About the Journal

Journal of Development Research is the flagship journal of Vivekanand Education Society's Institute of Management Studies and Research (VESIM) since 2009 and is presently published bi-annually. The journal was published quarterly till the year 2021. It is a multi-disciplinary journal with a special focus on societal issues such as institutional level structural transformation aimed at speeding up the economic growth, reducing the inequality and poverty eradication.

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Aims and Scope

Journal of Development Research is a peer-reviewed journal, and it abides by its peer review policies strictly.

The journal adheres to a rigorous double-blind reviewing policy, in which the identity of both the reviewer and author are always concealed from both the parties.

The journal publishes research papers and articles in broad areas such as:

- Banking and Finance
- Business Management articles in the field of Marketing, HRM, OB, Operation, Business Research Methods, Business Analytics, and other broad areas.
- Developmental Economics and Social Sectors Development
- Business Environment, Business Ethics, and Corporate Governance
- Sustainable Development, Entrepreneurship, and Social Entrepreneurship

It aims at disseminating new knowledge in the field of different domain areas of management, development studies, and related disciplines. It provides a platform for discussions and exchange of knowledge among academicians, industry professionals, researchers, and practitioners who are associated with the management, financial institutions, public and private organizations, as well as voluntary organizations.

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Editorial

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Information Technology undergoes frequent and regular transformations. In the upcoming years, the information technology industry is expected to significantly transform business structures, generate employment opportunities, and launch innovative technologies. Recent innovations have significantly enhanced productivity and introduced novel features in various fields such as medicine, entertainment, business, education, marketing, and law enforcement. As a result of the swift expansion of information technology, outdated forecasting techniques are being substituted by modern ones. Industry 5.0 has arrived, whether you are prepared or not. Although industries are currently focused on building strategies to connect new technologies and enhance efficiency and productivity.

After the COVID outbreak, the employment market experienced enhancements in digital movements, namely within the digital industry. The estimate predicts that technology occupations would have faster growth compared to other professions. According to the Bureau of Labour Statistics (BLS), there is an expected growth rate of 12% projected until 2028. The innovative nature of information technology requirements leads to the emergence of market gaps. To ensure success in the field of IT, it is imperative for individuals to remain abreast of the most recent technical breakthroughs.

The articles in this issue contribute to an increased awareness of the importance of emerging information technology in various industries, particularly in the aftermath of the COVID-19 outbreak. New technologies can help companies penetrate high-potential markets. The markets like the pharmaceutical industry brands struggle to manage the complex consumer journey and develop brand loyalty in the competitive global market and data-driven digital marketing strategy helps to satisfy the customers, the influence of social media and simultaneously the importance of self-discovery and self-awareness.

The study done by Bhatt compiled scholars' reviews of companies employing new technologies to compete. One of the most visible aspects of emotional culture shift in developing or developed countries is new technology. These emerging technologies give entrepreneurial enterprises huge potential and challenges in their pursuit for a competitive edge. This study examines how emergent technologies affect corporate survival and growth. The study aggregated scholars' reviews on corporations using the latest technologies to gain a competitive edge. The survey found that AI, robotics and drones, 3D printing, serverless computing, block chain, and

other technologies have transformed organisations' operations. These technologies empower organisations to make better decisions and grow.

Chhabhaiya attempted to understand a new product category between pharmaceuticals and cosmetics, cosmeceuticals aim to improve skin look and health. The brands struggle to manage the complex consumer journey and build brand loyalty in the extremely competitive global skincare sector. This study examines COSRX, a South Korean skincare business that succeeded by revitalising local health and beauty stores and encouraging consumer satisfaction through a fully involved, data-driven digital marketing strategy. This paper provides insights and actionable takeaways for brands navigating the ever-changing skincare marketing landscape.

Srivastava analysed FoMO as an anxiety caused by the thought that you may be missing out on pleasurable experiences that others are having. FoMO, an intrapersonal trait, pushes people to follow others on social media. The COVID-19 pandemic forced people to isolate, diminishing social chances and increasing social media use to preserve relationships. FOMO may increase the need to stay connected and speak with others, to avoid becoming invisible on social media in physical solitude. This study used one-way ANOVA to determine how gender affected FoMO during COVID-19.

Siyodia examined how media affects brand recall and decision-making in urban and rural India for paints and water-proofing goods. This exploratory study used primary and secondary data. The study sought to determine how media affects client purchases. The study also examined brand awareness and recall. The data was acquired using urban and rural questionnaires. This survey included 120 urban respondents from Pune, Mumbai, Bangalore, and Kolkata and 150 rural respondents from Lucknow, Patiala, Kochi, Hubli, and Yawatmal.

Saurabh Singh, Lakshmi Kant Tripathi, Snehal Karia conducted a study on how Faculty members are crucial to any university's performance, and their satisfaction matters for online education. This study examined the factors affecting faculty satisfaction in the virtual learning environment and faculty responses to the pandemic and their satisfaction levels due to challenges and benefits during the initial COVID-19 outbreak. Flexibility, training, institutional variables, simplicity of use, technological factors, and personal or psychological factors were used to assess teacher satisfaction with virtual instructional platforms.

Sangita Das and Amit Kundu attempted to understand whether school-aged children's participation as ‘not directly paid’ family labourers in household tasks and economic activities improves rural West Bengal families' livelihoods. The possibility of Hidden kid Labour increases when the kid's father is older, the child is not an infant, the home has good operational assets, and the mother is in a Self-help group. Positive parental attitudes towards their child's education can help lessen Hidden Child Labour. The two-step Treatment Effect model implies that Hidden Child Labour helps their family earn more than homes without it during the reference period.

Lastly, Debolina Mitra reviewed a very popular book "Discover Arjuna in You" by Dr Satish Modh. This masterwork shows how to enhance career and leadership abilities by fostering conflict management through self-management using Triguna Energy Quotient. The author wrote clearly and made several philosophical themes of life easy to understand, which may keep readers reading. The book outlines a smooth path to self-discovery and self-awareness.

I hope that readers have an enjoyable experience reading the articles and come up with deeper ideas about the ongoing debate about challenges that are associated with information technology.

Satish Billewar
Associate Editor

Article

Role of Emergent Technologies in Entrepreneurial Firms

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Abstract

New technologies are one of the most obvious parts of the emotional change of culture in developing or developed countries. These emergent technologies offer enormous opportunities for the entrepreneurial firms interested in searching for a competing lead in business as well as pose challenges to the firms. The emergent technologies can go a long way in helping the organisations to tap the newly emerging markets with high potential. The present study aims at identifying the role of emergent technologies in influencing the survival and expansion of the business. The study has compiled the reviews of various scholars on the usage of the latest technologies by the firms to achieve a competitive edge. This is a descriptive study and makes use of the secondary data. The findings of the study suggest that technologies, such as AI, robotics and drones, 3D Printing, serverless computing, block chain and so forth have been most important technologies for the firms, as they have completely changed their traditional way of organisation functioning. These technologies enable effective and efficient decision-making and promote the growth and development of the firms. The study makes a value addition to the existing literature on the role of emergent and futuristic technologies in enabling the entrepreneurial firms to pave their way towards sustainable growth in the competitive business environment through ingenious business solutions.

Keywords

Emergent technologies, entrepreneurial firms, challenges, competitive, decision-making

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Introduction

Organisations have been able to expand their business and generate new business models through the adoption of agile new technologies; these technologies enable the organisations to develop unique ways for value creation through constant innovation strategies (Zott & Amit, 2007). New technologies are one of the most obvious parts of the emotional change of culture in developing or developed countries. Furthermore advancements in technology are an apparent part of an economy which gives off an impression of being in progress towards the end of the 20th century, including everyday life, relations at work place and other features of an organisation. Emerging technologies enable the organisations to maintain a steady supply of innovative products and services; these technologies also play a significant role in influencing the market structure and business of the organisation (Sainio, 2004).

The spread of the internet and of portable technology has significantly changed the way individuals access data, how they pick the services they use and how they approach technological changes. The entirety of all this has prompted a sensational change in plans of action in businesses (Roblek et al., 2013). Social media platforms are significant for entrepreneurs as well as new companies. It empowers interfacing with general public and customers through different channels and modes of conversation; it also helps the internal discussion, decision-making and organisational development (Baptista et al., 2017; Kraus et al., 2019; Li et al., 2017; Shen et al., 2018). Bange et al. (2019) in their study found that online social media platforms make the stretch for brand building and development of faithfulness towards brand. Through new idea sharing, publication of model updates, getting admirable responses, the business visionaries can further influence the hierarchical information and can contribute towards enhancement of value creation through generation of the products (Hidayanti et al., 2018; Kane, 2017).

The development of game-changing technologies is evening the odds in various industries. Espousal of these technologies is on the ascent, offering awareness to advance scholars in different businesses to rethink what's conceivable. Latest techniques like machine learning, artificial intelligence (AI) and robotic process automation are ready to introduce another method of working together, due to which long established business practices will find difficult to exist. Development in natural language processing and sentiments will alter the service industry. This will happen soon as the Internet of Things (IoT) turns into a norm in each industry (Lampikoski et al., 2014).

Nowadays digital transformation is far reaching and unavoidable in most ventures and organisations. It leads to a rise in global view of digital business. This is driven by the improvements expected, implantation into huge assemblage of people adding to create imaginative innovation-based arrangements. The technological advancements as an outcome of innovation offer more clarity about the nature and distinguishing features of digital entrepreneurship ecosystem.

Emerging Technologies in Business

Internet of Things (IoT)

IoT can be defined as a connection of various interconnected machines, devices or items that are given unique identifiers and they have capacity to transfer data from one system/machine to other system/machines without creating the need for any type of human interference. IoT furnishes information to the organisations about the working of their frameworks. It conveys in-depth knowledge ranging from the presentation of machines to logistic operations and supply chain. IoT offers a number of benefits in almost every field, some might be specific to industry and some are general such as monitoring of overall business processes, improvement in customer experience, enhancement of productivity of employees, integration and adoption of business models, better decision-making and generation of more revenue (Schwab, 2016).

