

Research Article

A Statistical Approach To Analyse CSR Index

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Abstract

The current study aims to measure the Corporate Social Responsibility Index of leading FMCG companies of India for the financial year 2019-20. The study is based on the primary data collected from 200 employees and 200 customers. CSR index has been developed using the various aspects of CSR. It was found from the study that the CSR performance of the FMCG companies of India is good. FMCG companies of India are highly involved in the activities related to the Innovation aspect of CSR and showing less concern towards the environment. CSR performance towards the environment is very low for all the FMCG companies, which is a cause for alarm and concern also.

Keywords: Corporate social responsibility, FMCG, India, Innovation, Community, Environment, Safety, Employees.

Introduction:

Kutilya's Arthshastra says, "The welfare of a king always lies in the welfare of his people, the happiness of a king lies in the happiness of his people."

Corporate social responsibility is an easy way for a company to take care of its stakeholder and for the welfare of society.

Corporate social responsibility is the company's responsibility towards the stakeholders, namely, employees, customers, society, government, legal authorities, suppliers, and shareholders. The concept of CSR is not new; it is a widely explored area by researchers and corporate entities. First time in Indian history, the concept of CSR was practiced in 1892 by the Jamsetji Tata, by establishing JN Tata Endowment Trust, in order to promote higher education in India. Tata Company has promoted the concept of socio-economic development among the corporates, Bhattacharya et al., 2008. The occurrence of various incidents such as; Bhopal gas tragedy, oil spill case of Shell, Enron, etc., has arisen the need of reviving the concept of social responsibility of business and the need to follow the ethical practices by the corporate houses. Later or sooner, corporates have started realizing their social responsibilities towards the environment in which they operate their business houses.

Researchers have given both arguments in favor and against the concept of corporate social responsibility. Friedman (1963), argued in favor of CSR and stated that businesses could fulfill their social responsibility towards society by following legal and ethical practices. Davis (1973), stated that the concept of CSR is beyond the rules and laws. Carroll (1979), proposed a CSR model in the shape of the pyramid, which starts from economic responsibilities, followed by legal, ethical, and mandatory responsibilities. Carroll (1991), in his pyramid model, gave the topmost place to philanthropic responsibilities, defining it as "the corporate actions that are in response to society's expectations that businesses be good corporate citizen."

On the other hand, Friedman, who is a known defender of the neoclassical view

of economics – defines Social Responsibility completely differently; according to Friedman (1963) “There is one and only one social responsibility of business - to use its resources and engage in activities to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition, without deception or fraud.”

Management thinkers have explained CSR as a philanthropic activity, which aims to raise the standard of living of the society or community development, while some thinkers stated that CSR is doing socially responsible behavior and some researchers stated that CSR is to promote and protect the interests of the stakeholders of a company.

Nowadays, companies have adopted socially responsible behavior by getting involved in various community welfare activities such as; donations to schools, hospitals, adopting the villages, infrastructure development, campaigns against social evils, and environmental awareness. Companies like McDonald's have switched to the eco-friendly packaging of their food products to show their responsible behavior as a CSR practice. Banks have shifted to e-statement from print statements to shows their concern towards environment; similarly, there are many ways through which companies have shown their concern for their stakeholders. Companies have started realizing the fact that corporate social responsibility can be used as a competitive tool in this cut-throat competitive era. Due to the importance of CSR in the business, the current study aims to measure the CSR of the FMCG companies of India.

Review of Literature:

There is a vast literature available on the studies related to CSR practices of western countries, but the CSR approach of western countries cannot be used in Asia because these are developing economies, and there is a vast difference in the political system of western economies and Asian countries (Raman, 2006). Gupta (2007) stated that Indian companies are doing CSR activities related to almost all the possible areas for CSR, but there is a lack of clear metrics on which they can measure their corporate social performance.

Researchers have stated that the study of CSR practices of developing economies is essential because these economies contribute highly to global growth. These studies can offer new insights for global strategists (Arevalo and Arvind, 2011).

