CAPITAL STRUCTURE AND FIRMS' PROFITABILITY: EMPIRICAL EVIDENCE FROM INDIAN GREEN INDUSTRY

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ABSTRACT

Taking into account all the Green Companies constituting S&P BSE GREENEX, this study aims to derive relationship between capital structure and profitability over a period of 10 years ranging from April 2010 to March 2020. Capital Structure is indicated by Debt-Equity ratio, an accounting based measure of financial leverage and profitability is indicated by Return on Assets and Return on Equity. Variations due to several other industry or firm specific factors are controlled by using control variables namely age, size, sales GR and tangibility and analysis of information available is done with the help of multiple regression technique. The study asserts a positive and significant relationship of Debt-Equity Ratio with Return on Equity and Return on Assets both and signifies that highly levered firms are more profitable in comparison to low levered firms. Although positive relationship of Age, Sales GR and Tangibility with Debt-Equity Ratio is exhibited, study derived a negative and significant relationship between Size and profitability of Green Companies. Financial Leverage is a significant factor causing variations in profitability, but there are other firm, industry or environment specific factors also which cause variations in profitability.

Keywords: Green Company, Leverage, Debt-Equity Ratio, Return on Assets, Return on Equity

INTRODUCTION

Every firm needs funds to finance its assets and routine operating activities. Just as the blood propagation through every organ of human body is required for its efficient functioning, adequate flow of funds is also required for well maintenance of every business activity throughout the organization. But it is not always possible for a firm to possess all of its required funds at their own. There arises a need for external financing. Degree of debts used by a firm to finance its assets and activities is known as financial leverage. Although debt financing provides tax benefits because payment of interest on debt is not taxed in the hands of firms, it imposes financial burden in the form of fixed interest payments and increases the risk of bankruptcy. In case of equity financing, there is no fixed financial burden on the firms but it increases expectation of shareholders and they demand higher risk premium which leads to higher overall cost of capital. Practically it is not feasible to depend entirely on either debt or equity. Hence it is imperative to determine the extent of debts and equity in the capital structure so as to keep average cost of capital at minimum and profits at maximum.

RATIONALE OF THE STUDY

There are various theories of capital structure to assist the managers while taking capital structure decision. The proportion of debt and equity does not impact the cost of capital or the returns on capital employed as per MM approach (Modigliani and Miller, 1958); the firm should use its own resources such as retained earnings etc. to fulfill the extra needs of capital and avoid external financing as per pecking order theory (Myers and Majluf, 1984); larger portion of equity increases agency costs of the firms as per agency theory (Jensen and Meckling, 1976); debt and equity should be used by trading off all the costs and benefits associated with them as per trade off theory. It is evident from the above discussion that the conflicting views are prevailing regarding the optimum capital structure of a firm and consequently it becomes a subjective matter of financial manager of an organization to decide the same by keeping in view various factors affecting it.

OBJECTIVE

To study the effect of capital structure and other control variables on the profitability of Indian Green Companies.

REVIEW OF LITERATURE

There is a considerable amount of literature available related to the capital structure decision nationally as well as internationally:

El-Sayed Ebaid (2009) undertook a research study in Egyptian capital market about effect of leverage in firms' results taking 64 companies listed on Egyptian stock market as the sample for a period of 1997 to 2005. While controlling the effect of firms' size on its performance, the study revealed a week to no effect of leverage on of firms' profit. Gill and Obradovich (2013) revealed that the size of board has an adverse effect on American firms' valuation while leverage, firm size, ROA, insider holdings, CEO duality and audit committee have an affirmative and significant effect on value of American manufacturing and service sector companies.

A research study was conducted by Raza (2013) using sample of 482 companies of Karachi Stock Exchange, taking data for a time span of 6 years. This study revealed a negative and insignificant relationship between firms' leverage and performance giving support to Pecking Order Theory. Perinpanathan (2014) conducted a study in Shri Lanka taking only one firm namely John Keells Holding Plc, to constitute its sample and resulted a negative and significant association between leverage and the performance of firms.

Dawar (2014) investigated the impressions of leverage on productivity of firms taking a sample of 78 companies from S & P BSE 100 Index. While controlling difference in industry or firm related factors this study exhibited a negative and significant relationship between financial leverage and firms' performance and thereby contrasted Agency Theory.

Chadha and Sharma (2015) and Pandey and Sahu (2017) investigated the performance of Indian manufacturing sector firms listed on BSE and pointed out that there is no significant association between financial leverage and firms' Return on Assets. Also financial leverage has a negative and significant impact on Return on Equity.

Another research study conducted in India by Bansal and Singh (2016) to evaluate the aftermath of finance leverage on financial performance and value of 58 Fast Moving Consumer Goods companies listed on NSE and BSE. This study revealed a negative and significant relation of financial leverage with firms' profitability indicators and firms' valuation indicators. Rastogi and Saxena (2016) studied 11 companies from Indian Stock markets which were having a high degree of financial leverage and evaluated its impact on value of firms. This study highlighted low and negative association between leverage and value of firms.

Iqbal and Usman (2018) studied the impact of financial leverage of Pakistan's top 16 textiles companies listed on PSX (100 index) on their performance. The study highlighted that financial leverage has a positive and significant relation with ROA while a negative and significant relationship with ROE of firms. This study resulted that financial leverage has a positive impact on performance or profitability until amount of debt exceeds amount of equity. Hongli *et al.*, (2019) also conducted an experimental study to evaluate impact of financial leverage and liquidity on firms' performance on a set of 22 manufacturing companies listed on Ghana Stock Exchange for the period of 8 years. The results of the study exposed that both the liquidity and financial leverage has an affirmative and significant impact on firms' performance.

Further a study conducted by Tripathy and Shaik (2020) on 56 firms of BSE. The result of the study asserted that firms' performance which is measured by operating profitability and financial leverage are significantly and positively associated.

After going through existing literature, it has been realized that the previous studies are limited to specific sectors and hence there is a need of cross industry or indices studies and the research about green company index has not been conducted so far. On the basis of available literature two null hypotheses are formulated here viz.