Artificial Intelligence (AI)

AI has changed the working pattern in organisations; it has affected the pattern of client cooperation with organisation through bots and wise sites; these tools are effectively coordinated into day to day work. AI is expected to impact every industry from retail to healthcare, hospitality to finance by improving the security of data, speed and accuracy of decision-making as well as employee output and training. With an investment in AI, the company can avail benefit of reduction in cost.

5G System

5G system will enable the expansion of capacity for moving, controlling and breaking down of information. It is also expected that the system will drive the development of many advanced applications for handling various issues of business. This will also lead to business empowerment by facilitating complex operations. 5G will also enable to enhance the speed of the business through productive and early mover preferences.

Serverless Computing

Serverless processing permits associations to make robotised IT conditions. These robotised IT conditions offer various benefits like reduction in day-to-day operations and allows the organisations to utilise resources for enhancing additional capacities including additional worth. Serverless computing is a new innovation along with robotics, replacing automation as well as processing (Rayome, 2019).

Block Chain

Today, a huge number of business associations are making use of blockchain innovation ranging from bookkeeping and administrative consistence to other activities. The administration of unmistakable, immaterial and complex resources has become simpler and proficient with the assistance of blockchain innovation. Resources, for example, land can be tokenised, isolated and appropriated with negligible security concerns and the board costs, which is frequently worried about liquidity and venture size. Usage of block chain in managing finances additionally helps in encouraging instalments and dealing with the progression of cash effortlessly. There are numerous other creative methods of utilising blockchain by enterprises to smooth out development. With appropriated record innovation, approved members can get to a similar data simultaneously safely and effectively (Attaran & Gunasekaran, 2020). Application of block chain technology in supply chain management can enable the company to track and simplify the complex and geographically widespread supply chain. Real-time tracking of the operations and elimination of any kinks in the supply chain has become possible due to digitisation of different components in the supply chain.

Robotics and Drones

Automations can accomplish more than convey merchandise. One close term used for drones is inside the domain of stock administration. Automations are being tried for their value inside distribution centres. Imagine utilising drones to fly all through the stockroom and sweep the scanner tags of the available stock. Drones can confirm stock in a small amount of the time as compared to a group of individuals. While these stock control drones are flying around ensuring 100% stock exactness, self-sufficient trucks will pull up to the stacking docks while the self-sufficient forklifts empty them. Human distribution centre workers may be consigned to galleries. Robotics and drones replacing humans is not completely new. Technology has been replacing humans since long time and this always helped entrepreneurs to boast their growth and minimise costs (Marion, 2019).

3D Printing

3D printing is truly incredible as it changes spools of plastic fibre or plate of tar into physical items. NASA keeps up a 3D printer on the International Space Station and space explorers can fabricate custom apparatuses without flying them into space. 3D printing has been embraced by understudies, business visionaries, specialists and monstrous industrial facilities. Since 3D printing considers the change of an advanced plan into a substantial item, a wide exhibit of employments has been found (Gewirtz, 2019).

Big Data

It is a well-proven fact that big data plays a significant role in the success of business. However, only 29% of businesses have been able to tap the potential of

big data by conversion of analytics in to action. Big data can be extremely important in devising new offerings of an already existing or new brand apart from offering benefit of achieving the maximum potential of marketing activities. Organisations can gain insight into customer preferences through analytics and thereby offer their products for gaining maximum advantage and optimising their market share. Genetic testing companies like 23andMe, MapMyGenome and Ancestry are an outcome of the big data revolution (ForbesIndia, n.d.). These corporations have analysed scores of data for giving their customers a deeper understanding of their heritage and health.

Metaverse

The advent of the metaverse and its acceptance as a popular term has offered businesses with a plethora of new prospects for technological and business model innovation. While definitions differ, the metaverse has been characterised as 'a massively scaled and interoperable network of real-time rendered 3D virtual worlds that can be experienced synchronously and persistently by an effectively infinite number of users' (Ball, 2021). Analysing the socio-economic impacts of virtual worlds has become more important (Wang et al., 2022), as the concept has been publicly embraced not only by big tech companies like Meta, Microsoft and Tencent, but also by smaller companies and start-ups (Rizvanovi et al., 2023).

Business Application of New Technologies

According to a growing body of scholarship (Davidsson, 2003, 2016), entrepreneurship is the process by which new economic activities and organisations emerge. Digital entrepreneurship refers to a new trend in entrepreneurship that has emerged as a result of the adoption of digital technologies. Digital entrepreneurship is predicted to play an increasingly crucial economic and societal role in terms of driving innovation, job creation and economic growth. Politicians are beginning to recognise the relevance of digital technologies for entrepreneurship, for example, to encourage entrepreneurship in general and the use of digital technologies for such endeavours in particular within.

AI is used by e-commerce platforms to make personalised suggestions, optimise supply chains and provide Chabot-driven customer care. India's smart cities plan incorporates AI for traffic control, energy optimisation and public safety, promoting sustainable urban growth. In education, AI provides personalised learning experiences and assessments that meet the various needs of students.

E-commerce platform uses AI for personalised suggestion.

Overall, AI and robotics play critical roles in increasing productivity, creativity and societal well-being across a wide range of commercial sectors in India.

The Role of New Technologies in the Spread of New Businesses

Technology paves the way for development. Application of new technology in business is the need of the hour. Business is becoming more tech savvy with the

passage of time. Innovation largely affects business tasks. Regardless of the size of the organisation, technology can bring myriad benefits that will assist the business for expanding and developing the products as per the client's requirement. The fundamental part of technology in business is to drive development and improve tasks. Without technology, organisations would in all likelihood neglect to achieve their targets (Westerman et al., 2014). The digital economy has offered ascend to various innovative business models. Present day advancements in information technology have fostered conduction of numerous businesses at a remarkable scale without any hindrance of location or distances.

Technological improvements have dramatically impacted India's startup scene, encouraging creativity, scalability and market disruption. The availability of cutting-edge technologies has reduced entry barriers for entrepreneurs, allowing the formation of startups in a variety of industries. Cloud computing, for example, has provided low-cost infrastructure solutions, allowing businesses to scale operations without making large upfront investments.

Advancements in digital payment systems and blockchain technology have opened the way for innovative financial solutions and inclusive banking services, transforming the way transactions take place in the fintech sector. Machine learning and data analytics provide entrepreneurs with useful information for strategic decision-making, consumer profiling and personalised offerings, hence increasing competitiveness.

Remote cooperation is also made easier by technological solutions, allowing startups to form internationally distributed teams and access talent pools that are not limited by geography. Mobile technology has played a critical role, particularly in the healthtech and edtech sectors, by democratising access to healthcare and education via innovative apps and platforms.

Furthermore, the rise of AI-powered automation has simplified processes, lowered costs and increased efficiency for startups. In India, where different issues coexist with vast opportunity, technological improvements serve as a catalyst, allowing companies to address local needs with scalable and sustainable solutions. Overall, technology is critical to the development and growth of Indian businesses, promoting a vibrant entrepreneurial ecosystem.

The Role of New Technologies in Entrepreneurial Decision-making Process

The momentum of technological development has brought about important changes in people's life and work. It is affecting all disciplines, economies and businesses, maybe none more than production, and how, what, why and where people produce and deliver products and services. Traditional production methods have been replaced for a wider outreach that has never been thought of before—beginning from data origin, item composition, production and finally reaching the customer. Revolutionary changes have been brought about in terms of economy, return and reuse. Accomplishments in key regions are changing the destiny of formation, including robotics, the IoT, energy storage, biotechnology, self-governing vehicles, AI, nanotechnology, materials science, 3D printing and

quantum computing. In any case, precise facts on the worth and hazards that technology can make for organisations and nations is not broadly diffused. Business leaders, the general population, government pioneers would profit by simply gaining an insight in to availability and adoption of existing technology, and their combine effect on individual industry, firms, enterprises and the society. Policymakers and companies will understand the difference between excessive cases or exposure and reality, and will be able to settle on sound business investments and policy decisions (Kearney, 2017).

The Role of New Technologies on the Growth and Development of Entrepreneurial Firms

Shifting of research and capability of scientific establishments towards introduction of innovative products and services is the main characteristic of technology-enabled entrepreneurship. This change offers exceptional advantages to the purchasers along with economic development by guaranteeing powerful and synergistic relations where science meets economy, technology entrepreneurship centres around actualising creative solutions, also guaranteeing their market achievement, just as on utilising their applications and disseminating their belongings in the business environment (Bhardwaj, 2019). Constant innovation is one of the major contributing factor progression and adequacy expansion of existing business. It likewise permits present day organisations to construct a changeless upper hand, generally through such beneficial outcomes as (Cassiman et al., 2010; Rosenbusch et al., 2011) increasing quality and viability, restricting expenses, expanding client reliability, internationalisation of tasks of modernising the management processes and techniques (Mukherjee, 2018).

Conclusion

World is developing day by day in terms of technology. Every year new technology comes and it directly or indirectly affects the entrepreneurial firms. Technologies, such as AI, Robotics and Drones, 3D Printing, serverless computing, block chain and others have been recognised as most significant technologies for the accomplishment of the goals of the entrepreneurial firms. These technologies have enabled the firms to change their traditional way of working, manufacturing, selling and others. Many large and reputed firms like IBM follow the strategy of heavy investment in the developing countries like China and India. These firms believe in forming new ventures with their stake in the equity. The new ventures operate successfully with the help of disruptive technology (Sarason et al., 2006; Smith & Sharif, 2007). Both large and small organisations can make use of the emergent technologies for development of competencies which go a long way in enabling the firms to gain competitive edge in the uncertain market scenario.

Finally, emergent technologies in entrepreneurial enterprises play an important role in changing India's innovation and growth landscape. As proved by pioneering

companies, incorporating innovative technologies accelerates entrepreneurial endeavours to success and sustainability.

Consider the Indian financial behemoth Paytm, which has used emerging technologies such as mobile platforms, AI and digital wallets to transform digital payments. Paytm's narrative exemplifies how technology innovation can meet local market demands while simultaneously positioning a company on a global scale, demonstrating the transformative impact of emerging technologies in the entrepreneurial arena.

Furthermore, the significance of these technologies goes beyond the realm of finance. In a variety of industries, including healthtech, edtech and agritech, Indian entrepreneurs use emerging technologies to produce unique solutions. This not only tackles the unique issues that exist in the Indian setting, but it also encourages an environment of creativity and adaptation.