Arora (2013), defined CSR as a continuous commitment of the business towards the social, environmental, and economic objectives while maintaining a balance between the interest of various stakeholders. Researchers presented arguments both in favor and against corporate social responsibility. Some researchers have also argued that CSR is only a formality through which companies show off their social behavior because government bodies are continuously observing the operations of large organizations. NGOs, ethical consumerism, market forces, consumer awareness, social awareness, increased level of education, government regulations, accountancy firms, ethics training, and the employees of the companies work as driving forces for the organizations to adopt the ethical and social practices in their routine operations. Organizations need to make a separate strategy for corporate social responsibility activities in order to understand which activity/ action/operation of their business is having an inverse effect on the environment as well as on the society. Thus, it can be said that the main motive or corporate social responsibility is to make the companies aware of their economic, social, and environmental responsibilities. Jeremiah (2017) believed that if a company fails in justifying its duties towards society and environment then CSR alone cannot help it out. Singh (2016) discussed that shareholders are one of the most important stakeholders of the company. They provide life to the company as they make the investment in the shareholders' capital. Thus, it is important that all the functions, process, policy, and strategy of the company should be planned considering the interest of the shareholders and should be in favor of the shareholders and with a purpose to maximize the return on shareholder's capital.

CSR has become one of the integrated practices of the companies which exist in almost all the activities of the business. The purpose of companies is not only to perform the corporate social responsibility activities but also to measure the performance of CSR in order to ensure whether they have reached the targets they have set for the CSR practices or not? The purpose behind measuring corporate social performance is to measure the gap between the business actions and social goals of the business. Sethi (1979), stated that the goals of the business should be correspondence to the

overall social system, as the existence and sustainability of the business depend on society. Husted (2000) has also emphasized the CSR activities of the banks and stated that businesses need to satisfy the customers' expectations to have proper social support and maintain its legitimacy. Therefore, the companies should be very much concerned about their corporate social performance.

Krumay and Martinuzzi (2013) founded that Companies rely on CSR because it helps them in regaining consumers' loyalty and public trust. Kaur (2019) re-studied many researches on CSR and conducted his own study on CSR awareness; he explained that corporate social responsibility is some kind of social obligation that corporates should perform for the betterment of society around them. Srivastava et al. (2019) explained how corporates need to adopt the right corporate social responsibility strategy and communicate it properly to their stakeholders for a successful engagement. They believed that CSR is an integral part of corporate strategy. Chauhan (2019) stated in his research that FMCG sector, being the 4th largest sector in the Indian economy, plays a significant role in the economic development of India.

Following aspects of CSR have been extracted from the review of literature, researchers have widely used and measured these aspects of CSR:

1. **Integrity:** Integrity is related to the ethical practices of the companies, following transparent policies, rules, and regulations, ethical pricing policy, fairness in prices and no black marketing of the products, honest practices in business.
2. **Excellence:** This aspect of CSR is related to quality and performance. The quality of the products should be high, continuous practices of companies to improve the quality, performance of the products as per the customers' requirements, and increasing the overall performance of the products.
3. **Responsibility:** The responsibility aspect of CSR is related to the responsible behavior of the companies, accountability of the company towards its stakeholders, fulfilling commitments on time, and in the most suitable way.
4. **Innovation:** The innovation aspect of CSR is related to innovativeness, creativity, ingenuity, following innovative practices to make the products more useful, adding more value to the products, adding various new and updated features in the products, making eco-friendly products.
5. **Fairness:** The fairness aspect of CSR is related to the diversity and inclusiveness of the company. The company should indulge in diverse areas of CSR and should follow an inclusive approach for showing responsible behavior.
6. **Care:** Care aspect of CSR is related to the services provided by the companies to the customers, providing services on time, resolving complaints on time and in a favorable manner.
7. **Customers:** As per this concept of CSR, customers should be treated as a God. Customer satisfaction should be the company's primary goal by providing superior service quality and quality products at fair prices and with added features.
8. **People:** This aspect of CSR is related to the responsibility of a business towards its employees, providing a complete salary, fringe benefits, medical facilities, employee-friendly working environment, favorable working conditions, career growth, and development opportunities.
9. **Safety:** The safety aspect of CSR is related to the health of the customers, the products of the companies should be healthy, causing no harm to the human being, no ingredients should be used which can cause harm to the health of the customers, the production process should not cause any health issue to the labors and the nearby society members.
10. **Community:** CSR activities of the companies towards the Community, which is related to corporate citizenship of the company, activities towards the community welfare, practices for the development of the communities, raising the standard of living of the people by providing quality products.

