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Does the Listing Process of an Initial Public Offering affect the Choice of Earnings Management Practices?

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Abstract

Purpose: The main objective of the study is to examine the impact of the equity listing process on the choice of earnings management practices among new issue firms.

Design/Methodology: The study has used a unique sample of new issue firms listed on Indian and Chinese stock markets during the period 2007-2019 and investigated whether the difference in the listing process of these two markets affects the choice of earnings management practices. To empirically test the models, the study has used the two-stage least square regression method (2SLS).

Findings: The findings of the study show that the approval-based listing process in China motivates the new issue firms to substitute accruals with real earnings management. However, the registration-based listing process in India encourages the new issue firms to adopt both accrual and real earnings management practices as complements in their strategic decision-making.

Originality: The present study contributes to the literature by examining how the difference in the listing process of a country affects managers' choice of EM practices in new issue firms which have not been covered in earlier studies

Practical implications: The findings of the study provide insights to analysts, prospective investors, and regulators to correctly evaluate the new issue firms.

Keywords: Earnings management, initial public offering (IPO), accrual earnings management, real earnings management, emerging economies

JEL codes- G24, M40, M41

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1. Introduction

Earnings management (EM) during an initial public offering (IPO) is a well-established phenomenon. IPO is a procedure through which an unlisted private company raises funds by offering its securities to the public in the primary market to meet its financial needs. It is evidenced in the literature that motivation for EM is high when the firm transits itself from a private to a public entity (IPO). Inflated earnings boost share prices, and an increased price is required when the firm dilutes its equity (Teoh *et al.*, 1998a, b). Literature has observed that managers may adopt two ways to influence the reported earnings. First, accrual earnings management (AM), occurs due to structural pliability in generally accepted accounting principles (GAAP) (Healy and Wahlen, 1999). And second, real earnings management (RM), occurs due to artificially timing the important activities of the firm which are operation, finance, and investment to change the firm's financial performance (Roychowdhury, 2006). Prior studies evidenced that managers weigh the two EM practices to influence the firm's reported earnings. Some studies documented that firms use the two EM methods as a substitute (Chi *et al.*, 2011; Zang, 2012; Campa, 2019), while others evidenced that they use the two methods as complementary tools to each other (Das *et al.*, 2017; Hamza Kortas, 2018; Li, 2019). However, the question of whether the choice of EM practices among new issue firms differs due to the difference in the listing process followed by the primary market of a country is still unanswered. The listing process is often long and complex. A firm that wishes to dilute its equity is required to adhere to this process. However, the complexity of the process may differ among countries depending on the structure of the regulatory system and this difference may result in firms adopting different approaches toward EM.

The present study contributes to this part of the literature by examining how the difference in the listing process of a country affects managers' choice of EM practices in new issue firms. It is evidenced in the literature that a strict regulatory and legal environment will curb AM, however; will stimulate RM practices because it is more difficult to identify and less likely to catch the regulators' attention (Ding *et al.*, 2018; Baatwah *et al.*, 2020). However, firms may adopt AM and RM as complementary techniques to manage earnings when the regulatory environment is a little weaker (Leuz *et al.*, 2003; Hamza and Kortas, 2018). Hence, it can be assumed that new issue firms in countries having a more rigorous and stringent listing process will substitute AM with RM. On the contrary, in a country where the process of listing is relatively facile, AM and RM will be used as a complement.

To empirically test the above-stated objective, the current study has used the dataset of Indian and Chinese new issue firms listed on Bombay stock exchange (BSE) or National stock exchange (NSE) in India and Shanghai (SSE) or Shenzhen stock exchange (SZSE) in China. India and China are the two strong emerging economies



in the world and their growth stories are often compared. The two countries have different political and regulatory set-up making them unique from each other. Though, India and China have extensively witnessed privatization, the significant distinction between them is the degree of government's impact on companies. In India, the majority of the firms can be classified into two broad categories, public sector units (PSUs), which have state ownership and government holds the majority shares. The second category of firms is private firms, which are mostly family-owned businesses and are controlled by the promoters along with family members and friends. On the other hand, in China, the government plays a major role in the markets and it has a majority stake in most of the important industries. The average state ownership in companies listed on the Shanghai and Shenzhen stock exchanges was reported as 70% in the year 2002 (Tai and Wong, 2003). There is also a difference in the stock market listing process. China has an approval-based system of equity listing and on the other hand India has a less restrictive registration-based system. Therefore, identifying the unique features of the listing process followed by these two markets and how this listing process influences the manager's choice of EM practices will provide useful insights to the investors and regulators.

Two simultaneous equations have been developed and two-stage least square regression is used to empirically test the objectives. The results show that In China where there is an approval-based system new issue firms use AM and RM as a substitute to each other, however, In India where the regulators follow a registration-based system, newly listed firms adopt AM and RM as a complementary tool. The approval-based system has been identified as a more rigorous process than the registration-based system and hence new issue firms will find it more difficult to adopt AM and will substitute it with RM. The rest of the paper is organized as follows. Section 2 discusses the background of the listing process in India and China. Section 3 reviews the literature and develops the hypotheses. Section 4 discusses the methodology and specifies the empirical model. Section 5 presents the descriptive statistics. Section 6 presents and discusses the empirical results, Section 7 concludes the study and section 8 highlights the implications of the study.

2. Institutional Background

IPO approval system in China

China follows the “approval system” for new public listings since 1999 whose main purpose is to strictly supervise the firms issuing securities for the first time. The firms, applying for an IPO undergo a two-stage rigorous monitoring process. First, they are audited by a reputed accounting firm and later are referred to the China Securities Regulatory Commission (CSRC) by underwriters. CSRC plays an important role in the process of an IPO as it has the authority to reject the application of any firm



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that fails to meet the requirements. Underwriters help the new issue firms to prepare a prospectus, arrange for the roadshows, and fixing the prices at which the shares will be issued. They also carefully verify all the documents provided by the issuing firm and ensure the firm's financial statements' genuineness, precision, and rationality before endorsing them. The time to process the firms' evaluation is normally within six months but in some complex cases, the processing time may be extended further. The long and stringent reviewing procedure under the approval system makes it difficult for CSRC to timely process all the applications and since most of the reviews are done based on documents rather than real site visits, it is difficult to verify the authenticity of the documents provided.

IPO Registration system in India

In India IPOs were controlled by the Controller of Capital Issues. However, after the establishment of the Securities and Exchange Board of India (SEBI) on April 12, 1992, the regulatory system of the capital market in India got changed. The firms can now decide the prices at which shares should be offered independent of any regulatory intrusion. SEBI laid down the guidelines for public issuance, disclosure policies, and investor protection which were later converted into an Act in 2009 under ICDR. SEBI scrutinizes the offer documents at various levels to make sure that all required information about the firm is revealed. However, SEBI neither endorses any public offering nor does it claim about the financial health of a firm or prospects of a project for which the equity has to be raised. Therefore, the investors need to make decisions on their own based on the information provided in the offer document. Also, SEBI does not have any role in the fixation of the issue price. The firm in consultation with the underwriter considering market demand fixes the issue price.

Differences in the Listing process for Initial public offerings in India and China

| India | China |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Registration-based system for the issuance of new securities | Approval-based system for the issuance of new securities. |
| SEBI plays an important role in the IPO process. However, it cannot reject the application of a firm if it meets all the requirements stated under SEBI guidelines | CSRC plays an important role in the process of an initial public offering it has the authority to reject the application at its discretion |
| SEBI does not play any role in the fixation of the issue price. | Regulators impose an unofficial cap on IPO valuations-a price to earnings ratio of 23. |
| SEBI does not endorse the quality of issuing firms | Regulators endorse the quality of issuing firms |

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Moderate reviewing procedure under the registration system | The long and stringent reviewing procedure under the approval system |
| Firms should have a pre-tax operating profit of rupees 150 million and a net profit of at least rupees 10 million in three of the previous five years | Firms are required to show sustained profitability before they qualify for regulatory approval to go public. |

3. Literature Review

Accrual and Real Earnings Management Practices in New Issue Firms

Accruals present the true economic performance of the firms by recording revenues and expenses to the period in which they are incurred. Although their prime objective is to reflect the true performance of a firm, they can also be used to manage earnings. Reported income can be managed when managers want to book accruals for major events. One of the major events in a firm's life cycle is an initial public offering (IPO). It is an event where a firm raises funds from the public for the first time and hence, it is important for the firm to present itself as favourable for investment. New issue firms are found to manage their earnings upward during an IPO (Roosenboom *et al.*, 2003; Kimbro, 2005; Premti and Smith, 2020). Numerous studies have given several reasons for this upward movement of earnings during an IPO. Some of the reasons are influencing the price at which shares are offered (DeAngelo, 1988; Krinsky and Rotenberg, 1989), to realize capital gains (Darrrough and Rangan, 2005), to send encouraging signals to potential investors (Brau and Fawcett, 2006), to meet earnings forecasts which were reported in the prospectus at the time of IPO to avoid litigation risks and to maintain their reputation in the eyes of investors, analysts and underwriters (Gramlich and Sorensen, 2004). The evidence of the AM around IPOs and their motivation behind them are very well established in the literature.

However, recently, a growing area of research in EM has evidenced that managers are now shifting towards real earnings management to manage their earnings. According to Roychowdhury, (2006), RM constitutes a departure from normal operational practice and involves the acceleration of sales by changing credit terms, deferral of discretionary expenses like research and development (R&D) or advertising expenditure, and reporting of lower cost of sales through overproduction. Previous studies have defined the reasons for this shift of managers towards RM (Roychowdhury, 2006; Cohen *et al.*, 2008; Zang, 2012). They are of the view that firstly, unlike AM, RM is less likely to catch auditors' attention and hence remains undetected (Graham *et al.*, 2005). Secondly, RM can be performed throughout the year, however; AM can be performed only at the end of the quarter or fiscal year. As a result, if firms are only adopting AM, most likely, they might not be able to achieve their goal only through



managing accruals and it will be too late to adopt RM as it can be ineffective if not performed gradually throughout the year (Roychowdhury, 2006). Lastly, According to Barton and Simko, (2002), changes in the accounting methods are reflected in the balance sheet. Therefore, firms which managed earnings through AM in the previous years are more likely to resort to RM (Gunny, 2010).

More recently, there is a dearth of common consensus among the researchers on how managers trade-off between the two EM methods in their strategic decision making. Some studies defined that the two EM practices are used as a substitute for each other. They are of the view that an increase in the cost of one earnings management practice motivates the managers to shift to another (Ge and Kim, 2014; Chan *et al.*, 2015). On the contrary, other studies argued that managers can use both AM and RM in a coordinated approach to increase earnings and achieve the greatest effect (Chen *et al.*, 2012; Hamza and Kortas, 2018; Li, 2019). Despite, the occurrence of AM and RM is quite well established in the literature, the managers' choice between the two EM practices due to the difference in the listing process followed by the primary market of a country has still remained unanswered. Hence, it will be worthwhile to examine the choice of EM practices in new issue firms using the sample from two different economies which have different listing processes. The following discussion substantiates the formulation of requisite hypothesis on the basis of available literature

Substitution Hypothesis

The substitutive relation between the two earnings management techniques is a function of the relative costs associated with them. Most studies found that managers will favour AM when the cost associated with RM is increased and vice versa. Barton, (2001) and Pincus and Rajgopal, (2002) studied how managers substitute between derivative hedging and AM. Barton, (2001) suggested that firms using derivatives have higher costs related to RM compared to those firms which are managing AM. Hence, managers may substitute RM with AM. However, the use of RM will increase when the costs related to AM will increase. It is expected that in a strict and transparent regulatory environment firms may adopt RM more than AM. Libby and Seybert, (2010) defined stiffen regulatory environment as the composition of high accounting standards, reporting quality, rigorous auditors scrutiny, and other corporate governance regulations. The motivation behind such strict regulation is to enhance financial reporting quality. Cohen *et al.*, (2008) and Ge and Kim, (2014) evidenced that after the passage of the Sarbanes-Oxley Act (SOX) the firms increased the use of RM. Similarly, Ewert and Wagenhofer, (2005) also examined how strict financial reporting affects the choice of EM and evidence that high accounting standards restrain AM in favour of RM. Their study also confirmed the substitutive relationship among different EM strategies.



From the above discussion it can be inferred that the prevalence of a strict and transparent regulatory environment with high accounting standards, reporting quality, rigorous auditor's scrutiny, and compliance of other corporate governance regulations motivate firms to substitute AM with RM. Hence, it can be assumed that in China, new issue firms will substitute AM with RM as the IPO process is marked with stricter financial benchmarks, long and stringent reviewing procedure and the final acceptance or rejection is influenced by the CSRC's discretion.

H₁: Approval-based listing process encourages the new issue firms in China to Substitute AM with RM.

Complementary Hypothesis

Contrary to the substitute hypothesis, some empirical studies also evidence that there exists a complementary relationship between the two EM alternatives. Leuz *et al.*, (2003) identified that EM through AM would be more prevalent in the firms operating in a weaker regulatory environment. This implies that underdeveloped stock markets, concentrated ownership, low accounting standards, and weak investor protection mechanism encourage earnings management not only through different accounting strategies but also through real decisions taken by managers. Hamza and Kortas, (2018) examined the association between AM and RM in the Tunisian market and found a complementary relationship existing between sales manipulation and AM. Similarly, Li, (2019) examined the impact of equity compensation of chief executive officers (CEOs) on EM and the market pricing under the two types of EM practices and found a positive relationship existing between equity compensation and both types of EM practices. The study indicated that the joint effect of the two strategies is stronger than standalone in terms of stock returns. Similarly, studies in the United States (Mizik and Jacobson, 2007), Taiwan (Chen *et al.*, 2012), and India (Das *et al.*, 2017) suggest that managers use both AM and RM as complementary tools. Considering the above observations, it can be implied that there exists a complementary relationship between the two. Therefore, as discussed earlier, in India, the IPO procedure is a registration-based system under which any firm which meets the guidelines stated by the SEBI can issue securities in the primary market. Unlike CSRC SEBI does not endorse any public offering nor does it claim about the financial health of a company or prospects of a project for which the equity has to be raised. Also, SEBI does not have any role in the fixation of the issue price. Hence, it can be assumed that the registration-based system for IPOs followed in India is relatively facile than approval-based, which allows new issue firms to use both AM and RM simultaneously to achieve the greatest benefits.

H₂: Registration-based listing process in India encourages new issues to adopt AM and RM simultaneously.



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4. Methodology

Data and Sample construction

The primary sample of listed firms on NSE or BSE in India and SSE or SZSE consists of 5118 firms in India and 3776 in China for the period 1988 to 2019. For incorporating in the final sample, firms must have available Thomson Reuter's financial data both in the year of and the year before the IPO. The study restricted the sample to manufacturing firms with available data (Lee and Masulis, 2011; Wongsunwai, 2012). It was ensured that to calculate the AM and RM proxies each observation had the required data. This means every industry to be included in the non-sample firms for estimating the coefficients of the sample firms must have a minimum of eight observations. Industries have been grouped based on two-digit standard industrial classification (SIC) per year, also to meet the minimum eight observation criteria similar kinds of industries were clubbed together. Further, the study has excluded financial firms, the IPOs whose financial statement data for the year before the date of IPO filing was missing were removed from the sample. The sample also excluded spin-offs, closed-end funds, reverse leveraged buyouts (LBOs), limited partnerships, unit investment trusts and real estate investment trusts (REITs), rights and standby issues, combined offers of several classes of securities, such as unit offers of stocks and warrants and offers which are being made simultaneously in both domestic and international markets. Based on these criteria 500 firms in 10 industries during the period 2007-2019 were available. Firstly, the firms listed on Indian and Chinese stock markets were identified and their date of IPO was extracted. Then the financial data for all the IPO firms as well as for the non-IPO firm was collected. A non-IPO firm is a matching firm of the same industry year to which the individual IPO firm belongs.

[See Table I here]

Table (1) represents the number of initial public offerings during the period 1988-2019 in the Indian and Chinese stock markets. As expected in most of the years it can be seen that India has a large number of IPOs compared to China like, from 1988-1996 and then from 2005-2009 and 2014-2018. The plausible explanation for a large number of offerings in the Indian market can be the registration-based listing process which is relatively facile to the approval-based listing process in China. Also, it can be observed that during the period 1996-2005 in India there were less number of IPOs compared to China. The plausible explanation for this could be that during the period 1992-1996 the Indian equity market was hit by large number of companies out of which many of them were 'fly by night' operators. Also, SEBI had just been set up, pricing controls have been removed and lack of proper regulations and infrastructure facilitated this huge fraud on investors. Hence, following this period SEBI introduced major changes in the guidelines during 1996-2005 for the firms issuing securities



leading to a decreased number of IPOs. However, in China with the promulgation of the securities law during 1999-2007 as a key milestone. The legal status of China's capital markets in the economy was formalized and strengthened, and a series of major reforms were implemented to facilitate further development of the capital markets leading to large number of IPOs.

[See Table II here]

Table (2) presents the frequency of new issue firms industry-wise for India and China. In India, IPOs were frequent in miscellaneous manufacturing sector and in China in the machinery industry. The two-digit SIC codes are used to group industries. Also, other than the codes presented in the table, some other related two digits codes have been clubbed in the industries. However, the frequent codes are only reported.

Measuring Accrual and Real Earnings Management

Accrual-based Earnings Management

Following prior studies (Chen *et al.*, 2011; Li, 2019), the study has adopted the cross-sectional modified Jones model (1991) to calculate discretionary accruals which is the proxy for AM. The following cross-sectional regression model has been estimated for each industry and year to measure the total accruals of the non-sample firms

$$\frac{TA_{it}}{Assets_{i,t-1}} = K_1 \frac{1}{Assets_{i,t-1}} + K_2 \frac{\Delta Sales_{it} - \Delta Rec_{it}}{Assets_{i,t-1}} + K_3 \frac{PPE_{it}}{Assets_{i,t-1}} + \varepsilon_{it} \quad [1]$$

Where for fiscal year t and firm i , TA represents the total accruals defined as

$$TA_{it} = \Delta Currentassets_t - \Delta Cash_t - \Delta Currentliabilities_t + \Delta Shorttermdebt_t - Depreciation_t$$

$Assets_{t-1}$ represent total assets, $\Delta Sales_{it}$ is the change in revenue from the preceding year, ΔRec_{it} is the change in receivable from the preceding year and PPE_{it} is the gross value of property, plant, and equipment.

The coefficient estimates from Equation (1) were then used to estimate the firm-specific non-discretionary accruals (NA_{it}) for the sample firms.

$$NA_{it} = K_1 \frac{1}{Assets_{i,t-1}} + K_2 \frac{\Delta Sales_{it} - \Delta Rec_{it}}{Assets_{i,t-1}} + K_3 \frac{PPE_{it}}{Assets_{i,t-1}} + \varepsilon_{it} \quad [2]$$

Lastly, discretionary accruals were measured as the difference between total accruals and the fitted normal accruals, defined as

$$DA_{it} = \frac{TA_{it}}{Assets_{i,t-1}} - NA_{it} \quad [3]$$



4.2.2 Real Earnings Management

Prior studies (Roychowdhury, 2006; Alhadab *et al.*, 2016) have provided the theoretical foundation to develop the proxies for identifying RM. Roychowdhury, (2006) model is the most familiar in the literature when it comes to developing the proxies for RM. He identified three proxies for RM which are abnormal level of cash flow from operations (RM_{CFO}) production costs (RM_{PROD}) and discretionary expenses. However, the present study has adopted only two proxies i.e. RM_{CFO} and RM_{PROD} . The study dropped the discretionary expenses metric because there were fewer than eight observations due to which the regression coefficients could not be estimated. For measuring RM_{CFO} and RM_{PROD} first, the normal level of cash flow from operations (CFO) and normal level of production costs were estimated through the following cross-sectional regression for each industry and year

$$\frac{CFO_{it}}{Assets_{i,t-1}} = K_1 \frac{1}{Assets_{i,t-1}} + K_2 \frac{Sales_{it}}{Assets_{i,t-1}} + K_3 \frac{\Delta Sales_{it}}{Assets_{i,t-1}} + \varepsilon_{it} \quad [4]$$

$$\frac{COGS_{it}}{Assets_{i,t-1}} = K_1 \frac{1}{Assets_{i,t-1}} + K_2 \frac{Sales_{it}}{Assets_{i,t-1}} + \varepsilon_{it} \quad [5]$$

$$\frac{\Delta INV_{it}}{Assets_{i,t-1}} = K_1 \frac{1}{Assets_{i,t-1}} + K_2 \frac{\Delta Sales_{it}}{Assets_{i,t-1}} + K_3 \frac{\Delta Sales_{it-1}}{Assets_{i,t-1}} + \varepsilon_{it} \quad [6]$$

Using Equations [5] and [6], the following model is derived to estimate the normal level of production costs:

$$\frac{PROD_{it}}{Assets_{i,t-1}} = K_1 \frac{1}{Assets_{i,t-1}} + K_2 \frac{Sales_{it}}{Assets_{i,t-1}} + K_3 \frac{\Delta Sales_{it}}{Assets_{i,t-1}} + K_4 \frac{\Delta Sales_{it-1}}{Assets_{i,t-1}} + \varepsilon_{it} \quad [7]$$

Further, RM_{CFO} and RM_{PROD} were measured by deducting the normal CFO and production costs from the actual CFO and production costs. Also, following some previous studies, the study has combined the two individual RM measures to compute a single proxy variable for RM, which is the sum of the standardized value of RM_{CFO} and RM_{PROD} (Chen *et al.*, 2012).