In summary, the ability to absorb and use emerging technology is becoming increasingly important for the success of Indian entrepreneurial endeavours. As these companies negotiate the ever-changing business landscape, the strategic use of modern technology remains a defining feature in their pursuit of long-term innovation and market leadership.

Implication of the Study

This study is an amalgam of various emerging technologies and how they are helpful for successful operation of firms. The present study will be helpful to the start-up entrepreneurs and policymakers to develop an understanding of usage and application the nascent technology techniques and the benefits offered by them and why one should opt them in order to achieve success in the entrepreneurial pursuits.

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Article

Navigating the Skincare Journey: Analysing the Effectiveness of COSRX's Global Marketing Strategy

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Abstract

Cosmeceuticals are a brand-new product category that has emerged between pharmaceuticals and cosmetics to improve skin's appearance and health. In the fiercely competitive global skincare market, brands increasingly struggle to navigate the complex customer journey and secure lasting brand loyalty. This research delves into the success story of COSRX, a South Korean skincare brand that carved a distinct niche by prioritising key objectives like revitalising local health and beauty stores and fostering customer satisfaction through a deeply engaged, data-driven digital marketing strategy. By examining these objectives through four key pillars—revitalising local partnerships, customer-centric approach, leveraging Amazon reviews and designing a compelling digital strategy—this paper offers valuable insights and actionable takeaways for brands navigating the ever-evolving landscape of skincare marketing.

Keywords

COSRX, cosmeceuticals, skincare marketing, customer satisfaction, local partnerships, digital strategy, Amazon reviews, omnichannel, customer journey

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Introduction

Cosmeceuticals, which comprise a growing portion of the skincare market, are made from a wide range of substances, the primary types of which are covered in more detail later in this research paper. It is critical that doctors recognise these agents and comprehend their advantages, restrictions and potential drawbacks given the increased interest that patients are showing in these medications and the compelling claims made by the producers (Martin, 2011).

The landscape of skincare has transformed into a dynamic voyage, where brands navigate intricate consumer journeys like seasoned captains. Amidst this competitive sea, COSRX, a South Korean brand, has emerged as a rising star, carving its own niche by defying traditional currents and charting an innovative course. This research paper, akin to a meticulous expedition log, embarks on a deep dive into the effectiveness of COSRX's global marketing strategy, unravelling the secrets behind its remarkable success.

Driven by two critical objectives, COSRX rewrites the script of conventional marketing. Firstly, it boldly steers against the tide of online expansion, instead forging strategic partnerships with local health and beauty stores. This audacious move leverages the established expertise and customer base of these brick-and-mortar havens, allowing COSRX to cast a wider net and cultivate brand loyalty in a landscape increasingly dominated by digital waves. Secondly, COSRX prioritises customer satisfaction, transforming itself into a beacon of open communication and engagement. Utilising a data-driven, customer-centric approach, it dives deep into the digital ocean, actively soliciting feedback on platforms like social media and Amazon reviews. This treasure trove of insights fuels the development of products and marketing campaigns tailored to specific needs and preferences, ensuring COSRX remains anchored in the ever-evolving desires of its customers.

By meticulously charting these key areas, this research aspires to illuminate the path to effective marketing in the ever-shifting sands of the skincare industry. COSRX's innovative approach serves as a compass, offering valuable insights for brands seeking to navigate the complex customer journey and emerge triumphant in the global skincare market.

Objectives

This research aims to achieve two primary objectives:

1. Analyse COSRX's global marketing strategies.
2. Examining and correlating these marketing strategies with the brand's success.

Methodology

The methodology employed in this research utilised a robust approach to analysing COSRX's global marketing strategy through secondary data sources. To

ensure a comprehensive understanding, data was gathered from a variety of channels, each offering unique insights into different aspects of the brand's success.

Firstly, sales data from partnered local health and beauty stores, spanning diverse geographical regions, was obtained. This data provided a quantitative foundation for assessing the effectiveness of COSRX's partnership strategy. By comparing sales growth in partnered stores against non-partnered stores in similar locations, the research aimed to quantify the impact of these collaborations on revenue and brand reach.

Secondly, online review platforms, including Amazon reviews, were mined for customer sentiment analysis. This facilitated the gauging of consumer opinions and experiences with COSRX products and marketing practices. Sentiment analysis tools were employed to extract key themes and emotional tones from reviews, uncovering areas of customer satisfaction and potential areas for improvement.

Next, social media platforms were utilised to track brand mentions and engagement metrics. Data on website traffic, user interactions, and content-specific engagement provided valuable insights into the effectiveness of COSRX's digital strategy. By analysing how different types of content resonated with audiences, the research aimed to identify optimal content formats and engagement strategies for future campaigns.

Finally, industry reports and market research data were consulted to provide a contextual framework for COSRX's performance within the broader skincare market. This helped in benchmarking the brand's success against competitors and identifying emerging trends that could influence its future marketing strategies.

Through this multi-faceted approach, the research aimed to paint a holistic picture of COSRX's global marketing strategy and its effectiveness in achieving its objectives. By analysing and correlating data from diverse sources, the research sought to draw meaningful conclusions and provide actionable managerial implications for the brand and other industry players aiming to replicate its success in the competitive skincare market.

This expanded methodology section provides a more detailed description of the data sources and analysis techniques used in the research, contributing to a better understanding of the research's foundation and validity.

The scope of the study includes various resources of secondary data that helped in gaining valuable insights for the research study. This data was analysed and correlated with objectives stated and meaningful conclusions as well as managerial implications were drawn from it.

Literature Review

The global skincare landscape is undergoing a metamorphosis, propelled by a confluence of factors: rising consumer awareness, increasing disposable income and the quest for personalised beauty solutions. Navigating this dynamic market requires brands to understand the nuanced 'skincare journey' across diverse cultures and implement effective global marketing strategies. This research delves into key themes and recent research exploring this multifaceted topic.

Skincare is an essential part of personal care and beauty routines across the world. People in different cultures have developed unique skincare practices and techniques, often influenced by their environment, traditions and resources available to them (Chandra et al., 2022; Choi et al., 2022). For example, in Asian cultures, such as Japan and Korea, the focus is on achieving a clear and radiant complexion through a multi-step skincare routine that includes cleansing, toning, moisturising and using various treatments, such as sheet masks and serums (Dev et al., 2022). In African cultures, natural ingredients like shea butter and oils derived from plants are commonly used to moisturise and nourish the skin (Alander, 2004) . In India, Ayurvedic principles are applied to skincare, with a focus on balancing the body and using herbal ingredients like turmeric and sandalwood to treat and protect the skin. Consumers are increasingly seeking bespoke skincare regimens that cater to their unique skin concerns and cultural preferences. Studies by Markiewicz and Iduwo (2018) highlight the demand for products tailored to individual skin types, ethnicities and lifestyles, transcending the 'one-size-fits-all' approach. The perception of skincare expands beyond topical applications, embracing a holistic approach (Zhang et al., 2020). Research suggest consumers are incorporating diet, exercise, and mental well-being into their skincare routines, blurring the lines between internal and external care (Bates et al., 2022). Social media and online platforms wield immense power in shaping consumer behaviour. (Belanche, 2021) Reviews, influencer recommendations and educational content significantly influence purchasing decisions, as noted in studies by Kang et al. (2021). Ethical and environmentally conscious practices are gaining traction. Consumers are increasingly opting for cruelty-free, natural and eco-friendly brands, as reported in studies by Varma and Ray (2023). Considering marketing tactics, adapting marketing strategies to diverse cultural contexts and regulations is crucial for success. Research by Biemans (2023) underscores the importance of understanding local beauty standards, communication styles and distribution channels to avoid cultural faux pas and ensure market alignment. Integrating online and offline touchpoints creates a seamless and engaging experience for consumers. Studies by Chaffey et al. (2020) and Lemon and Verhoef (2016) highlight the effectiveness of leveraging social media, e-commerce platforms and physical stores simultaneously, tailoring content and offerings to each channel. Utilising customer data and market research allows for targeted marketing campaigns and product development strategies (Gorle & Pankhuri, 2021). Studies showcase the benefits of data analytics in understanding consumer preferences and behaviour across different regions, enabling customisation and relevance. Collaborating with relevant micro-influencers and brand advocates builds trust and credibility with diverse audiences. Research by Belanche et al. (2021) emphasise the impact of authentic partnerships in driving brand awareness, engagement and trust across cultural boundaries. Moving towards future prospects, AI-powered skin analysis tools and personalised product recommendations are poised to further shape the skincare journey, as discussed in studies by Movahedi (2023). However, ethical considerations and potential biases within artificial intelligence (AI) algorithms require careful attention. Augmented reality (AR)technology can enable virtual try-on experiences and enhance marketing

campaigns, as explored in studies by Dieck et al. (2023) and Romano et al. (2020). However, ensuring accessibility and cultural sensitivity in AR applications is crucial to avoid alienating certain demographics. The direct-to-consumer (DTC) model offers opportunities for brands to build direct relationships with consumers and gain valuable data insights, as highlighted in studies by Harrison & Hair (2017) and Nieto (2022). However, navigating logistics and regulations across diverse markets presents challenges that require careful planning and execution.

Analysis and Dissertation

As consumers gain awareness of their skincare options, more brands are producing skincare products tailored to particular lifestyles. Consumers prioritise high-quality, reasonably priced skincare products that are tailored to their skin type and offer specific tasks and advantages, according to Statista. Customers are looking for skincare products that cater to their specific needs, therefore, there is still room in the market for up-and-coming brands that prioritise customisation. Recent years have seen a surge in interest in the beauty business for K-Beauty brands, which are well-known for their distinctive innovations, attention to particular skincare needs and abundance of advantages that are now known and loved by customers worldwide (Na et al., 2021).

Jeon Sanghoon founded COSRX in 2013. After just a year, their products were making waves in the global skincare scene, with users citing noticeable improvements. The brand was a welcome change of pace for many. Natural skincare has changed as a result of its straightforward packaging, fuss-free compositions and reasonable pricing points. ‘We have been selecting skincare products for the global market, including Korea, for more than 10 years, taking into account th e unique demands and trends of our customers. Because we all had sensitive skin and could not use any of the products on the market at the time, we decided to select skincare items that would work for our skin type. This allowed us to enter the sector’, a brand spokesman stated.