11. Environment: The CSR practices of the companies include the activities for the protection of environment, following the business practices which causes less harm to environment, using green marketing, green advertising, green packaging, eco-friendly products, and eco-friendly waste disposal policies.

Keeping in view the importance of the CSR for the companies, the current study aims to measure the CSR of the FMCG companies of India, as there is a lack of research done by the researchers related to CSR practices of the FMCG companies of India. Thus, the study will bridge the gap found from the literature review.

Objectives: the study aims to meet the following objectives:

- To measure the Corporate social responsibility of the FMCG companies of India.
- To develop a CSR index for the FMCG companies of India.
- To measure the difference in the CSR practices of FMCG companies of India towards various aspects of CSR.

Research Methodology:

The study is based on the primary data collected from the employees and customers of the ten FMCG companies of India, listed on the Top 500 companies of India for the financial year 2019-20. The total number of respondents surveyed during the current study was 400, consisting of 200 employees of the selected companies and 200 customers residing near the locality where the companies have performed CSR activities. The data has been collected with the help of a self-developed questionnaire. Questionnaire consist of a total of 30 statements based on the eleven different aspects of CSR. Likert’s scale is used to rate the statements on the basis of a five-point scale where 1 means strongly disagree, 2 means disagree, 3 means neutral, 4 means agree, and 5 means strongly agree.

CSR INDEX = Index values of (Integrity, Excellence, Responsibility, Innovation, Fairness, Care, Customers, People, Safety, Community, Environment)

The index value of a particular aspect of CSR has been calculated by using the following formula as:

Index value = Mean value of a company for a particular CSR aspect / Overall mean value of all the companies for that particular CSR aspect.

The researcher has used the ANOVA analysis and ratio method using SPSS software. The following hypothesis has been tested during the study:

Null Hypothesis 1 (H₀₁): There is no significant difference in the performance of FMCG companies of India related to the different aspects of CSR.

Data Analysis: This section deals with the data analysis of CSR and its various aspects for all the ten selected FMCG companies of India. Table 1, 2 and 3 shows the development of CSR Index for all the ten FMCG companies.

Table 1: Mean values of Aspects of CSR

CSR Aspect	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Mean
Integrity	4.40	4.05	4.05	4.03	4.00	4.15	4.03	4.03	4.00	4.03	4.08
Excellence	4.30	4.08	4.05	4.03	4.00	4.03	4.03	4.03	4.00	4.00	4.05
Responsibility	1.98	2.28	2.03	1.90	2.00	2.00	2.00	2.05	2.00	1.98	2.02
Innovation	4.70	4.95	4.95	4.98	5.00	4.95	4.98	5.00	5.00	5.00	4.95

Fairness	3.73	3.75	3.73	3.83	3.80	4.03	3.85	3.98	3.53	3.83	3.80
Care	4.00	3.85	4.03	3.60	3.70	3.53	3.88	4.08	3.90	3.85	3.84
Customers	3.88	3.93	4.03	3.73	3.90	3.75	3.98	3.95	3.88	4.03	3.90
People	4.20	4.18	4.38	4.03	3.98	3.90	4.25	3.98	4.23	3.95	4.11
Safety	3.55	3.50	3.78	3.53	3.53	3.38	3.50	3.63	3.58	3.45	3.54
Community	4.23	4.05	3.85	3.30	3.48	3.58	4.18	3.93	3.58	3.20	3.74
Environment	2.40	2.30	2.25	2.48	2.35	2.60	2.55	2.50	2.18	1.85	2.35