H_{01}: There is no significant relationship between capital structure and profitability of firms measured through ROE.

H_{02}: There is no significant relationship between capital structure and profitability of firms measured by ROA.

RESEARCH METHODOLOGY

This is a descriptive cum exploratory research study to explore the impact of capital structure on firms' profitability. Capital structure is indicated by financial leverage of the firms. Financial leverage, the principle explanatory variable, is measured in term of Debt-Equity ratio and profitability is measured in the term of Return on Assets and Returns on Equity constituting two dependent variables. To control industry specific or firm's specific variations several control variables, age, size, sales GR and tangibility are considered. All the green companies listed on BSE constitute the population of the study. Top 25 green companies which are the constituents of S & P BSE GREENEX as on August 28, 2021 are selected. Hence non probability purposive sampling is applied for attaining the objectives of paper. As HDFC Life Insurance Limited and ICICI Bank Limited are adopting different formats of preparing their financial reports, they are excluded from the sample for the sake of good results and consequently the data for the study has been collected pertaining to remaining 23 companies for 10 years ranging April 01, 2010 to March 31, 2020 making a total of 230 observations for selected variables. Further the annual reports for Eicher Motors Limited are not available for the year 2015 due to change in the financial calendar. So the data is compiled from 229 reports here. The required secondary data for the study have been collected through annual reports of the sampled companies published on their websites and websites of BSE. Multiple regression analysis technique has been applied to analyze the information available and to draw conclusions with the help of IBM SPSS 26.

Independent Variable or Measure of Financial Leverage

Debt equity ratio is taken as the indicator of degree of financial leverage in a company. Previous studies used several measures for financial leverage such as Debt-Equity Ratio, Debt to Assets Ratio, STD to Total Assets ratio, LTD to Total Assets Ratio etc. Use of Debt equity ratio for indicating financial leverage is supported by studies done by Perinpanathan (2014), Pandey and Sahu (2017), Dutta *et al.*, (2018), Iqbal and Usman (2018).

Debt-Equity Ratio = Total Long Term Debts/ Total Equity

Dependent Variables or Measures of Profitability

Return on Equity and Return on Assets is taken as the profitability indicators of companies. Selection of ROA and ROE as profitability indicators is supported by various previous studies, El-Sayed Ebaid (2009), Dawar (2014), Perinpanathan (2014), Chadha and Sharma (2015), Bansal and Singh (2016), Rastogi and Saxena (2016).

ROA = (Net Profit/Total Assets)100

ROE = (Net Profits/Total Equity)100

Control Variables

To control the variations due to difference in factors related to company or industry, several control variables are considered in previous studies. Size of the firm has a significant impact on profitability (Azhagaiah and Deepa, 2012; Gill and Obradovich, 2013; Dawar, 2014). Age, Sales GR and Tangible assets of firms' impact profitability (Dawar, 2014; Chadha and Sharma, 2015). Thus Size, Age, Sales GR and Tangibility are chosen as control variables in current study.

Size of the firm = Natural log of total assets

Age of the firm = Current year – Year of registration

Sales GR = {(current year sales-previous year sales)/previous year sales}100

Tangibility = (tangible assets/total assets)100

To test the impact of financial leverage on firms' profitability, by taking into account control variables, two regression equations were created:

ROEit = β0 + β1DE Ratioit + β2Ageit + β3Sizeit + β4Sales GRit + β5Tangibilityit + εit

ROAit = β0 + β1DE Ratioit + β2Ageit + β3Sizeit + β4Sales GRit + β5Tangibilityit + εit

Where

ROEit, ROAit, DE Ratioit, Ageit, Sizeit, Sales GRit, Tangibilityit and εit are ROE, ROA, Debt equity ratio, Age, Size, Sales growth rate, tangibility and Error term of firm i in time t respectively. β0 is the constant term which is the value of ROE or ROA when the values of independent variables are 0 and β1, β2, β3, β4, β5, are the regression coefficients of DE ratio, Age, Size, Sales GR and Tangibility respectively, on ROE or ROA.

RESULTS AND DISCUSSION

Table 1: Status of Leverage and Returns on Equity and Assets of Sampled Green Companies

	Number of observations	Min.	Max.	Mean
ROE	229	-39.64	57.18	15.4183
ROA	229	-20.44	89.23	9.3242
Debt equity ratio	229	.00	4.43	.6048
Age	229	13	113	45.99
Valid N (list wise)	229			

Table 1 depicts the descriptive statistics of independent, dependent and control variables. It is established through above analysis that all sampled companies are using higher proportion of equity in comparison to borrowed funds (debt equity ratio less than 1) in the form of component of their capital structure. It asserts that sampled companies are risk averse which leads to low returns. The average life span of the companies has been exposed as more than 45 years confirming further that they are all well established and experienced companies. Also all the companies are having higher Return on Equity in comparison to Return on Assets asserting that profits generated by using assets are lower than profits available to equity shareholders. It further exhibits that either green companies are using excess assets than required or the assets are employed in less profitable activities.

Impact on ROE

Table 2: Regression Coefficients of Independent Variables on Dependent Variable and Multi Collinearity Statistics

Model		Coefficients B	T Statistics	P Value	Collinearity Statistics
1	**(Constant)**	48.207	9.529	.000	
	Age	.029	1.053	.293	1.061
	Size	-3.588	-7.548	.000	1.055
	Sales GR	.119	3.432	.001	1.076
	Tangibility	-.001	-.036	.971	1.005
2	**(Constant)**	58.474	10.843	.000	
	Age	.064	2.293	.023	1.153
	Size	-5.016	-8.953	.000	1.586
	Sales GR	.082	2.390	.018	1.144
	Tangibility	.027	.695	.488	1.034
	Debt Equity Ratio	3.820	4.404	.000	1.600

Source: Researcher's compilation (Sampled companies' annual reports)

To control industry and firm related factors, a two stage model of multiple regressions is applied. In the first model all the control variables are included and in model 2, principle predictor variable is introduced along with control variables. Thus the model 2 presents result for principle predictor variable after controlling the effect of various variables included in model 1. Therefore, results of model 2 are considered here.

