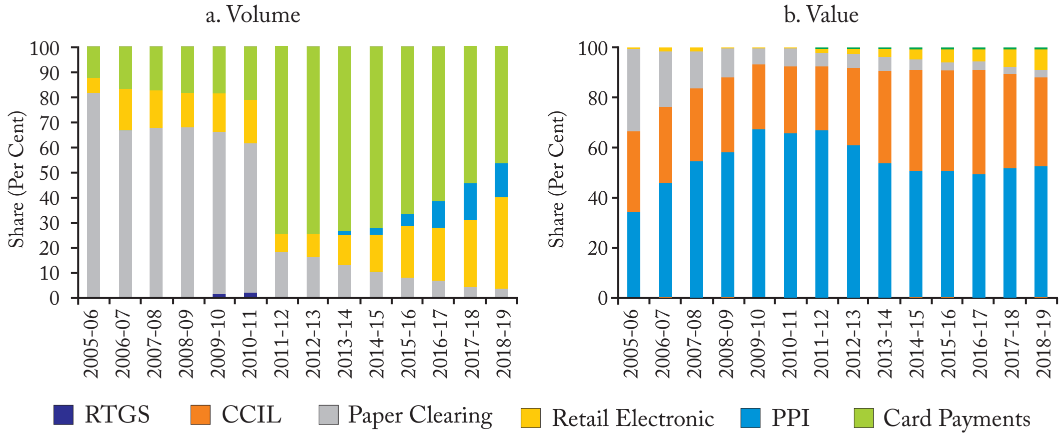
[9]RBI (2019). Drivers of Digital Payments: A Cross Country Study, *Reserve Bank of India*. Retrieved from: https://cutt.ly/FJ1eAMk

[10]National Payments Corporation of India (NPCI) - UPI Product Statistics. Retrieved from: https://cutt.ly/RJ1eCyG

Product Statistics (Figure 4, on page 15). Based on this it can be easily inferred that from August 2016 to February 2020 there has been a drastic increase in the volume of usage and amount. In August 2016, there were only 21 live banks on UPI and now there are 216 live banks on the interface. Through these years the transaction amount has increased from ₹ 3.1 crores in August 2016 to ₹ 5,04,886.44 crores in March 2021. In this aspect, another interesting trend (Figure 3) has been noticed; while on one hand retail electronic payments are increasing (in volume) since 2011, the share of card payments have shown some decline in terms of volume, although it continues to be a vital component in the payment ecosystem. UPI has been developed in such a way that all the complexities related to payments and transactions are efficiently hidden under its user-friendly framework (PwC, 2019)[11]. It allows an account holder of any bank to send and receive money using their unique identity known as UPI ID or payment address (also called Virtual Payment Address or VPA). With the aim of providing sufficient convenience, UPI users can also make transactions through the conventional process by using the account number and Indian Financial System Code (IFSC), or AADHAAR number.

UPI has been initially conceptualized as a mobile application-based solution primarily catering to internet compatible phones (smartphones). But there are also a huge number of non-smartphone users in India. Therefore, to cater equal services to these two groups of people, UPI is also available for non-

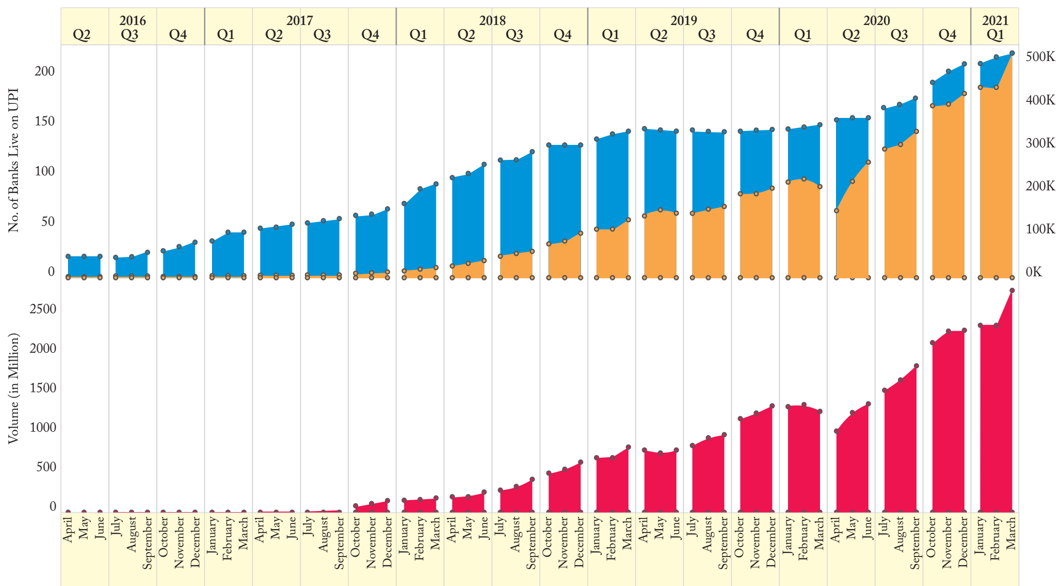
Figure 3: Payment System Indicator by (a) Volume and by (b) Value



Source: Reserve Bank of India (RBI).

[11]PwC (2019). Changing Preferences: UPI's Dominance over Digital Wallets in the Payments Market, December 2019. Retrieved from: https://cutt.ly/QJ1tuje

Figure 4: UPI Product Statistics.



Source: NPCI

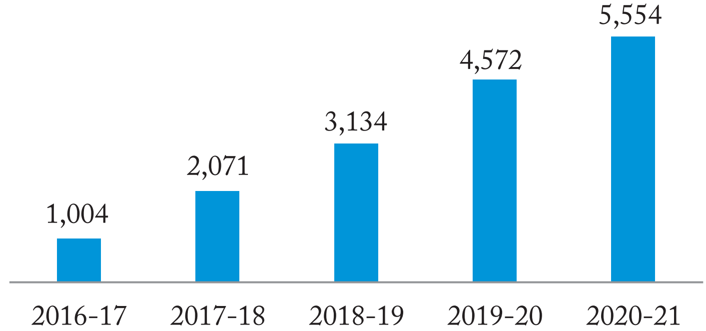
internet based mobile devices through the concept of Unstructured Supplementary Service Data (USSD). This is available in the form of a dialling option (*99#).