High mean Value Low mean Value

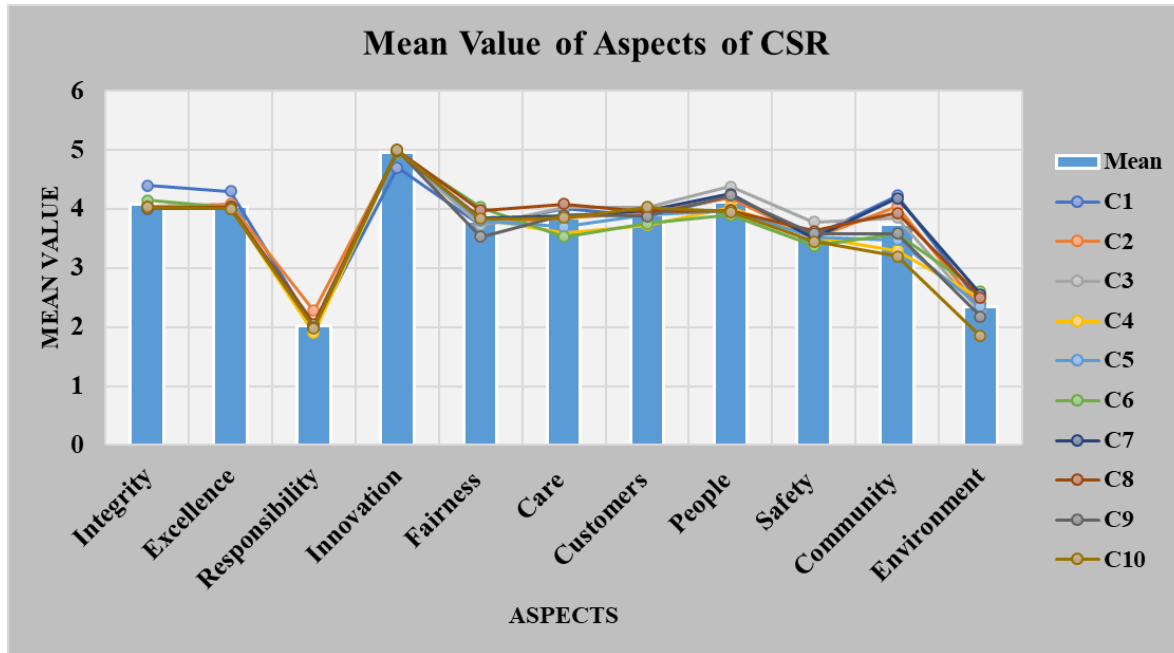


Figure 1: Mean Value of Aspects of CSR

Interpretation: It can be interpreted from **Table 1** & **Figure 1** that the highest mean value of CSR for all the companies has been recorded for the Innovation aspect followed by people, while the lowest mean value for the CSR for all the companies has been found for the environment. Thus, it can be said that FMCG companies in India are doing CSR activities related to innovation and towards the people and more concerned towards the environment. FMCG companies are involved in innovating new products for creating values to the customers and following ingenuity concept in their business; FMCG companies are also fulfilling their responsibilities towards the people working in the organizations i.e., employees. FMCG companies are providing competitive salaries, other financial benefits, and a friendly environment and career and growth opportunities, thus involved in CSR practices towards the employees. The study also found that FMCG companies are showing less concern for making eco-friendly products, environment-friendly waste disposal policies, green packaging, and green marketing/advertising policies.

Table 2: Index values of Aspects of CSR

CSR Aspect	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
Integrity	1.08	0.99	0.99	0.99	0.98	1.02	0.99	0.99	0.98	0.99
Excellence	1.06	1.01	1.00	1.00	0.99	1.00	1.00	1.00	0.99	0.99
Responsibility	0.98	1.13	1.00	0.94	0.99	0.99	0.99	1.01	0.99	0.98
Innovation	0.95	1.00	1.00	1.01	1.01	1.00	1.01	1.01	1.01	1.01