Empirical Model Specification

To examine the formulated hypothesis, simultaneous equations were formulated. Following previous studies (Chen *et al.*, 2012; Hamza and Kortas, 2019), the study adopted two-stage least squares (2SLS) regression to test the simultaneous equations. 2SLS is preferred over ordinary least squares (OLS) to avoid the endogeneity problem. It is an estimator which addresses the correlation problem of endogenous variables with the error term. (Kennedy, 2003). The study also performed the Durbin Wu-Hausman test for endogeneity (Chen *et al.*, 2012). The Hausman test showed a probability value of less than 5%, which suggests that the study was correct in treating

AM and RM as endogenous variables. Further, the Variance inflation factor (VIF) and white's heteroskedasticity tests were used to check for possible multicollinearity and problem of heteroskedasticity.

[See Fig I here]

To test the hypothesis, the study has formulated the following simultaneous equations:

$$AM_{it} = \beta_0 + \beta_1 * RM_{it} + \beta_2 * Size_{it} + \beta_3 * MB_{it} + \beta_4 * lev_{it} + \beta_5 * NI_{it} + \beta_6 * NOA_{it} + \beta_7 * AM_{t-1} + \beta_8 * Big_8_{it} + \beta_9 * D_year_t + \beta_{10} * listing_{it} + \beta_{11} * RQ_{it} + \beta_{12} * RL_{it} + \epsilon_t \quad [8]$$

$$RM_{it} = \alpha_0 + \alpha_1 * AM_{it} + \alpha_2 * Size_{it} + \alpha_3 * MB_{it} + \alpha_4 * lev_{it} + \alpha_5 * NI_{it} + \alpha_6 * NOA_{it} + \alpha_7 * PDC_{it} + \alpha_8 * Indus_D_{it} + \alpha_9 * D_year_t + \alpha_{10} * listing_{it} + \alpha_{11} * RQ_{it} + \alpha_{12} * RL_{it} + \epsilon_t \quad [9]$$

Where, the common explanatory variables for AM and RM include firm size ($Size_{it}$), measured by the natural logarithm of total assets; firm's equity market-to-book ratio (MB_{it}), measured by the ratio of market value to the book value of equity; leverage (Lev_{it}) measured by the natural logarithm of the ratio of debt to total assets; firm's earnings performance (NI_{it}) measured by the ratio of net income scaled by total assets; firm's accounting flexibility (NOA_{it}) measured by the ratio of net operating assets at the beginning of the year divided by the lagged sales, a dummy variable Listing ($Listing_{it}$) to indicate the type of listing process followed by the countries and the dummy for years. The two equations also included two different exogenous variables each as proxies for two accounting techniques (AM and RM). The unique exogenous variables for AM are abnormal accruals for the preceding year (AM_{t-1}) and auditor's reputation (Big_8_{it}), measured by auditor's firm size. For RM, unique variables include the firm's production capacity (PDC_{it}) measured by property, plant, and equipment (PPE) scaled by current sales for the year and dummy variables for all industries ($Indus_D_{it}$) included in the sample. The study also included country-level variables in the AM as well as RM model to control for the country-level governance factors. The study has considered two different measures i.e. regulatory quality (RQ) and the rule of law (RL). These two measures were adopted from the composite Worldwide Governance Index (WGI) computed by Kaufmann et al. (2011). This index consists of six indicators. But, out of six, the study has adopted only these two which were more relevant to the study. The variable regulatory quality (RQ), measures the notion related to the capability of the government to draw and realize sound guidelines, and rule of law (RL), gauge the trust of agents' in the regulation of the public, especially the constitution of property rights prosecution mechanisms, the law enforcement organization, the judicial system and also the likelihood of misdemeanour and savagery.



5. Descriptive Statistics

[See Table III here]

Table (3) reports the descriptive statistics of dependent and Independent variables used in the empirical analysis for India and China. In India, the sample mean of the decisive variables is 0.65 for AM and 0.72 for RM. Similarly, for China, it is 0.46 for AM and 1.64 for RM. This represents that the average value of AM is larger in India, however, the average value of RM is found to be larger in China. This suggests that new issue firms in India adopt more accruals management however in China firms adopt more real earnings management. Further, the standard deviation value for AM in India is 0.39 and in China, it is 0.26 however, for RM it is 1.20 in India and 0.09 in China. Further, the mean value of the accounting flexibility (NOA) is larger in India which is 1.64 compared to China which is 0.60. This represents that the accounting system in India is more flexible than in China.

6. Empirical Results and Discussion

The 2SLS regression results from Equations 8 and 9 are reported in Table 4. Model I represents Equation (8) and Model II represents Equation (9).

[See Table IV here]

For India, the coefficient value of RM in Equation (1) was 0.64 ($t = 2.46$) found to be positive and significant at the 1% level. However, for China, it was -0.20 (-2.11) found to be negative and significant at the 5% level. Similarly, in Equation (2), when the study took RM as the dependent variable, the coefficient values of AM were 0.35 ($t = 3.42$) found to be positive and significant at the 1% level for India and was -0.11 ($t = -2.74$) negative and significant at 5% level in China. The positive and negative coefficient values in India and China support the hypothesis that new issue firms in India will use AM and RM as a complement to each other, however, firms in China will use AM and RM as a substitute while managing the earnings of the firm before an IPO. The results are in line with the assumption that an approval-based system in China discourages new issue firms to adopt AM. Firms in China, applying for an IPO undergo a two-stage rigorous monitoring process and are under the strict supervision of CSRC making it difficult for firms to adopt AM. However, to achieve the desired incentives like higher offer price, meeting investors expectations, new issue firms will shift from AM to RM as it is difficult to detect, and therefore less likely to catch the regulator's attention (Ding *et al.*, 2018). In a related study by Ho *et al.*, (2015) it was observed that Chinese A-share firms substituted AM with RM after the adoption of international financial reporting standards (IFRS). Similarly, some prior studies also evidenced that firms functioning under a strict regulatory environment reduced the use of AM and increased the use of RM (Libby and Seybert, 2009; Zang, 2012;



Enomoto *et al.*, 2017). Contrary to this, the present study evidenced that new issue firms in India have used both AM and RM simultaneously. This may be due to the registration-based listing process which is relatively less stringent than the approval-based system in China. Under the registration-based system, the firm that meets the guidelines stated by the SEBI would be eligible for issuing securities in the primary market. Compared to CSRC, SEBI does not play a significant role in the listing process. Neither it has any role in the price fixation nor does it review any firm personally. Hence, to obtain the greatest incentives from an IPO, new issue firms tend to adopt AM and RM simultaneously. Prior studies evidenced that a less stringent regulatory environment gives more window of opportunity to firms to manage earnings (Libby and Seybert, 2009).

Further, in controlled variables, the variable firm size was found to be (-0.02, -0.04) negative and significant at the 1% level to AM and positive (0.13, 0.18) significant to RM at 5% level in both India and China respectively. It implies that larger firms will decrease the use of AM and will increase the use of RM. The plausible explanation behind this would be, larger firms have a better structure to monitor compared to smaller firms and therefore they coordinate with auditors and other external monitoring systems well and decrease the use of AM (Klein, 2002; Chen *et al.*, 2012). The variable MB was found to be negative and significant to AM but is positive and significant to RM in both India and China indicating that firms with high growth opportunities will substitute AM with RM. Also, in India, the variable leverage (lev) was found to be (-0.05) negative and significant to AM and positive (0.09), and significant to RM. It implies that Indian new issue firms with high leverage will substitute AM with RM. Similarly, Fields *et al.*, (2001) in their study also found that leverage is positively related to the choice of accounting practices. They argued that leverage enhances vigilance by banks as well as bondholders add more strict covenants and hence firms may find it difficult to practice AM and may resort to RM. The variable net income (NI) in India was found to be negative (-0.04) and significant to AM but was positive (0.05) and significant at a 5% level to RM. However, in China, the study evidenced an opposite relationship. The results suggest that new issue firms in India with high operating performance will substitute AM with RM. However, in China, it is just the opposite. Zang (2012) observed that firms with poor performance would prefer to manage earnings through AM as they find RM more costly. Further, in China, the accounting flexibility of the firm (NOA) was found to be negative (-0.11) and significant to AM and positive (0.03), and significant to RM. This suggests that in China strict accounting standards, financial reporting, and auditing will encourage the new issue firms to substitute AM with RM (Ewert and Wagenhofer 2005; Hamza and Kortas; 2018). However, the study does not find it to be a significant variable in India.

Further at country-level governance, RQ was found to impact AM negatively and



significantly at the 1% level in China. However, in India, RQ came out to be an insignificant variable. Further, RL was found to be negatively and significantly related to AM at the 1% level in China and India, respectively. These results indicate that the government's ability to develop and enact judicious policies and guidelines is better in China, which helps in restraining firms from indulging in AM practices. However, the results for rule of law showed that in both China and India, as the morale of people in rules increases, and they have more positive perceptions towards the enforcement of property rights and contracts, AM is constrained. However, unlike Mellado and Saona (2019) who found RQ and RL as significant variables in constraining RM activities, the present study could not find any such relationship.

7. Conclusion

The current study examined the influence of listing process of Indian and Chinese issue firms on the managers' choice between AM and RM practices. The study found that new issue firms in India use AM and RM practices as complement to each other. However, in China, a substitute relationship has been observed. One of the possible explanations behind this may be that new issue firms listed on SSE and SZSE face a stricter listing and reviewing process than firms listed in BSE or NSE before an IPO. Hence, Chinese firms are likely to shift from AM to RM as RM is difficult to identify and are outside the purview of regulators. However, Indian new issue firms adopt both AM and RM simultaneously to achieve the desired incentives from an IPO. Further, the study evidenced that factors like auditor reputation, earnings performance, flexibility in accounting standards, and firm size affect the manager's decision while choosing between the two EM practices in both India and China. The findings of the study imply that regulators need to understand that a strict regulatory environment does not reduce EM activities, but only lead to managers opting for alternative EM strategies. Therefore, regulators should not only watch the avenues of AM but should also try to look at the possible avenues of RM.

8. Implications and Future Scope

The findings of the study provide insights to analysts, prospective investors, and regulators to correctly evaluate the new issue firms. Investors and analysts to some extent can anticipate the strategy adopted by the new issue firms to manage their earnings by looking at the robustness of the listing process followed by the stock market. Similarly, the study encourages the regulators to enhance the guidelines for the new issue firms from time to time as the study implies that bringing enhanced regulatory environment will not reduce the EM activities altogether. Further, the study motivates the researchers to explore more about the listing processes followed by different stock markets all over the world and examine its impact on the strategic behaviour of the firms to manage earnings.



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| Year | Number of Initial Public Offerings | |
|--------------|------------------------------------|-------------|
| | India | China |
| 1988 | 3 | 1 |
| 1989 | 2 | 0 |
| 1990 | 166 | 7 |
| 1991 | 47 | 4 |
| 1992 | 93 | 36 |
| 1993 | 290 | 105 |
| 1994 | 561 | 99 |
| 1995 | 817 | 23 |
| 1996 | 244 | 179 |
| 1997 | 23 | 198 |
| 1998 | 18 | 101 |
| 1999 | 21 | 91 |
| 2000 | 85 | 134 |
| 2001 | 32 | 76 |
| 2002 | 36 | 70 |
| 2003 | 38 | 67 |
| 2004 | 47 | 99 |
| 2005 | 249 | 18 |
| 2006 | 127 | 65 |
| 2007 | 154 | 120 |
| 2008 | 141 | 74 |
| 2009 | 54 | 96 |
| 2010 | 134 | 342 |
| 2011 | 148 | 277 |
| 2012 | 97 | 149 |
| 2013 | 88 | 8 |
| 2014 | 147 | 130 |
| 2015 | 315 | 233 |
| 2016 | 284 | 230 |
| 2017 | 253 | 438 |
| 2018 | 246 | 102 |
| 2019 | 119 | 204 |
| Total | 5118 | 3776 |

Table I – Number of Initial Public offerings in India and China from 1988-2019

Note: Table (1) represents the number of initial public offerings during the period 1988-2019 in the Indian and Chinese stock markets.



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Table II - Industry distribution of new issue sample firms (India and China) during 2007-2019

| Industry | 2-digit SIC | India | | China | |
|-----------------------------|----------------------------------------|------------|-------------------------|------------|-------------------------|
| | | Fre-quency | Industry Proportion (%) | Fre-quency | Industry Proportion (%) |
| Food and Agro | 20, 28, 32,34,42,50,51 | 47 | 9.40 | 35 | 7.00 |
| Textile | 22,23,25,26,31,35,36 | 21 | 4.20 | 23 | 4.60 |
| Chemical | 29,30,32,33,34,36,37,38 | 38 | 7.60 | 77 | 15.40 |
| Consumer Goods | 30,31,32,33,34,35,36,38 | 64 | 12.80 | 40 | 8.00 |
| Construction Materials | 24,29,32,34,49,50 | 43 | 8.60 | 24 | 4.80 |
| Metal and Metal Products | 33,34,35,36,39,49,50,62 | 29 | 5.80 | 32 | 6.40 |
| Transport Equipment | 33,35,36,37,42,50,62 | 41 | 8.20 | 28 | 5.60 |
| Machinery | 27,29,30,32,33,34,35,36,37,38,39,49,50 | 56 | 11.20 | 134 | 26.80 |
| Miscellaneous Manufacturing | 33,34,35,36,39,47,48,49,50,51,59,60 | 125 | 25.00 | 80 | 16.00 |
| Tools and Equipment | 30,34,35,36,37,38,39,42,48,49 | 36 | 7.20 | 27 | 5.40 |
| Total | | 500 | 100 | 500 | 100 |

Note: Table reports the industry wise distribution of the IPO sample firms in India and China. The two digit SIC codes were used to group industries. Also, other than the codes presented, some other two digits codes were also clubbed in the industries however, the frequent codes are only presented.

Table III - Descriptive Statistics for sample firms conducting IPOs during 2007-2019 (India and China)

| Variables | India | | | | China | | | |
|-----------|-------|-----------|-------|-------|-------|---------|--------|-------|
| | Mean | Std. Dev. | Min | Max | Mean | Std.Dev | Min | Max |
| | 0.65 | 0.39 | -0.91 | 2.86 | 0.46 | 0.26 | -1.82 | 4.22 |
| | 0.72 | 1.20 | 0.10 | 1.74 | 1.64 | 0.09 | 0.93 | 1.92 |
| | 5.45 | 2.62 | 2.02 | 14.03 | 7.27 | 0.63 | 5.62 | 12.62 |
| | 0.00 | 0.00 | -0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.62 |
| | 0.75 | 0.82 | 0.05 | 0.20 | -2.21 | 1.43 | -10.26 | -0.13 |
| | 0.08 | 2.21 | -0.08 | 1.42 | -9.24 | 0.22 | -14.16 | -6.86 |

| | | | | | | | | |
|--|-------|------|-------|-------|-------|------|--------|-------|
| | 1.64 | 0.09 | 0.05 | 1.32 | 0.60 | 0.35 | -0.20 | 1.11 |
| | 0.51 | 0.28 | -0.72 | 2.82 | -0.02 | 0.66 | -1.10 | 2.94 |
| | 1.42 | 0.05 | 0.00 | 5.68 | 0.63 | 0.72 | 0.00 | 6.63 |
| | 0.66 | 1.24 | -1.82 | 16.42 | 0.04 | 1.27 | -12.26 | 10.46 |
| | 0.30 | 1.20 | -2.42 | 1.98 | -0.21 | 0.22 | -5.33 | 2.42 |
| | 40.71 | 1.92 | 34.61 | 42.31 | 46.63 | 2.30 | 43.75 | 50.97 |
| | 54.55 | 1.72 | 52.58 | 57.69 | 42.27 | 2.72 | 35.40 | 44.71 |

Note: Table 3 presents the descriptive statistics of dependent and independent variables

| Variables | India | | China | |
|-----------------|---------------------|---------------------|---------------------|---------------------|
| | AM (Model I) | RM (Model II) | AM (Model I) | RM (Model II) |
| | Coefficients | Coefficients | Coefficients | Coefficients |
| | (t-value) | (t-value) | (t-value) | (t-value) |
| <i>Constant</i> | 0.07*** (3.76) | -0.03*** (-3.01) | 1.34*** (9.15) | -0.93*** (-7.34) |
| | - | 0.35*** (3.42) | - | -0.11** (-2.74) |
| | 0.64*** (2.46) | - | -0.20** (-2.11) | - |
| | -0.02*** (-2.42) | 0.13** (1.19) | -0.04*** (-4.06) | 0.18*** (6.54) |
| | -3.05* (-1.70) | 0.73** (5.49) | -0.41*** (-6.42) | 0.06** (1.28) |
| | -0.05*** (-3.59) | 0.09*** (0.78) | -0.02 (-1.12) | 0.12 (5.42) |
| | -0.04** (-1.98) | 0.05** (0.40) | 0.04*** (5.53) | -0.02*** (-4.92) |
| | -0.02 (-0.20) | 0.01 (0.12) | -0.11*** (-4.82) | 0.03*** (2.04) |
| | - | 0.08** (0.69) | - | 0.08* (3.27) |
| | 0.09 (0.51) | - | -0.10* (-1.69) | - |



| | | | | |
|--|---------------------|------------------|---------------------|----------------|
| | -0.06* (-1.76) | - | 0.07 (0.39) | - |
| | 0.05 (0.40) | -0.08 (-0.54) | -0.74*** (-3.70) | 0.01 (1.40) |
| | -0.39*** (-2.40) | 0.12 (0.53) | -3.83*** (-4.03) | 0.05 (1.10) |

Table IV – 2SLS Regression Results for simultaneous equations (India and China)

Note: All variables are defined in the methodology part. The sample period is between 2007-2019. Model I and II are the simultaneous regressions, where in Model I dependent variable is AM (discretionary accruals) and in Model II dependent variable is RM (real activity management). The study used industry and year dummies to control for the industry and year effect. Value of t statistics is in parenthesis. ***, **, and * denote statistical significance at 1 Percent, 5 Percent, and 10 Percent levels respectively.

Fig. I- 2SLS model to explain the relationship between accruals and real earnings management

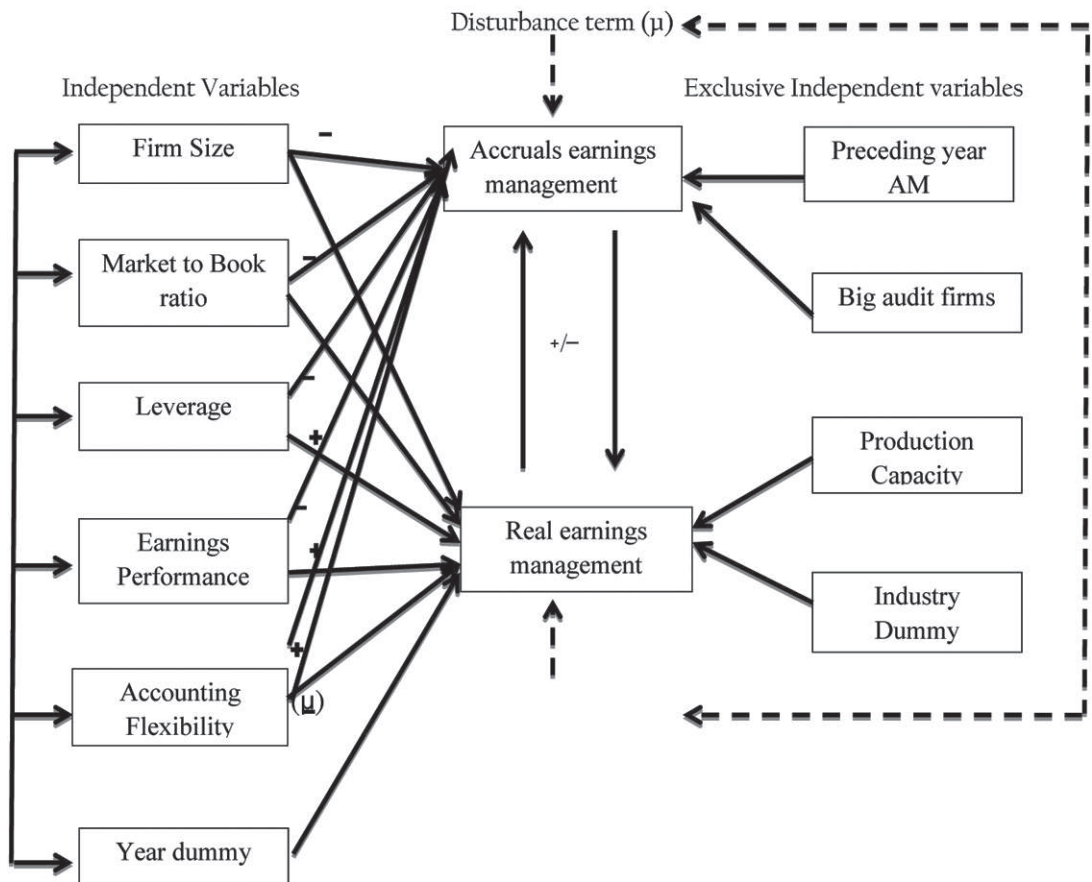


Fig. I The diagram shows the expected relationship between the dependent and independent variables. Dependent variables: Accrual earnings management measured through modified Jones model (1990) and Real earnings management is a combined comprehensive measure of the sum of standardized value of abnormal cash flow from operations and abnormal production costs. Independent variables: firm size (measured by natural logarithm of total assets, firm's equity market-to-book ratio) measured by the ratio of market value to book value of equity, leverage (measured by the natural logarithm of the ratio of debt to total assets, firm's earnings performance (measured by the ratio of net income scaled by total assets, firm's accounting flexibility (measured by the ratio of net operating assets at the beginning of the year divided by the lagged sales and the dummy for years. The unique exogenous variables for AM are abnormal accruals for the preceding year (and auditor reputation (measured by auditor firm size and for RM unique variables include firm's production capacity (measured by property, plant and equipment (PPE) scaled by the current sales for year and dummy variables for all industries (included in the sample.