According to a joint study done by the Associated Chambers of Commerce and Industry of India & PwC, it is expected that the number of smartphone users in India is expected to rise by 84 per cent from 468 million in 2017 to 859 million in 2022. With lower data tariffs and increasing smartphone penetration in the country, it can well be anticipated that the use of digital platforms for payments and transactions will also increase drastically.

4. DigiDHAN Mission

In its 2017-18 Union Budget, the Government of India announced the establishment of a mission for the Promotion of Digital Payments, with a target of 2,500 crore digital transactions using different modes of digital payments like Aadhaar Pay, UPI, IMPS, USSD and Debit cards throughout the fiscal year. Following this, the Ministry of Electronics and Information Technology was assigned the responsibility of promotion of digital transactions including digital payments, and as a result, the DigiDHAN Mission was launched during that time for promoting digital payments, along with monitoring the growth and sustenance of secured, adaptive and affordable national digital payments ecosystem within India, one that will be progressive as well as inclusive.

Figure 5: Volume of Digital Payment Transactions (in Crores) from FY 2016-17 to FY 2020-21.



Source: DigiDHAN Mission, Ministry of Electronics and Information Technology, Government of India

In a way, it can be said from MeitY (2021)[12], that the DigiDHAN Mission has been a driving factor which has catalysed the promotional activities of the digital payment ecosystem within the Indian subcontinent. There has been a steady increase in digital payment transactions over the years (Figure 5) and as per government reports the total transaction volume has increased by 453 per cent from FY2016-17 to FY2020-21.

5. National Electronic Toll Collection (NETC)

The National Electronic Toll Collection (NETC) programme is an initiative that has been developed by the National Payments Corporation of India (NPCI) with the objective to streamline the electronic tolling and payment requirements of the country.

The system is highly interoperable having real-time payment and clearing services for the proper settlement and any dispute arising thereof (Shree *et al*., 2021). It encourages the use of electronic devices called FASTag, for transferring and making toll payments using radio frequency identification (RFID) technology, directly from the payer's account. As shown in figure 6 (on page 17), the volume and value of transactions on NETC have been on the rise since FY 2017-18. Figure 6 shows the volume and value of transactions on NETC (in Crores) from FY 2017-18 to FY 2020-21.

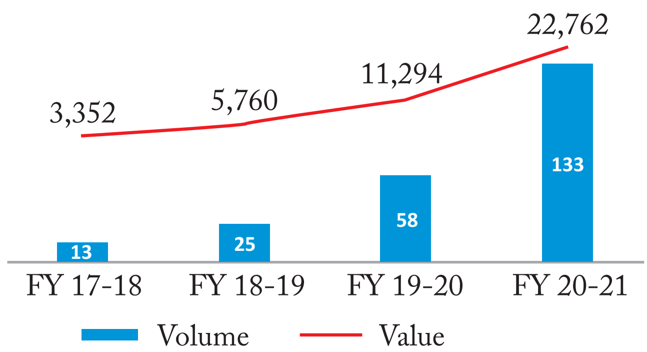
6. Union Budget 2022-23: Provisions for Digital Banking and Payments

The Union Budget (2022-23)[13] has given much importance to the digitisation and

[12]MeitY (2021). DigiDHAN Mission, Ministry of Electronics and Information Technology, Government of India, December 2021. Retrieved from: https://cutt.ly/sJ1tm0W

[13]Union Budget (2022-23). Government of India, Budget 2022-2023: Speech of Nirmala Sitharaman, Minister of Finance. Retrieved from: https://cutt.ly/YJ1t2pu

Figure 6: Volume and Value of Transactions on NETC (in Crores) from FY 2017-18 to FY 2020-21.



Source: DigiDHAN Mission, Ministry of Electronics and Information Technology, Government of India

enhanced incorporation of digital payments through digital banking. The budget has categorically mentioned that by 2022, 100 per cent of post offices will come under the umbrella of core banking with an objective to boost financial inclusion. This will further enhance the accessibility and interoperability of post office bank accounts through digital payment gateways like net banking, mobile banking, online transfer of funds and automated teller machines (ATMs), thereby helping the rural population to avail benefits and onboard them to the digital payment systems.

In order to mark 75 years of India's independence, the budget has also laid the proposition to frame 75 digital banking units (DBUs) in 75 specific districts of India by Scheduled Commercial Banks. Moreover, the financial support allocation of ₹ 1500 crores that was announced last year FY 2021-22 to encourage digital payments will steadily continue in this financial year of 2022-23 with an aim to promote digital transactions and enhance digital modes of payment in rural and semi-urban areas. Provisions have also been made in the 2022-23 Union Budget for the digitisation of the economy, with digital payments.

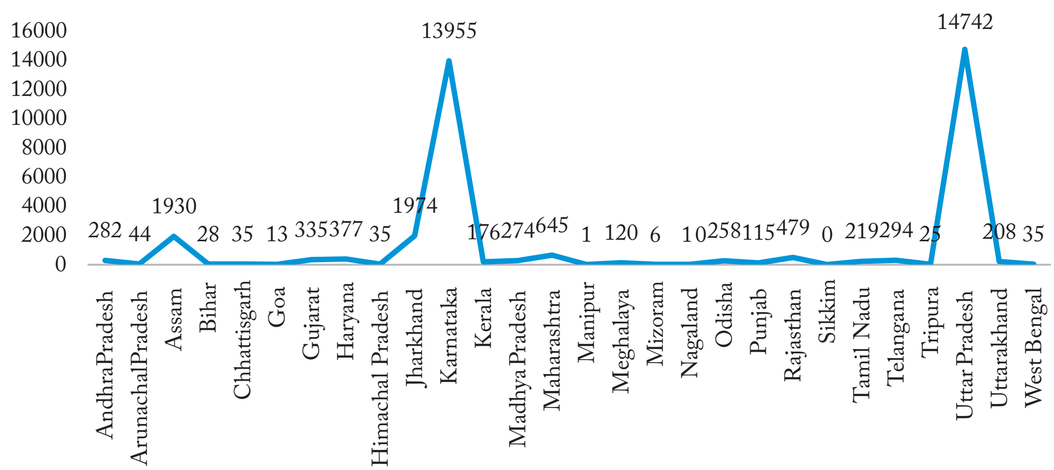
All these announcements clearly depict the government's urge on one hand to catalyse the fintech ecosystem of India by encouraging the use of digital payment platforms that could serve the citizens more economically and in a user-friendly manner along with pushing digital banking in rural, semi-urban, and under served areas of India.