COSRX chose to leverage individual experience by offering easily accessible skincare solutions that address common issues, as opposed to following the norm. A spokesman stated, ‘We wanted our customers to know that they were not alone and we still hope that when they use our products, they will be able to regain the confidence they deserve’. With an emphasis on Korean skincare, COSRX developed a list of basic active substances based on collective data, technology and ingredient composition. Before entering neighbouring nations, the brand began selling its goods in Korea.

COSRX distinguished itself from other skincare companies in the market by concentrating on two areas: their clientele and analytics. ‘As a brand, we investigate people’s lifestyles to discover answers to the problems we have, and by doing so, we are able to offer our clients products that are satisfactory and easy to use’. We consistently assert that ‘the solution lies with our clients’, an agent stated. The brand has taken an easy-to-understand approach to data collection. We examine a wide range of data. This may be as straightforward as a remark made on our

Instagram feed, comments from other social media platforms or remarks gathered via a software engine we built specifically for review research.

The sole goal of COSRX is to become the top hypoallergenic skincare line for those with delicate skin. The brand thinks that listening to what customers want is important and that philosophy should have a strong will. The spokesman stated, 'We base our decision-making on the reasons our customers chose COSRX, which we learn from their real-time feedback'. Acne Pimple Master, Aloe Soothing Suncream, Low pH Good Morning Gel Cleanser, Snail Cream and Snail Essence are among COSRX's best-selling products.

One Acne Pimple Master Patch is sold every 25 seconds, according to the firm. They are composed of hydrocolloid patches, which preserve skin hydration to stop new breakouts while preventing damage to injured or problematic regions from getting worse. Aloe Arborescens Leaf Extract is used in the formulation of the Aloe Soothing Suncream. It is simple to apply sun protection at any time of day because of its lightweight texture, moisturising feel and lack of white cast. In the United Kingdom alone, one sun cream is sold every 30 seconds.

The Low pH Good Morning Gel Cleanser, which has sold over 8 million units globally, gently cleanses skin without depleting it of its natural oils. The brand claims that users will noticeably display a firmer and brighter-looking complexion right away because it was designed with all skin types in mind. The brand's products have garnered over 100,000 five-star ratings together, with Snail Cream and Snail Essence standing as the top sellers on Amazon within the United States. The Snail Essence contains 96.3% snail secretion filtrate, which helps to maintain skin's moisture and brightness throughout the day. The Snail Cream is a thick gel-like cream that feels light and comfortable on the skin and absorbs quickly.

With the use of technologies that evaluate client testimonials and evaluations from social media and other sales channels, COSRX can promote its goods. An official stated, 'Data collection is used to develop strategies to improve communication and guarantee that the voices of our customers are represented in our marketing campaigns'. The company describes a 'cyclical conversational tool' as their approach to social networking. Instead, of telling customers what they need, it listens to their wants and then develops a solution to meet those needs. It continues to share instructional content on its social media channels after its debut.

The brand uses content production to combat the perception that skincare might be overly complicated. People frequently struggle to figure out which ingredient to use and how to apply a solution for their skin troubles. For the sake of our customers, we aim to minimise trial and error rather than just launching items. We encourage them to contact us with any questions or concerns they may have, and in return, we will produce content to help them better navigate their skincare issues, according to a spokesperson.

In an effort to reach a younger audience, COSRX has implemented an influencer marketing approach designed to foster relationships, raise brand recognition and introduce the company to new customers. Influencer marketing is an effective strategy. The proliferation of reviews on social media platforms made by consumers and micro-influencers is responsible for our business's success. Additionally,

we have used affiliate marketing. It can be used to track conversion when combined with influencers, according to a spokesman.

A recent innovation from the brand is the Vitamin C 23 Serum. Its specialised consumer research centre discovered that although people utilise vitamin C in the hopes of improving their skin, there are certain concerns regarding irritation and stinging, which it has addressed. Numerous clients with delicate skin have been forced to discontinue their use of vitamin C. We have been using words like 'stinging' and 'irritating' for a while, which is why we created a concentrated vitamin C serum that causes the least amount of discomfort while maximising effectiveness.

COSRX has been a leader in solution-based skincare for more than a decade. Solution-based skincare eliminates extraneous ingredients and concentrates on the important ingredients, making the formulation process simpler and targeting specific skin conditions. Both new and established firms have a chance to meet consumers' skin care needs without sacrificing skin health as the market for hyper-specific skincare continues to grow. 'We believe the skincare solution market will continue to grow and surpass its current size'. Individuality is a huge trend that we are witnessing and it seems to be impacting company strategies, a spokesman stated. Customers want goods that are tailored to their personal needs, and COSRX's mission is to curate items that address certain issues and improve the regimens that customers already follow (as depicted in Figure 1).

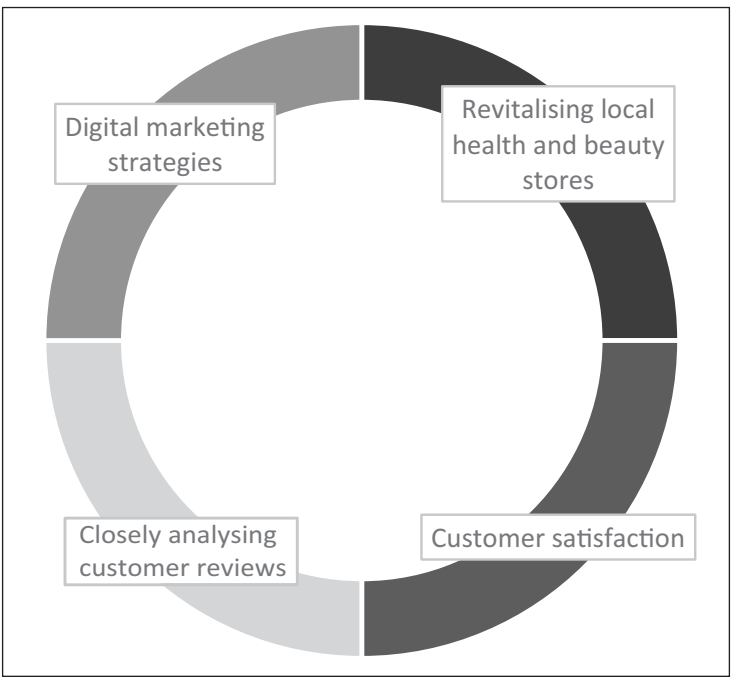

Figure 1. Key Elements Responsible for COSRX's Success.

In Southeast Asia, COSRX is currently highly recognised. After recently becoming well-known in the United States, they have had success in a number of the region's countries in just the past two years.

High Praise and Numerous Prizes in the US

The three items that won were Triple C Lightning Liquid (under $30 category), Acne Pimple Master Patch (under $10 category), and BHA Blackhead Power Liquid (blackhead category). With a total of five products, COSRX has won this competition three years in a row since 2017.

COSRX was also chosen as a Global Brand Success Story by Amazon in the United States in 2018. At the moment, they are selling their products through online and physical retailers in the United States, such as Riley Rose, Urban Outfitters and every Ulta Beauty shop. They have made arrangements for their products to be offered in every Forever 21 store as of May of this year. South Korean skincare company COSRX is quickly rising to prominence as one that has successfully expanded in the United States (BeautyTech.Jp., n.d.).

Additionally, COSRX has been growing its market share in Southeast Asia in recent years. They finished expanding their distribution network in February of this year, covering every Watsons pharmacy location in the Philippines, Indonesia and Singapore.

According to a COSRX representative cited in the South Korean newspaper Kukmin Ilbo,

> We were able to achieve a surprising level of growth within two years of expanding to the region as a result of meeting the needs of customers in Southeast Asian countries, of whom many deal with skin issues relating to the high-temperature and humidity the region is known for.

They added that their objective moving ahead is to expand on the sales success they have already experienced in the four major countries of the region and ultimately establish themselves as a well-known brand throughout Asia and eventually the entire world.

The Secret Behind COSRX's Growth

Sanghoon Jeon is the owner of the business, which was established in December 2013. An approximate estimate of its sales volume is 36.5 billion won, or $33.2 million USD. Other than this, the public is not given much information about the company, much less its history. Conversely, COSRX is considered a trailblazer in South Korea because it is a small-to-medium-sized business that has established distribution networks in overseas markets. Their effectiveness in doing so is mostly due to three elements.

The first is the change in how consumers choose what to buy. The conventional approach to entering overseas markets has traditionally been to establish a foothold in local department shops. However, COSRX has been able to drastically lower the hurdles to entry by focussing on revitalising the local H&B (Health and Beauty)

stores and beauty boutiques. Additionally, customer word-of-mouth and social media reviews have become highly significant in the market. This has increased the opportunities for small-to-medium-sized enterprises that produce high-quality goods to be integrated into local distribution networks. (as depicted in Figure 1).

The method by which COSRX creates its goods serves as the second defense. Customer satisfaction is the company's top priority. The owner of the company, Jeon, told South Korean media covering cosmetics, 'We plan to sell products that give consumers a high level of satisfaction, including in terms of price, rather than focussing on marketing materials'.

A big part of Amazon's praise for COSRX is its open lines of communication with customers. When releasing new products, they also utilise Amazon's Early Reviewer Program, which entails collecting customer feedback early on, evaluating them and changing products in response to identified user demands.

Its digital approach is the final justification. For example, COSRX fully utilised the Amazon platform as a global media influencer and not only as an online store when they moved into North America. They turned the Amazon sales page into appropriate reading material by structuring it like their own official website and providing thorough product descriptions, usage instructions, pricing and review excerpts. Additionally, they used influencer marketing, social media and video content to be in constant contact with customers, which greatly aided in raising COSRX's level of recognition.

Having a small-to-medium-sized business and being well-known online has helped it establish a presence in Southeast Asia. The introduction of COSRX into the Philippines is one such instance. Watsons is the H&B store with the biggest market share there at the moment, and COSRX is the only South Korean brand that has been successful in gaining in-store shelf space and driving up sales in those stores.