First the analysis of multi collinearity is done. Table 2 depicts that there is no significant association between various independent variables of the model because VIF < 10 which signifies acceptable range of multi collinearity (Franke, 2010). Further VIF is near to 1, confirming the absence of multi collinearity in the model and exposed that all the independent variables are acceptable.

The table exhibited a positive (ß=3.820) and significant ($p<0.05$) relationship between debt equity ratio and ROE indicating that as the use of debt financing goes up, ROE of the firms get elevated. The results are in accordance with Gill and Obradovich (2013), Hongli *et al.*, (2019), Tripathy and Shaik (2019) which shows an affirmative relationship between financial leverage and profitability. Results are consistent with Agency Theory propounded by Jensen and Meckling (1976).

Also a positive and significant relationship of age and sales GR with ROE is derived asserting that as the firms goes older, it becomes efficient to avail new opportunities and have better profitability. As the Sales GR goes up, revenues and net profits escalate and returns available to equity holders get enlarged.

Consequently, ROE tends to increase significantly. Results are in consistency with Dawar (2014), Chadha and Sharma, (2015). Also a positive but insignificant relationship between tangibility and ROE is found asserting that with the increase in tangible assets, ROE boosts up but not up to a significant mark. Also a negative and significant relationship between size and ROE is exhibited through the analysis. It demonstrates that when the firm size increases, various expenses associated with bigger size firms increase more than the benefits received due to large size. Result shows consistency with Dutta, Mukherjee and Sen (2018) and inconsistency with El-Sayed Ebaid (2009), Azhagaiah and Deepa (2012), Gill and Obradovich (2013) and Dawar (2014).

Table 3: R^2 and R^2 Change statistics

Model	R	R^2	Adjusted R^2	Statistics Of Change				
				R^2 Value Change	F Value Change	Df 1	Df 2	Sig. F Value Change
1	.515	.265	.252	.265	20.200	4	224	.000
2	.569	.324	.309	.059	19.399	1	223	.000

Source: Researcher's compilation (Sampled companies' annual reports)

In Table 3 values of R square underlying the fact that about 32 per cent of variations in ROE are explained by all the independent variables included in the model 2 viz. DE Ratio, Age, Size, Tangibility and Sales GR. Rest 68 per cent variations are due to some other factors. But while focusing upon the values of R Square Change, it is pointed out that only 5.9 per cent of variations in ROE are explained by Debt-Equity ratio and 26.5 per cent variations in ROE are due to the control variables included in model 1 viz. age, size, sales GR and tangibility. Table results demonstrate that financial leverage does impact ROE significantly, but it not the only factor causing variations in ROE. Although Age, Size, Sales GR and Tangibility explain the variations in ROE up to some extent, there are some other factors also causing variations in ROE.

Table 4: Test's Significance Statistics

ANOVA						
Model		Sum of Squares	Df	Mean Square	F Value	p value
1	Regression	9132.354	4	2283.089	20.200	.000
	Residual	25317.600	224	113.025		
	Total	34449.954	228			
2	Regression	11158.494	5	2231.699	21.367	.000
	Residual	23291.460	223	104.446		
	Total	34449.954	228			
a. Dependent Variable: ROE						
b. Predictors: (Constant), tangibility, sales GR, Size, Age						
c. Predictors: (Constant), tangibility, sales GR, Size, Age, Debt equity ratio						

Source: Researcher's compilation (Sampled companies' annual reports)

F values in Table 4 proved that at 5 per cent level of significance, given model is significant ($p<0.05$). Hence the null hypothesis $\mathbf{H}_{01}$ is rejected and it is asserted that there is a significant relationship between capital structure and ROE.

Impact on ROA

Table 5: Regression Coefficients of Independent Variables on Dependent Variable and Multi Collinearity Statistics

Model		Coefficients B	T Statistics	p value	Collinearity Statistics
1	(Constant)	44.039	12.783	.000	
	Age	.016	.824	.411	1.061
	Size	-3.727	-11.515	.000	1.055
	sales GR	.031	1.320	.188	1.076
	Tangibility	.058	2.105	.036	1.005
2	(Constant)	44.736	11.688	.000	
	Age	.018	.908	.365	1.153
	Size	-3.824	-9.617	.000	1.586
	sales GR	.029	1.175	.241	1.144
	Tangibility	.060	2.142	.033	1.034
	Debt equity ratio	.259	.421	.674	1.600
a. Dependent Variable: ROA					

To control industry and firm related factors, a two stage model of multiple regressions is applied. In the first model all the control variables are included and in model 2, principle predictor variable is introduced along with control variables. Thus the model 2 presents result for principle predictor variable after controlling the effect of various variables included in model 1. Therefore, results of model 2 are considered.

First the analysis of multi collinearity is done. Table 5 depicts that there is no significant association between various independent variables of the model because VIF < 10which signifies acceptable range of multi collinearity (Franke, 2010). Further VIF is near to 1, confirming the absence of multi collinearity in the model and exposed that all the independent variables are acceptable.

Table 5 demonstrates that when the profitability is measured in terms of Returns on Assets, there is a positive (ß=0.259) and insignificant ($p>0.05$) relationship between debt equity ratio and ROA asserting that when the use of debt financing in Green Companies hikes, Returns on Assets also moves in upward direction but the increment is not significant. The results are in accordance with Gill and Obradovich (2013), Iqbal and Usman (2018), Hongli, Ajorsu and Bakpa (2019), Tripathy and Shaik (2019) which shows an affirmative relationship between financial leverage and profitability. Results are in support with agency theory propounded by Jensen and Meckling (1976).