7. Cyber Threat and Security

With rapid digitisation, challenges also come. Digitisation exposes cyberspace which has its own inherent vulnerabilities. Therefore, it also demands privacy, safety and security. As per the recent reports published in 2022 by the National Critical Information Infrastructure Protection Centre (NCIIPC) which is a unit of the National Technical Research Organisation (NTRO), the cyber threat landscape has also amplified exponentially in these years. Ransomware threats, crypto and fileless malware, phishing attacks and other new advanced cyber threat techniques are continuously emerging and branching out their roots in recent times, NISPG-MHA (2019)[14].

Figure 7 shows a plot of State/UT-wise count of Cyber Crime activities in 2020, taken from official sources of the Government of India. In a recent report by the Ministry of Home Affairs, India's concern has been expressed over the increasing use of cyberspace, the rise in the number of cybercrimes including financial fraud and such related matters that have been highlighted in the data published by the National Crime Records Bureau (NCRB) that shows an increasing trend of cases registered under cybercrime, 21796 in 2017, 27248 in 2018 and 44546 in 2019. Anticipating all these threats, NCIIPC is relentlessly evolving the threat assessment framework for timely detection, identification and resolution of threats, NCIIPC (2022)[15]. It has also framed and structured the National Security Analysis Centre to continuously supervise the security aspects of critical

Figure 7: State/UT-wise Count of Cyber Crime Activities in 2020.



Source: Cyber Crimes (Crime Head-wise & States/UT-wise) – 2020, 1st Table from Left. 9A.2 (A) IT Act Cases 9A.2 (B) IPC (involving Computer as Medium/Target) Cases 9A.2 (C) SLL (involving Computer as Medium/Target) Cases & Total Cyber Crimes, National Crime Records Bureau (NCRB), Government of India.

[14]NISPG-MHA (2019). National Information Security Policy and Guidelines, Ministry of Home Affairs, Government of India, 2019. Retrieved from: https://cutt.ly/NJ1yebk

[15]NCIIPC (2022). National Critical Information Infrastructure Protection Centre- NCIIPC Newsletter, Volume 6, Issue 1, January 2022. Retrieved from: https://cutt.ly/IJ1yopM

information infrastructure (CII) organisations. India has developed a strong and tight cyber and information security (CIS) division that deals with matters relating to cyberspace and information security. Besides this, India has some highly efficient and active national nodal agencies for tackling cyber security incidents. Some of these notable agencies are NCIIPC, the Indian computer emergency response team (ICERT) under MeitY, etc. who are constantly monitoring cyberspace and continuously formulating better strategies and policies to counter cyber-attack, cyber terrorism and all possible threats.

The government has already established and is in the process of further strengthening the various law enforcement agencies for preventing, detecting, investigating and prosecuting cyber-related issues. Infrastructural development and capacity building are being done at both state and national levels for cyber threat anticipation and effective tackling through improving cyber forensic amenities. The government of India has established nodal points to prevent misuse of cyberspace by framing crucial schemes like the Indian cyber crime coordination centre (I4C) to provide a framework and eco-system for law enforcement and legal agencies to deal with the cyber related issues in a completely comprehensive and synchronized manner, MHA (2019)[16]. I4C component includes the national cyber crime threat analytics unit (TAU), national cyber crime forensic laboratory (NCFL) eco system and national cyber crime research and innovation centre for strengthening private and inter-governmental participation and for fostering strategic partnerships with interested parties on research, development and innovation focused on cyber crimes and its related impact, along with its detection, containment and proper investigations.

8. Conclusion

The Indian economy is a flourishing economy and can be seen as a promising and trusted economy when compared to various other countries. Despite a moderate growth curve, the Indian economy has shown steady market growth and a comparatively commendable GDP growth with respect to peer countries taken year on year basis. Digital payment infrastructure is a crucial mechanism that can directly influence the economy of a country. Systematic and sequential incorporation of new state-of-the-art technologies help the citizens to reduce their burden and streamline the complex transaction processes involved with the traditional systems. PricewaterhouseCoopers has published a detailed analysis report on the evolution of the Indian digital payment landscape titled, “The Indian Payments Handbook: 2020–2025”

[16]MHA (2019). Cyber and Information Security (C&Is) Division, Ministry of Home Affairs, Government of India, 2019. Retrieved from: https://cutt.ly/QJ1yl3x

(PwC, 2020)[17], where it has been explicitly highlighted that with the continuous efforts of the associated stakeholders, India is today moving rapidly towards a less-cash society where customer convenience and trust have grown which has helped India attain global leadership in digital payments and transactions. The massive rise of fintech companies is also indicating the same fact that now India is ready for digital transformation.

It is also true that every game-changing mechanism when implemented on a massive scale has some disadvantages associated with them and digital payments are no exception. Personal awareness and proper knowledge are much important while being a part of this digital ecosystem. A highly secured system is also susceptible to multiple threats if there is any sort of fallacy in authentication, authorization or encryption. Today everyone is leaving behind their "digital footprints" on the internet and these footprints are nothing but a hefty amount of information that is automatically tracked and captured by online systems. There are agents in the digital biosphere who are continuously monitoring and waiting to tap this identity or information to gain advantages by leaking out all vital data, financials, etc for their own benefits. Hence, we can say that shifting the paradigm to a digital arena, is undoubtedly a technological revolution and technology enabled-inclusion (Deloitte, 2019[18]; Deloitte & CII, 2019[19]) but at the same point, it is a social revolution too.