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Impact of COVID- 19 on Eating Out Culture and Sensory Priorities

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Abstract:

Purpose- The purpose of this study was to evaluate whether sensory priorities & dining out habits of the society were modified during COVID-19 pandemic outbreak.

Design / Methodology/ Approach- Data was collected from a total 304 respondents comprising frequent diners, academicians and industry practitioners. A structured questionnaire was designed through a detailed discussion with academicians & practitioners. Exploratory factor analysis was used to explore most preferred food choice variables whereas a paired sample t test was performed to assess shifts in frequencies of eat out prior and post COVID 19 pandemic outbreak.

Findings- ‘Taste and flavor of the product’ was most preferable sensory priority for food selection before pandemic. However, this priority has been replaced by hygiene, cleanliness, zero touch points and contactless order due to COVID-19 pandemic. Newly emerged most preferred food choice variables include touch less consumer experience, sanitized restaurants, food safety certifications, contactless order, health and hygiene. Restaurants had to reframe, restructure their SOPs and strategies to gain the confidence of the customers as an outbreak of a pandemic disrupted lifestyle whereas consumption pattern, dining habits of consumers were modified.

Originality/value- This study reveals the modified dining out habits and conscious consumption led to changed sensory priorities, as a strategy to recover from a worldwide epidemic and transition to a “new normal” phase of the service sector.

Keywords: Eating out, Sensory Priorities, Food choice, Covid-19, QSR, Social Distancing



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1. Introduction

Restaurant industry went through many dramatic changes over the last few years such as emergence of fast food and fine dining, online orders and payment through various food ordering, Self-order kiosk (Na et al.,2021) and delivery platform etc. (Preetha & Iswarya, 2019, Thamaraiselvan et al., 2019). This added a considerable convenience and comfort to the life of families (Karsten et al.,2015) and food lovers who prefer a variety of the specialty cuisines. Our young generation is driven by celebrating festivals and special occasions, hanging out and dating with their friends (Paddock et al.,2017) This has become their regular routine which shaped up their eating out habits (Goyal et al.,2007). Consumer decisions are driven by many set of parameters which are complex in nature (Lorenz & Langen, 2018). The changing demographics, increased income, urbanization, digital revolution, use of technology, local approach of international restaurants in menus and changing consumer preferences are driving F&B sector (Kearney, J. ,2010 ; Anand,R.,2011). This sector has observed tremendous growth at 11% Compound annual growth rate (CAGR) during 2015-16 to 2018-19 (NRAI IFSR 2019 report) i.e before pandemic.

Restaurants with this folded growth, shattered by an uncertain future due to pandemic Covid 19. The F & B industry was the first one to get a hit after announcement of lockdown as it completely relies on the spot cash flows. Due to Covid hit, restaurants that used to flood with food lovers, diners who used to wait in long queues to experience those special moments with their friends and loved ones in presence of their favorite food had to rely on home deliveries. There was a time when for effectively managing these long waiting lines various operational strategies like table management (Tse & Poon, 2017), models like mathematical model for revenue enhancement (Tang et al.,2019; Koh et al., 2020) were suggested. Diners used to prefer eating out mostly on special occasions (Paddock et al., 2017; Gursel et al.,2019) over online orders, getting home deliveries and take away. Dining out used to give motivation, gain pleasure and ultimately it used to have a long lasting impact on quality life (Oh.H.J et al., 2014). But during pandemic social dine-in has been replaced by social distancing (Yost & Cheng, 2021; Wei et al., 2021).

This study is an attempt to understand the impact of Covid -19 pandemic, which essentially demanded social distancing, on the growing culture of eating out in consumers and determinants of food choices/ restaurant selection. The research aimed: -

- 1) To study an impact of the social distancing culture created by Covid-19 pandemic on eating out habits.
- 2) To explore various food choice attributes used by customers as selection parameters, pre and post Covid 19 pandemic.



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- 3) To find out the most concerning factors for diners for selection of food items after Pandemic.

This study focuses on exploring changing habits of diners and sensory priorities through a structured questionnaire. Next section briefs about the literature review & hypothesis development followed by methods. Thereafter, data analysis & results of the study are discussed. Finally, at the end, the paper offers the conclusion & limitations of the paper.

2. Literature Review

2.1 Dining Out Dimensions:

While going out to dine in the neighborhood, some customers return to well-known restaurants because they liked their prior eating experience and want to recreate it. Such loyalty frequently develops into a behavior that is repeatedly practiced (Roberts & Shea, 2017). However, Richardson et al. (2019), examined the influence of dining experience on customer's overall satisfaction and their intentions to revisit the Quick Service Restaurant (QSRs). Dining experience parameters such as quality of food and services offered by QSRs and convenience were strong predictors of satisfaction and revisit, whereas ambience doesn't have a direct effect on customer satisfaction. Additionally, "Social Modeling " was identified as a prime factor of eating out behavior although diners use other people's eating pattern as a reference for the kind and quantity of food (Cruwys et al., 2015). Consequently, Higgs, S. (2015) indicated social norms as one of the major reasons for influencing eating behavior and food choices. Social norms may alter self-perception or/and sensory evaluation of food. Furthermore, Van der Horst et al. (2011) explained the contribution of various factors such as time spent, efforts required, cooking time and skill that influenced fast food consumption / takeaway of food. Beldona et al. (2010) explained the major role of two highly important and relevant constructs namely "Customer Involvement and Variety Seeking". Wright et al. (2001), highlighted the importance of cultural setting in framing preferences towards food taste. But due to Covid-19 pandemic, the fast moving restaurant industry took a U turn & pressed a pause button. As public health was prime objective, isolation & social distancing modified dietary and physical activity habits (Ammar et al., 2020). Significantly more people preparing their own meals, eating breakfast every day, and consuming less fast food was reported by Di Renzo et al., 2020. Recently, Nielsen, a media company, conducted a survey of 11 Asian markets, wherein they highlighted consumers ' thought process on reprioritizing their eating habits as an impact of Covid 19 pandemic. Therefore, we put forth following hypothesis statement:

H1: Eating out habits of consumers has been changed as an impact of the social distancing culture created by Covid-19 pandemic.



According to literature review, Food Taste (Goyal, A., and Singh, N. P.,2007; Onwezen et al., 2012; Nakata, R., & Kawai, N.,2017; Reed et al., 2019), food quality (Klaus G. Grunert, 2005; Goyal, A., and Singh, N. P.,2007; Sadiliek T., 2019), sensory Appeals (Lindeman M. and Vaananen M.,2000; Prescott et al., 2002; Ares, G. and Gambaro,A., 2008; Fotopoulos et al., 2009; Carrillo et al., 2011; Januszewska et al., 2011; Milošević et al., 2012; Rahman et al., 2013; Cabral et al., 2017; Pearcey, s. & Zhan, G., 2018), health & convenience (Steptoe et al., 1995; Prescott et al., 2002; Januszewska et al., 2011; Milošević et al., 2012; Onwezen et al., 2012; Cabral et al., 2017) ,ambience and hygiene (Goyal, A., and Singh, N. P.,2007; Anand R., 2011) were some of the prime parameters, that were considered by diners before Covid-19 Pandemic.

Boesveldt, S. and Graff Kees (2016), focused on smell and taste aspects which help to induce eating rate with perfect food texture whereas Fisher et al. (2016), highlighted health concerns in a long term period as a result of the food choices. Furthermore, Machin et al. (2014), identified the influence of context on food choice motives. FCQ was used to study the essence and impact of various factors on food choice. “Price”, “Perceived quality” and “Freshness” of food dimensions were with highest cognitive salience, however “Convenience” and “Variety” were the most relevant dimensions for the consumption context. Additionally, Clemes et al. (2013), studied the role of ethnic food and its increasing worldwide demand. They identified five major significant factors influencing choice of restaurant, namely “Dining experience”, “Social status”, “Service quality”, “Food quality” and “Value for money”. However, Anand, R. (2011), highlighted passion for eating out and socializing. “Ambience and taste” for students, “Convenience” for dual income families were identified as primary determinants of food choice of consumers. He also focused on growing trends of green and organic food taken into consideration as health parameters. But later on, Covid-19 brought health parameters on a priority & rest all fell in the list after health related parameters only. This give rise to the next hypothesis:

H2: Food choice attributes used by customers as selection parameters are differed amidst Covid 19 pandemic outbreak.

and

H3: Selection of food items is controlled by the concerning factors due to Covid 19 pandemic.

3. Method

3.1 Participants and Procedures

A sample of 304 respondents actively participated in an online survey. A random sampling method was used for this survey. Survey questionnaire was forwarded to



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more than 375 respondents, who were above 18 years and prefer to eat out/dine out. Out of approx. 375 respondents, the survey could fetch 304 (81.06%) valid responses.

3.2 Data Collection

Through a detailed discussion with the academicians and practitioners, a structured questionnaire was developed. This questionnaire was divided into 4 parts. First part focused on demographic characteristics of respondents, frequency of visit to the QSRs before lockdown and after lockdown and eating out preferences. Second part concentrated on understanding the priorities of customers for selection of QSRs through Likert scale where 1= Strongly Agree and 5= strongly disagree. Through the third part of the questionnaire, respondent’s sensory priorities were ranked from 1st choice to 5th choice in both cases that is before lockdown and after lockdown, where as in fourth part of the questionnaire, Likert scale was used to evaluate post lockdown preferences of the respondents towards selection of QSR.

4. Data Analysis and Results

4.1 Normality & Reliability Check

The collected data was first subjected to check the normality where values of skewness and Kurtosis were calculated. Maximum absolute value of skewness = 1.898 and maximum absolute value of Kurtosis = 3.738. As recommended values are skewness < 2 and Kurtosis < 7 (Curran et al.,1996), hence data normality is verified. The Cronbach’s alpha for the 17 items is 0.904. This suggests the high internal consistency among the items.

4.2 Demographic Analysis

The demographic aspect of the respondent is explained in Table 3 wherein more than 50% of respondents (53.6%) were in the age group of 18-25 Years, 21.7% respondents were from 26-35 Years age group, 20.7 % respondents were from 36-45 Years age group. Very few respondents responded from 46 and above age group people where 3.3% were from 46-55 Years and only 0.7% were 56 Years and above.

Table 1.

Demographic characteristics of respondents. (n=304)

| Age | | | Occupation | | |
|-------------|--------------|------|---------------|--------------|------|
| | Participants | (%) | | Participants | (%) |
| 18-25 Years | 163 | 53.6 | Student | 129 | 42.4 |
| 26-35 Years | 66 | 21.7 | Salaried | 135 | 44.4 |
| 36-45 Years | 63 | 20.7 | Self Employed | 17 | 5.6 |
| 46-55 Years | 10 | 3.3 | Professional | 19 | 6.3 |

| | | | | | |
|--------------------------|-----|------|-----------------------|-----|------|
| 56 and Above | 2 | 0.7 | Homemaker | 4 | 1.3 |
| Gender | | | Marital Status | | |
| Female | 159 | 52.3 | Married | 107 | 35.2 |
| Male | 145 | 47.7 | Unmarried | 195 | 64.1 |
| Edu.Qualification | | | Income | | |
| Upto HSC | 10 | 3.3 | Upto 20000 | 37 | 12.2 |
| Undergraduate | 61 | 20.1 | 20000-50000 | 80 | 26.3 |
| Graduate | 58 | 19.1 | 50000-100000 | 83 | 27.3 |
| Post Graduate | 165 | 54.3 | 100000 and Above | 104 | 34.2 |
| Other | 10 | 3.3 | | | |

4.3 Descriptive Analysis

Table 2.

Descriptive Statistics of Variables

| Items | Mean | Std. Deviation | Cronbach's Alpha |
|-------------------------------------------------------------------------|------|----------------|------------------|
| Sensory Priorities- | | | |
| Touch less customer experience | 1.98 | 1.284 | 0.965 |
| Up to the mark sanitization level | 1.86 | 1.287 | |
| Sanitized public places in restaurants | 1.87 | 1.309 | |
| Food Safety Certifications | 1.99 | 1.307 | |
| Zero touch contactless order/ Personalized service | 1.95 | 1.322 | |
| Hygiene and cleanliness / Ambience | 1.66 | 1.264 | |
| Safe Dining experience / Cost efficiency | 1.91 | 1.256 | |
| Healthy food menus | 2.20 | 1.284 | |
| Fresh and hygienic food / Variety of menu | 1.67 | 1.267 | |
| Self-service kiosk | 2.23 | 1.331 | |
| Safety Assurance | | | |
| Open kitchen restaurants to ensure hygiene and sanitation. | 1.64 | .817 | 0.720 |
| Less no. of table and seating capacity | 1.88 | .916 | |
| Display CCTV camera / live video to confidence | 1.54 | .735 | |
| Restaurants applying all precautionary measures and NOC certifications. | 1.58 | .689 | |



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| Health Parameters | | | |
|-------------------------------------------------|-------------|-------|-------|
| Social distancing following restaurants | 1.45 | .633 | 0.510 |
| Hygiene preference over specialty of restaurant | 1.31 | .542 | |
| MNC preference over local food | 2.75 | 1.113 | |

In order to evaluate the internal consistency of the various constructs, Cronbach alpha coefficients were utilized. With 10 elements, the construct of sensory priority has a very high Cronbach alpha of 0.965, indicating extremely good internal consistency among the construct's items. While the health parameter construct has the lowest Cronbach alpha, at 0.510, the second construct, safety assurance, also has very strong internal consistency. The most important factors at the individual level are hygiene preference over restaurant specialty (1.31) and social distance following restaurants (1.45).

5. Results and Discussion

5.1 Eating out Habits (Hypothesis 1)

A paired sample t-test was performed to examine the effect of the Covid-19 epidemic on consumers' dining out patterns. The frequency of visits pre and post pandemic is used to gauge eating out behavior. To determine if there is a statistically significant difference between the means of visit frequency before and after the lockdown due to the Covid-19 epidemic, a paired sample t test was used.

Significance value of paired sample t test was 0.000 which is $< .05$ with 95% of confidence level. The results of the paired sample t test were significant with P value of 0.000 which was less than 0.05, indicating that there is a significant increase in mean (1.243) and Std. Deviation(1.886), with 95% confidence level. This indicates that eating out habits of the customers got reshaped and reframed due to Covid-19 which essentially demands social distancing. Covid-19 pandemic replaced social dine in opportunities with social distancing threat. The Covid-19 pandemic & imposed restrictions became the prime reason for closure and severe losses borne by the overall restaurant industry (Brizek et al.,2021). Customers' comfort level while eating out and preferred dining settings were the mediating factors for eat out decisions during the epidemic. Based on perceived risk & perceived trust factors, customers were willing to spend more (Jeong et al., 2021).

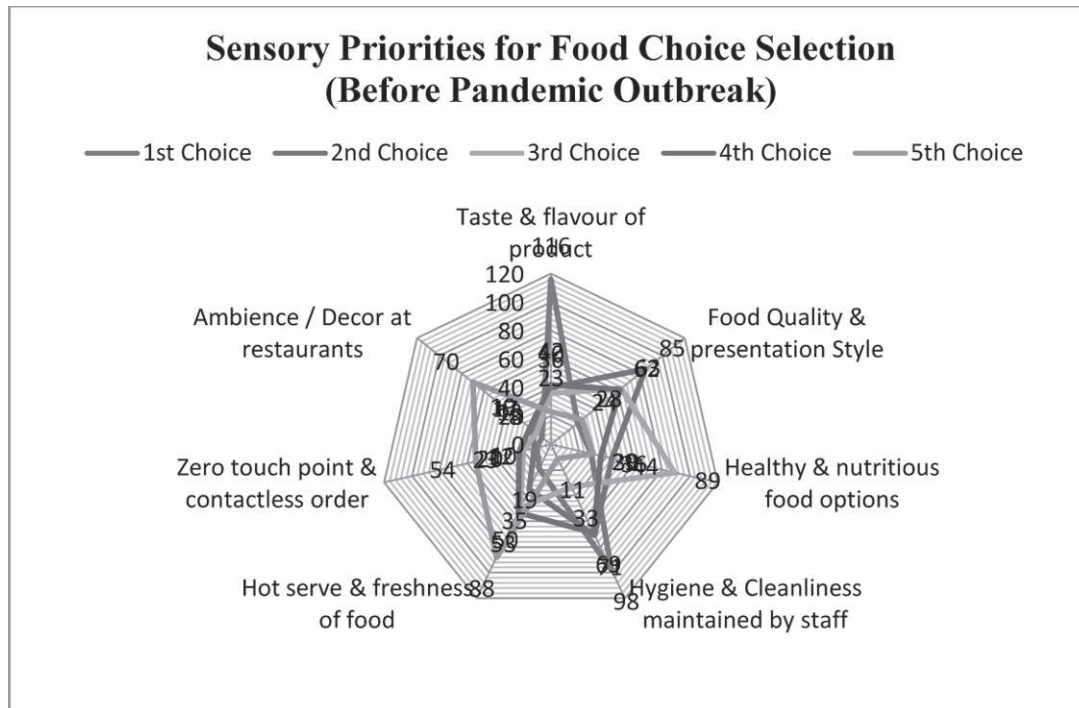
5.2 Sensory priorities of food choice before and after pandemic conditions (Hypothesis 2)

Spider charts were used to analyze the priorities of food choice attributes in pre & post pandemic conditions. To investigate consumer preferences toward these sensory priorities while selecting a food of choice before and after the epidemic, the major



7 features were chosen- Taste and flavor of product, Food Quality and presentation Style, Healthy and nutritious food options, Hygiene and Cleanliness maintained by staff, Hot serve and freshness of food, Zero touch point and contactless order, Ambience/Decor at restaurants.