Small-to medium-sized South Korean skincare products are increasingly making their way into the Southeast Asian market. The total cosmetics market size of the six major Southeast Asian nations is estimated by Euromonitor to be US$19.1 billion (as of 2017), or 4.2% of the worldwide market. They also forecast an average annual growth rate of 8.8% for this Southeast Asian industry by 2022.

Conclusion

In summary, COSRX is a pioneer in solution-based skincare and is well-positioned for future expansion.

COSRX has become a well-known skincare brand by emphasising these important elements:

- Customer-centric approach: Giving input and needs from customers top priority during the creation and promotion of new products.
- Products that are solution-based: They provide efficient formulas with key components that address particular skin issues.
- Open communication and transparency: Using data to understand customer preferences and having open conversations with them.

- Strategic distribution: collaborating with appropriate retailers and making good use of internet channels.
- Concentrate on Southeast Asian market: appreciating the region's potential and customising goods to meet local needs and weather conditions.

With its solid base and dedication to innovation, COSRX is ideally positioned to seize more expansion in the worldwide skincare sector, especially in Southeast Asia. Customers looking for specialised solutions are drawn to the brand's commitment to providing high-quality, reasonably priced products that cater to particular demands. With the growing need for hyper-specific skincare products, COSRX is expected to maintain its position as a pioneer in providing affordable and efficient solutions for all skin types.

Managerial Implication

Managerial implications based on the COSRX case study:

Customer focus:

- Prioritise understanding customer needs and preferences: Conduct regular market research, gather customer feedback and actively engage with customers on social media.
- Develop products that address specific customer pain points: Focus on offering solutions to common skin concerns and personalise product offerings based on different skin types and needs.
- Be transparent and communicative: Share product information openly, address customer concerns promptly and utilise feedback to improve products and marketing strategies.

Product development:

- Focus on essential ingredients and avoid unnecessary additives: Streamline formulations to ensure effectiveness and affordability.
- Conduct thorough testing and research: Ensure product safety and efficacy before launch.
- Continuously innovate and adapt: Keep up with industry trends and develop new products to meet evolving customer needs.

Marketing and distribution:

- Leverage online platforms effectively: Utilise social media, influencer marketing and e-commerce channels to reach target audiences and build brand awareness.
- Partner with relevant retailers: Target distributors that align with your brand image and reach your desired customer base.
- Utilise data-driven insights: Analyse customer data to inform marketing campaigns and optimise distribution strategies.

Global expansion:

- Conduct market research to identify opportunities: Understand the specific needs and preferences of consumers in new markets.
- Adapt products and marketing strategies to local contexts: Consider cultural nuances and regulations when entering new markets.
- Build partnerships with local distributors and influencers: Leverage local expertise to gain market access and credibility.

Additional implications:

- Embrace a small-and-agile business model: Adapt quickly to changing market trends and customer demands.
- Invest in building a strong brand identity: Create a brand image that resonates with your target audience and differentiates you from competitors.
- Focus on long-term sustainability: Implement ethical and environmentally conscious practices throughout your business operations.

Following these management recommendations can help skincare firms replicate COSRX's success and prosper in the cutthroat worldwide market. Always keep in mind that the secret is to comprehend your clients, provide practical solutions and develop a powerful brand that speaks to their requirements.

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Article

An Empirical Study to Find the Relationship Between the FoMO Constructs with the Gender: A Post-COVID Scenario

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Abstract

The term 'fear of missing out' (FoMO) describes the uneasy sensations that surface when you realise that you might be losing out on fulfilling experiences that other people are enjoying. One intra-personal characteristic that encourages people to monitor what others are doing, especially on social media, is called FoMO. The COVID-19 pandemic-induced forced isolation had a significant negative influence on people's well-being by decreasing opportunities for social interactions. As a result, people were using social media more frequently to stay in touch with others. In fact, FoMO may intensify people's need to maintain social connections and engage in communication with others, which may result in persistent social networking (PSN) as a means of overcoming the fear of becoming invisible on social media when one is physically isolated. In this investigation, during the COVID-19 pandemic, a one-way ANOVA test was used to determine the impact of gender on FoMO. The empirical results prioritise the impact of gender and also assist academics in understanding the potential future scope. The study's primary data were gathered using a self-structured, self-administered questionnaire with 33 valid items. Statistical Package of Social Science (SPSS 21.0) and Microsoft Excel 2007 were used to analyse the collected data and produce a valid conclusion.

Keywords

COVID-19, fear of missing out, social media, online communication attitude, problematic social networking sites use, pandemic, lockdown

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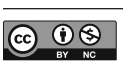

Introduction

The fear of missing out (FoMO) refers to the sensation or belief that other people are enjoying themselves more, having a better life or going through better experiences than you are. It has a detrimental effect on self-esteem and is typified by intense jealousy. The issue gets worse on social media sites like Facebook and Instagram. The sensation that you are missing out on something essentially important that other people are currently enjoying is known as FoMO. It goes beyond the notion that there are more worthwhile activities for you to do at this time. It may be anything, like a job advancement or a Friday night party, but it always entails a hopeless sense that you are losing out on something important.

Numerous difficulties have been brought up by the COVID-19 epidemic. Mental health concerns are the most urgent causes of concern among these obstacles. One such mental health issue that has been more prevalent since the pandemic's start is anxiety, according to statistics. There are many reasons behind these increased anxiety levels. Among the numerous causes of worry that people have identified are health issues and financial loss.

The COVID-19 restrictions increased people's use of social media, and those who were suffering from FoMO attempted to control their anxieties by using excessive or problematic social networking sites (SNS). This was made better by their preexisting attitudes towards online communication, which may have been further strengthened by the particular social distancing situation. These results require attention because they appear to indicate that attitudes resembling online communication traits may be a risk factor for the misuse or abuse of social media if they are associated with a genuine feeling of social isolation and/or a fear of losing the chance to relate to and participate in the experiences of others.

When we talk about young children, we picture them playing outside, going to school, and hanging out with friends. But since the pandemic struck, kids of all ages have been spending more time in front of screens at home. Even if the government and education ministries have issued rules to limit screen usage, mental health issues are associated with online learning. Having access to an electronic gadget can be very stressful for older kids and college-bound students. There is a significant digital divide in India among different states. According to a recent article, only half of the students in the state of Maharashtra have access to online schooling (Fegert et al., 2020). Students have severe difficulties when they are unable to attend online classes because of a lack of electricity or an internet connection, as this interferes with their ability to complete assignments and even exams. The younger generation has also taken a more 'relaxed' stance towards COVID-19 since they do not think it is dangerous for people in their age range. They have thereby transgressed social rules on social distancing. The young person may experience the opposite outcome, becoming nervous as a result of spending extended amounts of time apart from friends and peers. This, popularly known by the youth, is called FoMO (O'Sullivan et al., 2021).

Review of Literature

The fear of missing out (FoMO) is defined as

> A pervasive apprehension that others might be having rewarding experiences from which one is absent, FoMO is characterised by the desire to stay continually connected with what others are doing. For those who fear missing out, participation in social media may be especially attractive. (Boursier et al., 2020)

In fact, people's demand for relatedness is satisfied by the online world, which provides the perfect setting for meeting their needs for social awareness and connection with others even in remote places (Casale & Flett, 2020). For this reason, some studies by Kargın et al. (2020) have concentrated on the connection between Internet addiction and FoMO. However, some argue that the term 'Internet addiction' is too general and ignores significant distinctions between different types of online activity (Starcevic & Aboujaoude, 2017; Starcevic & Billieux, 2017), which conversely, warrants specific and differentiated attention.

Blackwell et al. (2017) discovered that those with FoMO are more likely to spend excessive amounts of time online since social media makes it simple to connect with others and can boost one's perception of social involvement, making it the perfect place for people to learn about others (Przybylski et al., 2013). Abel et al. (2016) assert that a person is a social being who values the thoughts and behaviours of others and the ways in which these reflect on them. People use social media to see what is happening in other people's lives as the digital world gets more and more integrated into their daily lives (Abel et al., 2016). People can see what they are missing out on (a party, supper, etc.) thanks to their continual (digital) access to others, which has been shown to increase emotions of worry, unworthiness and discontent (Abel et al., 2016; Przybylski et al., 2013). After using social media, people frequently experience increased anxiety, irritability, feelings of inadequacy and low self-esteem (Abel et al., 2016). Adolescents are especially susceptible to FoMO because of their peer participation, social ties and interactions (Barry et al., 2017).

In this sense, FoMO is a kind of internet addiction that primarily affects kids and teenagers, according to Tomczyk and Selmanagic-Lizde (2018). People feel bad when their demands to be online and obtain information as a source of satisfaction are not satisfied. Twenty per cent of the teenagers in their study had FoMO symptoms, and 30% were at risk of developing an SNS addiction. Three internet usage and addiction predictions are mentioned by the authors (along with FoMO). Initially, they characterise the escapist drive as the wish to get away from psychological problems like loneliness and melancholy. The second reason is boredom, which refers to the lack of activities to occupy one's free time. Lastly, there is the 'up-to-date' reason, which is wanting to remain informed about the actions of others and maintain relationships with friends, or look for new experiences.

Research Objective

The main objective of the present study is to study the effect of gender on the behaviour of FoMO.

Hypotheses

H_1: There is no significant effect of gender on the behaviour of FoMO on personal.
H_2: There is no significant effect of the gender on behaviour of FoMO on social.
H_3: There is no significant effect of the gender on behaviour of FoMO on novelty seeking.
H_4: There is no significant effect of gender on the behaviour of FoMO on consumer susceptibility.
H_5: There is no significant effect of gender on the behaviour of FoMO on social usage.

Research Methodology

The Study

The study is of an exploratory character and is predicated on a survey of Gen-X, Gen-Z and millennial viewers. Its goal is to investigate FoMO in millennials, Gen-Xers and Gen-Zers.

The Sample

The population being studied consists of current members of Gen-X, Gen-Z and millennial audiences. In the current investigation, samples from the population were chosen using non-probability judgmental sampling in the absence of a sampling frame. A handful of thoughtful respondents received invitations via e-mail to complete the questionnaire, and they were asked to pass it to other people who shared their profiles. The questionnaire was also completed using social media sites. The study's sample came from a variety of Indian cities. Ultimately, out of the 500 intended respondents, 420 completed the survey satisfactorily.