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Gender Differences in Investment Pattern: A Literature Review

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Abstract

Much of the economic and financial theories presume that individuals act rationally in the process of decision making, by considering all available information. But there is evidence which shows repeated patterns of irrationality, over-confidence and gender bias in the way humans make decisions and choices when faced with investment options. Moreover, despite several theoretical frameworks and various research carried out globally, the authors could not confirm a common conclusion about the gender bias in the investment decision making process. The purpose of the paper is to extend the knowledge acquired from previously published papers and to review the main reasons for gender bias and irrational investment decisions. The study mainly is a secondary form of research and has reviewed the literature available on this topic to understand the reasons why the investment pattern differs between male and female investors, the factors that influence the investment decision, the confidence level, investment avenues selected and risk tolerance level.

Keywords: Gender Differences, Over-confidence, Investment Avenues, Irrational Behaviour, Risk Tolerance.

1. Introduction

Various studies have supported the fact that there is a significant variation in men's and women's concepts of economic wellbeing and financial behaviour. Women are generally risk-averse than men in various aspects of life (Oslen & Cox, 2001). The aim is to identify and understand why people make certain financial choices. Within behavioural finance, it is assumed the information structure and the characteristics of the market participants systematically influence an individual's investment decision as well as market outcomes. Men earn lesser returns than women not because of worse security selection but due to the frequent nature of trading (Barber & Odean, 2001). Several studies have confirmed that there exists a gender bias in the investment pattern, as women are more sceptical than men, they try to choose less

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risky assets rather than risk-free returns and for them, safety is of utmost importance, but in case of men several studies have shown that they do not prefer risk-free returns and they feel confident about taking risks. Sharma and Vasakarla (2013) pointed out that women are much more comprehensive information processors than men and can deal with much more complex financial decisions more accurately. Now, this overconfidence of men sometime results in a tendency to hold on to securities losing value waiting for better terms and sometimes they also invest in highly volatile stocks. People are prone to trust their own intuition and skillset regarding investment decisions and thus they do not trust others regarding money matters (Kumar & Goyal, 2018).

2. Literature Review

The purpose of this segment is to report on the review of literature relevant to the research title of the present study. A thorough review of the pertinent literature imparts a foundation for the study being taken. It helps to identify relevant theories and assists in establishing an appropriate research methodology to study the problems. Moreover, it also facilitates comparison of the results of several previous studies with the findings of the current study.

Barber and Odean (2001) reported that men trade more frequently i.e., almost 45 per cent more than women annually and as a result, men's net return reduces by 2.65 per cent whereas in the case of women it is only 1.72 per cent. Fisher (2010) found a significant difference in the financial behaviour of men and women in the case of short-term savings as women who have low-risk tolerance or have poor health are less likely to invest in short-term savings. Barber and Odean (2001) reported that women have less experience than men in terms of financial investment. They documented that 47.8 per cent of women reported having good or extensive investment experience, while 62.5 per cent of men report the same level of experience. According to Yao and Hanna (2005), married males have a substantially greater risk tolerance level than married women. Fisher (2010) further pointed out that with every added year of education men are more likely to invest in a short-term investment. But the same variable "education" has a significantly different result in the case of women in terms of short-term savings. Yao and Hanna (2005) mentioned that unmarried men are inclined to take much more financial risk compared to unmarried women. According to Barber and Odean (2001), men get lower returns compared to women not because of inferior security selection but because of excessive trading practices. Fisher and Yao (2017) reported that the majority of men in their sample had high risk tolerance which was significantly higher than the proportion of women willing to take risks i.e., women have significantly lower risk tolerance levels compared to men. Fisher and Yao (2017) identified factors such as income, income uncertainty, net worth and financial knowledge, that significantly vary in men and women. Fisher (2015) reported that men with high risk tolerance have a significantly higher probability of saving. Whereas, in the case of women no such relationship exists. Powell and Ansic (1997) highlighted that as women are risk-averse, they tend to select strategies to avoid predicaments and to gain security. But men prefer risk as they want more returns. Powell and Ansic (1997) opined that women prefer the strategy of selecting the widest insurance cover and like to stay out of the market as long as possible in the currency decision to avoid the losses. But males prefer to focus on the strategies which yield the highest possible gains which mean they select the shortest insurance cover and try to stay in the market as long as possible for the currency situation. Powell and Ansic (1997) found that with a similar level of experience and education men are more confident than women in case of investment decisions as for women they indubitably accredit their performance to good luck. They further reported that a male uses multiple strategies very often than a woman and spend time analysing different information source. Now analysing available information indicates that a male takes much more time in decision making and as they have more risk preference, they tend to invest in a wider variety of investment options and this explains the significant variance in male and female investment patterns. Powell and Ansic (1997) found that as the strategy differs for males and females in terms of investment, males tend to overvalue their invested security and women tend to undervalue their investment.

Hira and Loibl (2008) pointed out women are more responsible for daily money management whereas men are more obliged towards investment related activities. They furthermore mentioned that to make changes in their financial plans women investors mostly seek help from the financial advisors whereas males are in charge of making adjustments to their investment plans. According to them, women take their advice from financial planners but they also take advice from family and friends whereas men like to learn about investments on their own. Hira and Loibl (2008) emphasized that men are frequent users of computer-based tools and they use them with more confidence compared to women. They also indicated that for women the greatest change in investment participation is due to the birth of children, death of a family member or marriage as these increase their investment but for men, the change in investment planning is due to retirement and sudden gain. The greatest gap in the investment behaviour is due to divorce for women as it significantly changes their investment pattern but in the case of men, it is least likely to affect the course of investment. Hira and Loibl (2008) pointed out that almost half of the women in their collected sample (which is much less than men) are comparatively sceptical and have lesser knowledge about investment than men.

Charness and Gneezy (2007) pointed out in their paper that women invest less compared to men and are more risk-averse than men. Bayyurt *et al*., (2013) reported in their study that Turkish men favour investing in real estate and common stocks whereas Turkish women invest mostly in gold, fund and time deposit. For women the most preferred investment option is gold and the last option is investing in real estate but for men investing in real estate is the second most preferred option. The researchers concluded that the preference for investment in real estate differs hugely in men and women due to the fact of the amount of capital they own. Investing in real estate requires comparatively more capital which is not easily available to women whereas Turkish men have such capital and thus, they invest more in stocks.