Figure 1



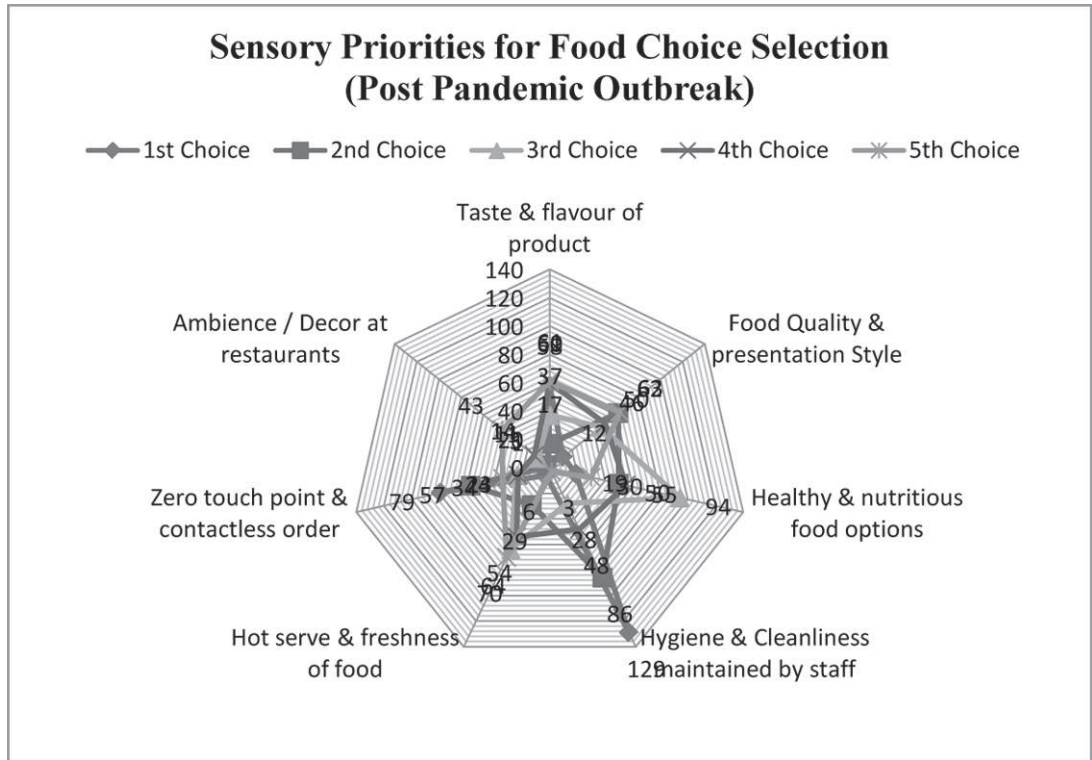
Spider Chart for Sensory Priorities for Food Choice Selection (Before Pandemic Outbreak)

Prior to lockdown, taste and flavor of the product was the primary selection criterion, followed by staff hygiene and cleanliness whereas, Food Quality and Presentation Style was the second most popular choice among consumers, followed by Staff Hygiene and Cleanliness and Healthy and Nutritious Food Options.



Figure 2

Spider Chart for Sensory Priorities for Food Choice Selection (Post Pandemic Outbreak)



Priorities for Food Choice Selection (Post Pandemic) shows that staff hygiene and cleanliness were the top selection factors followed by zero touch points and contactless ordering. Further healthy and nutritious food, Hot serve and freshness of food were considered to be next selection criteria which was the least preferred attributes in normal time. The least preferred attribute was Food Quality and presentation Style, which was the first priority for customers during normal time.

Table 3.

Sensory priorities of food choice before and after pandemic conditions

| | 1st Choice | | 2nd Choice | | 3rd Choice | | 4th Choice | | 5th Choice | |
|-------------------------------------|------------|------|------------|------|------------|------|------------|------|------------|------|
| | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post |
| Taste and flavor of product | 116 | 58 | 40 | 17 | 36 | 37 | 42 | 60 | 23 | 61 |
| Food Quality and presentation Style | 24 | 12 | 85 | 62 | 63 | 46 | 62 | 50 | 28 | 63 |

| | | | | | | | | | | |
|---------------------------------------------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Healthy and nutritious food options | 29 | 19 | 44 | 50 | 89 | 94 | 36 | 55 | 30 | 30 |
| Hygiene and Cleanliness maintained by staff | 98 | 129 | 71 | 86 | 33 | 28 | 69 | 48 | 11 | 3 |
| Hot serve and freshness of food | 19 | 6 | 35 | 29 | 50 | 64 | 53 | 54 | 88 | 70 |
| Zero touch point and contactless order | 10 | 79 | 12 | 57 | 20 | 24 | 23 | 23 | 54 | 34 |
| Ambience / Decor at restaurants | 8 | 1 | 17 | 3 | 13 | 11 | 19 | 14 | 70 | 43 |

A comparative study of sensory priorities as in Table 6 indicates –

- Before Pandemic, Taste, flavor of the product and hygiene, cleanliness maintained by staff were the 1st priority options for the majority of customers. At the same time, hot served fresh food and ambience/ décor at restaurants were the last priority for the majority of customers.
- Post Pandemic, 1st priority of customers, i.e. taste and flavor of the product was replaced by hygiene, cleanliness and zero touch point and contactless order and that became the 1st priority for majority of the customers. Hot served fresh food continues to be the last priority for most of the customers whereas food quality, presentation style and taste, flavor of product are also last priority for most of the people.

As the entire world struggles for survival due to the pandemic, customers prefer to have hygienic food over tasty, quality food with zero touch points and contactless order. Keeping these things in mind, restaurant operators started bringing few changes in their menus which cope with the changing priorities which are revolving around hygiene & social distancing. Jeong et al., 2021 found restaurant dining environment, communication and hygiene, as crucial predictors of patrons' during Covid 19.

Concerning factors for selection of food items (Hypothesis 3)

Table 4.

| Rotated Component Matrix | Component | | | |
|-----------------------------------|--------------|----------|----------|----------|
| | Factor 1 | Factor 2 | Factor 3 | Factor 4 |
| Touch less customer experience | 0.918 | | | |
| Up to the mark sanitization level | 0.912 | | | |



| | | | | |
|-------------------------------------------------------------------------|--------------|--------------|--------------|--------------|
| Sanitized public places in restaurants | 0.9 | | | |
| Food Safety Certifications | 0.885 | | | |
| Zero touch contactless order | 0.884 | | | |
| Hygiene and cleanliness | 0.882 | | | |
| Safe Dining experience | 0.88 | | | |
| Healthy food menus | 0.838 | | | |
| Fresh and hygienic food | 0.837 | | | |
| Self-service kiosk | 0.774 | | | |
| Open kitchen restaurants to ensure hygiene and sanitation. | | 0.795 | | |
| Less no. of table and seating capacity | | 0.744 | | |
| Display CCTV camera / live video to gain confidence | | 0.711 | | |
| Restaurants applying all precautionary measures and NOC certifications. | | 0.594 | | |
| Restaurant visit before lockdown | | | 0.765 | |
| Restaurant visit post lockdown | | | 0.754 | |
| Frequency of home delivery/ takeaway/ drive through | | | 0.685 | |
| Social distancing following restaurants | | | | 0.778 |
| Hygiene preference over specialty of restaurant | | | | 0.69 |
| MNC preference over local food | | | | 0.513 |

| | | | | |
|----------------------------------|-------|----------|------|------|
| Total of EigenValues | 7.70 | 2.74 | 1.76 | 1.10 |
| Percentage of variance explained | 38.51 | 13.68 | 8.82 | 5.39 |
| KMO | 0.91 | | | |
| Bartlett's test of sphericity* | | *4062.57 | | |
| df | | 190 | | |
| Total of Variance explained | | 66.40 | | |
| * $p < .05$ | | | | |



Exploratory factor analysis was performed using the principal component analysis type of extraction method with varimax rotation method. Rotated component matrix signifies 4 components with a cutoff point of 0.40. Table 7 indicates data suitability for the structure detection in factor analysis. KMO measures of sampling adequacy is 0.905 which is > 0.5 and it is significant. This indicates that factor analysis would be useful for the data. In Bartlett's Test of Sphericity, $P < 0.05$, which is also statistically significant. There are 4 components explaining 66.399% total variance. Factors having eigenvalue more than 1 are considered significant. So, the results indicate that there are 4 distinct constructs with the eigenvalue more than 1 out of 20 components.

Sensory Priorities

To identify the load of each attribute of Food and restaurant selection & its relationship with the other factors, factor analysis was performed (Table 7). Touch less customer experience is a factor with the highest loading. It indicates that out of all sensory priorities, considered for the study, touch less customer experience is the top priority attribute for the customers.

In the first construct, all rest sensory priorities such as up to the mark sanitization level, sanitized public places, certified restaurants, zero touch / contactless order, hygiene, safe dine in, healthy food, fresh and hygienic food and self-service kiosks are highly correlated. Past study indicates Food Taste (Goyal, A., and Singh, N. P.,2007; Onwezen et al., 2012), sensory Appeals like taste, smell, food presentation, nice look (Lindeman M. and Vaananen M.,2000; Prescott et al., 2002; Ares, G. and Gambaro,A., 2008; Fotopoulos et al., 2009; Carrillo et al., 2011; Januszewska et al., 2011; Milošević et al., 2012; Rahman et al., 2013; Cabral et al., 2017)and ambience, hygiene (Goyal, A., and Singh, N. P.,2007; Anand R., 2011) as important sensory priorities ; which were replaced by touch less experience, sanitization level, hygiene due to pandemic situations.

Safety Assurance

In the second construct, four factors formed a construct namely- restaurants with open kitchens to ensure hygiene, restaurants with reduced number of tables and seating capacity, restaurants with CCTV cameras and live video and NOC certificate to gain customer's confidence. Majority of the restaurant studies have been done on sensory appeals, health parameters whereas Food safety parameters (Grunert K.,2005) and risk perceptions (Rahman et al.,2013; Cabral et al.,2015) were also focused in few. Safety assurance of diners has become a priority need now due to Covid-19.

Eating out frequencies and home deliveries

Third construct includes eating out frequencies before and after pandemic and



frequency of home delivery /take away/ walk through. Prior to the Covid-19 outbreak, the majority of diners preferred social dining over takeaway or delivery service of meals, however the NRAI IFSR Report (2019) indicates that preference has shifted significantly as a result of the pandemic. However Online orders were less likely to be placed by respondents who had a greater perceived risk, less interest in the product, and a lower anticipated profit from Online Food Delivery (OFD) services (Mehrolina et al., 2020). Based on perceived risk & intentions to purchase, consumers decide or take a final call on purchase be it online or offline. Theory of reasoned action (Fishbein & Ajzen, 1977) is a widely used theory to predict the behavior of customers under certain circumstances. During & post pandemic timeline, due to high perceived risk related to health concern, customers were very volatile in their actions. As a result of lockdown, health concerns, high mortality rates, customers had to shift to online buying. So even though they were skeptical earlier regarding online purchase & transactions, they had to shift their action of purchase with the more critical reason responsible for it.

However Planned behavior theory (Ajzen,I., 1991) brought more critical perspectives to the limelight. As pandemic demanded social distancing, health & hygiene customers were more inclined towards more protective behaviors, healthy food habits, and having homemade food. So, even in new normal, customers developed healthy habits & were more inclined towards healthy food.

Health Parameters

Last construct includes 3 factors and they are social distancing, hygiene and preference towards MNC over local. Restaurants many times have been questioned for their hygiene maintenance & sanitization standards. Covid-19 pandemic showcased the cracks and gaps that need to be filled specially in the unorganized restaurant sector. Health and hygiene parameters (Steptoe et al., 1995; Prescott et al., 2002; Januszewska et al., 2011; Milošević et al., 2012; Onwezen et al., 2012; Cabral et al., 2017) focused on healthy menus, nutrition, vitamins and mineral contents of food. But Covid-19 pandemic made all restaurant owners think and revise their operating ways. The Health ministry released Standard Operating Procedures (SOPs) for all restaurants. As a result, diners can now witness contactless ordering, digital menu cards, cashless payments, use of robots and importantly health menus.

The restaurant industry should enforce a few strict rules that would be beneficial for survival in the long run and prepare the restaurants for the future to facilitate the smooth operation of the industry in order to deal with changing consumer eating habits, perceived risk and perceived benefits. Customers get engaged in self-protective behavior whenever they perceive risk in the environment whereas this behavior intensifies dramatically during illness epidemics. The Health Belief Model



(HBM) is a widely accepted theory to explain health-related behavior as a compass for behavioral health interventions (Maiman & Becker, 1974). This model focuses on individual ideas, attitudes, and behaviors and may be utilized to comprehend consumer purchasing behavior during the pandemic.

The best practices that need to be implemented to deal with perceived risk by industry can be: Operational level safety such as seating arrangements and Ordering queue, Cleanliness and sanitation of staff and premises, Healthy habits like regular use of hand wash and sanitizer, Healthy food menus (Inclusion of healthy menus, Display of Nutrient content & calories gained, Customer friendly operations like digital menu card, digital payment and home deliveries and pick up.

Basic framework/SOPs need to be designed by restaurant and government to deal with such contingencies. Restaurant Associations & Government should keep some funds to deal with these epidemic

Conclusion, Limitations and Future Scope of Study

Covid-19 has twisted the scenario of the restaurant industry and reshaped eating out habits of the customers. The present work highlighted qualitative insights on eating out habits and customer priorities towards the food choice attributes as an impact of Covid-19 pandemic. Sensory priorities of diners' taste, flavor of the product and hygiene, cleanliness were replaced by hygiene, cleanliness and zero touch point and contactless order. Restaurant industry should design a SOP to deal with such sudden attacks of contagious diseases. The restaurant industry has to gear up with innovative ways of approaching and reaching out to the customers considering health and hygiene as a priority. This study does not generalize the outcome. It may differ for the unorganized food industry & at the different locations. Based on these studies and changing dining out preferences, one can think of developing an ideal service model for a post pandemic restaurant industry.

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6. CONFLICT OF INTEREST

The authors state that there was no sponsor participation in the study that would have impacted the findings.



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The researchers claim that no sponsors had any role in the study that would have impacted its findings.

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The Relationship among Transformational Leadership, Employee Engagement and Commitment

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Abstract:

Purpose: An engaged employee contributes significantly to the organization. He is an excellent mean to achieve competitiveness and effectiveness. Still the conclusive research with regard to employee's engagement, its antecedents and consequences are limited. Keeping this in mind, the present study attempts to provide insights into the interplay among leadership, engagement and commitment by investigating the mediating role of employee engagement.

Methodology: The data was collected using convenience-based sample method. A total of 450 filled questionnaires from managers and officers of commercial banks were found suitable for the analysis. Model 4 in PROCESS macro (Hayes, 2013) was applied.

Findings: It was found that transformational leadership exerted a significant impact on both commitment and employee engagement. Further, employee engagement partially mediated transformational leadership-organizational commitment relation. The results revealed that transformational leadership style is crucial in predicting positive work related aspects such as organizational commitment and engagement.

Practical Implications: Employee engagement is a positive behavioral attitude that is vital for the success of any organization. It is believed that engagement and commitment can potentially translate into valuable business results for an organization. Since Leaders have a greatest influence on the subordinates especially in high power distance country like India. Hence, they can significantly foster engagement and commitment among employees. Therefore, the present study is of great importance to the organization.

Value: The present study talks about engagement and its association with other constructs in a non-western culture, that is, India where it severely lacks the theoretical and empirical presence. It addresses the mediating effect of employee engagement on transformational leadership and organizational commitment which is overlooked before.

Keywords: Employee Engagement (ENGT), Transformational Leadership (TRFLDR), Organizational Commitment (COMT), Mediation, Social Exchange Theory (SET)

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Introduction

In this era of competition and constant change, organization heavily rely on their people. They provide organization with unique capabilities that cannot be copied or imitated, hence, providing an edge to an organization over its competitors. Managements are always keen to promote such positive behaviors among their workforce that are vital for its survival and success. One such behavior that has garnered a great deal of interest is- Employee Engagement. It has been derived by considering those behaviors demonstrated by employees that yield higher productivity and positive outcomes. An engaged employee excels in his job and contribute significantly to the efficiency of the organization. Avey, Wernsing and Luthans (2008) pointed that when employees exhibit engagement, it enhances positive organizational change. Enhancing engagement among employees creates a positive psychology which made them believe that their personal ability is the cause for the organizational success. They become rigors and dedicated while performing the tasks ensuring more productivity, less wastage and adapting to the necessary changes.

Previous studies have established a compelling and positive link of engagement with reduced turnover intention (Schaufeli and Bakker, 2004; Harter, Schmidt and Hayes, 2002), leadership (Papalexandris and Galanaki, 2009; Breevaart et al., 2014; Hayati, Charkhabi and Naami, 2014), organizational citizenship behavior (Babcock-Roberson and Strickland, 2010; Rurkkhum and Bartlett, 2012; Ariani, 2013), job satisfaction (Harter, Schmidt and Hayes, 2002), and other positive organizational outcomes (Sonnetag, 2003; Salanova and Schaufeli, 2008; Christain, Garza and Slaughter, 2011; Anitha 2014; Yongxing et al., 2017). Anitha (2014) asserted that employee engagement is a great tool at the disposal of organization to gain competitive advantage. Hence, creating and sustaining higher engagement level among its employees is apparently desirable (Ghadi, Fernando and Caputi, 2013). Any organization should focus on identifying the antecedents that could foster the level of engagement among employees (Crawford, LePine and Rich, 2010). However, the research concerning the same still remain limited (Macey and Schneider, 2008; Saks and Gruman, 2014). Moreover, in the extant literature on engagement, the majority of the studies are conducted in western countries (Bhatnagar, 2007; Motyka, 2018). The generalization of such results is debatable as the validation of management models in one cultural context may not necessarily validate its existence in other different culture (Parnell, 2003). The present study is set out to assess the relationship of employee engagement with other constructs in a non-western context, that is, India. The uniqueness of this study is that it addresses the mediating effect of employee engagement (ENGT) on transformational leadership (TRFLDR) and organizational commitment (COMT) which is overlooked before (Avolio et al., 2004; Choi, Tran and Park, 2015; Popli



and Rizvi, 2016; Asif et al., 2019). The aim is to investigate the relationship among TRFLDR, COMT and ENGT by examining the mediating role of ENGT.

The coming section examines the literature on ENGT, its linkage with COMT and TRFLDR. Afterwards the section summarizes the methodology related aspects of the present study which is followed by the analysis of the results. At last, discussions, conclusions and limitations are given.

Literature Review

ENGMT

Although the academics research on engagement has significantly flourished recently but until date there lack a consensus in the theoretical definition of engagement (Little and Little, 2006; Macey and Schneider, 2008; Saks and Gruman, 2014).

It was Kahn (1990) that conceptualized engagement as the expression of ‘preferred self’ by an employee in the task behaviors that encourage them to connect with their work as well as to others. It involves ones’ physical, cognitive as well as emotional presence and active role performances. It is a state of mind that is characterised as pervasive and persistent. Employee feel connected to their work and get actively involved in their given task (Kahn, 1990, 1992). Later on May, Gilson and Harter (2004) and Christian, Garza and Slaughter (2011) stated that engagement involves investment of employees’ personal resources (that constitute of physical, emotional and cognitive energies) in their job. Engagement is characterized as a positive antipode of burnout by Maslach, Schaufelli and Leiter (2001). Saks (2006) also argued that it is a distinctive construct that define the degree to which an employee is attentive and absorbed in one’s formal role. Likewise Rich, Lepine and Crawford (2010) argued that an engaged individual is psychologically present and fully attentive, connected and focussed in one’s role performances. Macey and Schneider (2008) connote engagement as a combination of involvement, passion, enthusiasm and focused efforts that creates a preferable condition to serve organizational purpose. According to Rurkkhum and Bartlett (2012) it is a positive psychological mindset of employees that causes them to dedicate themselves actively in their job and organization.

The most widely used definition in the literature (Hakanen, Bakker, Schaufeli, 2006; Salanova et al., 2011; Ghadi, Fernando and Caputi, 2013) is introduced by Schaufeli, Salanova, González-Romá and Bakker (2002, pp. 74) that defined engagement as ‘a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption’ While vigor is defined by ‘high levels of energy and mental resilience’ during job, dedication is characterized by a ‘sense of significance, enthusiasm, inspiration, pride, and challenge’. The third dimension- absorption, is defined as being ‘fully concentrated and deeply engrossed in one’s work’, whereby



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one finds it difficult to detach oneself from work (Schaufeli et al., 2002; Schaufeli and Bakker, 2004).

ENGT and TRFLDR

Ariani (2013) argued that employee engagement highly depends on the leadership style adopted by the organization. Past studies have indeed reported the positive association between leadership style and employee engagement (Babcock-Roberson and Strickland, 2010; Tims, Bakker and Xanthopoulou, 2011; Ariani, 2014; Hayati, Charkhabi and Naami, 2014; Scheepers and Elstob, 2016; Singh et al., 2016). Leadership, particularly transformational leadership (TRFLDR) is one of the prominent motivators in enhancing employee's engagement (Saks and Gruman, 2014; Carasco-Saul, Kim and Kim, 2015). Transformational leaders lift its followers to extra-ordinary heights. They transform the followers' basic notions, beliefs and attitudes so that employees willingly perform beyond the minimum level specified by the organization. (Podsakoff, Mackenzie and Moorman, 1990; Avolio, Walumwa and Weber, 2009). According to Bass et al. (2003) transformational leadership is a multi-dimensional construct that constitute of four major elements namely, idealized influence (behaving in ways that result in being role model among their followers), inspirational motivation (motivating and inspiring by providing meaning and challenge to the follower's works), intellectual stimulation (stimulating the followers' efforts to be innovative and creative) and individualized consideration (giving special attention to individual's needs for achievement and growth). These characteristics traits of transformational leader foster positive attitudes among employees such as engagement and commitment. While aspects like idealised influence and inspirational motivation build loyalty and devotion among employees that helps them to identify with organization; intellectual stimulation and individualised consideration stimulate the employees to expend their traditional working role (Ghadi, Fernando and Caputi, 2013; Hayati, Charkhabi and Naami, 2014). Another important trait of Transformational leaders is their charisma (Conger, 1999; Babcock-Roberson and Strickland, 2010) that helps inspire others (Howell and Shamir, 2005). Dvir et al. (2002) comprehended that charismatic personality of the leaders stimulates their followers to expend their boundaries and by treating them with individualized consideration, they arouse inspirational motivation among its followers. They help the followers to identify their true potential and generate the highest levels of performance at the workplace.