Tools for Data Collection

The primary data for the study have been collected through a self-structured and self-administered questionnaire comprising 33 valid items. Following a thorough examination of the literature, the researchers finalised 36 items, which were then forwarded to six judges/experts from academia and industry for the face validity process. The judges decided on 33 of the 36 items. These questions were asked of a sample of 420 respondents using a 5-point Likert scale that went from strongly agree (7) to strongly disagree (1). A different component of the questionnaire was used to gather general demographic data from the respondents.

Tools Applied for Data Analysis

Collected data was analysed using Statistical Package of Social Science (SPSS 21.0) and MS Excel 2007 to arrive at a meaningful conclusion. The reliability of the 33 items of the scale was determined by Cronbach's alpha method. The reliability coefficient alpha (α) was found to be 0.953 showing high reliability of the 34-item scale (Table 1).

Results and Discussions

To fulfil the objective—the results and discussion are as follows:

H_1 is not rejected as the significance value is found as .295 which is more than .05, so no significant effect of gender was found on the behaviour of FoMO on personal (Table 3).

H_2 is not rejected as the significance value is found as .277 which is more than .05, so no significant effect of gender was found on the behaviour of FoMO on social (Table 3).

H_3 is not rejected as the significance value is found as .141 which is more than .05, so no significant effect of gender was found on the behaviour of FoMO on novelty seeking (Table 3).

H_4 is not rejected as the significance value is found as .836 which is more than .05, so no significant effect of gender was found on the behaviour of FoMO on consumer susceptibility (Table 3).

H_5 is not rejected as the significance value is found as .668 which is more than .05, so no significant effect of gender was found on the behaviour of FoMO on social usage (Table 3).

Table 1. Reliability Statistics.

Cronbach's Alpha	No. of Items
0.953	33

Table 2. Details of Group Statistics.

	Gender	*N*	Mean	Std Deviation	Std Error Mean
Personal FoMO	Male	86	26.3721	8.00889	0.86362
	Female	83	27.3614	8.63286	0.94758
Social FoMO	Male	86	19.5698	9.17354	0.98921
	Female	83	19.2289	8.18286	0.89819
Novelty seeking	Male	86	35.5349	9.01854	0.97249
	Female	83	34.6988	10.54460	1.15742
Consumer susceptibility	Male	86	26.8372	10.23703	1.10389
	Female	83	25.1325	10.27402	1.12772
Social usage	Male	86	34.1163	9.03382	0.97414
	Female	83	33.9518	9.38331	1.02995

Table 3. Independent Sample *T*-test.

		Levene's Test for Equality of Variances	
		F	Sig.
Personal FoMO	Equal variances assumed	1.105	.295
	Equal variances not assumed		
Social FoMO	Equal variances assumed	1.188	.277
	Equal variances not assumed		
Novelty seeking	Equal variances assumed	2.188	.141
	Equal variances not assumed		
Consumer susceptibility	Equal variances assumed	.043	.836
	Equal variances not assumed		
Social usage	Equal variances assumed	.185	.668
	Equal variances not assumed		

Discussions

Social media and digital tool usage have unavoidably increased as a result of the COVID-19 pandemic. We attempted to identify the causes of peoples' encounters with FoMO that emerged from this usage of technology by conducting two investigations at the start and end of the epidemic.

Our findings show that people had FoMO during the epidemic, even if they were socially isolating themselves at home. There has been a significant change in the kind and volume of digital information people are consuming over this time. Our research indicates that the inability to keep up with real-time social media information, other people's postings and videos, recently released films and television shows on streaming services like Netflix, and virtual get-togethers with loved ones are all common causes of FoMO (Table 2). Particularly, those with a higher propensity for FoMO as a personality trait reported experiencing it more strongly when it comes to digital information. We discover that akin to a vicious circle, greater virtual activity participation fuels higher degrees of FoMO, which in turn fuels further engagement.

Contrary to popular belief, there was no correlation found between the inability to keep up with the abundance of digital content and an individual's extroversion or productivity orientation. Crucially, individuals exhibiting elevated trait levels of FoMO indicated a strong experience of FoMO throughout these online activities, throughout both the high point and subsequent phases of the outbreak. Even when the vaccination was made public and the limits were relaxed, there was no decrease in virtual FoMO, which may indicate that people were becoming accustomed to their highly digitalised 'new normal'.

Conclusion

The global impact of the COVID-19 outbreak has disrupted daily lives worldwide, the challenges during the pandemic have been in distributing vaccines, and still aftermath challenges are impending. Despite vaccine availability, vaccine hesitancy persists in some regions, potentially prolonging the pandemic's recovery. Identified as a significant threat by the World Health Organization, vaccine hesitancy posed a key risk to global health. Researchers and professionals are attentively determined to mitigate the pandemic's adverse effects on individuals and society. Responding to urgent calls from various fields to investigate the pandemic's impact on well-being, our study focuses on exploring how the FoMO influences individuals' emotional and physical experiences amid increased exposure to digital content. As public health specialists refer to it, 'quarantine fatigue' is the outcome of staying inside to slow down the curve. In particular, a lot of individuals find it difficult to keep up with the plethora of virtual activities, which leads to a new type of FoMO that significantly impairs people's happiness and well-being. It would seem reasonable to anticipate that during a time when people's contacts and bodily motions are restricted, FoMO would be suppressed or even eliminated. However, we discover that instead of going away, FoMO has been replaced by an altered version of virtual FoMO which is associated with increased internet engagements, leading to significant health issues.

Future Directions for FoMO and Its Impact on Well-being

As individuals seek essential social connections amidst their current circumstances, turning away from digital and social media platforms, despite advice to do so, may prove challenging to execute. This relationship makes you more susceptible to FoMO. It would be interesting to investigate if social media activity, such as sharing and uploading content, as opposed to passive activity, such as browsing and staring at other people's accounts, could lessen FoMO. Being in charge of and capable of keeping up with the current digital information may actually inspire thoughts of adequacy and provide a sense of respite from FoMO if one chooses to be a poster as opposed to a lurker.

Another way to reduce FoMO worry could be for people to start focusing more on themselves than on other people. It has long been demonstrated that mindfulness and meditation techniques improve subjective well-being by bringing people into the present. By cultivating an attentive awareness of the present, people might avoid focusing on other experiences that are going on at the same time. Likewise, JoMO (the joy of missing out) enjoying one's current moment regardless of thinking about what others are doing is a term that has not been extensively academically researched and explored. Investigating the contextual elements and rewards that could spur delight in the moment—whether it be through digital or offline experiences while eschewing peer comparisons would be beneficial. As people go on to the next phase of the epidemic, a change from FoMO to JoMO may prove beneficial.

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Article

Impact of Media in Brand Recall and Decision Making in Urban and Rural India

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Abstract

This study was undertaken to understand the effectiveness of the media, which helps in brand recall and, thereby, decision making in urban and rural India for the paints and waterproofing solution brands. This exploratory study is based on both primary and secondary data. The study was aimed at determining the awareness and recall of selected brands and how media influences buying decisions of the customer.

The data was collected through a questionnaire from both urban and rural areas. The primary data was collected through interviews and questionnaires. In all, 120 respondents contributed from urban areas such as Pune, Mumbai, Bangalore and Kolkata, and 150 respondents from rural areas around cities such as Lucknow, Patiala, Kochi, Hubli and Yawatmal were part of this study. The rural locations were selected in such a way that it was possible for us to visit them in a short span of time, whereas for urban locations, we floated a survey online with our questionnaire and selected the cities from where we had at least 30 respondents (minimum sample size for correlation analysis).

The analysis pointed out that, though the type of media viewed by the customer differs with the area, that is, urban and rural, the decision of both types of customers regarding buying a product of a specific brand was found to be independent of the media. A positive correlation was observed between brand awareness and brand recall. The outcome of this study pointed out that buying decisions independent from media influence needs to be taken seriously

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by companies before spending on advertising or before allocating a budget for advertisement.

Keywords

Media, brand awareness, brand recall, customer buying decision

Introduction

Companies spend huge amounts of money on advertising. This expenditure is done with the hope that it will result in increased sales. Companies hesitate to cut their advertising budget due to fear of reduced top-line growth. They want the maximum bang out of every penny spent. The options to reach out to buyers in today's times are varied. Companies are using various media such as social media, TV, radio, newspapers, magazines, brochures, leaflets, hoardings, posters, shopkeepers, dealers, company salesperson demo and others to reach customers. The media preferences of buyers are different in urban and rural India. Companies need to understand this while deciding on the choice of media to be used in urban and rural parts.

This research work is an attempt to understand the importance of media in the decision making of a customer in buying a particular product. It also focuses on finding out relationship between usage of different advertising media and buying decisions in urban and rural areas of India. The respondents from Pune, Mumbai, Bangalore and Kolkata represented urban areas, while respondents from Lucknow, Patiala, Kochi, Hubli and Yatamal represented rural areas. Brand recall and brand awareness may be able to make a difference in customer buying decisions and thereby directly influence brand reputation. Brand awareness and brand recall along with media may be able to create an impact on customer decision making for purchase of a product. Getting deeper insights into this aspect can help companies create a good image of the brands and create sustainable revenue streams in a highly competitive market.

By recalling a brand, the customers remind themselves about the positive as well as negative aspects of product(s) or service(s). It is necessary for companies to create a positive image of their brand so as to appeal to customers looking to buy their product(s) or avail their service(s). Brand recall also reflects in terms of brand loyalty of the customer. Brand unrecalled is perilous for any company; hence, it is necessary for companies to take care of their branding in order to make their business robust.

Concept and Definition

Brand

As stated by Brian Lischer, 'A brand is the way a product, company, or individual is perceived by those who experience it. Much more than just a name or a logo, a brand is the recognizable feeling these assets evoke'. It is an important part of

business strategy as it is one of the measures of ROI of the business. A stronger brand indicates more customer acquisition. Brands are among a company's most important and valuable assets. As stated, brand is one of the strongest things which—along with consistency in the case of product(s) or service(s)—build trust in the mind of customers, which in turn leads to brand promise.