Also it has been derived that there is a positive and significant relationship of Tangibility with ROA which depicts that with the increase in tangible assets, ROE boosts significantly. Results are in consistency with Dawar (2014), Tripathi and Shaik (2019). Positive and insignificant relationship of Age and Sales GR with ROA is also pointed out asserting that as the firms goes older, it becomes efficient to avail new opportunities and have better profitability. As the Sales GR goes up, revenues and net profits escalate and returns on assets get enlarged. Consequently, ROA tends to increase. Also a negative and significant relationship between size and ROA is exhibited through the analysis. It demonstrates that when the firm size increases, various expenses associated with bigger size firms increase more than the benefits received due to large size. Results show consistency with Dutta, Mukherjee and Sen (2018) and inconsistency with El-Sayed Ebaid (2009), Azhagaiah and Deepa (2012), Gill and Obradovich (2013) and Dawar (2014).

Table 6: R^2 and R^2 Change Statistics

Model	R	R^2	Adjusted R^2	Statistics Of Change				
				R^2 Value Change	F Value Change	Df 1	Df 2	Sig. F Value Change
1	.631	.398	.387	.398	36.976	4	224	.000
2	.631	.398	.385	.000	.177	1	223	.674

Source: Researcher's compilation (Sampled companies' annual reports)

In Table 6 values of R square underlined the fact that about 39.8 per cent of variations in ROA are explained by all the independent variables included in the model viz. DE Ratio, Age, Size, Tangibility and Sales GR. Rest 60 per cent variations are due to some other factors. But when the values of R square change are considered, it is pointed out there is no addition of variation explained due to inclusion of Debt-Equity Ratio and all the 39.8 per cent variations in ROA, explained by the model are due to the variables included in model 1 viz. age, size, sales GR and tangibility. Table results demonstrate that Financial Leverage is not the only factor causing variations in ROA. Although Age, Size, Sales GR and Tangibility explain the variations in ROA up to some extent, there are some other factors also causing variations in ROA.

Table 7: Test's Significance Statistics

ANOVA						
Model		Sum of Squares	Df	Mean Square	F Value	p value
1	Regression	7753.426	4	1938.356	36.976	.000^b
	Residual	11742.401	224	52.421		
	Total	19495.827	228			
2	Regression	7762.748	5	1552.550	29.508	.000^c
	Residual	11733.079	223	52.615		
	Total	19495.827	228			
a. Dependent Variable: ROA						
b. Predictors: (Constant), tangibility, sales GR, Size, Age						
c. Predictors: (Constant), tangibility, sales GR, Size, Age, Debt equity ratio						

Source: Researcher's compilation (Sampled companies' annual reports)

F values in Table 7 proved that at 5 per cent level of significance, given model is significant ($p<0.05$). Hence the null hypothesis $\mathbf{H}_{02}$ is rejected and it is asserted that there is a significant relationship between capital structure and ROA.

CONCLUSION AND MANAGERIAL IMPLICATIONS

The results of the study exhibit a significant relationship between capital structure and profitability of green companies. The relationship is positive in both of the measures of companies' profitability viz. ROA and ROE, asserting an escalation in companies' returns with an increase in financial leverage. Companies using more borrowed funds are found more profitable. But results of the study reveal that green companies are using less borrowed funds in comparison to equity funds and are risk averse. Consequently, returns are found low in green companies due to limited use of cheaper source of funds. The result of the study affirms Agency Theory and contrasted Pecking Order Theory and Modigliani and Miller theory. It has been exposed that companies having a longer life span becomes efficient to avail various economies which enables them to capture new market opportunities and attain new market targets. Also a hike in sales growth rate causes enlargement of returns available after paying fixed charges. Further tangible fixed assets in green companies are employed efficiently as with the inclusion of tangible assets in company, returns go up. But the current assets and intangible assets are not used profitably because the size or total assets of a green company have an inverse relationship with Returns on Assets and Equity. Either assets are used in excess than required or the expenses associated with bigger companies are more than economies availed due to large size. Therefore, proper management of assets and inclusion of more borrowed funds need to be worked upon in Indian Green Industry.

LIMITATIONS AND FUTURE RESEARCH DIRECTION

This study is about green index conducted using secondary data. So the limitations pertaining to secondary data exist here. Time period is limited to ten years. Future research can be conducted by taking into account other indices or for a longer time period. Also a comparative study between developed and emerging markets can be undertaken. Sector specific study at national or international level can be conducted also. The study provides guiding insights to the finance managers for taking capital structure decisions and provides base of further research.

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ORGANIZATIONAL VIRTUOUSNESS AS A PREDICTOR OF ORGANIZATIONAL IDENTIFICATION: CAN POSITIVE AFFECT BE A POTENTIAL MEDIATOR?

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ABSTRACT

The declining belongingness of the employees necessitates the organizations to focus on the ways through which their attachment can be enhanced, as the key to organizational success relies on the hands of happy employees. Thus, the study aims to analyze the impact of organizational virtuousness on employees' organizational identification through the intervening role of positive affect. Concerning this, the data were gathered from 339 Indian service sector employees by incorporating a cross-sectional study design and analyzed using the SPSS and AMOS software by incorporating the multiple regression and mediation analysis techniques. The study's results revealed that organizational virtuousness had a remarkable impact on organizational identification, with positive affect partially mediating the relationship. Thus, the study concludes that HR managers and practitioners should focus on incorporating ethical practices in the working of the organizations for enhancing employees' emotions and their organizational attachment.

Keywords: Organizational Identification, Organizational Virtuousness, Positive Affect, Social Identity Theory.

INTRODUCTION

In today's competitive environment, organizations should pay attention to employees' welfare (Magnier-Watanabe *et al.*, 2020), as the organizations that care for their workforce by focusing on their welfare are successful. Moreover, such care and concern on the part of the organization, make the employees perceive that they are a valuable part of the organization, which makes them feel attached to their organization (Hur *et al.*, 2017). Thus, to emphasize the employees' welfare, organizations can indulge themselves in ethical and virtuous practices, by maintaining a virtuous workplace environment in the organization. Organizations can do so, by relying on organizational virtuousness (OV) which denotes "individuals' actions, collective activities, cultural attributes, or processes that enable dissemination and perpetuation of virtuousness in an organization" (Cameron *et al.*, 2004). Such an environment not only helps in improving employees' well-being (Ahmed *et al.*, 2018; Rego *et al.*, 2010) but also makes the employees identify themselves with their organization by enhancing their organizational bonding (Hur *et al.*, 2017; Tsachouridi & Nikandrou, 2016). This implies that the caring environment on the part of the organization makes the employees develop a feeling of oneness towards the organization.