Engagement is the result of an exchange relation between leader and employees wherein leaders provides them with the necessary resources and empower them and in turn employees reciprocate through greater efforts and commitment (Vincent-Hoper, Muser and Janneck, 2012). It has been argued that an employee who receives support, proper guidance and inspiration will engage more in his job (Tims, Bakker and Xanthopoulou, 2011).



Recent work by Bhatnagar (2007), Popli and Rizvi (2015, 2016) also revealed that supportive nature of the management could be significant in predicting employee engagement. Popli and Rizvi (2015) explored the association between TRFLDR and ENGT with the help of 106 samples collected from private sector organization. It revealed a positive association between the two ($R= 0.59, p< 0.01$). In 2016, Popli and Rizvi expanded their study by assessing the effect of two more leadership style viz transactional leadership and passive-avoidant on ENGT. It reported the positive association of ENGT with transactional leadership but negative association with passive-avoidant. They further maintained that there still lacks ample empirical works linking leadership with employee engagement in India-specific context. Therefore, the present study hypothesized.

H1: Transformational Leadership (TRFLDR) positively predicts Employee Engagement (ENGT)

ENGT and COMT

The committed employees are defined as one who feel pride for being with the organization (Mowday, Steers and Porter, 1979) and strongly believe in its value (Porter et al., 1974) As per Vance (2006) employees feel pride in their organization only to the extent they enjoy and believe in their work and employee engagement warrants that employee feel proud in what he does and is connected with his job (May, Gilson and Harter, 2004; Macey and Schneider, 2008). This ensures that highly engaged employees would feel committed and are attached to their organization (Schaufeli and Bakker, 2004; Kataria, Garg and Rastogi, 2012). According to Jackson, Rothmann, and Van de Vijver (2006) engagement is a strong predictor to organizational commitment. Literature has also supported a strong association between engagement and commitment (Hakanen, Bakker and Schaufeli, 2006; Field and Buitendach, 2011; Dalal et al., 2012; Hanaysha, 2016; Azim, 2016). Saks (2006, 2019) also observed a positive effect of both job and organizational engagement on commitment. Therefore, it is being hypothesized.

H2: Employee Engagement (ENGT) positively predicts Organizational Commitment (COMT)

ENGT, TRFLDR and COMT

The leadership is an important factor in determining the positive employees' attitude. There are ample of empirical evidences to support the positive influence of transformational leadership on both organizational commitment and engagement (Robert, 2000; Cotton and Hart, 2003; Attridge, 2009; Avolio et al., 2004; Wiza, and Hlanganipai, 2014; Mesu, Sanders and Van Riemsdijk, 2015; Dajani and Zaki, 2015). Transformational leadership has assumed to facilitates the activities and structure and



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guide people thereof. It integrates the elements of empathy, compassion, sensitivity, relationship building and innovation (Jin, 2010, Popli and Rizvi, 2016). By providing ample opportunities and enriching the job, they can strengthen the commitment and engagement (Mclaggan, Botha and Bezuidenhout, 2013).

Social Exchange (SET) Theory (Blau, 1964; Saks, 2006) and Job Demands-Resources (JD-R) theory (Demerouti et al., 2001; Bakker, Demerouti and Verbeke, 2004) offers a more strong theoretical rationale for establishing a connection of transformational leadership with commitment and engagement. As per SET when one person does or doesn't perform something that holds some value for other, the receiving party will try to reciprocate with something that is equally valuable. The relationship between leaders and employees may evolve into one of reciprocity (Strom, Sears and Kelly, 2014). Transformational leaders create a social relationship with their employees that is built on mutual trust and respect, this creates a positive attitude among employees who may choose to show their respects to such relations by performing their required duties more seriously and vigorously at the workplace. Saks (2006) also make the case that employees see their supervisor's attitude toward them as a sign of the company's support. So, employees that receive any economic and socio-emotional aids from their leaders will readily devote themselves in performing the work roles assigned to them by the organization in exchange of the support extended by leader.

Similarly, JD-R theory established that job resources play an instrumental motivational role in achieving work goals. When employees are provided with necessary supports, mutual respect, and innovative climate to grow to their highest potential, then the task will automatically be completed more successfully and the further outcomes that are likely to occur as a result of such support and climate would be committed attitude and greater engagement among employees (Hakanen, Bakker and Schaufeli, 2006). Moreover, it is plausible that engaged employees are assumed to be committed to the organization (Ariani, 2013, 2014). Transformational leader ensures that its followers are provided with these necessary job resources and therefore more engagement among employees which in turn leads to greater commitment for the organization. Based on previous studies and logical arguments, it is being hypothesized

- H3:** Transformational Leadership (TRFLDR) positively predicts Organizational Commitment (COMT)
- H4:** The relationship between Transformational Leadership (TRFLDR) and Organizational Commitment (COMT) is mediated by Employee Engagement (ENGT)

Figure 1 depicts the present study hypotheses.

(Figure 1- here)



Research Methodology

The survey was conducted on bank employees that included managers and officers working in various branches of commercial banks (private and public banks). Through convenience sampling method, the data was collected from Delhi and Haryana because of the rich geographical diversity present in these areas. Total 481 filled questionnaires were received but only 450 were found adequate for study.

Instrument development

The employee engagement was measured with short version of Utrecht Work Engagement Scale developed by Schaufeli, Bakker and Salanova (2006) that constitute nine statements. The scale composed of three statements from each dimension viz. vigour, dedication and absorption. To measure Transformational leadership, the scale developed by Podsakoff, Mackenzie and Moorman (1990) has been used. Total twelve statements were extracted from twenty-two statements mentioned in it. The five statements created by Armstrong (2009) was considered to assess the Organizational commitment level among the respondents. All the items were measured on 7-point Likert scale ranging from strongly disagree (1) to strongly agree (7).

The results of normality of data analysis of all constructs revealed that data was normally distributed as the value of skewness and kurtosis ranges between +2 and -2 (Ryu, 2011).

Demographic Characteristics of the Respondents

Majority of the data was collected from public sector banks (315, 70 per cent) and only 135 (30 per cent) was collected from private sector banks. The data constituted 313 (69.6 per cent) males and 137 (30.4 per cent) females working in commercial banks. In the data 272 (60.4 per cent) respondents were married and remaining 178 (39.6 per cent) were unmarried. About 228 (50.7 per cent) aged below 30 years, followed by 155 (34.3 per cent) between the age group of 30-40 years and 67 (14.9 per cent) aged more than 40 years. Similarly, based on the work-experience, of 450, 221 (49.1 per cent) had an experience of less than 5 years, 127 (28.2 per cent) respondents had an experience between 5-10 years and 102 (22.7 per cent) had more than 10 years respectively.

Measurement Model

Confirmatory Factor Analysis was run to assess the validity and reliability. To ensure convergent validity, the values of average variance extracted (AVE) and composite reliability (CR) should be greater than 0.5 and 0.7 respectively (Malhotra, Nunan and Birks, 2017). Discriminant validity is checked with the square root of the AVE of each construct that should be higher than the construct's highest correlation with any



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other construct (Hair et al., 2014). While Factor loadings are used to test which items converge to the measuring construct. According to Hair et al. (2014), minimum factor loadings of 0.5 is preferable.

In the present study, after dropping one statement from each construct namely employee engagement and commitment, rest loaded significantly on their intended latent construct and were well above the preferred limit. Contrary to the three-dimensional model of employee engagement, the present study supported the single factor model (Sonnetag, 2003; Shimazu et al., 2008.). In case of transformational leadership, six-dimensional model with two statements each was observed. Table 1 shows the results of reliability and convergent validity of the constructs. The Cronbach value ranged between 0.860 to 0.938 which are well above the ideal limit of 0.70 (Nunnally, 1978).

(Table-1 here)

Discriminant validity is observed by the diagonal values as shown in Table 2. Further, it can be seen that AVE is greater than Maximum Shared Squared Variance (MSV). This indicate that discriminant validity was achieved. Various indices that depict the fitness of the data are shown in Table 3. Except CMIN/Df which is sensitive to sample size and considered to increase with large data (Malhotra, Nunan and Birks, 2017), all the other indices are well above the threshold limit. The assessment indicates that the theoretical account of the constructs is satisfactory.

(Table-2 here)

(Table-3 here)

Results

Summary Statistics

The descriptive Statistics of the measures are shown in Table 4. The intercorrelations among the constructs were statistically significant that provided an initial support to hypotheses of the present study.

(Table-4 here)

Analysis

To test mediation effect, a mediation model (Model 4) with PROCESS macro (Hayes, 2013) is used. The results presented in Table 5 revealed a significant influence of transformational leadership (TRFLDR) on employee engagement (ENGT) ($B= 0.69$, $p<.001$). It has been observed from Table 6 that both TRFLDR ($B= 0.37$, $p<.001$) and ENGT ($B= 0.39$, $p<.001$) had a direct effect on organizational commitment (COMT). Hence, H1, H2 and H3 are supported.



(Table-5 here)

(Table-6 here)

Table 7 depicts the indirect effect of TRFLDR on organizational commitment COMT via ENGT. The Zero did not fall between the confidence interval [CI= (0.162, 0.374)]. Hence, it is reported that there is a significant effect of TRFLDR on COMT through ENGT with $B = 0.27$ [CI= (0.162, 0.374)]. It is observed that direct effect as well as indirect effect of TRFLDR on COMT was statistically significant. Since the direct relation between the two remained significant even in the presence of ENGT, therefore, it is drawn that employee engagement partially mediated the TRFLDR-COMT relationship. Hence, H4 is partially accepted.

(Table-7 here)

Discussions and Conclusions

Organizations have always shown interest in discovering the positive employees' behavior so as to use it for the betterment. Employee Engagement is one such meaningful behavior (Saks, 2006) that predicts positive organizational outcome and act as excellent mean to achieve competitiveness and effectiveness. Still, there lacks an adequate amount of research that comprehend the effect of employee engagement in Indian context. The present study tries to fill that gap in the sense that it proposed and empirically analyzed an often-neglected relationship among employee engagement, transformational leadership and commitment. The finding supported the hypotheses H1, H2, H3 and partially accepted H4.

Employee engagement is a positive behavioral attitude that is vital for the success of the organization. Encouragement of such positive behavior is necessary. Vance (2006) believed that engagement and commitment can potentially translate into valuable business results for an organization. Since Leaders have a greatest influence on the subordinates specially in high power distance country like India (Organ, Podsakoff and MacKenzie, 2005; Varma, Srinivas and Stroh, 2005) and hence, they can significantly contribute in fostering engagement and commitment among employees. According to Welch (2011) engagement is a concern for those who directly communicate with employees as they can significantly stimulate their engagement level with the way they communicate. The transformational leaders, particularly, has the ability to influence its followers and extend the vision that helps the them to utilise their total amount of talent and potential in their job and aids in achieving organizational goals more effectively and efficiently. Tims, Bakker and Xanthopoulou (2011) argued to be the first to establish the relationship between transformational leadership and employee engagement. Later on, Hayati, Charkhabi and Naami (2014) also supported the existence of a positive link between transformational leadership and engagement



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in Iran. The results of the present study are in line with the previous study and indicated a positive effect of transformational leadership on engagement. Consistent with previous studies (Rowden, 2000; Emery and Barker, 2007; Mclaggan, Botha and Bezuidenhout, 2013) the present found a positive association between transformational leadership and organizational commitment as well. Further, study found the mediating effect of engagement on commitment. This is because transformational leaders are such that provide employees with challenging purpose and widen their sense of identification, and worthiness. Such leaders provide a good working culture that is characterised with mutual trust and respect. They stimulate employees' to challenge the traditionally accepted methods and provide them with relevant job resources, individualised consideration for their individual needs and growth. All these factors are strongly connected with improved employee engagement and commitment (Avolio et al., 2004; Attridge, 2009). Consequently, a general implication is focussing on promoting and adopting transformational leadership style is an organization. (Parry and Sinha, 2005).

The present study, however, is not free from limitations. The use of self-report survey to generate response may have biased the answers. There's a possibility that employees reacted in a way that favoured their actions. Future research should include studies that use a different sources and approaches to corroborate the relationships shown in the present study. Second, because the study is cross-sectional, causal inferences are not possible (West, 2011). As a result, longitudinal research designs are needed in the future to investigate changes in the relevant factors. Further studies could conduct the research with larger sample size and across different industries for the generalisation of the findings.

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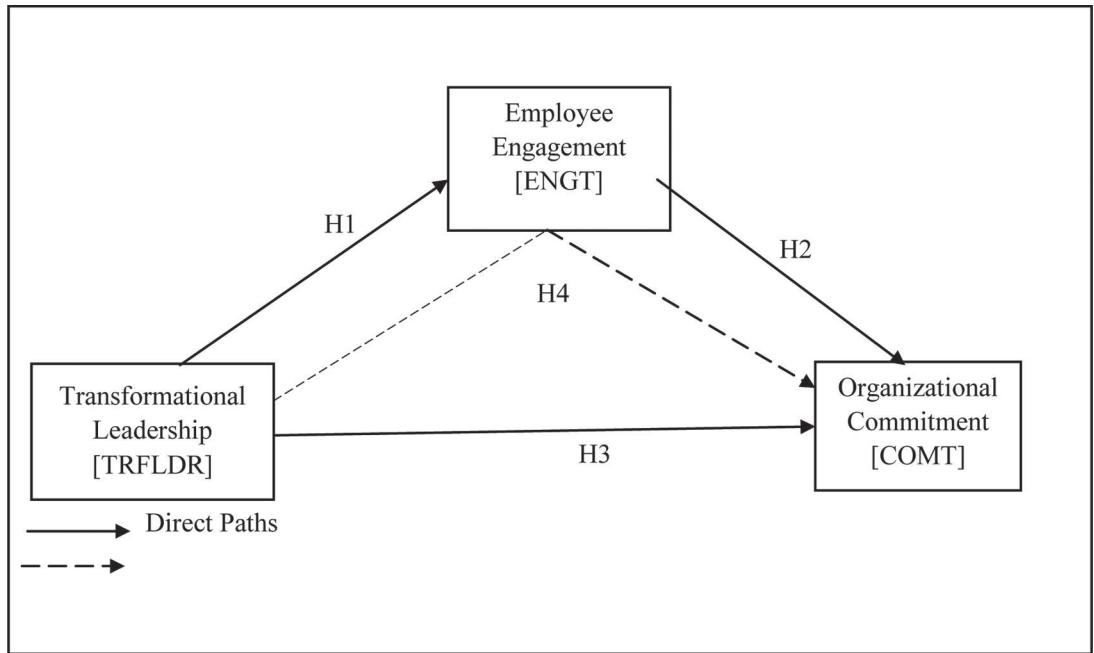


Figure 1: The Conceptual Model
 Source: The Authors

| Latent Construct | Items | Factor Loadings | Cronbach Alpha | AVE | CR |
|------------------|-------|-----------------|----------------|-------|-------|
| ENGT | ENGT1 | 0.809 | 0.926 | 0.621 | 0.929 |
| | ENGT2 | 0.887 | | | |
| | ENGT3 | 0.882 | | | |
| | ENGT4 | 0.816 | | | |
| | ENGT5 | 0.658 | | | |
| | ENGT6 | 0.725 | | | |
| | ENGT7 | 0.776 | | | |
| | ENGT8 | 0.714 | | | |
| COMT | COMT1 | 0.882 | 0.860 | 0.641 | 0.872 |
| | COMT2 | 0.910 | | | |
| | COMT3 | 0.849 | | | |
| | COMT5 | 0.477 | | | |



| | | | | | | |
|--------|-------|----------|-------|-------|-------|-------|
| TRFLDR | AV | TRFLDR1 | 0.728 | 0.938 | 0.731 | 0.941 |
| | | TRFLDR2 | 0.907 | | | |
| | AM | TRFLDR3 | 0.864 | | | |
| | | TRFLDR4 | 0.936 | | | |
| | FAG | TRFLDR5 | 0.923 | | | |
| | | TRFLDR6 | 0.877 | | | |
| | HPE | TRFLDR7 | 0.853 | | | |
| | | TRFLDR8 | 0.808 | | | |
| | IS | TRFLDR9 | 0.897 | | | |
| | | TRFLDR10 | 0.925 | | | |
| | INTST | TRFLDR11 | 0.818 | | | |
| | | TRFLDR12 | 0.836 | | | |

Table 1: Reliability and Convergent Validity Result

Sources: The Authors

Notes: AV: Articulating Vision; AM: Appropriate Model; FAG: Fostering Acceptance of Group goals; HPE: High Performance Expectations; IS: Individualised Support; INTST: Intellectual Stimulation

| | AVE | MSV | ENGT | COMT | TRFLDR |
|--------|-------|-------|--------------|--------------|--------------|
| ENGT | 0.621 | 0.569 | 0.788 | | |
| COMT | 0.641 | 0.403 | 0.630 | 0.801 | |
| TRFLDR | 0.730 | 0.569 | 0.754 | 0.635 | 0.854 |

Table 2: Discriminant Validity Result

Sources: The Authors

| Model fit Indices | CMIN/Df | SRMR | CFI | TRFLDRI | GFI |
|-------------------------------------------------------------------|---------|-------|------|---------|------|
| 8 items 1 factor model of ENGT | 9.225 | .0424 | .936 | .910 | .900 |
| 12 items 6 factor model of TRFLDR | 6.326 | .0468 | .941 | .919 | .908 |
| 4 items 1 factor model of COMT | 3.431 | .0160 | .995 | .986 | .993 |
| Acceptable Limits (Hu and Bentler, 1999 and Hair et al., 2014) | <5 | >.09 | >.09 | >.09 | >.09 |

Table 3: Fit Indices of the constructs

Source: The Authors



| Constructs | Mean | Standard Deviation | ENGT | COMT | TRFL-DR |
|------------|------|--------------------|--------|--------|---------|
| 1 ENGT | 5.33 | 1.09 | 1 | | |
| 2 COMT | 5.13 | 1.17 | .672** | 1 | |
| 3 TRFLDR | 5.30 | 1.24 | .796** | .680** | 1 |

Table 4: Descriptive Statistics, Reliabilities and Intercorrelations of the Constructs

Sources: The Authors

Note: **Significance is at level of .001

| Predictors | on ENGT | | | |
|----------------|---------|-------|----------|----------|
| | B | S.E. | Lower CI | Upper CI |
| TRFLDR | 0.69** | 0.025 | 0.650 | 0.748 |
| R ² | 0.63** | | | |
| F | 772.84 | | | |

Table 5: Direct Effect Result of TRFLDR on ENGT

Source: The Authors

Note: **Significance is at level of .001; B= Beta Value, CI=Class Interval

| Predictors | on COMT | | | |
|----------------|---------|-------|----------|----------|
| | B | S.E. | Lower CI | Upper CI |
| TRFLDR | 0.37** | 0.051 | 0.271 | 0.473 |
| ENGMT | 0.39** | 0.059 | 0.270 | 0.500 |
| R ² | 0.51** | | | |
| F | 231.66 | | | |

Table 6: Direct Effects Results

Source: The Authors

Note: **Significance is at level of .001

| Mediator | B | S.E. | Lower CI | Upper CI |
|----------|------|-------|----------|----------|
| ENGT | 0.27 | 0.054 | 0.162 | 0.374 |

Table 7: Indirect Effect Results of TRFLDR on COMT

Source: The Authors



Factors influencing the Return on Investment of Initial Coin Offerings (ICOs): Exploration of ICO companies

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Abstract

Purpose : This research therefore examines internal as well as external factors that may influence ICO's return on investment (ROI) by collecting data from 100 ICO companies with positive ROI between 2018 and 2020.

Design/Methodology/Approach : Overall, this is a mixed-method research. Based on a literature review a conceptual research model has been proposed which includes internal and external factors (incl. 9 hypotheses) that affect ICO ROI. A multiple regression analysis was employed to examine the causal relationships in the proposed research model.

Findings: The results indicate that internal factors such as publication of sources codes on GitHub, relevant ICO expert ratings, ETH platform usage, and pre-ICO processes and the external factors such as Google search data and number of tweets positively influence ICO ROI. The findings reveal that expert ratings and the number of tweets are the most critical internal and external factors.

Practical Implications & value: The findings and suggestions provided in this study will help the relevant investors for increasing public trust in the ICO market and enhancing investors' interest in this area of investment.

