

---

**To find out Consumer Perception towards CSR practices of FMCG Manufacturers**

---

<sup>1</sup>Sudhanshu Shekhar, Research Scholar, Institute of Management, Bundelkhand University,  
Jhansi (UP)

<sup>2</sup>Dr. Kamal Bhatia, Assistant Professor, Institute of Management, Bundelkhand University,  
Jhansi

---

**ABSTRACT**

Customer demand for corporate social responsibility (CSR) has been rising, and customers play a significant and intricate role in the CSR equation. Certainly, their purchasing habits could aid in its dissemination. In order to maximise the impact of their CSR programmes, businesses must take a more proactive approach to consumer social responsibility, as consumer behaviour, attitudes, and decisions continue to be the primary factors influencing the demand for goods and services. One of the areas of the Indian economy that is expanding the fastest is the fast-moving consumer goods (FMCG) industry, which has grown extraordinarily during the last ten years. When it comes to CSR initiatives in India, it leads the pack. The majority of FMCG firms actively participate in corporate social responsibility initiatives in areas including women's empowerment, sports promotion, healthcare, education, community welfare, environment, rural development, disaster relief, and animal welfare. A significant shift in the operations of FMCG companies will have an effect on how FMCG consumers behave. Therefore, it is crucial to determine whether Jharkhand consumers' behaviour has changed as a result of FMCG businesses' CSR initiatives.

**KEY WORDS:** Customer Demand, Corporate Social Responsibility (CSR), Fast-Moving Consumer Goods, Industry.

**INTRODUCTION**

The idea of "corporate social responsibility" is that businesses should take society's interests into account by being accountable for how their actions affect consumers, staff members, shareholders, communities, and the environment in all facets of their business operations. The corporation is voluntarily taking further steps to improve the quality of life for its employees and their families, as well as for the local community and society at large. These obligations seem to

go beyond the statutory obligation to comply with laws and legislations. Depending on the type of company, there can be differences in the scope and character of corporate social responsibility.

It is a well-known truth that gaining riches and making money are the main goals of business. A company cannot continue for very long if it does not make money through profits. Additionally necessary for its development and growth are profits. Even though earning a profit is a company's primary goal, it is not possible for a business organisation to pursue profits in a profit-blind manner without also considering its social and human goals.

At one point, it was expected of these business corporations to show off their efforts to maximise profits by producing and distributing goods and services as efficiently as possible, innovating and improving processes and products, and expanding their customer base. But in addition to these traditional economic goals, business organisations are also being asked to support a growing number of social ones. A company doesn't just happen to exist. A business corporation is a community of people, not merely a collection of tangible assets like real estate, buildings, machinery, capital, etc. It is therefore a component of society and can only fulfil its primary goal of maximising profit by being deeply ingrained in it. Consequently, business is a social institution in addition to an economic one. Additionally, a commercial firm has obligations to society just like any other social institution.

India is a nation full of contrasts. Even though India's economy has expanded to become one of the largest in the world and a major player in the new global order, the country still maintains the highest percentage of undernourished children and adults living in absolute poverty. The image that emerges shows how growth's advantages are not distributed fairly, which is the underlying source of social instability. Those who are disturbed by this uneven development have also turned their attention towards companies (Confederation of Indian Industry, Handbook on Corporate Social Responsibility in India). Traditionally, businesses have been seen as the engines that propel an entity's economic performance; their success is gauged by their strong returns on equity and their ability to foster societal advancement and the economic expansion of the country. Businesses rely on society for everything in order to survive, thus it is their duty to give back to the community by fostering positive attitudes. Should it fall short of societal norms, the community will penalise the company by means of its purchasing habits. Therefore, an

organization's ability to succeed depends mostly on how ethically it conducts itself in relation to society. Global business firms modify their social responsiveness in accordance with the evolving social expectations of society to foster goodwill and a positive reputation for their businesses.

### **CSR is Service to the Society**

Due to the reciprocal dependence between the business and society, it is the responsibility of the corporation to engage in CSR operations. The company cares about the well-being, security, and prosperity of the local communities. The corporate world has evolved beyond those financially autonomous organisations designed only to maximise profits at the expense of society at large. It is not acceptable for corporations to function as separate economic entities with no regard for society. Since businesses are a part of society and cannot survive in isolation, it is a widely acknowledged reality that successful company empires are established by contributions from society in the age of globalisation, liberalisation, and privatisation. It cannot flourish in a culture where social unrest is caused by issues with social fairness, injustice, and economic disparities. To ensure that there is no social unrest and that there are sufficient resources for health, education, literacy, and other areas, businesses should give back to society a portion of their gains.