Branding

Branding is the process which creates positive impacts as well as shapes the end user's mind about the product(s) or service(s) of the company. It may be called a part of marketing, which includes the company's mission statement, logo and theme, among others.

As defined by Dandu (2015), 'Branding is the perpetual process of identifying, creating, and managing the cumulative assets and actions that shape the perception of a brand in stakeholders' minds'. Effective branding helps to change the mind of the customer or the view of the customer about product(s) or service(s) offered by the company. The future of the business is mainly dependent on branding, as it gives leverage to the company in the competitive environment.

Branding acts as a referral for acquiring new customers. It is one of the effective ways of advertising a business.

Brand Awareness

Brand awareness is the degree to which a customer can relate a brand with a specific product. It may be knowns familiarity of the customer with the product through its brand. It comprises both brand recognition and brand recall. Brand awareness is an important part of brand equity. Brand awareness is possible through various means such as word-of-mouth publicity, advertisement, social media such as blogs, events and so on. It is of two types: aided awareness and top-of-mind awareness. In the former, with the help of a product or the category of the product, customers are able to identify the brand from a list presented. In the latter, with the mention of a product or the category of the product, customers immediately recall the brand. Thus, brand awareness is an important way for a company to acquaint and familiarise customers with their brand and to recognise that particular brand. Actually, brand awareness distinguishes a specific brand from other brands in the same product category.

Brand Recall

Brand recall is the ability of a customer to name the brand. It may be referred to as how much impression the brand is able to make on the customer's mind. The brand name which comes into mind of the customer with respect to any product(s) or service(s) distinguishes the brand from others in the same league and enhances the chances of evaluation of particular product(s) or service(s) at the time of purchase. Brand recall is also of two types: unaided brand recall and aided brand

recall. In the first case, the customer is able to remember the brand without any hint or clue. In the latter case, a hint or clue is required by the customer to recognise a particular brand.

Media and Customer Buying Decision

Nowadays, the media plays an important role in brand awareness or brand recall, which may impact customers' buying decisions. Social media platforms are buzz words for any type of branding. More than 40% of social media users use social media platforms to search for new brands or products, which creates a huge opportunity for the companies for creating awareness about their brand and keep their brand promise (Global Web Index). Media, especially social media, can help to build awareness about brands as it is a common platform for many users where a brand can be viewed by many customers. On social media platforms, not only a company's brand is viewed but purchasers' reviews are also seen by potential buyers before they purchase product(s) or service(s) of any brand. Research studies have pointed out that many individuals trust the information and reviews presented on social media for their purchase. Based on a report by Deloitte, the impact of social media should not be neglected. A customer who is under the influence of social media is likely to spend four times more on the next purchase.

Marketing Strategy

In the current market situation, there are numerous ways for companies to reach the customers. In such cases, limiting to the standard, tried and tested methods is not enough to make a widespread impact on the buying behaviour of customers. A marketing strategy helps create a set of parameters for every specific product, and then on the basis of that target audience, the company's approach to promoting every brand is accurately planned.

The process starts with market research for the brand, determining the category of customers in need of the product and then positioning the brand to cater to those intricate needs. To be in line with the dynamic market environment, where digital media is at par or in the case of some products surpasses the physical market, companies invariably must keep an eye on key performance indicators for the brand, across various marketing channels, to keep abreast with the competition.

Literature Review

A recent study was conducted on how social media impacts purchase decisions due to the role played by the brand image (Wulandari, 2023). In today's modern age of digital technology revolution, social media is steadily altering consumer expectations and behaviour and suggests that if that brands work on creating strong and creative social media content, it can lead to improved brand image and

have an impact on purchasing decisions. Companies could potentially enhance its brand awareness and brand image by expanding its use of social media.

An essay published in 2015 on the 'Association Between Brand Recall and Consumer Purchase Intention' tried to find out the connection between brand recall and consumer purchase intention.

It also highlighted that a strong and reliable brand image strengthens the brand, which is useful in a competitive business environment and brand awareness is an important means for this. The research indicated that primarily brand recall affects the customers' buying decision process. The customers' purchase decisions also affect other factors, –including advertising, brand loyalty and brand recognition of the product.

Fatmah Assagaf (n.d.), in the article 'The Effect of Advertising on Consumer Decision Making Through Brand Awareness', studied the impact of advertising on various means of transport. The study was aimed at finding out how advertising affects brand awareness and consequently customer decision making. The outcome of the research pointed out that advertising had a significant effect on brand awareness and customer decision individually, but a weak relation was observed between customer decision making through brand awareness by advertising the brand (Assagaf, 2023).

'The Influence of Advertising Media on Brand Awareness' by Domazet (2018) pointed that television is a robust impact creator for brand awareness followed by the Internet and billboards. Media platforms such as radio and newspaper are able to create a very minor impact. In all, 690 responses were collected from Serbia. The authors stated that the media is a suitable medium for brand awareness if a company is targeting specific customers (Domazet, 2018).

Saydam (2015) emphasised the importance of brand awareness, brand loyalty, brand image and consumer in their research work, 'An Analysis Study of Improving Brand Awareness and Its Impact on Consume Behavior Via Media in North Cyprus (A Case Study of Fast-food Restaurants)'. The study discovered that brand awareness is positively affected by both types of media: the older ones like newspaper or radio and the newer ones like social media. It was also observed that the customers rated lower for brand equity in the case of brand loyalty as compared to other listed parameters (Saydam, 2015).

In continuation of the above, Ardiansyah (2019) studied 'The Effect of Brand Awareness, Brand Image, and Media Communication on Purchase Decision in the Context of Urban Area Restaurant'. It was a case study of the Gubuk Makan Mang Engking Restaurant, situated in an urban area (Jakarta, Indonesia). The objective of this descriptive research was to know how customer purchase decisions get affected by brand awareness, brand image and communication via media. In all, 100 respondents were part of this study. The outcome of the study pointed out that the customers' buying decision is impacted by communication via media and brand image, while brand awareness does not have any impact on brand image (Ardiansyah, 2019).

Febriyantoro (2020) focused on one of the social media platforms, namely YouTube, for 'Exploring YouTube Marketing Communication: Brand Awareness, Brand Image and Purchase Intention in the Millennial Generation', as social

media platforms have become an inevitable marketing source in the current business scenario. The said research was aimed at knowing the use of YouTube ads for building awareness and image of the brand and its impact on customers' buying intention. The structural equation modelling technique was used to test the hypotheses. The data was collected from 101 respondents aged between 18 and 35 years. The outcome of the research study noted that entertainment, customisation, information and irritation are a part of YouTube advertisement, which plays an important role in enhancing brand image and brand awareness. This may be further helpful in shaping the purchase intention of the customers. The research concluded that the purchase intention of the customers does not get affected by brand image and brand awareness (Febriyantoro, 2020).

'The Impact of Brand Awareness on the Consumers' Purchase Intention' was studied by Zarlish and Hussain (2017). This secondary data-based study reviewed the effect of brand awareness and brand equity on customers' purchasing intentions. In order to reach a larger customer base, the need of prompting and advertising the brand is highlighted. The researchers stated that it will help raise awareness about the brand and in turn will help to retain the customers (Shahid & Hussain, 2017).

Trivedi (2013) carried out research on 'Would Brand Recall Impact the Customer Buying Behaviour of Mobiles'. The objective of the study was to understand the efficacy and responses of consumers towards the advertisements in TV by major mobile phone companies. The advertisement strategies, growth pattern and market share of major mobile companies was also studied by the author. The 150 participants responded to a questionnaire based on variables such as effective impact, perceived informative value, interest value and comprehensibility, memorability and believability. The researcher found that TV commercials are creating a noteworthy impression on customers' buying behaviour. The study suggested that business houses must be cautious while trying to build a brand image as brand recall via TV advertisements create a high impact on the purchasing behaviour of the customers (Trivedi, 2013).

Thus, literature review highlighted varied views about media and its effect on buying or purchasing decisions of customers. This research work is an attempt to get a clear-cut idea about the influence of media on customers' buying decisions and establishing a relationship between brand recall and brand awareness.

Research Design

This exploratory research used primary data for the study. In all, 270 responses were collected from urban areas (120) and rural areas (150). The urban area respondents were from Pune, Mumbai, Bangalore and Kolkata. The rural area representation included respondents from Lucknow, Patiala, Kochi, Hubli and Yawatmal. The study is based on brand awareness and brand recall about paint and waterproofing brands. The impact of media is also studied for the identified brands of both paint and waterproofing solutions. The brand selected in the paint category for their various products was Asian Paints Smart Care. In the case of the

waterproofing solution, Dr. Fixit was selected. Both these brands are popular in the product category; hence, the researchers decided to realise the branding equation for the same.

Problem Statement

It is critical for any company wanting to survive and thrive in a highly competitive world to know the right medium to communicate with its potential and existing customers. The medium of communication plays a very important role in helping the brand to establish itself in the minds of the customers. The marketing strategy of any company highly depends on market research, to understand market dynamics, consumer expectations and perceptions of the brands.

Objectives

1. To appreciate the use of various media in brand awareness and brand recall
2. To know which medium of communication is effective in urban and rural areas
3. To understand how brand awareness and brand recall are associated with each other
4. To comprehend the impact media on the customer buying decision

Hypotheses

H_1: There is an association between brand awareness and brand recall.
H_2: Media creates an impact on customers' buying decisions.

Research Methodology

Data collection was done through two sources: primary data collection through the means of questionnaire, interviews and collection through local sources, among others and secondary data collection through books, magazines and papers, among others.

All the interviews in rural areas were done face-to-face, with a questionnaire designed beforehand, whereas the interviews in urban areas were published on the Snap Surveys web server. Interviewers were provided with the advertisement brand cards of all the well-known brands in paints and waterproofing solutions.

The cities were selected at two levels, Tier 1 and Tier 2, covering entire India, and data were analysed at the state level and zone level. All the interviews were done in regional languages by the interviewer, with data collection being managed at the zonal level. The statistical tool used to evaluate the data was Statistical Package for the Social Sciences (SPSS). The association was checked by using correlation analysis and regression analysis.