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Fairness	0.98	0.99	0.98	1.01	1.00	1.06	1.01	1.05	0.93	1.01
Care	1.04	1.00	1.05	0.94	0.96	0.92	1.01	1.06	1.02	1.00
Customers	0.99	1.01	1.03	0.96	1.00	0.96	1.02	1.01	0.99	1.03
People	1.02	1.02	1.07	0.98	0.97	0.95	1.03	0.97	1.03	0.96
Safety	1.00	0.99	1.07	1.00	1.00	0.95	0.99	1.03	1.01	0.97
Community	1.13	1.08	1.03	0.88	0.93	0.96	1.12	1.05	0.96	0.86
Environment	1.02	0.98	0.96	1.06	1.00	1.11	1.09	1.06	0.93	0.79

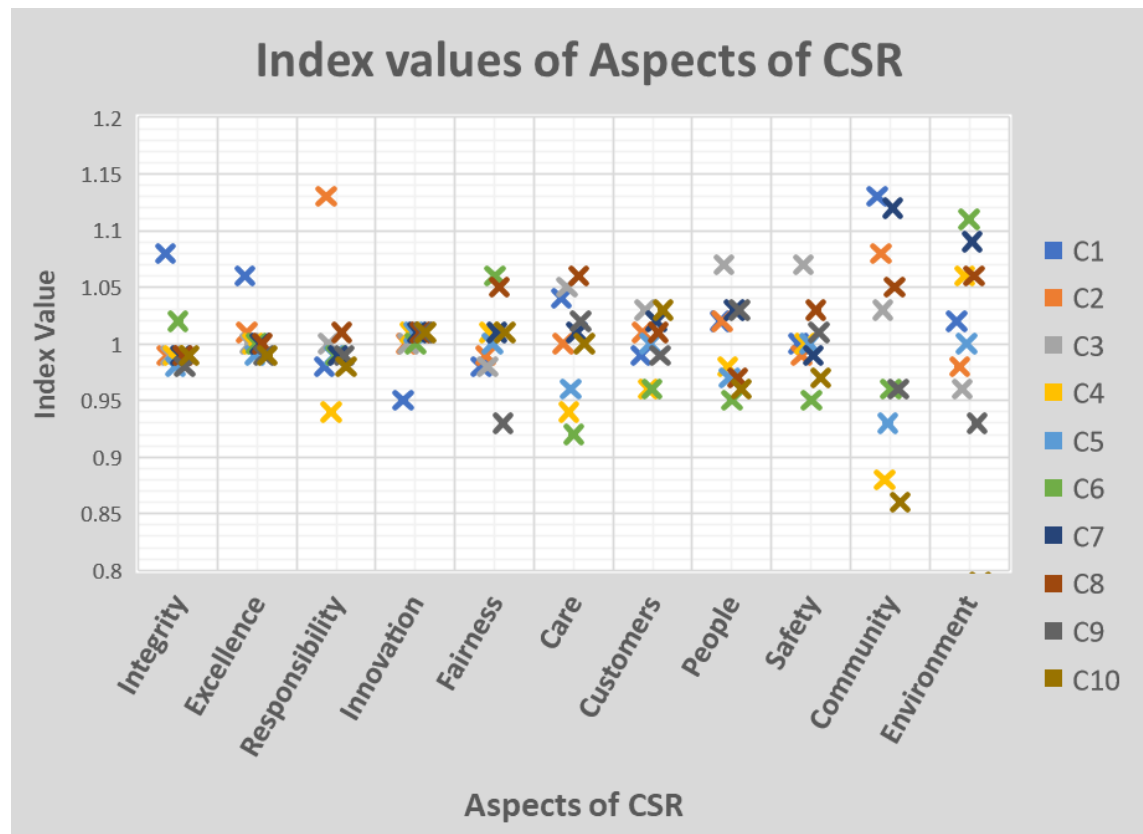


Figure 2: Index value of aspects of CSR

Interpretation: The index values of each of the CSR aspects have been calculated by using the overall mean value of that particular CSR aspect. It can be interpreted from **Table 2** & **Figure 2** that HUL Company is leading in CSR activities related to Integrity, Excellence and Community. Colgate Palmolive Company is leading in CSR activities related to Responsibility. ITC Company is leading in CSR activities related to Customers, People, and Safety, while Nestle India and Parle Agro are leading in CSR activities related to Innovation. Britannia Company is leading in CSR activities related to Fairness and Environment, Marico, Godrej India, and Amul are leading in CSR activities related to Innovation. Proctor and Gamble is leading in CSR activities related to Innovation and Care. Thus, overall it can be said that the majority of the FMCG companies are leading in CSR activities related to Innovation.