### **CSR - Indian Perspective**

Companies have been engaging in corporate social responsibility in India for many years. The pioneer of CSR in India is the Tata Group, an indigenous global company with roots in India and a remarkable 140-year history of community service. Since the mid-1990s, a number of significant corporations have been actively involved in corporate social responsibility initiatives. These days, CSR has gained popularity thanks to such wonderful, inspiring instances; in India, CSR is still growing. Businesses that engage in corporate social responsibility initiatives in areas such as education, health, livelihood creation, skill development, and the empowerment of marginalised communities include Infosys, Bharti Enterprises, ITC Welcome Group, Indian Oil Corporation, and others. Four Indians are listed among Forbes Asia's "48 Heroes of

Philanthropy" in 2010. One of the top Asian nations giving corporate social responsibility disclosure standards more weight is India.

### **Mandatory Provision on CSR**

CSR in India often concentrates on what happens to earnings after they are generated. However, sustainability is about taking into account how doing business—that is, how profits are made—affects society and the environment. As a result, a significant portion of CSR in India is a part of sustainability, or responsible business, which is a more general concept. This is demonstrated by a number of sustainability frameworks. The NVGs for social, environmental, and economic obligations of business, which were released by the Ministry of Corporate Affairs in June 2011, provide an intriguing example. The Companies Act of 2013's CSR provision covers most of the topics addressed under principle eight, which is related to inclusive development. The remaining eight principles, however, deal with different facets of the company. Ten principles that address social, environmental, human rights, and governance issues make up the UN Global Compact, a popular sustainability framework. What is commonly referred to as CSR is implied rather than stated in these principles.

From the different definitions of CSR proposed by international bodies, it appears that the concepts of sustainability and CSR are becoming more and more similar on a worldwide scale. The preamble to the recently released draft rules pertaining to the CSR clause within the Companies Act, 2013, which discusses stakeholders and integrates it with the social, environmental, and economic objectives—all of which make up the concept of a triple bottom line approach—is where this convergence first emerged. Additionally, it is recognised in the DPE's April 2013 Guidelines on Corporate Social Responsibility and Sustainability for Central Public Sector Enterprises. The following is mentioned in the new rules, which have replaced two earlier, distinct guidelines on CSR and sustainable development that were published in 2010 and 2011, respectively:

Given the close relationship between corporate social responsibility and sustainability, it is possible to define corporate social responsibility and sustainability as a company's commitment to its stakeholders to conduct business in a transparent, ethical, and economically, socially, and environmentally sustainable manner.

Why is the CSR clause of the new Companies Act, 2013 so critical?

The enterprises Act, 2013 is expected to attract many enterprises into the CSR fold, as it requires companies with a minimum net profit of 5 crores INR to spend on CSR initiatives. This will provide a new set of difficulties for an industry that is seeing a rise in requests from its business-to-business (B2B) clients to adhere to ethical and environmental norms while maintaining price and quality competitiveness.

## **RESEARCH METHODOLOGY**

The survey approach is the foundation of this study. Survey instruments are now a well-accepted and utilised research approach across the globe. It entails posing structured questions to a sample of the population at one particular moment in time. Studies in the social and behavioural sciences typically benefit from surveys. It is an illustration of a field study. Either sample surveys or census data may be used. Regardless of the kind, questionnaire approaches, interviews, or observation are the methods used to acquire data.

## **POPULATION IDENTIFIED**

The demographic for this research, from whom the sample was taken, is the customers of FMCG companies in Jharkhand, and as the research is restricted to the FMCG Sector, the customers should be aware of CSR.

## **NATURE OF DATA**

The primary and secondary data needed for this investigation were gathered. In addition to information gathered from several books, newspapers, journals, theses, and dissertations, among other sources, secondary data were gathered from the internet. A carefully designed questionnaire was created to gather primary data from FMCG consumers in order to investigate the impact of corporate social responsibility on consumer behaviour in the industry.