Generally, the organizational virtuousness's relationship with employees' organizational identification can be supported via social identity theory, which denotes that the individuals use to classify themselves in the environment by categorizing them in the groups. These groups, in turn, affect their social identity, which influences their feeling of belongingness towards the organization (Ashforth & Mael, 1989). Based on the theory, it can be ascertained that whenever employees perceive that their organization focuses on providing them ethical workplace environment, such a moral and ethical environment makes the employees believe in the organizational values, which influence them to link their organizational membership with their social identity (Tsachouridi & Nikandrou, 2016). Thus, whenever the employees perceive that the organizations treat them fairly by incorporating virtuous practices in their working and by providing a virtuous workplace environment, such employees' perceptions make them identify themselves with the organization (Marique *et al.*, 2013). Undoubtedly, when an employee feels attached to his organization, he aligns his goals with that of the organizations' goal which helps in promoting favorable work-related behaviors (Zhu *et al.*, 2015). Here, employees' oneness can be expressed using employees' organizational identification (OI) which denotes the extent to which an employee feels attached to the organization where he works (Dutton *et al.*, 1994).

Indeed, along with focusing on employees' welfare, there is a need to concentrate on their well-being too, as the recent Gallup survey revealed a significant fall in the overall well-being of the employees (Harter, 2021). Such a sharp decline in the employees' well-being can prove detrimental for the overall employees' performance, as employee well-being is one of the crucial indicators impacting their contextual performance (Kumar *et al.*, 2021), and engagement towards their work (Sivapragasam & Raya, 2018). These further mandates the existence of a virtuous environment on the part of the organizations for improving the well-being and happiness of the staff working therein (Ahmed *et al.*, 2018; Singh *et al.*, 2018). Here, employee well-being implies a positive assessment of an individual's life (Magnier-Watanabe *et al.*, 2017). Particularly, it can be expressed using the emotions that an employee experiences in his day-to-day life. Such emotions, as denoted by positive affect play a significant role in influencing the employees' well-being (Diener *et al.*, 2009). Positive affect (PA) here implies a person's tendency to sustain favorable emotions in different situations (Barsade & Gibson, 2007).

Notably, concerning the need to focus on employees' welfare and their well-being, this study analyzes the outstanding role of organizational virtuousness as a key area on employees' well-being (as denoted by positive affect in the current study) and their organizational identification perception. Indeed, organizational virtuousness has been chosen as an important indicator in the current study, due to its marvelous role in influencing an individual's behavior, yet being a slightly explored area (Singh *et al.*, 2018). Along with this, the other crucial reason behind choosing organizational virtuousness as a key variable in the current study is that to date several authors have examined the pathways via which OV influence employees' work-related (Hur *et al.*, 2017), and organizational related outcomes (Sun & Yoon, 2020). But authors, to date, have not examined the pathway through which organizational virtuousness affects employees' organizational identification via positive affect (PA). Thus, this study aims to contribute to the OV and OI studies by empirically checking the intervening role of positive affect in the organizational virtuousness and organizational identification relationship.

Here, the mediating role of PA in the OV and OI's relationship can be explained using the broaden-and-build theory (BB theory) of favorable emotions (Fredrickson, 2001), which implies that the pleasing emotions widen a person's thought-action process and influences psychological resources within them. Moreover, positive emotions foster innovative ideas and prosocial actions (Fredrickson *et al.*, 2003). Therefore, individuals experiencing positive emotions are engaged in the work they do (Wang *et al.*, 2017), and are attached to the organization where they work. Based on this, it can be ascertained that, when the employees perceive that the environment of the organizations where they work is virtuous and ethical, such virtuous environment elicit the feeling of happiness within them (Singh *et al.*, 2018), which helps in promoting positive affect (Rego *et al.*, 2010). Enhancement of such positive affect makes the individual feel attached towards their work and the workplace (See Figure 1). Accordingly, the following hypothesis (H) is framed:

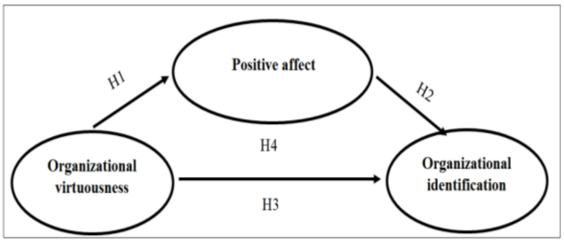
H$_1$: Organizational virtuousness significantly influences employees' positive affect.

H$_2$: Positive affect significantly influences employees' organizational identification.

H$_3$: Organizational virtuousness significantly influences employees' organizational identification.

H$_4$: Employees' positive affect mediates in the organizational virtuousness and organizational identification relationship.

Thus, with an underlying aim to empirically check the intervening effect of PA in the OV and OI association, this study has been divided into several sections. Beginning from introducing the area of research, the subsequent section comprises the aims and objective, and methodology section. This has been followed by results, discussion, and implications explaining the contribution of the study from the theoretical and managerial perspectives. Following this, the limitations of the study have been highlighted, based on which future research directions have been provided. Finally, the study has been concluded by concluding remarks.



Source: The authors

Figure 1: Model Representing Organizational Virtuousness Influencing Organizational Identification Via-Positive Affect

Objective

The study aims to address the issue concerning low employees' well-being and their organizational bonding, which needs to be focused on by the Indian service sector companies to achieve long-term success. Concerning this, the study aims to analyze the impact of organizational virtuousness on employees' organizational identification via positive affect to check, whether PA intervenes in the organizational virtuousness and organizational identification relationship or not. This will help get an insight regarding the importance of virtuous and ethical practices on the part of the organization, to enhance employees' emotions in such a manner that such favorable emotions will, in turn, contribute to enhancing their organizational identification.