Jianakoplos and Bernasek (1998) pointed out that single women are much more risk-averse compared to single men and married couples. The study also pointed out that 63 per cent of single women and 57 per cent of married women are not willing to take any form of financial risk compared to 43 per cent of single men and 47 per cent of married men. Bajtelsmit and Bernasek (1996) mentioned that women have less wealth compared to men and they are much more risk-averse than men. They pointed out that the difference in investment behaviour is due to the income as the annual income of women is less than men it is evident that they have fewer investment options. Lee *et al*., (2013) revealed that with all available information in hand, males and females make different kinds of decisions as males try an assortment of investment options available to increase their possible returns, on the other hand women exaggerate the possibility of loss as they perceive the risk associated with the possible investment option. Males and females process the available information differently and thus their responses vary. This is the effect of behavioural bias due to gender differences. Some of the behavioural biases have shown large scale variation in male and female investors as accounting bias was remarkably higher in males i.e., males have a greater inclination of segregating their portfolios into different categories, whereas anchoring and adjustment bias and the ambiguity effect bias were notably greater in case of female respondents i.e., they tend to circumvent circumstances that could be possibly risky than others.

The study of Bacha and Azouzi (2019) showed interesting results that optimistic and overconfident females are much more conservative in financial decision making than men. Endres *et al*., (2008) reported that both men and women underestimate their personal efficiency and personal goals although women tend to be much more under confident than men. Men significantly have more challenging personal goals compared to women.

Tomar and Tomar (2019) found that although both males and females invest more in equity and do not prefer to invest in bonds and debentures, females are conservative in the case of investments as they prefer to invest in insurance. Sharma and Kota (2019) mentioned that in case of investments like bank deposits, 5-year tax-saving fixed deposits, precious metals like gold, silver or diamond, public provident fund, national pension system, post office saving scheme, mutual funds, life insurance and commodities, the influence of women is more compared to their spouse. But in the case of real estate, company deposits, debentures or bonds, pension schemes, equity shares and derivatives influence of the husband is more. Sharma and Kota (2019) pointed out that "lack of knowledge" and "lack of confidence" were the top reasons which restrict women to invest followed by their risk-averse behaviour. Banumathy and Azhagaiah (2016) pointed out that there is a significant difference in the awareness level of male and female investors regarding stock market investment. Reddy and Narayanan (2015) also pointed out that women are weaker than men as on average they earn less and they have to take care of children and the elderly and they are less likely to have health insurance or pension coverage in their jobs. Sharma and Vasakarla (2013) revealed that 38.5 per cent of males and 6.7 per cent of females invest in the financial market regularly i.e., a male is much more frequent in terms of investment in the financial market; the study also suggested that females are much more risk-averse than male investors i.e., males prefer to invest in risky assets and do not prefer risk free investments. Kansal and Singh (2013) reported that there is no significant difference in male and female investment patterns.

3. Research Objective

The prime research objectives of the study are first, the paper will try to identify the investment avenue mostly selected by men and women in the previous papers. Secondly, to analyze the effect of overconfidence in decision making. Lastly, to analyze the risk tolerance level of men and women investors in the previous studies.

4. Data Collection and Major Findings

The theoretical foundation of the study is based on various secondary sources such as textbooks, articles and published papers. Accordingly, the major findings are that females are more conservative in their financial decision-making process than men and thus the choice of less risky assets compared to men. For women less risky assets like equity, fixed deposits, gold and silver are much more preferred but for men, such risk-free returns are not much preferred. But in the case of real estate investment men are much more involved than women due to the fact that women have less wealth accumulated compared to men. The study also revealed that due to being overconfident men end up earning lesser returns annually compared to women. The decrease in return is not due to the fact that men choose inferior quality stocks but due to excessive trading practices. Contrastingly, women are under confident in their decision-making process. The fact that women prefer less risky assets is due to the fact that they exaggerate that they might face losses that is why they love to invest in insurance for a longer period of time and try to stay out of the currency market. But men love their returns and to increase the same, they intend to segregate their assets into various categories. The gender gap in the investment pattern is due to the fact that women have much more obligations like children, taking care of the elderly etc. and the fact that women generally earn less is also an important parameter for their choice of investment. The inclination to invest more for men increase due to sudden capital gain or retirement but for women childbirth, divorce and marriage are the most important reasons to increase their investment. With the same information provided, men and women act differently in the case of investment. As men are confident and prefer to learn more about several investment options thus they choose a variety of asset classes for investing. But as women are conservative in terms of investment, they prefer to avoid risky circumstances in case of investments.

5. Conclusion

It is evident from the past studies that there exists a wide difference in the investment behaviour of male and female investors. Sometimes women do not even plan investments until it is too late or they are confronted with life predicaments such as divorce or the death of their spouse. But in the case of men, they prefer to take more risks just to gain more and more returns; the thought of losing out on profitable security is disheartening for them, so, men have the tendency to trade frequently. The reason for such investment may be because of the fact that men overvalue their securities whereas women tend to undervalue their security.

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The Antecedents of Sustainable Environmental Performance Applying Green HR Practices

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Abstract

Most organizations aspire to enhance their environmental performance. It is seen that the environmental and sustainability efforts of an organization lead to positive outcomes. Green human resource practices play a very important role in making an organization's sustainability efforts successful. However, there is still a paucity in the literature in terms of the identification of relevant factors as well as human resource practices that lead to an organization's environmental and overall performance. In the present study, relevant factors including human resource factors are identified with the help of a literature review, thereafter a framework is developed that can guide an organization in achieving better environmental performance leading to organizational performance.

Key Words: Environment Management System, Top Management; Green HR Practices; Organization Performance; ISO 14001

1. Introduction

Environment sustainability is an emerging global megatrend (Gerdt *et al.*, 2019). The concept is gaining popularity across all industries. Green management refers to the connection between environmental consciousness and enterprise behaviour. Green management focuses on the reduction of the negative environmental impact created by organizations. It also demands the inclusion of environmental considerations in every aspect of an organization's operations. Human Resource Management (HRM) also needs to be aligned with green management so that all the employees can contribute towards making the organization sustainable. Green human resource management (GHRM) can be understood as policies and practices followed by an organization that promotes sustainable usage of resources within a business organization (Mandip, 2012).