## PILOT STUDY

To verify the validity and dependability of the research tools on consumer behaviour and corporate social responsibility, a preliminary analysis was conducted. In order to do this, the researcher gathered 100 responses, which were spread across the cities of Ramgarh, Dhanbad, and Ranchi, with percentages of 30, 30, and 40, respectively. The following outcomes were obtained by applying Cronbach's Alpha value to the CSR and consumer behaviour components.

TABLE – 1. RELIABILITY RESULT

Label	No. of Items	Cronbach's Alpha value
Importance for choosing FMCG products	13	.781
Awareness on CSR	8	.704
Response towards Mandatory Provision of CSR	5	.755
Importance to CSR practices	8	.562
Perception on Companies' Responsibility	25	.898
Consumer perception towards CSR	18	.855
Buycott	18	.855
Boycott	10	.826
Satisfaction	7	.802
Trust	6	.744
Loyalty	7	.791

The aforementioned data indicates that the CSR Practices Cronbach's Alpha value was a lower. As a result, the researcher completed the primary study and revised the procedures listed in the questionnaire. At the 5% level, all other Cronbach's Alpha values are statistically significant. This suggests that the primary study does not require any modifications.

## SAMPLING DESIGN

The study's respondents are those who are aware of corporate social responsibility (CSR) and who buy FMCG goods or brands. Given that the population is limited and FMCG users in Jharkhand numerous, the respondents were chosen using the convenience sampling technique.

**TABLE NO.2 SAMPLING**

S. No.	Name of the Corporation	No. of Questionnaires				
		Issued	Received	Not Received	Rejected	Valid Responses
1.	Ranchi	150	149	1	4	145
2.	Dhanbad	150	143	7	13	130
3.	Ramgarh	150	130	20	7	123
4.	Deoghar	150	120	30	18	102
5.	Hazaribagh	150	135	15	35	100
<b>Total</b>		<b>750</b>	<b>677</b>	<b>73</b>	<b>77</b>	<b>600</b>

The sample is made up of 600 replies that were gathered from each of Jharkhand's five corporations: Ranchi, Dhanbad, Ramgarh, Deoghar, and Hazaribagh. The first 150 surveys were distributed to each of the five corporations listed above. 677 questionnaires were received out of the total, 73 were not received, 77 were rejected because the data were deemed invalid, and 600 were ultimately determined to be valid for analysis. Based on population and origin, the study's corporations were chosen into three categories: highest, middle, and lowest.

## MEASURES

There were four sections on the survey questionnaire. The effect that CSR practices have on consumer behaviour in the FMCG sector was outlined in Section D. The questionnaire was composed of five-point Likert scales with anchors at "5 = Very Important" to "1 = Not at all Important" and "5 = Strongly Agree" to "1 = Strongly Disagree," in addition to optional type items.

## RESULTS AND DISCUSSION

### PERCEPTION OF THE RESPONDENTS TOWARDS THE RESPONSIBILITY OF THE COMPANY

Companies have several obligations to society, shareholders, and customers. Customers' perceptions of these obligations vary as well. Therefore, it is crucial to learn what customers believe about the obligations of businesses. For this, the companies' obligations are listed in twenty-five statements, and the t-test was used to determine the results.

**TABLE NO. 3**

#### ONE-SAMPLE STATISTICS FOR THE PERCEPTION ON COMPANY RESPONSIBILITY

<b>Particulars</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>
Have a reputation for ethical behaviour	300	4.2583	.82019	.03344
Meet the legal requirements for product safety	300	4.0350	.79467	.03248
Produce wealth	300	3.8633	.97617	.03987
Its suppliers	300	3.7083	.96859	.03956
Hire people with disabilities	300	3.6400	1.05146	.04295
Maximize earning per share	300	3.7517	1.00748	.04115
Produce organic products	300	3.8267	1.01077	.04123
Its local community	300	3.7517	1.06703	.04353
Obey all the rules and regulations of the law	300	3.9067	.97615	.03987
Contribute to economic development	300	3.9783	.96233	.03927
Its employees	300	3.7167	.99064	.04046
Get profit	300	3.7017	.98875	.04035
Provide accurate products information	300	3.8300	1.06442	.04347
Use optimum natural resources	300	3.8617	.95606	.03905