METHODOLOGY

Participants and Procedure

For the current cross-sectional survey, employees working in the Indian service sector industries viz. Finance/Accounting/Auditing, Banking and Insurance, IT & ITES, Hospitality and Tourism, Logistics and Transportation, and E-commerce were targeted by incorporating convenience and judgmental sampling techniques. Importantly, the service sector was selected for being the most influential sector contributing to India's GDP growth and employment generation (Lakshmanan, 2019). Hence, it is crucial to know that how the virtuous organizational environment provided by the Indian service sector companies contributes to enhancing employees' organizational bonding. As such virtuous environment can play a prominent role in retaining the existing workforce and in attracting newcomers in the organization.

Particularly, the convenience sampling technique was chosen for being an easily accessible and suitable sampling type in the case of a finite population (Etikan *et al.*, 2016). Along with this, judgmental sampling was used as it's a relevant sampling technique, whereby the selection of the respondents is based on the researchers' judgment about the respondents, which helps in achieving the study's objective effectively (Etikan & Bala, 2017).

Prior to the questionnaire administration, details of the most influential Indian service sectors industries were carefully drawn via the online search on Google. Following this, these organizations were contacted via mail and were informed about the purpose of the survey along with a request to allow data collection from their respective organizations. Based on their responses and opinion, the questionnaire was distributed to 800 employees via blended mode by keeping in view the minimum sample size requirement which was 88 being computed using the G* power software (Faul *et al.*, 2009). Further, to get the maximum responses, the respondents were informed about the research's objective and were assured about the anonymity and confidentiality of their responses. Following such criteria and by repeatedly reminding the employees, a total of 430 responses were received representing a response rate of 53 percent. However, out of the total responses received, 37 unusable responses were discarded. Thus, the final data comprised 393 respondents. Among the respondents, 79 percent were male and the rest of them were female employees. Concerning educational qualifications, 43 percent had a graduation degree, 42 percent of them was having post-graduation degrees, while the rest of them had professional degrees. Further, regarding the work experience of the employees, 74 percent had less than five years of experience, 20 percent had 5-10 years, and the remaining were having more than ten years of work experience. Moreover, among the overall respondents, 40 percent were married employees and the remaining were unmarried.

Measurement Scales

Organizational Virtuousness

The employees' views regarding the ethical and moral workplace environment was measured using the 15-items Cameron *et al.* (2004)'s scale. The sample statements were "honesty and trustworthiness are hallmarks of this organization" and "employees trust one another in this organization."

Positive Affect

Employees' positive affect was measured using the Diener *et al.*'s (2009) Scale of Positive and Negative Experience (SPANE), which comprised six statements. The sample statements include the following "how often have you felt pleasant?" and "how often have you felt joyful?"

Organizational Identification

Employees' organizational belongingness perception was assessed using the five-item organizational identification's scale (Mael & Ashforth, 1992). The sample items of the organizational identification scale were "I am very interested in what others think about my organization" and "my organization's success is my success."

All the statements were calculated on a five-point Likert scale ranging from one to five ('*strongly disagree'* to '*strongly agree'*). Notably, the five-point Likert scale was chosen because of its capability of being readily comprehensible, which allows the respondents to express their views more accurately (Marton-Williams, 1986). Along with this, the rationale behind using the scale adopted from the previous literature is that they ensure content validity.

Statistical Analysis Strategy

The current study relies on the SPSS (version 20) and the AMOS (version 21) software for the statistical analysis of the results. Notably, the analysis comprised reliability and validity check using Cronbach's alpha, average variance extracted (AVE), and composite reliability (CR) measures. Following this, the method bias was checked using Harman's one-factor test, and multicollinearity was assessed using the VIF (variance inflated factor). Thereafter, the correlation and regression analysis were conducted, based on which the hypothesis framed were tested, and results were explained.

RESULTS

Descriptive Statistics

Table 1 denotes the descriptive statistics (means, standard deviations) and correlations (r) for the variables of interest in the study. Further, the Cronbach's alpha value of the variables was provided in the diagonal. As highlighted by the alpha values in table 1, all values were above the threshold limit of 0.6 (OV= 0.89, PA= 0.75, and OI= 0.64 respectively) (Hair *et al.*, 2006), thus denoting that the scales used in the study were reliable. Further, the results of Pearson's correlation matrix revealed that employees' organizational virtuousness' perception was favorably associated with positive affect (r= 0.658**, $p<0.01$) and employees' organizational identification (r= 0.610**, $p<0.01$). Moreover, positive affect was also significantly associated with organizational identification (r= 0.510**, $p<0.01$).

Table 1: Descriptive Statistics

Constructs	M	SD	Organizational Virtuousness	Positive Affect	Organizational Identification
Organizational Virtuousness	4.09	0.592	**0.89**		
Positive Affect	4.05	0.576	0.658**	**0.75**	
Organizational Identification	3.97	0.643	0.610**	0.510**	**0.64**

Source: The authors

Note. M= Mean. SD= Standard Deviation. Diagonal values denote Cronbach's alpha values.

** $p<0.01$.

Validity Analysis

To check the construct and discriminant validity of the constructs, the Confirmatory Factor Analysis (CFA) was conducted. However, before it, the item parceling approach was adopted as the parcels were considered more reliable than the individual-level data (Little *et al.*, 2002). Concerning this, five parcels were created for organizational virtuousness (each parcel comprising of three statements), two parcels were created each for positive affect and organizational identification (each parcel composed of three statements) (See Figure 2). Thus, after creating the parcels, the average variance extracted (AVE) and composite reliability (CR) was calculated for each of the variables under study. As specified by the results in Table 2, the value of AVE of each of the three variables ranges from 0.54 to 0.69, and the CR ranges from 0.69 to 0.90. Therefore, the results of AVE and CR values confirmed the convergent validity of the model, as the AVE and CR values for each construct were greater than the threshold limit of 0.5, and 0.6 respectively (Fornell & Larcker, 1981).