Keywords: Financial technology, Cryptocurrency, Initial Coin Offering, Return on investment

JEL Classification G11 · G20 · K22 · M13

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1. Introduction

Financial technology (FinTech) is an emerging industry that employs cutting-edge technologies to disrupt the existing financial service model. Blockchain, which emphasizes decentralization of the financial system by transferring of control from a centralized entity to a distributed network, is the most popular topic in FinTech (Swan, 2015). Blockchain is also recognized by investors and professionals as a novel technique with substantial potential (Ehrenberg & King, 2020). The implementation of blockchain has also focused attention on initial coin offerings (ICOs). However, most ICO offerings do not conform to the ‘standard investment paradigm’ because of “the ways value is created and attributed between the different participants of a network and the difficulty in quantifying that effect” (OECD, 2019, p. 7). ICOs have not only a potential to deliver a quick return, but they ‘can turn into an unrecoverable loss’ due to their high risks. (Dean et al., 2019). ICOs use mainstream cryptocurrencies, such as Bitcoin (BTC) and Ethereum (ETH) for transactions. Šapkauskienė and Pakėnaitė (2021) described ICO as a “new financing instrument for entrepreneurial ventures” (p.55) as it grows rapidly at the pace of distributed ledger technology (DTL) and cryptocurrencies. An ICO is a blockchain-based ‘crowdfunding’ mechanism that enables a group of or single entrepreneurs to issue new cryptocurrency in order to collect funds and avoid centralized processes (Giudici & Adhami, 2019). The emergence of ICOs has enabled startups to collect funds based on their business proposals. ICOs help increase productivity because they have no commission fees and target entities beyond financial institutions and enterprises and thus ICOs have become the most attractive funding model for startups (Wu et al., 2019). However, government supervision of ICOs is still limited, resulting in substantial information asymmetry risks between the ICO team and investors (Chod & Lyandres, 2019). Because of the rapid development of ICOs and the cryptocurrency market, there is a good number of literature focusing on the factors influencing the success rate of ICOs (Fisch, 2019). These factors include white paper details, publication of source code on GitHub, platform selection, pre-ICO processes, and team size (Fisch & Momtaz, 2020). Expert ratings and the campaign duration are also discussed as external factors in the literature (de Jong et al., 2018). On the other hand, announcements through social media which may promote the ICO (Momtaz, 2020), and frequent social media activity that may mitigate the information asymmetry problem (Fisch, 2019) are the two important internal factors.

Researchers have mostly used total collected funds as the indicator of a successful ICO (Momtaz, 2020). However, the amount of collected funds cannot guarantee future operation and profit following the ICO. Howell et al. (2020) argued that overcollection of funds results in more expenses and harms future operations. By contrast, return on investment (ROI) may be an appropriate indicator of ICO success



(Benedetti & Kostovetsky, 2018). According to our findings, most relevant research investigated the effect of known internal factors on ICO success rate. However, the definition of success rate for each study is varied. Hence, this research aims to fill the gap by integrating external factors as well as internal factors and using ICO ROI to represent ICO success. The two research questions therefore to address in this study are : (1) what are the internal and external factors that affect ICO ROI? and (2) how do internal and external factors differ in importance in ICO ROI?

2. Literature Review

FinTech has been developing rapidly in the finance industry, and it relates to topics such as network security, mobile transactions, data analytics, blockchain, online loans, chatbots, and Internet of Things technology (Chen et al., 2019). The cryptocurrency market is a FinTech application based on blockchain technology (Thakor, 2020). Blockchain uses encrypted blocks to connect and distribute ledger technology, enabling each block to be protected from modification after verification. Cryptocurrency is a novel trading media, and cryptocurrency assets can be regarded as real assets if the value of a currency is redefined (Liu et al., 2020). However, Frame et al. (2018) argued that cryptocurrency is merely an electronic token, not an asset. According to Huynh et al. (2020), the legitimacy of cryptocurrency is still under debate, but the market has become a popular form of investment. Cryptocurrencies generate new potential risks, and new methods should be developed for investor risk management. Tran and Leirvik (2020) have revealed that the number of cryptocurrency transactions has dramatically increased, and the price has increased accordingly. The price of a currency is positively associated with ROI. To address the demands of cryptocurrency users, many payment companies have begun offering cryptocurrency payment services.

An ICO is a fundraising method that involves receiving cryptocurrency from investors. The decentralization of ICOs can reduce extra ICO costs faced by startups and help them raise capital efficiently and rapidly (Burns & Moro, 2018). ICOs are similar to initial public offerings (IPOs) but without the associated supervision and regulations. Moreover, an ICO collects funds for the development of a business, whereas in an IPO, the business develops first before collecting funds. ICO fundraising is conducted mostly in the early stage of idea construction. Evaluating the potential value of the ICO is thus challenging. Researchers have investigated ICO success rates to help investors make judgments. A major disadvantage of ICO is information asymmetry (Adhami et al., 2018). The success of an ICO depends on relevant white paper details, publication of source code on GitHub, and pre-ICO processes. According to the study of Bourveau et al. (2018) success of ICO offerings is positively associated with the quality of disclosure and the information environment of token issuers. In this case, the frequency and quality of social media activity is important aspect of



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such an information environment. The study also found some critical characteristics of the secondary market characteristics. Token issuers with higher liquidity and volatility will be more likely to crash in the market if they have a high degree of opaque disclosures. Ahmad et al. (2021) investigated the success of ICO campaigns using data on 503 ICOs from 60 countries launched between 2015 and 2018. The results indicated that while the number of team members and advisors, contribute positively to the ICO's funding success and post-ICO activity, presale offers, and bonuses contributed negatively. Additionally, the results highlighted financial system development of a country and legal friendliness strongly determines the success of the ICO issue. Belitski and Boreiko (2021) examined the effect of ICO characteristics on ICO performance and found that three boundary conditions predict ICO fundraising amount,

such as number of investors, hard cap achievement and token ranking. The study also identified some other factors, such as serial investors, presale of tokens, bonus sales and funders' ownership share. Sharma and Zhu (2020) empirically investigated over 8000 blockchain companies and their study showed that ICO offering size, start bonus, VC backing, and social media are related to the success of ICO. The success factors that Dean et al. (2019) identified were investor sentiment, time horizons and correlations with other assets of the markets.

Relevant studies have mostly investigated the role of internal factors on the ICO success rate. However, investors and market sentiment are also influenced by social media (Benedetti & Kostovetsky, 2018; Fisch, 2019). Domingo et al. (2020) study suggested that the ICO return is positively influenced by the sentiment extracted from social networks. External factors such as the amount of Google search data may influence the ICO success rate (Gächter & Gächter, 2020).

3. Research Methodologies and hypotheses

Overall, this is a mixed-method research. Based on a literature review a conceptual research model has been proposed (Figure 1) which includes internal and external factors that affect ICO ROI. Internal factors refer to the features of an ICO company, which are relevant to the company and information revealed in public. Examples of such factors are white paper details, publication of source code on GitHub, pre-ICO stage processes, ETH platform selection, and team size (Fisch, 2019; de Jong et al., 2018; Burns & Moro, 2018). A white paper includes details on the specifications of the ICO and can help investors understand the real operation of the company. Having the ICO's source code on the GitHub platform can enhance exposure and security to influence willingness to invest. The expert ratings of credible ICO platforms is a key reference point for investors and the ratings came from trustable experts.

External factors are those that cannot be controlled by the funding company. Studies



have indicated that investors and market sentiment may be affected by factors related to the Internet (Benedetti & Kostovetsky, 2018; Fisch, 2019), such as Google search data (Gächter & Gächter, 2020), popularity on Google, and number of Twitter followers (Burns, 2018). Burns and Moro (2018), and Boreiko and Sahdev (2018) have revealed that Twitter has high information dissemination value, which can be leveraged by ICO companies to publicize their messages. Hence, we regard Google search data and the number of Twitter posts as critical external factors that influence the success of an ICO. Moreover, this research uses ICO ROI as the principal dependent variable based on relevant research (Fisch, 2019; Howell et al., 2020). The current approach differs from that of most related research, which has used the amount of collected funds in ICOs and is close to the success of the future business.

Hypotheses Development

A white paper is an official document that includes essential information for investors, and it is a major part of ICO activities (Cohney et al., 2019). An IPO specification disclosures provide information to the same standard as a whitepaper and are managed by the relevant government which provides investors with objective information. A white paper is the major channel for presenting ICO details and must be specific (Lashkov, 2018). Studies have investigated the association of the information contained in the white paper variables with ICO success; for example, the number of pages in a white paper is positively associated with ICO success rate (Amsden & Schweizer, 2018) and the lack of an ICO white paper may reduce the likelihood of ICO success (Fisch, 2019). Hence, we propose the following hypothesis:

H1a: Number of pages in an ICO white paper is associated with ICO ROI

Numerous ICO companies store complete or partial source code on GitHub to highlight the feasibility of their ICOs. Investors can pre-evaluate an ICO and its value by reviewing the source code and progress of that ICO. If ICO companies opt not to confirm their source code and store it on GitHub, the likelihood of ICO success diminishes (Amsden & Schweizer, 2018). The ICO guidebook for investors indicates the importance of scrutinizing source code before investing in an ICO (Mulders, 2018). Fisch (2019) also indicated that positive reviews of ICO source code influence ICO success. The visibility of GitHub enables investors to trace the progress of an ICO. Therefore, we propose the following hypothesis:

H1b: Storing of ICO source code on GitHub is associated with ICO ROI

During the ICO campaign duration, the company must still develop its product, and the intellectual properties such as patent or trademark are incomplete. Most investors lack sufficient domain knowledge to understand the techniques outlined in white papers and assess an ICO. That is, expert ratings is a crucial reference point for



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investors (Fisch, 2019). Mollick and Nanda (2016) reported that expert ratings can be employed through a third party that may be able to uncover reliable signs of risk. De Jong et al. (2018) indicated that expert ratings are positively associated with ICO success. Hence, we propose the following hypothesis:

H1c: ICO expert ratings is associated with ICO ROI

ETH is a blockchain platform that emerged in 2015, and Ether is the cryptocurrency it uses. Each node on ETH operates an ETH virtual machine to execute a complete program—the smart contract. Any individual can create their cryptocurrency by following related regulations (ERC20). ICO companies receive cryptocurrency through the use of smart contracts. According to ICOWatchList, 82% of ICOs issued currency on ETH. Moreover, the security level of ETH is mature, enabling rapid and convenient currency exchange (Amsden & Schweizer, 2018). The use of ETH is positively associated with fundraising potential (Amsden & Schweizer, 2018; Fisch, 2019). Thus, we propose the following hypothesis:

H1d: Use of the ETH platform for an ICO is associated with ICO ROI

Pre-ICO is the independent stage before the official ICO and after the private ICO. In this stage, cryptocurrencies can be used for transactions and investment. The funds collected during this stage help cover the cost of the official ICO. The costs consist of sales expenses and ICO setup costs, which can increase the speed of execution. Promotions offered by the ICO team in the pre-ICO stage may encourage investors to purchase this currency, thus raising the ICO success rate (Fisch & Momtaz, 2020). Crowdfunding focuses on attracting investors to join the project and maximizing fund collection (Vismara, 2018). A pre-ICO is positively associated with an ICO success rate (Adhami et al., 2018; de Jong et al., 2018). Hence, we propose the following hypothesis:

H1e: Pre-ICO is associated with ICO ROI

The literature has revealed that entrepreneur and team features are major criteria for investors (Block et al., 2019). Investors prefer large ICO teams because large team size indicates that more people are willing to contribute to the ICO. The problem-solving ability of large teams is also superior to that of small teams, thus enhancing the likelihood of ICO success. Human capital is positively associated with the amount of funds collected, and large ICO teams may use their large network to promote ICO development (Ahlers et al., 2015). A large ICO team is also positively associated with ICO success rate (Amsden & Schweizer, 2018; de Jong et al., 2018) and the final amount of collected funds (Burns & Moro, 2018). Hence, we propose the following hypothesis:



H1f: ICO team size is associated with ICO ROI

Crowdfunding researchers have tended to use the campaign duration as a control variable (Anglin et al., 2018; Vismara, 2016). Investors can use the time period of an ICO to determine the likelihood of the ICO raising a considerable amount of money. However, the campaign duration is strongly associated with the amount of funds collected, and a shorter campaign duration is more likely to achieve the expected goal (Courtney et al., 2017). That is, long campaign durations may diminish investor confidence and increase the difficulty of reaching the fundraising goal (Mollick, 2014). De Jong et al. (2018) revealed that a long campaign duration is negatively associated with the ICO success rate. Hence, we propose the following hypothesis:

H1g: ICO campaign duration is associated with ICO ROI

Market sentiment, which can be affected by media coverage, is another factor that influences ICO success (Benedetti & Kostovetsky, 2018; Fisch, 2019). As an example, ranking in Google trends was demonstrated to affect the ROI of cryptocurrencies (Sovbetov, 2018). Polasik et al. (2015) reported that a high Google search volume on BTC was associated with positive ROI. Google search volume is positively associated with ICO fundraising success (Gächter & Gächter, 2020; Burns & Moro, 2018). Thus, we propose the following hypothesis:

H2a: Google search volume on an ICO is associated with ICO ROI

Entrepreneurs use Twitter to manage their personal and company networks (Fischer & Reuber, 2011), which indicates that Twitter activity is critical to attracting potential investors. Kuppuswamy and Bayus (2017) calculated the number of tweets of an ICO team to measure enterprise activation. Benedetti and Kostovetsky (2018) also indicated that Twitter activity influenced the ICO market. Moreover, Burns and Moro (2018) reported that the number of Twitter followers positively influenced the amount of ICO funds raised and the ROI. Therefore, we propose the following hypothesis:

H2b: Number of tweets is associated with ICO ROI

Measurement

This research uses the number of pages of an ICO as one measurement. We use GitHub to investigate ICO source code data, and we establish a dummy variable to represent companies with (1) and without (0) code on this platform. We also use ICObench to examine expert ratings, with values ranging from 1 and 5. We establish a dummy variable to denote if an ICO is on the ETH platform (1) or not (0). The pre-ICO stage is the step before the ICO, and we set up a dummy variable to denote companies that employ (1) and do not employ (0) at this stage. Team size represents the number of people on the ICO team, and this number is used for measurement. Finally, we



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use total days to represent the campaign duration. We also use the ICO company's name as the keyword for Google search data collection (search volume) and number of tweets with the ICO company's name to represent the two external factors. This research uses ICO ROI as the dependent variable concerning the research of Burns and Moro (2018), who considered the ICO price difference between the 1st and the 120th day after fund collection was completed. Equation (1) presents the concept of ICO ROI, where P_1 and P_{120} are the prices on the 1st and 120th day after fund collection was completed, respectively. Finally, the number is converted by natural logarithm to reduce the absolute number as follows:

$$ROI = \ln\left(1 + \frac{P_{t=120} - P_{ICO}}{P_{ICO}}\right)$$

4. Results and discussion

We use data on ICO companies in operation between 2018 to 2020 which means started ICO after 2018 and ended before 2021. The data for estimating ICO ROI are collected from CoinMarketCap. There are nearly 250 companies between 2018 and 2020 but we filter samples by positive ICO ROI. The reason is results may reveal useful insights for future ICO companies. Finally, we include data for 100 ICO companies (see examples in Table 1 and full list in Appendix available at <https://bit.ly/ico-nmr>). This research uses public data on ICObench and ICOHODER to collect data for internal variables and data on Google and Twitter for external variables.

We employ multiple regression analysis to examine the causal relationships in the proposed research model. The results of collinearity analysis reveal that all variance inflation factor values are lower than 10, which indicates that each variable is independent (Table 2). This result indicates that white paper publication is not associated with ICO ROI ($p = 0.869$); thus, H1a is not supported. This finding is in accordance with that of Adhami et al. (2018), who reported that because ICO white papers have no public verification and review procedures, they may not attract potential investors. Moreover, investors require background knowledge to understand the technical details provided in a white paper (Jafery, 2018). The use of specific words or phrases in white papers was also not directly associated with ICO success in several studies (Moss et al., 2018), and studies have revealed white paper content with few modifications can help deliver accurate information to investors (Kim et al., 2016). Therefore, we infer that the feasibility of techniques in a white paper is more critical than is the number of pages.

The results also reveal that GitHub ($\beta = 0.069, p < 0.001$), expert ratings ($\beta = 0.442, p < 0.001$), ETH platform ($\beta = 0.09, p < 0.001$), and pre-ICO ($\beta = 0.159, p < 0.001$) positively influence ICO ROI. Hence, H1b, H1c, H1d, and H1e are supported. These



results are also consistent with related research on GitHub (Adhami et al., 2018; Amsden and Schweizer, 2018; Fisch, 2019), expert ratings (Mollick & Nanda, 2016; de Jong et al., 2018; Fisch and Momtaz, 2020), the ETH platform (Amsden and Schweizer, 2018; Fisch, 2019), and pre-ICO processes (Adhami et al., 2018; de Jong et al., 2018). Moreover, team size ($p = 0.191$) is not associated with ICO ROI; therefore, H1f is not supported. De Jong et al. (2018) indicated that the fundraising goal did not influence ICO ROI. Team size may influence the amount of ICO funds raised but not ICO ROI (Burns and Moro, 2018). Team size is not a determinant of ICO execution and not associated with future success. The result of ICO campaign duration ($p = 0.892$) is also not associated with ICO ROI; hence, H1g is not supported. Studies have indicated that the campaign duration is strongly associated with the amount of funds raised, with longer campaign durations diminishing the likelihood of ICO success (Mollick, 2014; Courtney et al., 2017). However, Vismara (2016) and Anglin et al. (2018) have reported that longer campaign durations increase the likelihood of collecting more funds. We infer that the campaign duration indicates the ICO team's acceptance of various levels of risk but not ICO success.

In terms of the effect of external factors on ICO ROI, Google search data ($\beta = 0.086$, $p < 0.01$) and number of tweets ($\beta = 0.17$, $p < 0.05$) are both positively associated with ICO ROI; thus, H2a and H2b are supported. ICO information on social media represents the visibility and potential value of the ICO team (Boreiko and Sahdev, 2018) and may help maximize fund collection. These results are in accordance with those of related research on Google search data (Gächter & Gächter, 2020; Burns & Moro, 2018) and number of Twitter followers (Benedetti & Kostovetsky, 2018; Fisch & Momtaz, 2020).

Discussion

Relevant studies have mostly investigated internal factors by focusing on the amount of funds collected during an ICO. By contrast, this research uses ICO ROI and adds external factors. The results (Table 3) indicate that the major factors in decreasing order of importance are expert ratings ($\beta = 0.442$), number of posts on Twitter ($\beta = 0.17$), pre-ICO use ($\beta = 0.159$), ETH platform use ($\beta = 0.09$), Google search data ($\beta = 0.086$), and availability of source code on GitHub use ($\beta = 0.069$). Kuppuswamy and Bayus (2017) indicated that regular tweets by an ICO company can help update investors on the ICO progress and reduce information asymmetry (Benedetti & Kostovetsky, 2018; Fisch, 2019). Twitter activity can influence the success of an ICO. Our results confirm that the number of tweets is the most crucial external factor and second most important factor overall in terms of the effect on ICO ROI. The fifth most important factor overall is Google search data. Both external factors are positively associated with ICO ROI, which is consistent with the viewpoint that social media activity may influence investors and market sentiment.



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Our results indicate that expert ratings have a larger effect on ICO ROI than do GitHub, ETH platform, and pre-ICO. As a factor, expert ratings indicates the recognition of third parties and is a credible indicator of risk (Mollick & Nanda, 2016). Most investors are concerned about the visibility of an ICO, and expert ratings can reduce the risk of information asymmetry. Expert ratings is similar to social media (external factors), which aims to enhance the publicity of a funding project. Our result confirm that expert ratings is positively associated with ICO ROI. Adhami et al. (2018) indicated that the use of GitHub and pre-ICO processes was positively associated with ICO success rate; in particular, pre-ICO processes are more critical than is the use of GitHub. These results are consistent with our findings as summarized in Table 3. Our results indicate that using the ETH platform is also more crucial than publishing source code on GitHub in terms of ICO ROI, which confirms the results of Fisch and Momtaz (2020).

5. Conclusion

The popularity of ICO enables investors to evaluate the complexity of diverse virtual currencies. Knowledge of the factors that influence ICO ROI are essential for increasing investor trusts in ICOs and attracting more people to invest in ICO projects. Different from previous studies that have tended to focus on ICO success rate, this research examines internal and external factors that may influence ICO ROI. We collect data on 100 ICO companies between 2018 and 2020 with positive ROI. The results indicate that internal factors such as publication of source code on GitHub, relevant ICO expert ratings, ETH platform usage, and pre-ICO processes and external factors such as Google search data and number of tweets positively influence ICO ROI. The findings reveal that expert ratings and number of tweets are the most critical internal and external factors, respectively. We discover that social media can reflect market sentiment and influence investors (Benedetti & Kostovetsky, 2018; Fisch, 2019). Our findings confirm the major role of external factors in ICO ROI and future management success.