Table 3: CSR Index and CSR Performance

Companies	CSR Index	Ranking on the basis of CSR Index	CSR Performance
Marico	11.26	1	Good
Hindustan Unilever	11.25	2	Good
Proctor & Gamble	11.24	3	Good
Colgate Palmolive	11.2	4	Moderate
ITC	11.18	5	Moderate
Britannia	10.92	6	Moderate
Godrej India	10.84	7	Poor
Parle Agro	10.83	8	Poor
Nestle India	10.77	9	Poor
Amul	10.59	10	Poor

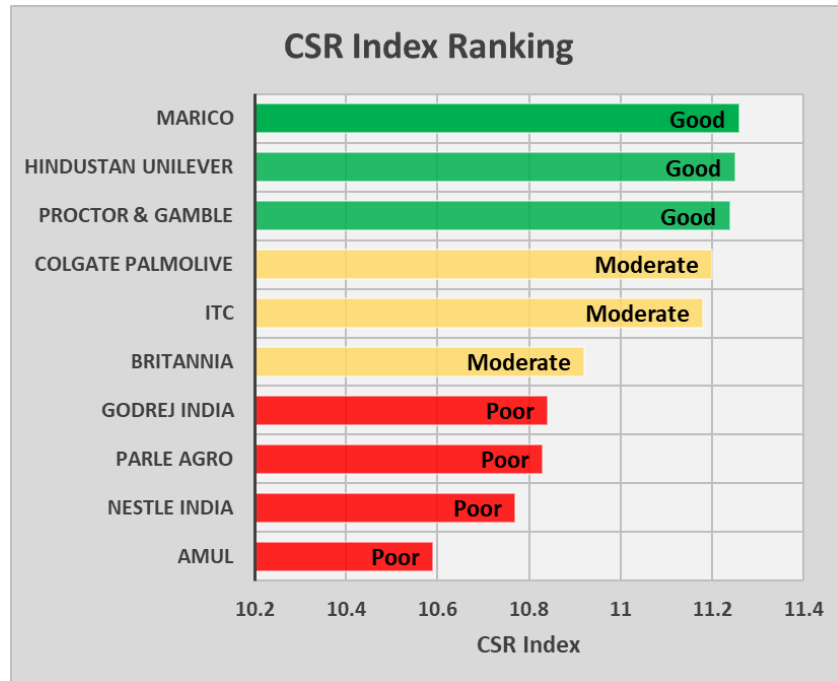


Figure 3: CSR Ranking Index

Interpretation: Table 3 shows the CSR Index of all the ten FMCG companies of India based on the various aspects of CSR. It can be seen from **Table 3** & **Figure 3** that the highest CSR Index is of Marico Company, followed by Hindustan Unilever and Proctor & Gamble. The lowest value of the CSR index is of Amul and Nestle India. Thus, it can be said that the companies which are performing well in all the areas of CSR have shown overall good CSR performance.

Null Hypothesis 1 (H_{01}): There is no significant difference in the performance of FMCG companies of India related to the different aspects of CSR.

Table 4: Results of ANOVA Analysis

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
INTEGRITY	Between Groups	5.350	9	.594	10.350	.000
	Within Groups	22.400	390	.057		
	Total	27.750	399			
EXCELLENCE	Between Groups	2.922	9	.325	6.674	.000
	Within Groups	18.975	390	.049		
	Total	21.897	399			
RESPONSIBILITY	Between Groups	3.440	9	.382	1.456	.163
	Within Groups	102.400	390	.263		
	Total	105.840	399			
INNOVATION	Between Groups	2.950	9	.328	7.082	.000
	Within Groups	18.050	390	.046		
	Total	21.000	399			
FAIRNESS	Between Groups	6.973	9	.775	.597	.800
	Within Groups	506.425	390	1.299		
	Total	513.398	399			
CARE	Between Groups	11.860	9	1.318	1.444	.167
	Within Groups	355.900	390	.913		
	Total	367.760	399			
CUSTOMERS	Between Groups	3.773	9	.419	.445	.910
	Within Groups	367.425	390	.942		
	Total	371.198	399			
PEOPLE	Between Groups	9.140	9	1.016	1.345	.212
	Within Groups	294.450	390	.755		
	Total	303.590	399			
SAFETY	Between Groups	4.110	9	.457	.193	.995
	Within Groups	923.250	390	2.367		
	Total	927.360	399			
COMMUNITY	Between Groups	47.060	9	5.229	3.689	.000
	Within Groups	552.850	390	1.418		
	Total	599.910	399			
ENVIRONMENT	Between Groups	17.440	9	1.938	.689	.719
	Within Groups	1096.950	390	2.813		
	Total	1114.390	399			