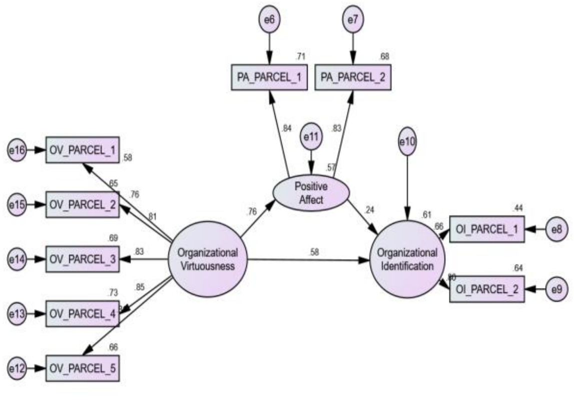
Following this, the discriminant validity was assessed. Clearly, as indicated by the results in Table 2, the discriminant validity criteria were achieved too, as the square root of AVE values were greater than the correlation values of each construct. Further, after the reliability and validity check, model fitness was ascertained, results of which revealed that the model was fit for further analysis as the model fitness criteria were achieved (CMIN/DF=2.594, CFI= 0.981, NFI=.970, TLI=.972, RMSEA=.06) (Byrne, 1998; Kline, 2015; O'Rourke *et al.*, 2005).

Table 2: Convergent and Discriminant Validity

Constructs	AVE	CR	OV	PA	OI
Organizational Virtuousness	0.66	.907	**0.812**		
Positive Affect	0.69	.819	0.658**	**0.830**	
Organizational Identification	0.54	.698	0.610**	0.510**	**0.734**

Source: The author.

Note. The diagonal values represent the square root of AVE values. OV= Organizational Virtuousness. PA= Positive Affect. OI= Organizational Identification.



Source: The authors
Note. OV= Organizational Virtuousness. PA= Positive Affect. OI= Organizational Identification.

Figure 2: AMOS Results Describing the Factor Loadings of the Constructs' PARCELS

Common Method Bias and Multicollinearity Check

As the data were gathered from a single source, therefore common method bias (CMB) may have affected the overall results. Thus, to assess whether CMB was a major issue of concern in the study or not, Harman's one factor test was conducted. The result of CMB denoted 30.1 per cent of the variance, which was within the limit of 50 per cent (Podsakoff *et al.*, 2003). Hence, the results revealed that the CMB was not a significant problem in the current study. Along with CMB, variance inflated factor (VIF) was also checked, the value of which was less than 2.6 (1.204 and 1.204 respectively). This implies that multicollinearity did not exist in the data (Hair *et al.*, 2017).

Hypothesis Testing

The study aimed to analyze the intervening effect of PA in the organizational virtuousness and identification relationship. Based on this, the multiple regression techniques were applied, results of which denoted (See Table 3) that employees' OV perception was significantly linked with their PA (β= .256***, p<0.001). Moreover, employees' positive affect was favorably linked with their feeling of attachment toward their workplace (β= .213***, p<0.001). These results thus supported the H_1 and H_2 framed. Along with this, the employees' organizational virtuousness perception was significantly and positively associated with organizational identification (β= .210***, p<0.001), thus supporting the H_3. The results thus fulfilled the necessary conditions for further checking the intervening role of PA in the OV and OI association.

Table 3: Relationship Testing

			95 per cent CI	
Relationship	**B**	**T**	**LLCI**	**ULCI**
OV-PA	.256***	17.27	.226	.285
PA-OI	.213***	3.65	.098	.328
OV-OI	.210***	9.25	.165	.255

Source. The authors.
Note. OV= Organizational Virtuousness. PA= Positive Affect. OI= Organizational Identification. LLCI= Lower Limit Confidence Interval. ULCI= Upper Limit Confidence Interval.
*p***<0.001.*

Mediation Analysis

With an underlying aim to check the key objective concerning the intervening effect of PA in the virtuousness and identification relationship, the mediation analysis was conducted using the PROCESS macro at 5000 repetitions (Hayes, 2013) (See Table 4), revealing that PA intervenes between the two, as the lower and upper confidence intervals didn't include zero.

Further, the direct relationship between organizational virtuousness and organizational identification decreased after including the PA as a mediator in the aforesaid relationship (β=.054***, *p*<0.001), thus denoting the PA intervenes in the relationship but partially only. Therefore, the results of the study supported the H4 framed. This implies that organizational virtuous practices can boost pleasing emotions within an employee, which will act as a stimulator in enhancing their feeling of belongingness towards their organization. Thus, the managers can work on making their organizational environment virtuous, if they want to make their workforce attached to their organization.

Table 4: Mediation Estimates

Effects	Labels	B	BootLLCI	BootULCI
Indirect	a* × b*	.054***	.0127	.1075
Direct	c*	.210***	.165	.255
Total	c + a × b	.265***	.231	.299

Source: The authors
Note. a= Organizational Virtuousness→ Positive Affect. b= Positive Affect → Organizational Identification. c= Organizational Virtuousness→ Organizational Identification. LLCI= Lower Limit Confidence Interval. ULCI= Upper Limit Confidence Interval. Boot= Bootstrapping.
p***<.001.

DISCUSSION AND IMPLICATIONS

Despite the abundance of research on organizational identification, few researchers have empirically examined the impact of virtuousness practices prevailing in the organization on employees' organizational identification feeling. Thus, the current study is a practice to further contribute to virtuousness and organizational identification research via social identity theory (Ashforth & Mael, 1989). Not only this, the study explored the mechanism through which the organizational virtuousness perception effect employees' organizational identification via positive affect by relying on the BB Theory (Fredrickson, 2001). Notably, the results of the study confirmed our expectations regarding the outstanding role of ethical organizational environment in influencing employees' emotions and organizational belongingness feeling. These results, therefore, supported the H1 and H3 framed concerning the role of organizational virtuousness in influencing the positive affect and employees' organizational identification favorably. Notably, these findings complement the results of Hur *et al.* (2017) concerning organizational virtuousness and identification relationship. Along with this, the study's results supported the H2, and H4 framed, concerning the intervening role of PA in the organizational virtuousness and organizational identification relationship by identifying that PA intervenes in the aforesaid relationship partially.