Implications

In conventional IPOs, the market and competitors may influence outcomes. Hence, market sentiment may change investors' behaviour, indicating that external factors are also crucial to IPO companies. Similarly, company potential is a major consideration for investors in ICO startups, and the management performance directly influences the development of the company. Our findings indicate that expert ratings substantially influences ICO ROI. ICO companies must have a solid team as well as efficient and reliable execution ability to obtain high expert rating evaluation. Moreover, ICO companies should actively communicate with the public through social media to increase exposure and reduce information asymmetry. The popularity of social media can be leveraged to maximize ICO ROI, and ICO companies should emphasize the influence of external factors in the future.



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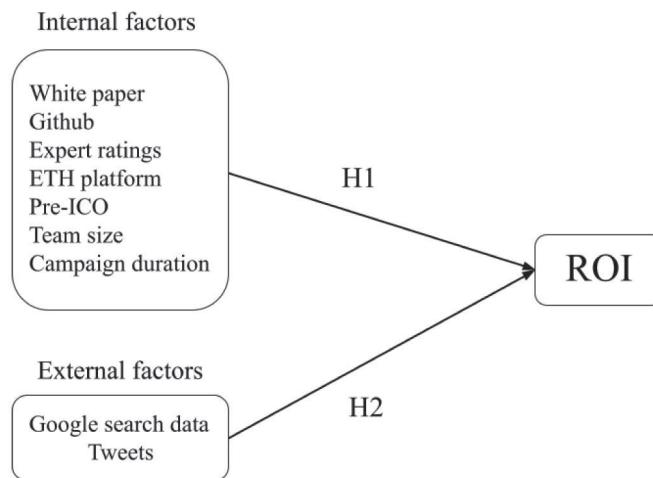


Figure 1 Research model

| ICO Com-pany | White paper (pages) | GitHub | Expert ratings | ETH | Pre-ICO | Team size (person) | Cam-paign dura-tion | Google search data | Tweets | ROI |
|------------------|---------------------|--------|----------------|-----|---------|--------------------|---------------------|--------------------|--------|--------|
| Lunes Platform | 86 | 1 | 4.5 | 1 | 1 | 63 | 15 | 13.0385 | 9.0783 | 1.7918 |
| Game.com | 52 | 1 | 3.3 | 1 | 1 | 39 | 50 | 13.6651 | 7.9215 | 1.2809 |
| Digitex | 16 | 0 | 2.4 | 0 | 0 | 19 | 90 | 12.8071 | 6.4265 | 0.4959 |
| Power Ledger | 93 | 1 | 4.8 | 1 | 1 | 70 | 15 | 15.3649 | 9.1601 | 1.9095 |
| Maester Protocol | 22 | 0 | 1.9 | 0 | 0 | 15 | 100 | 11.7981 | 5.8777 | 0.2469 |
| YGG-DRASH | 40 | 0 | 3 | 0 | 1 | 31 | 70 | 13.4303 | 6.9197 | 1.0296 |
| BCDi-ploma | 17 | 0 | 2.4 | 0 | 0 | 19 | 90 | 12.8186 | 6.4313 | 0.5176 |
| XAYA | 63 | 1 | 3.7 | 1 | 1 | 48 | 40 | 14.2289 | 8.4022 | 1.5041 |



| | | | | | | | | | | |
|-------------|----|---|-----|---|---|----|----|---------|--------|--------|
| Pan-the- | 33 | 1 | 2.8 | 0 | 0 | 24 | 80 | 13.1519 | 6.5971 | 0.7747 |
| Breeze Coin | 62 | 1 | 3.7 | 1 | 1 | 46 | 40 | 14.0830 | 8.3763 | 1.4784 |

Table 1 Data on a sample of 10 ICO companies

| ICO return on investment | | | | |
|---------------------------|-------------|-------------|----------|-------|
| | <i>B</i> | <i>SE B</i> | β | VIF |
| White paper | 0.000 | 0.001 | 0.007 | 3.378 |
| GitHub | 0.073*** | 0.015 | 0.069*** | 6.332 |
| Expert ratings | 0.276*** | 0.042 | 0.442*** | 4.085 |
| ETH platform | 0.095*** | 0.016 | 0.09*** | 5.948 |
| Pre-ICO | 0.172*** | 0.015 | 0.159*** | 4.382 |
| Team size | 0.002 | 0.001 | 0.048 | 5.483 |
| Funding time period | 0.000 | 0.002 | 0.014 | 3.878 |
| Google | 0.044** | 0.015 | 0.086** | 2.068 |
| Twitter | 0.081* | 0.034 | 0.17* | 3.756 |
| <i>R</i> ² | 0.84 | | | |
| <i>Adj R</i> ² | 0.78 | | | |
| <i>F</i> | 1802.135*** | | | |
| <i>df</i> | (9, 90) | | | |

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 2 Factors and ICO ROI

| Internal Factors | Result |
|------------------------------------------------------------------------------------------|---------------|
| H1a: Number of pages for ICO white paper is associated with ICO return on investment | Not supported |
| H1b: The store of ICO source code on GitHub is associated with ICO return on investment | Supported |
| H1c: Expert ratings of ICO is associated with ICO return on investment | Supported |
| H1d: The use of ETH platform for ICO is associated with ICO return on investment | Supported |
| H1e: Pre-ICO is associated with ICO return on investment | Supported |
| H1f: ICO team size is associated with ICO return on investment | Not supported |
| H1g: ICO funding time period is associated with ICO return on investment | Not supported |
| External Factors | Result |
| H2a: The amount of Google search data on ICO is associated with ICO return on investment | Supported |
| H2b: Number of Tweets is associated with ICO return on investment | Supported |

Table 3 Summary of hypothesis testing



“Engagement with social media, self-obsessive presentation on the web and interrelated self-esteem-A study related to urban lifestyle”

Sangita Ghosh*

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Abstract:

Purpose: The article examines how the new urban social classes are somewhat trapped into their insatiable appetite to experience happiness by overconsumption, social networking and ultimately ending up accumulating more stress.

Methodology: We are following descriptive research design in this study as it describes the characteristics of individuals. This study estimates centrally the percentage of responses of a specified sample population exhibiting a certain behavior. Two structured questionnaires are used to conduct two online surveys and with the help of those questionnaire, respondents are asked to express their opinions freely regarding their purchasing pattern, engagement with social media and their way of self-presentation. A total sample size of 87 is considered within the specified sample, 61 respondents are young adults and 13 are matured young adults, 12 are middle-aged and only one elderly respondent is interviewed to record their responses.

For this research statistical software, SPSS is used for analyzing the collected data deliberately for accurate results and methodological findings.

Finding and conclusion: The main aim of the paper is to investigate demographic, personality and individual differences are impactful to the addictive use of social media and self-presentation. The study reveals the results are consistent with previous researches and hypothesis formed with the results showing that the demographic parameters like age, gender, income, occupation are significantly contributed to narcissism and self-esteem with addictive use of social media.

Implication of study Engagement with social media and portraying a beautified picture-perfect life can provide a feel-good factor and actually act as a stress-buster in daily chores of life? Or this over engagement in the virtual world gradually pushing them to the corners of much-increasing loneliness, stress and depression. This present paper shall try to introspect and explore the various facets of engagement in social media in the context of the major cities of India and its impact on the individual’s everyday life.

Keywords: Self-obsessive presentation online, Addictive use of social media, self-esteem, Social media narcissism.



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Introduction

Modernity makes us happier or not it's a point of debate since long back at least to Rousseau¹ who claimed as the civilization becomes more contemporary marshaled a loss of genuine happiness. "The actual meaning to attain happiness is also manifested in the works of Durkheim, James, Locke, and Comte, all of whom envisaged how modernity affects the notion of happiness and individuality." Recent Economic changes in India coincided with a drastic change in lifestyle and consumer's aspirations and desires. Our culture of consumption inspired by western countries allows us to surrender to lure and engage with certain self-indulgent activities to console us without considering consequences. These self-indulgent activities may cause more anxiety, stress, and unhappiness, and by controlling them psychological state of mind can be improved. Because we must understand that only self-indulgent behavior like impulsive buying or brag-some expensive purchase over social networks and portraying a picture-perfect life is not the answer to all our worries. Instead, it is a never-ending cycle of anxiety, unfulfilled desires, and stress. We must become cautious about the fact that over-engagement with social media is another reason to invite stress, anxiety, even the feeling of lacking and other negative emotions.

The article examines how the new urban social classes are somewhat trapped into their insatiable appetite to experience happiness by overconsumption, social networking and ultimately ending up accumulating more stress. Affluent urban consumers believe in a philosophy to celebrate life every day and by this perceived ally to happiness which motivates them to become an impulsive buyer or they may become addicted to social media. The removal of restrictions on consumption of course, encourage mindless consumerism as the way out to all kind of stress even if the majority of population still lacks the economic ability. Consumerist culture has been interpreted as a control mechanism, environmentally disgraceful, ensuring redeeming meaning to life and emancipating in multiple ways (Bauman, 1997; Featherstone, 1987, Firat and Venkatesh, 1995; Marcuse, 1968; Sahlins, 1976; Twitchell, 1999). In neoliberal regime, consumer culture has drastically evolved, and many theorists agree that the modern day consumerist culture, which primarily started in the Western countries, has now downcasted deep roots across the world (Bauman, 1997; Belk, 1996; Venkatesh, 1994; Zukin and Maguire, 2004). Consumption precisely considered as global reality across every socio-economic strata. Post-colonial consumption pattern reflects imitative orientation and illuminates symbolic consumption conducive towards identity expression prevalent in middle to lower socioeconomic classes. This article reflects on how shopping decisions, consumption profiles, and aspirations are conveyed in redesigning social life and how the urban consumer base is constantly getting confined into these hollow way-out in search of happiness.

Many research articles predominantly focus on social media and personal happiness



or unhappiness relationship. Happiness or subjective well-being (SWB) pertains to the subjective estimation of one's life (Diener, 2000). It also involves cognitive and reasonings (i.e., life fulfillment) and emotional (i.e., constructive affect and adverse effect) components (Diener, 2000). Different studies on psychology reveal the fact social networking always encourages social comparisons in different spheres as if one's own life events are less exciting than their acquaintances and what they see on the web (Yang, 2016; Vogel, Rose, Roberts and Eckles, 2014; Vogel, Rose, Okdie, Eckles, and Franz, 2015).

Obviously, social networking does not affect the emotional behavior in a singular straightforward way as at times this potent way of self-representation plays dramatically different roles in different situations. Various analyses were conducted to study the data about posting recent purchases on social media or updating status information on the web is a modern way of self-presentation interchanges with consumers' happiness are influenced by self-esteem (Djafarova & Trofimenko, 2017, 2019).

1.1 Impact of personality trait like self-esteem, narcissism, isolation on the usage of social networks:

Instead of the predicted relationship between usage of social networking platforms and Big Five personality factors, earlier studies only found weak relationships among those personality traits and social networking (Hughes, Rowe, Batey, and Lee, 2012; Ross, Orr, Sisic, Arseneault, Simmering, and Orr, 2009). Researchers recommended that slender personality facets are more intricate to explain the online behavior of social media users. Ross et al. (2009). For instance, self-expressive users are more prone to employ self-representation features of SNS, such as updating recent activities and achievements and more no of pictures of themselves on their social networks (Pagani, Hofacker, and Goldsmith, 2011). Additionally, self-esteem is also an individuality that has been crucially related to SNS use (Mehdizadeh, 2010; Krämer, and Winter, 2008). Therefore, it is prevalent to be included in this study. Other researches in the same field, for instance, (Ellison, Steinfield, and Lampe, 2007) also found the most commonly and rigorously used social networking site Facebook is actually compensating lower self-esteem of individuals and the number of this kind of users in social networks is quite large. On the contrary, Gonzales and Hancock (2011) used ANOVA in a study with 63 student participants and reported self-esteem is positively, significantly associated with Facebook usage. This study demonstrates the argument that one can experience enhanced self-esteem by creating and updating self-promoting information on the profile because social networks enable oneself to regulate and generate self-produced posts regarding own achievements or activities about their life events freely and uncovering only positive traits and characteristics that emphasize self-esteem (Gonzales and Hancock, 2011). However, a number of studies reflect there is no considerable association between Facebook usage and self-esteem (Kalpidou, Costin,



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and Morris, 2011). Self-esteem is the most critical psychological component related to the concept of self (Heatherton and Wyland ,2003) which aids numerous societal and predominant functions (e.g.,to get involved and conformity in groups, redeeming purpose in life); (Leary, Tambor, Terdal, and Downs ,1995; Solomon, Greenberg and Pyszczynski ,1991). Markedly, self-esteem may be theorized as a typically constant trait that matures over time and all-encompassing state that is reactive to daily events and contexts (Błachnio, Przepiorka, and Pantic, 2016;Heatherton and Polivy, 1991). In particular, long term use of social media can affect self-esteem than incidental usage. Certain prior research pointed out that more frequent use of Facebook is significantly connected with a higher level of depression and may reduce psychological comfort. (Feinstein, Hershenberg, Bhatia, Latack, Meuwly, and Davila, 2013; Kalpidou, Costin, and Morris ,2011; Kross, Verduyn, Demiralp, Park, Lee, Lin, et al., 2013; Mehdizadeh ,2010; Rutledge, Gillmor, and Gillen ,2013). Moreover, some prominent research has focused on over engagement to Facebook or addictive use of social media and self-esteem (Błachnio, Przepiorka, and Pantic, 2016;Forest and Wood ,2012; Gonzales and Hancock ,2011; Wilcox and Stephen, 2013).

2. The focus of current research:

The potential influence of social networking over social comparison and consequences of the same over the psychological well-being of individuals is a dominant area of research nowadays (Vogel, Rose, Roberts, and Eckles, 2014). Extant research pointed that people always look and pretend happier in social media and they believe always the other social media users live a more exciting and better living in all respect than they have (Chou and Edge ,2012). Users, who are intensely involved in social media have more strong disclosure to such increasing social comparisons. However, preceding research in the offline framework also established that the increasing level of upward social comparison may inflate negative thoughts and decline the self-contented state of mind (Brown, Novick ,Lord, and Richards, 1992; Thornton and Moore, 1993; Wheeler and Miyake, 1992). The assumption of this study is aligned with several previous investigations, that people may suffer from negative feelings because of the social comparison generated by various social media platforms(Feinstein et al., 2013). The increasing no of social media users always try to compare and evaluate their own status with their pretentious ideal self(Haferkamp and Kramer, 2011), and these over engaged users of social networking sites often suffer from deflated psychological wellbeing (Kalpidou et al., 2011; Mehdizadeh, 2010; Kross et al., 2013). Integrating the findings of prior research and theories we assume people who are over engaged with social media have poor self-esteem which is well interrelated with upscaled societal comparisons on social networking sites. We hypothesized accordingly and tested these assumptions with two studies.



2.1 Objectives of the study

1. To understand various effects of social media, impulsive purchase, and the impacts over participants irrespective of age and income as demographic parameters.
2. This article investigates the impact of consumerist behavior, posting pictures of purchases on social networks and mood regulations from portraying the idealistic pretentiously happy self of the individual.
3. This article advances the understanding of how consumers are influenced by social media usage and mediating effect of self-esteem on upward social comparisons.
4. This study also investigates and provides insights into the role of self-presentation over social media to increase well-being .

3. Research Methodology

3.1 Hypotheses Formation

Previous researches on self-esteem already showed that high self-esteemed people always focus on their abilities, strength and motivations but in case of low self-esteemed individuals they tend to emphasize on deficits, weaknesses and negative characteristics (Baumeister and Tice, 1985; Brockner, 1979). Posting updates of recent or luxurious purchases on social networks or posting images of the affluent lifestyle would lead to self-obsessed portrayal of lifestyle. Such expression of self-presentation is distinctly different in low and high self-esteemed personalities. As a result, consumers with high self-esteem present materialistic self-exhibition while on the other hand individuals' having lower self-esteem may involve in more defensive self-representation. Current studies on self-presentation reveal an interesting fact that, in comparison to protective self-presentation, materialistic self presentation brings instant poignant benefits because it propels upward temperament modifications and contribute to pleasant feelings in social communications (Dunn, Biesanz, Human, and Finn, 2007) and such individuals find themselves cheerful and satisfied most of the time (Human, Biesanz, Parisotto, and Dunn, 2012). For this mentioned reason acquisitive or materialistic self-presentation enhances feel-good factor and psychological wellbeing (Kim and Lee, 2011; Wojcik and Ditto, 2014). But no empirical evidence suggests that defensive self-representation positively correlates happiness or well-being. Thus, it is the prime focus of the current research to assume that engagement in various social media and luxury purchases and updating on social media would associate with self-esteem in influencing happiness.

H0: Addictive use of social media, consumerist behavior, posting purchases on



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social media and portraying beautified, idealistic picture-perfect life has no effects on consumers' happiness and mood regulation where self-esteem behaves as the predictor.

H1: Addictive use of social media, consumerist behavior, posting purchases on social media and portraying beautified idealistic picture-perfect life has significant effects on consumers' happiness and mood regulation where self-esteem behaves as the predictor.

1.2 Method and procedure

This study follows descriptive research design because it demonstrates the attributes of individuals. The proportion of reactions of a stated sample population displaying a definite behavior is also being exhibited in this present study. This study created segments according to the opinion of dissimilar age and income group respondents and prediction regarding the consumer's psychology. For the sake of time and cost constraints, the study was focused on three demographic parameters i.e. gender, age, and income. The study used a structured questionnaire to understand and develop in-depth knowledge of consumer's perception of change in consumption pattern in everyday life of the urban class. Data collection was based on two criteria i.e. income and age. Respondents earn an average monthly income of Rs 8,000 to Rs 20,000 (lower income group) and Rs 20,001 to Rs 50,000 (middle income group) and Rs 50,001 to Rs 1,00,000 (higher income group) and more than Rs 1,00,000 (higher high-income group) and not yet earning. There was four age grouped i.e. young adults (18 to 25 years), matured adults (25 to 35years), middle-aged (35 to 45 years) and elderly (45 years above).

The four age groups of consumers namely young adults, matured adults, middle-aged and elderly are considered for the survey. For the purpose of recording responses, each group was requested to communicate freely their opinions on their buying patterns as well as regarding their social media usage on a number of closed-ended and open-ended questions. For this study, a structured questionnaire was used.

To fulfill the objective of the study all the questions are designed in the questionnaire. At first, questions were asked to respond whether respondents feel that their habit of spending time in social media is impactful to their emotions. Then they were inquired to state how much time they devote on social media on different activities like socialization, posting purchases or other posting activities and whether they get involved with impulsive buying activities influenced by social media advertisements, etc. Next, we tried to capture responses regarding their happiness and overall wellbeing, whether getting affected by engagement with social media and this engagement is leading any behavioral change in them. We also tried to interpret an individual's shopping habit and the impact of social media on mood change or our



purchase behavior in general, with a 10-point rating scale. We also tried to capture individual's perception and consideration over happiness and how they consider themselves as happy people when they are engaged with social media and finally, we tried to identify individual's experiences and the reason for involvement with social media.

3.3. Population for the survey

In the study to establish the assumptions based on prior research works selected sample population was chosen from the different city dwellers of India. In this study, the survey was conducted in three major Indian cities namely Kolkata, Delhi, and Bhubaneswar. One of the cities is in the central region of India and the other two cities are located in the eastern region of India.

1.3 Sample size

The first online survey is piloted with a total sample size of 87 to explore the objectives of the current study. Within that specified sample, 61 respondents were young adults and 13 were matured young adults, 12 were middle-aged and only one elderly respondent was participated to record their responses. These four ages grouped respondents were further categorized as per their household income i.e. the higher high-income group is considered whose average monthly household income is more than Rs 1,00,000 and those respondents whose monthly household income is Rs 50,000 to Rs 1,00,000 were considered as higher income group. Average monthly household income Rs 20,001 to Rs 50,000 per month was regarded as middle-income group and average monthly income Rs 8,000 to 20,000 (household income) was considered as lower-income group and we have got 15 respondents from higher high-income group, 13 respondents from the high-income group, 21 middle-income groups and only two respondents are from lower-income group and other than income respondents we have got 36 respondents who have not started earning yet but from higher high-income holder family.

1.4 Data collection and analysis

In the data collection stage, we have conducted an online survey through a structured Google form. Respondents who agreed to answer the survey questions were asked regarding their purchasing behavioral pattern, engagement with social networking sites and their way of self-presentation.

The analysis for this study was done with the help of statistical software SPSS and R programming language to analyze the collected first-hand data in a deliberate way.