However, there is an absence of sufficient

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research showing how the firms' initiative of adopting an environment based strategy is sustainable in terms of environmental performance and is helping them in gaining a competitive advantage (Orlitzky *et al.*, 2003). Additionally, what are the factors that influence achieving environmental sustainability initiatives remain a question.

The present study thus attempts to identify antecedents to an organization's sustainable performance and its environment oriented HRM practices. Further, the study aims to identify the significant influencers of the GHRM practices. The resultant conceptual model will facilitate not only understanding the importance of different factors but can also guide other organizations attempting to encourage such practices in their corporations.

2. Literature Review

2.1 Defining Sustainability

Researchers have used varying definitions of "Sustainability". The earliest reference may be traced to Brundtland Commission's Report-defining sustainability as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987; Maniora, 2018). Ehrenfeld (2008) has proposed a holistic definition by mentioning that sustainability is all about enabling the co-existence of human beings and other life forms till perpetuity. Different terms have been employed in the literature such as sustainable development, sustainable business and sustainability with multiple interpretations (Montiel & Delgado-Ceballos, 2014). The inclusivity of sustainability has been divergent. Some studies consider social and environmental issues to be an integral part of sustainability while other studies consider only social issues. Some authors (Mirvis *et al.*, 2010) caution against a very narrow organizational definition of sustainability in terms of measuring wastages, environmental emissions and pollution. They urge organizations to look at social equity and environmental conservation. An entity is supposed to be upholding its sustainability agenda when it makes efforts to balance commercial with societal and environmental goals. This resonates with Elkington's emphasis on the triad of goals enmeshed in the concept of "Triple Bottomline". The three dimensions, i.e., "People, Planet and Profits" were advocated for organizations to strive for better performance (Elkington, 2013).

2.2 Sustainability as an Organizational Agenda

In order to understand the environmental focus of an organization, it is important to understand an organization's environmental intent and its overall concern for sustainability. A clear and explicit commitment to the sustainability agenda signals its importance to the members of the organization, the key strategy makers, the customers and society at large about the green position of the organization (Yozgat & Karatas, 2011). Vision and mission with a green message serve as a guide to help managers think about environmental consciousness in an organization. Sustainability conscious organizations explicitly spell out their environmental intentions with words such as "socially responsible", "protect the environment", "benefit the communities", "socially and environmentally responsible", "implement solutions to environmental crisis", and "cherishes nature and restores the environment".

The mere presence of a vision does not seem enough to motivate and guide stakeholders to take sustainability seriously (Kim & Oki, 2011). It needs to get reflected in the organization's environmentally responsible actions. A number of firms in present times are linking sustainability goals to their strategy (Maniora, 2018) with an understanding that failure to do so would be a riskier choice. Organizations that wish to create an environmental impact would have to integrate their environmental strategy with the corporate strategy, which would enable them to allocate crucial resources for environmental causes and institute formal environmental processes and routines. The strategy needs to be crafted in alignment with stakeholders and in conformance to environmental regulations. There is a multitude of other reasons for organizations to adopt the environmental strategy. They could be attempting to evade penalties for environmental non-compliance, build a green brand for themselves, target the eco-friendly segment of the market, meet the expectations of the stakeholders, enhance resources and operational efficiency, cost optimization or further their environmental cause (Yozgat & Karataş, 2011).

2.3 Motivations for Sustainable Environmental Practices in Organizations

There is very less clarity on the implementation of a sustainability oriented strategy and the degree to which organizations choose to become environment friendly (Baumgartner, 2014). Organizations can have a very myopic and reactive focus on sustainability, which may prompt them to merely meet the environmental regulations or they can be proactive in which case they would take action to cut pollution and adopt resource conservation methods. Earlier studies have quoted different factors such as stakeholders' expectations, ethicality, positive environmental image, management of risks and profitability which have propelled organizations to adopt environmentally conducive actions (Artiach *et al*., 2010). Best and Thapa (2013) have differentiated between internal and external motivation for implementing environment-friendly practices. The external motivators are the Government (Govt.), industry, and market that could be the influencers for organizations to take up environment management practices. Among internal motivators are the leader's personal inclination, or the organization's culture that values the environment and social concerns (Robin *et al*., 2017). The role of Govt., customers, NGOs and the adjoining community is noteworthy as they put pressure on organizations to control and manage the damage caused to the environment (Sharma & Vredenburg, 1998). In the interest of all, Govt. manages the environmental issues for the industry by providing guidance and through law enforcement which may pertain to eco-friendly infrastructures like emission standards and environmental regulations. Such environment focused mandates are instrumental in making organizations more environmentally responsible (Pedersen *et al*., 2013). Similarly, the media too has highlighted malpractices and put pressure on organizations to become environmentally sensitive. Organizations demonstrating commitment towards sustainability attract customers and potential employees (Zhu *et al*., 2014). It is notable that customers' expectations have led companies to produce greener and environmentally friendly products. Some studies suggested that restructuring and refocusing green product design and packaging increases customers' willingness to pay a premium for environmentally friendly products and services (Jeong *et al*., 2014).

Top management and leadership support are important in helping organizations operationalize their environmental strategy, else there emerges a gap between the environmental intent and daily operations (Mirvis *et al*., 2010). A study by Jang *et al*. (2017) established that the leadership and values of the senior management team had a deep impact on the environmental commitment demonstrated by the organization. The absence of alignment with the sustainability strategy resulted in the lack of synergy in the efforts culminating in a haphazard collection of unconnected, sporadic activities which fail to make a strong impact. This is where the role of leadership becomes important. The leader can bring clarity, focus and integration to efforts. William *et al*. (2014) proposed that top management commitment moderated the relationship between the organization's mission statement and firm performance as top management's actions such as creating organizational architecture, communication, planning and review of progress facilitated the actualization of the mission. Similarly, leadership can communicate, organize, plan and review the envisioning and the implementation of the environmental component of the organization's vision.