Create jobs	300	3.8250	1.18886	.04856
Involve in charitable activities	300	3.5517	1.07047	.04370
Help the needy	300	3.5667	1.16382	.04753
Behave honestly	300	3.7817	1.07359	.04385
Give donation	300	3.7233	1.02886	.04200
Its consumers	300	3.9200	1.05457	.04307
Give ethical advertisement	300	3.7167	1.10985	.04533
Provide reasonable price to its products	300	3.8733	1.02586	.04186
Use eco-friendly raw materials	300	4.0283	.97079	.03965
Give cleaner environment	300	3.9183	1.07094	.04374
Its shareholders	300	3.6233	1.13296	.04627

According to the above data, the standard deviation varied from 0.79467 to 1.18886, and the mean values of the variables related to the opinion on the company responsibility ranged from 4.2583 to 3.5517. The one-sample t-test computation is shown in the following table.

**TABLE NO. 4**

**ONE-SAMPLE T-TEST FOR THE PERCEPTION ON COMPANY RESPONSIBILITY**

Particulars	Test Value = 3					
	t	df	Sig. (2- tailed)	Mean Difference	95% confidence interval of the difference	
	Lower	Upper	Lower	Upper	Lower	Upper
Have a reputation for ethical behavior	37.560	300	.000	1.25833	1.1926	1.3241
Meet the legal requirements for product safety	31.906	300	.000	1.03500	.9713	1.0987
produce wealth	21.666	300	.000	.86333	.7851	.9416
its suppliers	17.916	300	.000	.70833	.6307	.7860

Hire people with disabilities	14.907	300	.000	.64000	.5557	.7243
Maximize earning per share	18.277	300	.000	.75167	.6709	.8324
Produce organic products	20.035	300	.000	.82667	.7456	.9077
its local community	17.257	300	.000	.75167	.6661	.8372
Obey all the rules and regulations of the law	22.753	300	.000	.90667	.8284	.9849
Contribute to economic development	24.904	300	.000	.97833	.9012	1.0555
its employees	17.723	300	.000	.71667	.6372	.7961
Get profit	17.386	300	.000	.70167	.6224	.7809
Provide accurate products information	19.100	300	.000	.83000	.7447	.9153
Use optimum natural resources	22.073	300	.000	.86167	.7850	.9383
Create jobs	16.994	300	.000	.82500	.7297	.9203
Involve in charitable activities	12.625	300	.000	.55167	.4658	.6375
Help the needy	11.925	300	.000	.56667	.4734	.6600
Behave honestly	17.832	300	.000	.78167	.6956	.8677
Give donation	17.223	300	.000	.72333	.6408	.8058
its consumers	21.367	300	.000	.92000	.8354	1.0046
Give ethical advertisement	15.815	300	.000	.71667	.6277	.8057
Provide reasonable price to its products	20.855	300	.000	.87333	.7911	.9556
Use eco-friendly raw materials	25.945	300	.000	1.02833	.9505	1.1062
Give cleaner environment	21.002	300	.000	.91833	.8325	1.0042
its shareholders	13.475	300	.000	.62333	.5325	.7142

It is inferred from the above table that the twenty five t-test values of opinion on the level of agreements on Companies' Responsibility on reputation for ethical behaviour ( $t=37.560$ ,  $p=0.000$ ), Legal requirements for product safety ( $t=31.906$ ,  $p=0.000$ ), produce wealth( $t=21.666$ ,  $p=0.000$ ), its suppliers ( $t=17.916$ ,  $p=0.000$ ), Environment ( $t=28.780$ ,  $p=0.000$ ), Rural Development ( $t=20.281$ ,  $p=0.000$ ), Hire people with disabilities ( $t=14.907$ ,  $p=0.000$ ), Maximise earning per share ( $t=18.277$ ,  $p=0.000$ ), produce organic products ( $t=20.035$ ,  $p=0.000$ ), its local