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1.5 Data Analysis and Interpretation

We found a set of 87 respondents who answered the survey questionnaire. From the data set to obtain the optimum number of a cluster solution, analysis is done by running a hierarchical clustering algorithm on the variables. We tried different cluster solutions and found that the three-cluster solution provides us with the best interpretation of clusters and we can better describe the characteristics of each cluster with a significant difference.

Generally, interval-scaled variables are ideally suited for cluster analysis. As our questionnaire contains most of the questions with the scaling technique, we have chosen cluster analysis as a method of combining similar characteristics of respondents.

If we go back to the original variables (in our study, 15 questions including demographic information were present in the form of a structured questionnaire) and tried to infer the behavior of clusters in terms of the 15 variables.

Hierarchical Cluster for Social Media Analysis

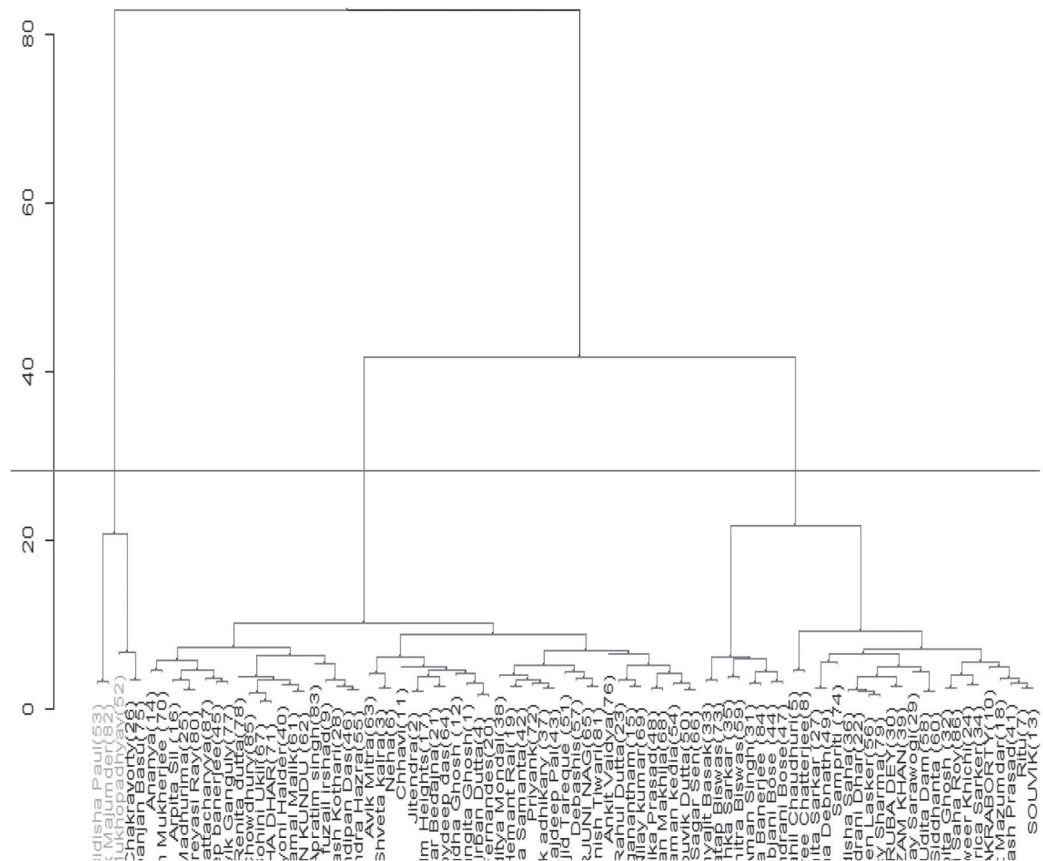


Figure 1: Hierarchical Cluster for social media users



Cluster 1: Heavy Spenders and Impulsive Buyers:

People belonging to this cluster are young adults i.e. within 18 to 25 years of age group are high spenders even if they have still not started earning. They are not careful at all regarding their spending habits and 80% of their money, they spent on shopping. We can easily mark them as impulsive buyers and engaged in consumerist behavior consciously or unconsciously. They describe their experience and engagement with social media is to get temporary pleasure or to reconnect with old friends and they agree that their involvement with several social media platforms affecting their mood regulation as well as overall wellbeing.

In terms of happiness, these respondents mark themselves as not very happy or neither happy nor unhappy. So, we can interpret this cluster as high spenders but still not getting ample satisfaction and happiness from their involvement with social media or habit of consumerism. They may find temporary pleasure from over-engagement with social media but ultimately getting trapped with the never-ending cycle of unhappiness, stress, and overconsumption.

It is thus a cluster exhibiting many lifestyle factors of the urban upper class who are trying to comfort themselves with self-indulgent consumerist behavior and portraying themselves as savvy consumers by posting their luxurious purchase over social media platforms but ultimately a little worried because these behavior does not provide them abundant happiness.

Cluster 2 Economy Oriented Thinkers:

People belonging to this cluster are not high spenders and not too impulsive in their shopping habits. We can interpret them as not very aggressive buyers and are too particular about thinking before spending. They don't get involved in the brag some posting of luxury purchases over social media. Basically, these groups of respondents' value economics rather than social status up-gradation. This group is not pretty sure about social media's role as a mood enhancer. We can describe this group as a thinker and not too much influenced by other's activities and posts over social media. In terms of happiness, this group of respondents believes themselves as neither happy nor unhappy and they perceive their state of mind doesn't depend or influenced much with involvement with social media.

Cluster 3 Value-Oriented Neutral shoppers: People belonging to this cluster are mostly middle-aged respondents who think twice before buying. They are mostly indifferent to social media's influence over their behavioral change or mood up-gradation. They don't perceive social media as a strong influencer over their happiness and overall wellbeing. They basically describe their involvement with social networking sites to reconnect with old friends. They value quality products and



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get involved in purchase activities depending on the need level. They are not always priced sensitive but cautious regarding spending and only value quality products. They are not necessarily influenced heavily by social media advertisements and always want to spend money on occasions which are worth-while, if and only if they see the value, they may spend a lot.

In brief, by hierarchical cluster analysis, we can infer a lot regarding the segments of respondents that exist in the target population of urban, higher high to middle income and young adults to elderly age group consumers.

In our recent study of the influence of social media over an individual’s happiness, we have used one way ANOVA with one categorical independent variable age and in second case gender, and one dependent variable which is metric (continuous) i.e. the ratings are given by different groups of respondents regarding the impact of usage of social networking over mood change and behavioral changes they feel (if any) or regarding individual’s purchase behavior in general. From the result, we can clearly see that age as an independent factor is not significantly combined with ratings of individual respondents.

ANOVA

Now consider the impact of social media usage on mood change or our purchase behavior in General. On a scale of 1 to 10, where 1 is not at all influenced and 10 is fully influenced, how would you rate the influence of social media on your mood modification?

| | | Sum of | | Mean | | | |
|---------------|------------|------------|--------|--------|-------|-------|------|
| | | Squares | df | Square | F | Sig. | |
| Between | (Combined) | 17.484 | 4 | 4.371 | 1.324 | .268 | |
| Groups | Linear | Unweighted | 8.642 | 1 | 8.642 | 2.617 | .110 |
| | | Weighted | 4.825 | 1 | 4.825 | 1.461 | .230 |
| | Term | Deviation | 12.659 | 3 | 4.220 | 1.278 | .288 |
| Within Groups | | 270.792 | 82 | 3.302 | | | |
| Total | | 288.276 | 86 | | | | |

Table 1 ANOVA table to show impact of age as independent variable over influence of social media on mood modification

If we consider gender as an independent variable and ratings of respondents as a metric dependent variable and using ANOVA we try to interpret whether they are statistically significantly combined with each other or not, we find the result is not significantly associated with gender as well.

Study 2:

Study 2 has two purposes. First to identify whether an individual respondent having higher self-esteem behaves differently from a respondent having lower self-esteem with respect to their way of self-presentation and how they correlate their happiness with self-presentation. Material Value Scale MVS as described by Richins and Dawson (1992) interprets an individual's environment and structure of life. Materialism is according to them an important parameter described and acquiring material resources can cause an elevated state of happiness and may help in accomplishing important life goals. Material values comprising three major domains as being described by Richin and Dawson are instrumental to judge how successful are others in comparison to ourselves, we use to compare possessions of others and ours, we believe possession is the pivotal life goal, and we believe with certainty that possession only leads to accomplishment and satisfaction. This concept of materialistic acquisition is linked with self-presentation style, which is being analysed in the current study. We may attain a greater amount of happiness and satisfaction by not only acquiring materialistic resources, but we also want to encourage comparison of our acquired possessions and this style of self-promoting presentation can provide meaning to our lives. This concept of self-obsessed and material-centric view is proposed by several previous researches and we want to evaluate the strength of the concept with our empirical findings. The participants have asked to respond to how many times they updated about their purchases on social media in the past six months and then asked to express their opinion to a scale assessing happiness and self-worth to evaluate self-esteem. Validated Rosenberg Self-Esteem Scale Rosenberg (1965) has been used, which measures how people evaluate themselves and feel self-worth (e.g., "I feel that I am a person of worth, at least on an equal plane to others"). Thirdly to determine exposure to societal evaluation or comparison, we tried to note the responses about the extent to which respondents focus on people who are way better than or worse off in comparison to themselves on social media platforms.

The respondents are also asked to mention their type of post in social media and the frequency of posting in the past six months and whether they posted their own achievement, life event, day to day activities or some important event which made them feel truly successful. Finally, they answered demographic questions.

4. Result

Group Differences: ANOVA reveals the cause and effect of independent variables like age, gender educational level and income these demographic parameters on a dependent variable like the rating given by the respondents on different addictive parameters of social media usage. With demographic parameter gender, we have got the result of F test as 0.129 in case of social comparison i.e. if social comparison has no



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effect on gender difference and as the significance level of F test is greater than 0.05, we can say the ratings given by respondents of different gender are not significantly different in case of social comparison. The same result can be seen in case of being motivated to other positive posts on social media i.e. male and female being motivated towards other positive posts are not significantly different. The involvement with social media is impactful to mood modification and self-promoting content posting is not significantly different from gender. On the other hand, in the case of socialization, both males and females use social media with no significant differences as the F test result ($\text{sig}=0.766>0.05$). In the case of posting recent purchases on social media is also not significantly different in the case of male and female as the F test result ($\text{sig}=0.736>0.05$). To describe the addictive, use of social media we have got no significantly different opinions of male and female as they have responded regarding their restlessness if they are restricted to access social media and whether they feel their time spent on social media encourages any kind of negative emotions like envy, feeling of lacking and stress. The F test ($\text{sig}=0.560>0.05$) reveals male and female respondents are not significantly different in responding regarding their number of times per day checking social media profiles and the frequency of post regarding their recent purchases in the last six months as the result of F test ($\text{sig}=0.863>0.05$). Only the result of the F test shows males and females both get involved with impulsive purchases by exposure of an advertisement on different social media platforms with significant differences. In all other cases of addictive use of social media, we can see gender as a demographic parameter is not statistically significant at 95% confidence level.

ANOVA reveals the result of the F Test as the extent of involvement with social media of different demographic parameters like gender, income education level and occupation are not statistically significant at the 95% confidence level. But in case of age as a demographic parameter, we can see the result of F Test ($\text{sig}=0.015<0.05$) reveals different age groups of respondents get involved in impulsive purchase with the influence of online advertisements differently. The same differences in responses of different age grouped people are also statistically significant in case of posting purchases in the past six months($\text{sig}=0.009<0.05$) and feeling of restlessness if restricted to use social media ($\text{sig}=0.025<0.05$) is established from the result of F test.

4.1 Correlation analysis:

For the social media addiction variables with demographic parameters like age and gender, the correlation is observed. A negative and significant correlation is found with narcissism and age as from the correlation table we can see the age and a narcissistic statement like “I expect a great deal from other people” negatively correlated at 99% confidence levels (correlation coefficient-0.460)



A positive and significant correlation is observed with self-esteem and narcissism (correlation coefficient 0.598) at 99% confidence level. Contrary to this addictive and somewhat excessive use of social media with an individual's self-esteem is negatively correlated. (Medium to small effect as correlation coefficient is negative -0.2).

To test the hypothesis whether addictive use of social media and mood modification of user is dependent on interrelated self-esteem, we used regression with the stepwise selection process in SPSS. Here we have taken interaction of mood modification and addictive use of social media as the dependent variables and self-esteem as an independent variable. The result shows the value of R square 0.500 i.e. the model explains 50% overall variances with variables. The result of ANOVA also reflects that the association between mood modification and addictive social media usage and self-esteem as a predictor is statistically significant.

To test the hypothesis whether the frequency of posting purchases recently (in past six months) over social media and mood modification is significantly associated with self-esteem as a predictor we again used multiple regression analysis in SPSS, but the result is not statistically significant as the value of R square is only 0.226. So according to our study, the interaction effect of two variables i.e. frequency of posting purchase in the last six months and mood modification is not dependent on self-esteem as a personality trait. The result is the same if we take the principal factors extracted from 10 statements mentioned by Rosenberg's self-esteem scale.

In study 2 we took responses to understand different reasons for social media usage and the frequency of checking social media profiles per day and we have done principal component analysis with SPSS and extracted two components with Eigenvalues >1. For factor one we have got Eigenvalue 2.304 and for factor two we have got Eigenvalue 1.276. Next, we have done multiple regression with interaction effect of these extracted factors of social media usage and mood modifications as dependent variable and self-esteem as an independent variable and the value of R square is much less so we can say the model is not statistically significant.

The result of ANOVA also explains the model is not statistically significant. So, we can conclude the social media usage and mood change are not dependent on self-esteem as a personality trait.

5. Outcome and Conclusion

Extant research found that using social media momentary mood regulations, encouragement of shallow relations with minimal expectations and planning for enjoyment may enhance the level of satisfaction. It has been observed excessive use of Facebook and other social networking sites and increased socialization is positively correlated with mood modification, and therefore a feeling of serenity in



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life can be attained. Researchers also established that the ‘emotional contamination’ of posts in social networking sites functioned as emotive encounter happens offline, where people with cheerful nature interact with others and makes an individual more content, while negative people make us feel less comfortable and gratifying.

Some previous researches only highlighted the adverse emotional and psychological consequences of social media but there are other aspects too. Others emphasised certain potential positive emotional support may also come along the path because people do situational different things in this platform of the social network. In fact, a user may experience varied involvements with several platforms in social media. Most popular social networking sites like Instagram, Facebook are not only used for a single purpose but can be used differently depending on the objectives of the individual user. Obviously, when social media platforms are used for different reasons at different timeframes, it does not affect an emotional state to a large extent. Modern society is facing stressful circumstances in various ways. So coping behaviors to stress involve “instrumental coping behavior,” which is finding way out in certain typical ways to resolve the core reason of the problem, and “responsive coping behavior, “which is to maintain and confirm one’s sense of well-being (Folkman and Lazarus,1985). This study examines engagement with social media as well as shopping as “emotional coping behavior,” which has defined as “diversifying behavior”. Posting pictures of purchased goods over social media is a compulsive post-purchase behavior to gain happiness nowadays. Tauber (1972) in his research categorized the motives for shopping primarily into two types i.e. individualistic motives and societal motives. Individualistic motives included role-playing, diversion, self-indulgence, understanding about new trends and imitation of the same and physical encouragement. Researchers also found that diversion motive from stress largely includes the motive for mindless over-purchase or shopping without considering consequences. This current study examines the relationship between handling stress with impulsive buying and living in the virtual world of social media. Impulsive buying, as the name itself, proposes an act which is generally illogical or irrational and considered as an undesirable kind of purchase and often a feeling of regret is followed afterward (Sekiguchi,1985;Hama,2001).However, modern contemporary researches have inferred that urban dwellers at large value self-indulgent behavior like impulsive buying (e.g., “It was right to have bought it,” or “It helped to get rid of stress”) was amplified self-love greatly. So, the self-indulgent consumerist behavior associated with unreal showoff of picture-perfect life is tricking every individual irrespective of age and income as a demographic parameter. This study highlights the effects of updating social networks regarding recent purchases and over engagement with the social media ,based on two surveys collecting the factual data. The survey results clearly showing that there were significant interrelations between involvements with social media and posting purchases on happiness among individuals with higher levels of self-esteem, also enhanced level of satisfaction is



observed when posting pictures updating about luxurious purchase. However, among the lower self-esteem individuals, addictive use of social media is significant behaviour, but no substantial effect was seen for posting an important purchase on life satisfaction. As the present study reveals narcissistic behavior and self-esteem are positively correlated and individuals with self-obsession portray a cognitive self-presentation on the web, which is in line with the assumptions we have made from different kinds of literature. This finding suggests, self-representation through one's posting of updates regarding recent purchases of high valued items on social media has a disparity in consequences among higher self-esteem consumers and lower self-esteem consumers.

6. Discussion

The principal objective of the paper is to explore the responses of urban consumers of different demographic profiles because individual respondents are behaving differently with respect to excessive involvement in social networking sites and self-representation. Our current study reveals the results of statistical analysis which are steadily aligned with previous researches, as the results showing that the demographic parameters like age, gender, income, occupation are significantly correlated with self-obsession and self-esteem along with addictive use of social media. It is most likely that narcissism as a phenomenon is significantly correlated with the addictive usage of social media and gives the impression to impose a moderate effect. This is in line with the previous researches and hypothesis. Twitter, Facebook, Instagram, Snapchat, and other social networks are applied as an ideal social arena for individuals. Previous studies also showed that the users of these social networking sites have different purposes (Ryan and Xenos, 2011; Wang, Tchernev, and Solloway, 2012), as these social networks facilitate to satisfy the ego by the influence of prompt reaction from possibly large numbers of people connected to them in any way. These online social networks legitimately fulfill one's need for affiliation, recognition, and self-worth. Social media helps to conform with an individual's conviction regarding ideal self and this faith is reflective with self-obsessed personalities. This is related to the result of the studies which revealed that narcissism is certainly related to frequent profile updates with special activities of accomplishment like exercises, diet or holiday showcasing (Marshall, Lefringhausen, & Ferenczi, 2015).

Self-esteem is negatively correlated with an addictive usage of social networking in the present study. This finding reassured and in line with previous researches (e.g., Hong et al. (2014); Malik & Khan (2015); Wang et al. (2012); Wilson et al. (2010)), and may infer that maximum number of individuals are engaged in social networking to practice self-recognition and affiliation. Higher level of self-esteem implies affiliation, self worth (i.e., gathering "likes" and conformity of norm within-groups), and/or to spurt from feelings of dissatisfaction and lacking in case of low self-esteem



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(Andreassen ,2015). But individuals with inadequate self-worth and self-image may choose to engage themselves behind the screen i.e. online instead of in person. Thus, engagement with social media has a correlation with individualistic self-esteem.

7. The Implication of Current Research, Limitations , Future Scope

This study involves all the common limitations using an online survey and convenience sampling methodology as mentioned by Kuss et al. (2014). Nevertheless, as per the two online survey questionnaires, the full assortment of tallies on the entire set of variables is represented in the data.

After successful digitization in most of the spheres of the Indian market, the third-largest country in terms of Internet access is rightly reaping the benefits. With such developments, individuals, more intensely urban dwellers, while pursuing fast lives are easily falling prey to doses of stresses and becoming prone to depression. This present paper shall try to introspect and explore the various facets of engagement in social media and its impact on the individual's everyday life.

The current study concludes that people always try to show themselves happy on social networks, and as they overemphasize this not so real picture of their daily lives, a constant pressure to represent happy self with happy pictures and faces accumulate strss. In social media negative emotions like frustrations are expressed sarcastically, but happiness is not actually evident. In this regard, the consequences of skyhigh aspirations are also prevalent .Thus, modern individuals always aspire to attain happiness. Social media provides numerous options for communications (Berger, 2012). Facebook status updates or public Tweets are only a representation of happy-self or delightful representation in order to portray a deceptive view of their lives to a presumed audience. In most Asian countries especially in India true feeling of delightfulness is all about the societal conformity and acceptance. So public display of happy-self into social media proliferate and simply become new norm, a place to express a pretentious appearance of feeling happy and content (Rettberg, 2017). The social network sometimes a pathway to recombine with old friends and to cherish the memory. It may be a wonderland to show the original, real picture of delightfulness or to pretend a fake amused face for the audience (Yau & Reich 2019). The main focus of our study is to determine whether social networking is impactful to an individual's state of mind, mood modification and overall wellbeing and to understand whether people are genuinely happy, or they simply seem happier because of deceptive rather pretentious self representation on social media. Rather it is only instrumental in learning how we are habitually representing ourselves in social media and falsifying our understanding about actual happiness.Future research may find answer to the meaning of actual happiness and the operative pathways to attain the same with theoretical and empirical evidence.



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