2.4 Role of Green Human Resource Management

It is observed from various studies that the growing interest in the environment and sustainability all over the world has prompted organizations to adopt green initiatives with the aim of improving financial performance (Boiral *et al*., 2018; Font *et al*., 2016; Martiniz-Martiniz *et al*., 2015). Previous studies identified the absence of knowledge of environmental issues, employees' disinclination to codify their behaviour and dearth of human resource capabilities in the application of environmentally favourable practices as adversely affecting the sustainability intent of the organization (Robin *et al*., 2017). This is where environment-oriented HRM practices can be introduced in organizations to nurture and mould employees' behaviour to become more sustainable. Mahajan and Bose (2018) have argued that the acknowledgement of the need for sustainability or increasing the environmental orientation among employees is not enough, there needs to be a major change in the mindset of the employees. This change can lead to employee green behaviour. Successful implementation of green practices involves encouraging employees to get involved in the social and environmental initiatives of the organization (Renwick *et al*., 2013; Norton *et al*., 2014). Chan *et al*. (2014) identified three triggers, i.e., environmental knowledge and awareness, environmental concern and employees' ecological behaviour. One of the facilitators would be a robust set of HR practices that would ensure talent, skill and employees' motivation for the organization's environmental initiatives (Fayyazi *et al*., 2015). Researchers have coined a separate term to denote environmentally oriented HR practices. Renwick *et al.* (2013) have introduced the concept of GHRM to align all the different HRM practices with the environmental strategy of the organization. GHRM is a set of policies, practices and systems to create an environmentally sensitive, resource efficient and socially responsible workplace and organization (Sheopuri & Sheopuri, 2015). Puri and Agrawal (2018) in their review of literature on Green HRM found that there is a positive relationship between Green HR and environmental sustainability. Renwick *et al*. (2013) have provided a framework linking all the HRM practices such as Recruitment and Selection, Training and Development, Compensation System and Employee Involvement to demonstrate how all these practices individually can be redesigned to include the environmental dimension and these, in turn, can go a long way in shaping the employees' and the organization's green performance. Tilleman (2012) found that employees' perception of the organization and commitment to it was favourably related to the manufacturing of organic products and the organization's environmental management practices. Ramus and Steger (2000) pointed out that serious environmental commitment made employee environmental initiatives successful in organizations. Individuals need a strong conviction in the importance of environmental projects to be involved in them (Sonenshein *et al*., 2014). A study by Bissing *et al*. (2013) advocated that promoting pro-environmental attitudes among employees helped in motivating employees to demonstrate environment-friendly behaviour.

2.5 Linking Environmental Performance and Organizational Performance

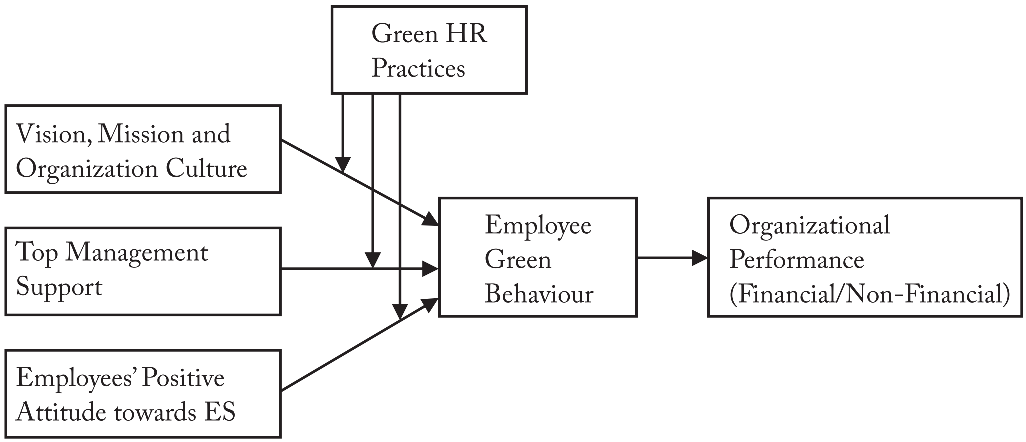
There is a direct relationship between

environmental performance and organizational performance (de Burgos-Jimenez *et al.*, 2013). An organization's performance is influenced positively by the improved reputation of the company when the company has better access to markets and superior product quality. As per Porter *et al.* (1995), the reputation and brand image of the organization can be enhanced by putting more emphasis on green and lean manufacturing. In addition, Obeidat *et al.* (2018) added the financial as well as the non-financial links between environmental performance and an organization's performance. Revenue can also be increased with cost reduction when we produce less wastage or have better access to markets (de Burgos-Jimenez *et al.*, 2013). In addition, green and proactive environmental management practices offer increased revenue with better conviction when the company offers improved green products. These environmental practices help in enhancing market share via new market opportunities that lead to better revenue and returns (Carter *et al.*, 2000). Financial returns are enhanced when either revenue is increased or cost is reduced or both are achieved (de Burgos-Jimenez *et al.*, 2013; Nishitani *et al.*, 2017). A green way of working can significantly help in improving profitability (Agyabeng-Mensah *et al.*, 2020). It was confirmed with the result of Woo *et al.* (2016) as green supply chain management practices are the leading indicator of improved financial performance. Green value chain applications help in obtaining improved sustainable competitive advantage. It was also found that employees with a green mindset and preference help in achieving better environmental performance (Longoni *et al.*, 2018), and this further leads to improved profitability and sales of the organizations. The study of Ameer and Othman (2011) analysed that continuous internal environmental improvements have a significant impact on the return on assets of the firm, profit and the growth in sales. It was found that financial performance improvement in an organization's context is routed through improved customer satisfaction. When customers are happy or they appreciate the organization's green initiatives, they show more satisfaction and loyalty to the organization. Abdel-Maksoud *et al.* (2016) arrived at a similar conclusion through a meta-analysis suggesting that customer collaboration and green supply chain management practices help in achieving better economic performance.