community ( $t=17.257$ ,  $p=0.000$ ), obey the rules and regulations ( $t=22.753$ ,  $p=0.000$ ), contribute to economic development ( $t=24.904$ ,  $p=0.000$ ), its employees ( $t=17.723$ ,  $p=0.000$ ), get profit ( $t=17.386$ ,  $p=0.000$ ), provide accurate product information ( $t=19.100$ ,  $p=0.000$ ), use optimum natural resources ( $t=22.073$ ,  $p=0.000$ ), create jobs ( $t=16.994$ ,  $p=0.000$ ), involve charitable activities ( $t=12.625$ ,  $p=0.000$ ), help the needy ( $t=11.925$ ,  $p=0.000$ ), behave honestly ( $t=17.832$ ,  $p=0.000$ ), give donation ( $t=17.223$ ,  $p=0.000$ ), its consumers ( $t=21.367$ ,  $p=0.000$ ), give ethical advertisement ( $t=15.815$ ,  $p=0.000$ ), provide reasonable price to its products ( $t=20.855$ ,  $p=0.000$ ), use eco- friendly raw materials ( $t=25.945$ ,  $p=0.000$ ), give cleaner environment ( $t=21.002$ ,  $p=0.000$ ), its shareholders ( $t=13.475$ ,  $p=0.000$ ) are statistically significant at 5 per cent level. According to the T-Test, the respondents strongly agreed that the company had a reputation for moral behaviour, that it should adhere to all legal requirements for product safety, that it should follow all rules and regulations, that it should support economic development, that it should be accountable to its customers, and that it should meet all other legal requirements. The respondents only moderately agreed with the other variables.

### **THE FACTORS INFLUENCING COMPANY RESPONSIBILITY**

Twenty-five variables on Likart's 5-point scale, which goes from Strongly Agree to Strongly Disagree, are used to collect data from customers regarding the key elements determining the company's responsibility. The researcher used the principal component method of factor analysis to categorise variables and create new factors in order to decrease these variables. The following illustrates the factor analysis results:

**TABLE NO. 5**

#### **KMO AND BARTLETT'S TEST FOR COMPANY RESPONSIBILITY**

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</b>		.897
Bartlett's Test of Sphericity	Approx. Chi-Square	4546.954
	df	300
	Sig.	.000

According to the preceding table, the estimated chi-square value of 4546.954 indicates statistical significance at the 5% level for Bartlett's Test of Sphericity, which yields a KMO measure of sample adequacy of 0.897. This demonstrates that the variables can be clustered with the necessary variance and that they form the Normal Distribution. The following table on communities shows each individual variation of company responsibility.

## CONCLUSION

Customers are becoming more conscious of their purchasing decisions and are demanding products that have little to no detrimental effects on the environment. Additionally, businesses begin to understand that, in addition to being the “right thing to do,” “doing good” also results in “doing better” due to the favourable outcomes for important stakeholder groups. Companies may benefit from participating in these "corporate social responsibility" initiatives in a number of ways. Stakeholders may, for example, adopt a more optimistic outlook that boosts their investments or purchases. Companies may improve their company image and fortify their bonds with stakeholders over time.

It was not lost on anyone how important corporate social responsibility was becoming. Numerous studies have been done regarding corporate social responsibility practices. While some of this research attempted to explore the influence of CSR on consumers' purchasing behaviour, the majority of these studies attempted to define the notion of CSR. A few of these studies were constrained by the ignorance and inattention of consumers towards corporate social responsibility. Companies confront stakeholders about their CSR initiatives via radio, television, and the internet in an effort to raise consumer knowledge and awareness. On their websites, almost 80% of Fortune 500 firms discuss their corporate social responsibility initiatives. The purpose of this study is to learn more about customers' genuine awareness of organisations' corporate social responsibility programmes.

Corporate social responsibility has garnered significant attention in the last ten years due to its perceived status as the newest weapon in the business world. The government cannot be the only entity to address societal issues. Since business organisations receive everything from society, it

is their responsibility to give something back to it. Although corporate social responsibility (CSR) is often viewed as a marketing tactic or as a means of generating wealth, it also provides certain unrealized benefits. It is crucial for emerging nations such as India. Even though the CSR provisions have been made necessary by the Indian government, not even the middle class has been covered. The higher-educated FMCG consumers in this survey are also aware of Jharkhand's CSR laws. Unknowingly, it benefits other customers who are unaware of the terms and the concept of corporate social responsibility. Jharkhand shoppers are eager to buy high-quality, environmentally friendly, and ethical products. They are enthusiastic about using CSR-related products and are interested in buying them. They also happily recommend the products to others. Because there is a strong and good relationship between the company and its product, the customers are satisfied, trust the CSR product, and grow loyal to it.