Interpretation: It can be interpreted from **Table 4** that the f-value (10.350) has been found significant for the Integrity at one percent level of significance, which shows that there is a considerable difference in the CSR activities of the FMCG companies towards the Integrity, which is related to ethical practices, transparent policies, and honesty of the companies. It can also be seen from **Table 4** that the f-value (6.674) has been found significant for the Excellence at one percent level of significance. This shows that there is a considerable difference in the CSR activities of the FMCG companies towards the Excellence, which is related to the quality of the products, continuous practices of the company for improvement in the quality, performance of the products or services of the company. It can also be seen from **Table 4** that the f-value (7.082) has been found substantial for the Innovation at one percent level of significance, which shows that there is a substantial difference in the CSR activities of the FMCG companies towards the

Innovation, which is related to creativity of the company, innovating new products, adding new features to the existing products for increasing the value of the products, ingenuity of the company, research and development practices of the company. It can also be seen from **Table 4** that the f-value (3.689) has been found significant for the Community at one percent level of significance, which shows that there is a significant difference in the CSR activities of the FMCG companies towards the Community, which is related to corporate citizenship of the company, activities towards the community welfare, practices for the development of the communities, raising the standard of living of the people by providing quality products.

For the remaining aspects of the CSR, namely; fairness, safety, people, environment, care, customers and responsibility, no significant differences have been found in the CSR practices of all the ten selected FMCG companies of India. Thus, it can be interpreted that all the selected FMCG companies are performing similar CSR activities towards fairness, safety, people, environment, care, customers, and responsibility aspects of CSR.

Conclusion: It can be concluded from the study that overall the CSR performance of the FMCG companies of India is good. FMCG companies of India are highly involved in the activities related to the Innovation aspect of CSR and showing less concern towards the Environment. CSR performance towards the environment is very low for all the FMCG companies, which is a cause for alarm and concern also. It was also found from the study that Hindustan uniliver, Marico, and Proctor & Gamble are the good performers in the field of Corporate social responsibility while Amul, Parle agro, Nestle India, and Godrej India are the poor performer in the field of Corporate social responsibility. The study also highlighted that there is a significant difference in the CSR practices of the FMCG companies towards Integrity, Excellence, Community and Innovation while there is no significant difference in the CSR practices of the FMCG companies towards fairness, safety, people, environment, care, customers and responsibility.

Limitations and Future Scope: The study is limited to the FMCG sector; a comparative study of other sectors can also be done to understand the CSR performance of Indian companies better. The sample size of the study is 400, which is, of course, very small in comparison to the population. The study is based on the data of only ten companies, which can be extended to have a clearer picture of the CSR performance of the companies. The study is based on primary data, and primary data suffers from the personal biases and judgment of the respondents. A cross-sectoral study can be done using the same CSR index methods.

Managerial Implication: The study is beneficial for the managers, strategists, policymakers, environmentalists to know that FMCG companies are performing well in the area of innovation but showing less concern for the environment. The CSR practices of the companies should also include the activities for the protection of environment, should follow the business practices which causes less harm to environment, using green marketing, green advertising, green packaging, eco-friendly products, and eco-friendly waste disposal policies. FMCG companies should understand the fact that CSR practices of companies should be directed towards the betterment of the environment, to make this world a happy, safe, healthy, and beautiful place to live.

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