This denotes that the organizations which rely on a moral code of ethics, clearly define their rules, focus on the means, and not the ends, and where the leaders rely on ethical practices in their working by following ethical leadership, such organizational practices together help in making an organizational environment virtuous. Such a virtuous environment, in turn, influences employees' emotions in a positive manner, which therefore enhances their attachment toward their work. This implies that a favorable workplace environment makes the employees feel connected with the organization (Tsachouridi & Nikandrou, 2016).

Theoretical Implications

The current research contributed to the burgeoning field of literature by examining the mediating role of positive affect in the organizational virtuousness and organizational identification relationship. Indeed, a growing body of research on organizational virtuousness area has attracted the researchers' attention to further contribute to this crucial but slightly explored area (Singh *et al.*, 2018). Even though several researchers have examined the pathways through which organizational virtuousness affects work engagement (Hur *et al.*, 2017) and performance (Cameron *et al.*, 2004), as per authors' apprehension this is the first study of its kind specifically demonstrating the pay through which virtuousness influence employees' organizational identification. Thus, complementing the scarce research on the virtuousness literature, the current study's findings suggest that the organizations can influence positive emotions within the employees by providing them with virtuous workplace environment. This will not only make the employees feel satisfied and happy but also enhance their belongingness to their organization.

Along with this, the study results also supported the social identity (Ashforth & Mael, 1989) and BB theory (Fredrickson, 2001) by explaining the mechanism through which virtuousness affects organizational identification via positive affect. This implies that whenever employees feel that the organizations where they work, follow virtuous practices in their day-to-day working, such employee's perception influences their emotions favorably, which enhance their attachment toward their workplace. Therefore, the organizations can rely on virtuous practices for the organizational performance, by taking care of their employees and considering them as a crucial asset for the organization.

Practical Implications

Along with the theoretical implications, the current empirical study has important implications for the organizations too. The results of the analysis suggest that organizations and managers should rely on moral practices for the organization's long-term survival. Based on the findings indicating the crucial role of organizational virtuousness in stimulating positive emotions within employees and influencing their feeling of attachment towards their organization, the study suggests numerous implications from the managerial perspective. To begin with, relying on the outstanding role of virtues and virtuous practices, HR managers and practitioners should incorporate ethical practices in the organizations' working. This will assist in enhancing the feeling of happiness within an individual (Singh *et al.*, 2018), which will make them feel that they are a valuable part of the organization.

Along with this, HR managers should ensure that the workplace environment should be accompanied by honesty and trust, which will further influence employees' emotions favorably. In addition to this, a reward-based initiative can be followed, whereby the employees who help in encouraging the ethical workplace environment can be rewarded either by monetary or non-monetary means like recognition. Undoubtedly, this will help foster an environment of positivity in the workplace. Not only this, the managers and the HR practitioners can also follow a punishment-based criterion whereby the employees, who hinder the ethical and smooth functioning of the organization can be punished. This will help maintain the virtuous environment in the organization.

Furthermore, leaders should focus on following an ethical approach in their work, which will enhance employees' trust in the leaders, which will, in turn, contribute to employees' happiness and satisfaction with the working of the organizations. This will make the employees perceive that they are valuable asset of the organization, therefore making them attached to their workplace. Also, supervisors can organize weekly or monthly employee interaction programs, where the employees can interact with their supervisors and can share any problem faced by them without any fear. This will make them feel that organizations do care for them, which will also prove beneficial in enhancing employees' organizational bonding. Therefore, by relying on these means, HR professionals and practitioners can enhance positive emotions within an individual, which will thus make them attached to the organization. This will surely prove advantageous for the organization, as the individuals who are attached with the organization where they work, use to consider their organizations' success as their own. Such employees put their whole efforts into the organization, thus proving to be an asset for the organization.

LIMITATIONS AND FUTURE PROSPECTS

Along with the key suggestions, the study has several limitations too that need to be addressed by future researchers. Firstly, this study incorporated the cross-sectional study design, leaving the scope for conducting a longitudinal study on this area for future researchers. Notably, the longitudinal study on these variables will be of key importance for future researchers in interpreting the evolution of the variables over a while.

Secondly, as the data were gathered from a single country, the findings of the same cannot be generalized in other countries. Thus, future researchers can conduct a similar study concerning other countries' contexts. This will help to gain an insight regarding the influential role of virtuous practices in the organization in enhancing positive emotions within an employee, which will thus enhance their organizational attachment. Thirdly, as the study investigated the impact of OV on employees' OI perception with positive affect mediating the relationship, so other organizational-related factors were not taken into consideration. Therefore, future researchers can incorporate other organizational level independent variables along with organizational virtuousness in the study too like organizational support.

Fourthly, as the role of moderator was not examined in the current study, so future researchers can ascertain the role of demographic or individual-level factors to ensure whether any of the factors moderates in the virtuousness and identification relationship or not. Lastly, as the impact of overall organizational virtuousness was assessed on organizational identification in the current study, so future researchers can check the impact of all five sub-dimensions of virtuousness on identification individually. This will help ascertain that among the five sub-dimensions is a better predictor of organizational identification. Thus, by suggesting the future research directions, the current study's limitations provide great avenues for future researchers to carry forward the research in the crucial but slightly explored area of organizational virtuousness.

CONCLUSION

In conclusion, those organizations, which follow virtuous practices in their working, and care about their employees are successful. Employees of such organizations use to experience joy and happiness in their work, which makes them more devoted toward their organization. Thus, based on the propensity of organizational virtuousness in enhancing positive emotions and employees' organizational identification, the study serves as a foundation for theoretical and managerial implications suggesting the managers and the HR practitioners rely on virtuous and ethical practices as a base for the organizational long-term survival. Undoubtedly, the study has several shortcomings too, which provide an opportunity for future researchers to further contribute to the virtuousness literature. Overall, the study's results are accompanied by uniqueness, thus supporting the relevance of an ethical workplace environment.

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