## REFERENCES

1. "Consumers' perception of corporate social responsibility in a developing country," Denni I. Arli and Hari K. Lasmono (2010), *International Journal of Consumer Studies*, 34, pp. 46–51.
2. *The Journal of Corporate Citizenship*, I-42, Summer 2011, Diana Ingenhoff and Katharian Sommer, "Corporate Social Responsibility Communication - A multi-method Approach on Stakeholder Expectations and Managers' Intentions."
3. Dimitrios PAPADOPOULOS, Olga ANDREADOU, Efstathios DIMITRIADIS, and Dimitrios CHATZOUEDES (2011), "The Effect of Corporate Greek consumers' attitudes and behavioural intentions regarding social responsibility legislation, *Scientific Bulletin - Economic Sciences*, Vol.10, I-1, pp.93-102.
4. Elias G. Rizkallah (2012), "Do consumers truly care about corporate social responsibility and the brand-consumer relationship?" *Research in Business and Economics*, Vol. 10, I-6, June, pp. 343-347.
5. "Corporate Social Responsibility: An Analysis on Consumer Perception," by Flavio Boccia and Virginia Sarno (2012), *Journal of Agricultural Science and Technology*, I-2, pp. 1119–1125.

6. Business Ethics: A European Review, Vol.17, I-2, April, pp.210-226; Geoffrey Williams and John Zinkin (2008), "The effect of culture on consumers" willingness to penalise irresponsible business behaviour: applying Hofstede"s typology to the punishment aspect of corporate social responsibility".
7. Customer-based corporate reputation of a service firm: scale development and validation, Gianfranco Walsh and Sharon E. Beatty, Journal of the Academy of Marketing Science, I-35, pp. 127-143, 2007.
8. "A Study of linkage between Corporate Social Responsibility Initiatives with Financial Performances: Analysis from Oil and Gas Products Industry in India," Vol.5, I-5, November 2013, Govindarajan V.L., Amilan S. (2013).
9. The September issue of Gambling Studies included a paper by Hai Li, James J. Zhang, Luke Lunhua Mao, and Sophia D. Min (2011) titled "Assessing Corporate Social Responsibility in China's Sports Lottery Administration and its Influence on Consumption Behaviour."
10. "The Impact of Management on CSR," Hasan Fauzi and Kamil M. Idris, Issues in Social and Environmental Accounting, Vol. 4, I-2, pp. 104–114, December.
11. The study "Effects of Corporate Social Responsibility on Consumer Retention in Cellular Industry of Pakistan" was published in the African Journal of Business Management in April 2010 by Imran Ali, Kashif Ur Rehman, Ayse Kucuk Yimaz, Sajid Nazir, and Jawaria Fatima Ali.
12. "Consumers' Perceptions of Corporate Social Responsibilities: A cross-cultural Comparison," by Isabelle Maignan (2001), Journal of Business Ethics, Vol. 30, pp. 57–72.
13. IzaGigauri (2012), American-Eurasian Journal of Scientific Research, Vol. 7, I-5, pp. 207–211, "Impact of Corporate Social Responsibility on Consumer Purchase Decision."
14. The 2009 article "Society is out there, organisation is in here" by James A. H. S. Hine and Lutz Preuss discusses how different managerial groups view corporate social responsibility (Journal of Business Ethics, I-88, pp. 381-393).
15. In the January 2012 issue of Indian Economic Panorama, a quarterly journal covering agriculture, industry, trade, and commerce, Jayakumar A. and Geetha K. wrote, "CSR - A key ingredient for Corporate Sustainability," pp. 42–45.
16. The article "Financial Inclusion as a Corporate Social Responsibility-A Way for Rural Development" was published in the January 2013 issue of Indian Economic Panorama, a

quarterly journal covering agriculture, industry, trade, and commerce, pages 38–41.  
Jayakumar A. and Geetha K.

17. "Understanding Corporate Social Responsibility and Product perceptions in Consumer Markets: A Cross- Cultural Evaluation," Jaywant Singh, Maria del Mar Garcia, de los Salmones Sanchez, and Ignacio Rodriguez del Bosque, *Journal of Business Ethics*, I-80, pp. 597–611.