3. Conceptual Model

Based on the literature review, the authors have proposed the conceptual framework in Figure 1 (on page 34). Although the authors have not empirically established the framework, an attempt has been made to connect organizational level variables with employee green behaviour and subsequently organizational performance. The understanding of the organization's green vision and culture supporting green actions along with the support of senior management to green initiatives and the employee's pro-

Figure 1: Antecedents of Employee Green Behaviour and Organizational Performance



Source: Authors

environmental attitude impact the green behaviour demonstrated by employees. This relationship is moderated by Green HR practices which positively influence employee green behaviour. The green behaviour of employees in terms of performing tasks in environmentally conscious ways also impacts the organization's overall performance.

4. Methodology

The present paper applies a qualitative approach to understand the relevance of the factors included in the proposed model based on the review of the literature. Data were collected from ten persons holding senior leadership positions such as Vice President, Director, etc., in the area of sustainability and human resource management were used. The data was also collected from twenty employees from middle and junior levels from 14001 certified organizations to understand and validate the factors identified from the literature review. The respondents belonged to different industries such as hospitality, automobile, energy, carbon black, banking and financial services. The data was analysed using the content analysis method with the help of the following question set.

- What is the importance of environment and sustainability in an organization's context as the organization's main aim is to earn profits?
- What kind of benefits do organizations receive when they choose to become environmentally conscious?
- What is the role of an organization's culture in achieving environment and

sustainability related objectives?

- What is the role of top management in achieving these goals and how crucial is it?
- Do you believe that there is a need for sensitization to all the employees towards the environment and sustainability?
- How HR is related to achieving these goals and how do you define the role of HR?
- Can HR influence or facilitate achieving these goals?
- What is employee green behaviour and how important it is?
- Is there any benefit that an organization achieves while adopting environment and sustainability related practices?
- Is there any other important aspect that you would like to add?

5.Study Findings and Discussions

The analysis has shown that Indian organizations, in general, are still evolving in terms of the adoption of sustainability and sustainable practices. After the SEBI's mandate, where the top 500 listed companies have to mandatorily produce Environment, Social and Governance (ESG) reports, it has become a necessity for companies to follow sustainability norms. Interaction with the respondents revealed that most companies included in this study were very enthusiastic about adopting sustainability practices. Few of these companies had already introduced sustainable practices. The results also showed that organizations that were concerned for the environment, were practising environmental sustainability. Such organizations also associated positive outcomes such as higher profitability, better financial performance and higher stock prices (Flammer, 2013) with sustainability. Organizations, that link environmental sustainability with their strategic business goals, see their environmental actions as a source of competitive advantage (Porter & Kramer, 2011). The respondents believed that firms can improve operational performance while contributing to environment and sustainability related strategies and practices.

Table 1 highlights the level of importance respondents place on the different factors which can impact sustainability in an organization. The respondents considered top management support to be very important as the majority of them rated it as very crucial. Similarly, green practices and employee green behaviour were considered to be very important by the respondents.

The results of the study resonate with the findings of Abbas *et al.* (2021), where the researchers found that green management practices such as management's vision and policy have a significant influence on the competitive advantage of the firms as measured by the ability to improve its image, increase customer and employee satisfaction. The policy emphasized the need to take

Table 1: Priority Placed by the Respondents on Different Factors

S.No.	Factors	Very Crucial	Very Important	Important
1	Vision, Mission & Organization Culture	50%	40%	20%
2	Top Management Support	90%	10%	10%
3	Employees' Positive Attitude towards ES	20%	20%	60%
4	Green HR Practices	10%	80%	10%
5	Employee Green Behaviour	10%	80%	10%
6	Organizational Performance (Financial/Non-Financial)	70%	20%	10%

Source: Authors

environment oriented actions and develop employees who are responsible for promoting sustainability in the organization. Moreover, these practices have a positive influence on operational performance as they aid in reducing operational costs. The operational performance, in turn, has a significant positive effect on firm performance measured by an increase in sales and profits.

Early research findings from 186 US firms on the Forbes list revealed a strong relationship between top management/leader's attention (CEO's interest) and the firm's environmental reputation and overall brand image (Stanwick & Stanwick, 2001). In similar other studies, the role of top management was found important towards environmental sustainability related advantages taken by the organization. An environmentally oriented mission and vision along with top management support become very important in promoting environmental consciousness in organizations and then the subsequent organizational performance (Baumgartner, 2014). Managerial attitude is found to be acting as a strong driver for undertaking active environment management (EM) behaviours (Marshall *et al.*, 2005). Leaders, who involve employees actively in sustainable processes are found successful in achieving their goals as found in the study of medium-sized and large German and Dutch organizations (Siebenhüner & Arnold, 2007).

The creation of green employee teams positively affects both environmental performance and organizational reputation. In the study of Dumont *et al.* (2017), extra efforts by employees towards green initiatives are moderated by the effect of psychological green climate on extra-role green behaviour. Environmental management (EM) can only be effectively implemented when companies have the right people with the right skills and competencies (Daily & Huang, 2001). These companies educate their employees about the threats of climate change and also train them to become more environmentally sensitive. Such environmental training would be instrumental in shaping the employees' green behaviour. Such companies by projecting their environmentally responsible image also manage to recruit employees who are motivated to contribute to the environment (Gully *et al*, 2013). Thus, the role of HR is crucial in generating sustainable competitive advantage, especially in a rapidly changing economic environment. It is the responsibility of HR to develop environmental orientation among the employees. The sensitivity towards the environment and requisite skills to implement green actions will be conducive to promoting employee green behaviour.

6. Conclusions

The present study helps in identifying the factors that are important for adopting environment and sustainability related initiatives by organizations. It also busts the myth that the adoption of Environment Management Systems is a cost intensive approach and organizations have to bear a lot of costs when they decide to be environmentally conscious and adopt environmental sustainability as a practice. The present study validates that organizations which invest resources in becoming environmentally sustainable experience better organizational performance. The study also gives a lot of importance to the support of all the stakeholders such as top management and employees at all levels in making organizations sustainable.

In future, researchers can study further the conceptual model on a bigger data pool using a structured questionnaire followed by interviews with sustainability champions. The studies can be across sectors and their best practices and challenges can be captured that can help organizations in general. Also, when the data is collected across industries and sizes then the results can be seen as more realistic and any organization in any industry or of any size can refer to such results. The conceptual model presented in this paper can also be empirically tested to establish the linkage among the different variables.

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