Sampling Techniques and Sample Size

There are two major types of sampling techniques: probability sampling and non-probability sampling. In this research, as part of the probability sampling technique, convenience sampling was used. The reason for choosing this technique is that every individual uses FMCG products and knows their impacts on the buying behaviour, so it is easy to find out the results on behalf of the available population sample. The sample size of the research was 270 respondents, which includes 120 respondents from urban areas and 150 respondents from rural areas.

Research Instrument

The questions and brand card of the selected brand were provided for understanding brand awareness and knowing brand recall. The list of products was shown to the participants for checking brand recall. Then, pictures of brand, that is, brand cards, were shown for testing the brand awareness. The respondents were asked to tick the sources of brand awareness. A ranking for the brand was also given by the respondents based on the choices provided in the questionnaire.

Data Analysis

Before starting the actual analysis of data, we took a few steps to check the quality of data, as that would be pivotal in determining the accuracy of our results:

Reliability: When starting the research, based on data collection split between both physical and digital mediums, it was important to check the reliability of data more keenly in the case of the digital medium to isolate the outliers and modulate the set before actual analysis.

Validity: For physical interviews, in addition to the answers received from customers, we also did some extra dummy interviews of the shop owners in the area to test the validity of responses received.

The reason for choosing both descriptive and inferential statistics was to gauge facts based on the actual selected population. And then after verifying the validity of the data, we considered that as an ideal sample to make predictions about larger populations.

The collected data was segregated for Tier 1 and Tier 2 respondents. A separate analysis was done for Tier 1 and Tier 2. Variables were assigned for suitability of data analysis by using SPSS. The data analysis was carried out in two steps.

1. a. Descriptive statistics, where mainly the mean value and standard deviation values were checked for further processing of data.
   b. Analysis was done based on the chart.
2. Analysis for hypotheses testing was done through t-test, correlation analysis and regression analysis.

Table 1. Descriptive Statistics.

Variables	Minimum	Maximum	Mean	Median	Standard Deviation	Sum
MediaT1	10	62	24	16	21.40	120
CBDT1	9	50	24	21	15.60	120
MediaT2	17	48	30	24	13.32	150
CBDT2	14	59	30	24	19.17	150
BARW_PT1	0	21	8	3	8.77	40
BARW_DFPT1	0	42	16	15	16.99	80
BARW_TT1	5	55	24	21	18.79	120
BARC_PT1	29	80	52.6	50	20.02	263
BARC_DFT1	12	90	37.4	30	31.33	187
BARC_TT1	56	170	90	62	48.66	450
BARW_PT2	0	24	10.8	10	8.67	54
BARW_DFPT2	1	64	19	10	26.08	95
BARW_TT2	9	88	29.8	14	33.41	149
BARC_PT2	36	137	68	54	39.59	340
BARC_DFT2	14	105	48.2	49	37.40	241
BARC_TT2	67	242	116.2	85	73.23	581

Part 1

Descriptive Statistics

Table 1 shows minimum and maximum values, mean and standard deviation for the variables. The variable names are given on the basis of brands and tiers. The variable *TT1* shows the total number of responses considered either for brand awareness or for brand recall with respect to the tier.

The minimum, maximum and standard deviation show the dispersion of the data. The mean value varies as per variables expressed in terms of brand and tier. The minimum value for customers' buying intention for Tier 1 cities is 9 and the maximum value is 50. In the case of Tier 2 cities, the minimum and maximum values are 14 and 59, respectively, and mean values are 24 for Tier 1 and 30 for Tier 2.

Analysis Based on Chart

1. Opinion about using Asian Paint:

Figure 1 shows that 60% of Tier 1 respondents and 56% of Tier 2 respondents opined that Asian Paints is the only brand they would consider. 18% and 34% respondents, respectively, from Tier 1 and Tier 2 quoted that they would consider Asian Paints as one of the two or three brands in the pain category. As per 13% respondents from Tier 1 and 20% respondents from Tier 2, the Asian Paint brand is considered as one of several brands. The Asian Paint brand might be selected by 8% Tier 1 respondents and 10% Tier 2 respondents. Thus, it may be stated that more than 50% of the respondents from both Tier 1 and Tier 2 consider Asian Paints as the only brand in the paint segment.

2. Opinion about using Dr. Fixit

As shown in Figure 2, in the case of Dr. Fixit as a waterproofing solution, it is the only brand used by 42% of Tier 1 respondents and 49% of Tier 2 respondents.

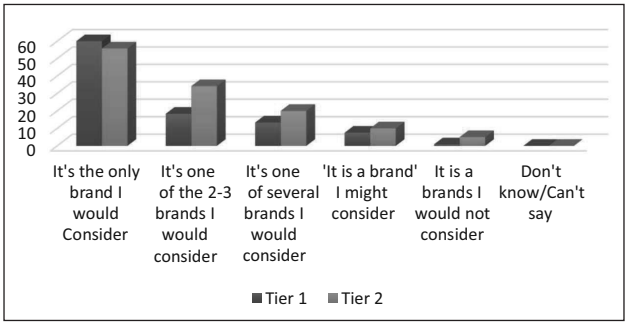

Figure 1. Use of Brand—Asian Paints (Values are in %).

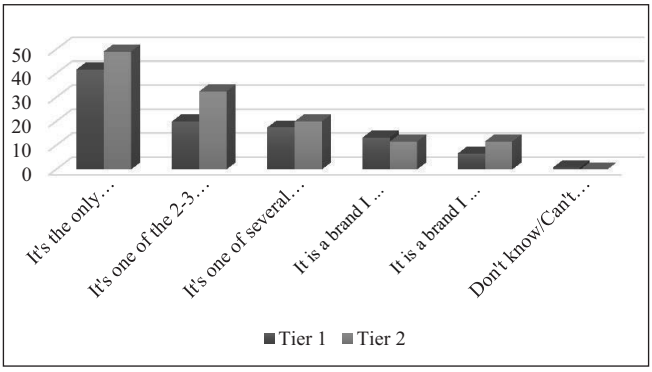

Figure 2. Use of Brand—Dr. Fixit (Values are in %).

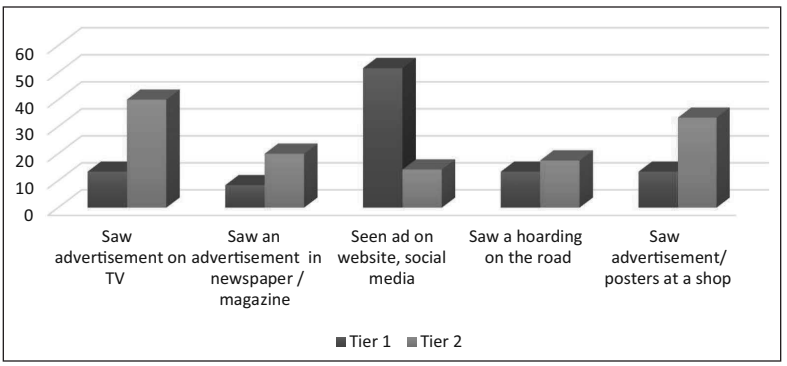

Figure 3. Sources of Awareness (Values are in %).

Dr. Fixit as one of the two or three brands would be considered by 20% respondents from Tier 1 and 33% respondents from Tier 2. Dr. Fixit as a waterproofing solution was selected as one of the several brands by 18% respondents from Tier 1 and 20% respondents from Tier 2. It may be stated in the case of Dr. Fixit that comparatively the awareness of this brand is less than the respondents expected because this is the only brand considered by them as a waterproofing solution.

3. Sources of awareness

Figure 3 points out that the main source of awareness in the case of respondents from Tier 1 is advertisement on websites, and social media was voted by 52% of the respondents. In the case of respondents from Tier 2 cities, the main source of awareness about the brand is advertisement on TV, as voted by 40% of respondents.

Part 2: Hypotheses Testing

H_1: There is an association between brand awareness and brand recall.

The hypothesis is tested based on the responses received from selected Tier 1 and Tier 2 cities separately.

To determine if any relationship exists between the selected variables, the best approach is to use correlation analysis. Furthermore, using the ANOVA test, we were successful in calculating the magnitude of the relationship between variables of different groups.

For Tier 1 cities, the output of correlation is shown in Table 2.

The regression analysis for the association is presented in Table 3.

Considering the regression analysis, following equation can be written on the basis of responses received form Tier 1 selected cities as follows:

$$\text{Brand awareness} = -8.246 + 0.358 \times \text{brand recall}$$

For Tier 2 cities, the correlation is presented in Table 4.

The regression analysis based on the responses from Tier 2 cities is shown in Table 5.

Table 2. Correlation Analysis—Brand Recall and Brand Awareness—Tier 1 Cities.

		Correlations	
		BARW_TT1	BARC_TT1
BARW_TT1	Pearson correlation	1	0.928*
	Sig. (2-tailed)		0.023
	N	5	5
BARC_TT1	Pearson correlation	0.928*	1
	Sig. (2-tailed)	0.023	
	N	5	5

Note: *Correlation is significant at the 0.05 level (2-tailed).

Table 3. Regression Analysis—Brand Recall and Brand Awareness—Tier 1 Cities.

Variables Entered/Removed[a]			
Model	Variables Entered	Variables Removed	Method
1	*BARC_TT1*[b]		Enter

Notes: [a]Dependent variable: *BARW_TT1*.

[b]All requested variables entered.

Model Summary				
Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate
1	0.928[a]	0.861	0.815	8.090

Note: [a]Predictors: (Constant), *BARC_TT1*.

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	*F*	Sig.
1	Regression	1,215.676	1	1,215.676	18.577	0.023[b]
	Residual	196.324	3	65.441		
	Total	1,412.000	4			

Notes: [a]Dependent variable: *BARW_TT1*.

[b]Predictors: (Constant), *BARC_TT1*.

Coefficients[a]						
		Unstandardised Coefficients		Standardised Coefficients		
Model		B	Std. Error	Beta	*t*	Sig.
1	(Constant)	−8.246	8.310		−0.992	.394
	BARC_TT1	0.358	0.083	0.928	4.310	.023

Note: [a]Dependent variable: *BARW_TT1*.

Table 4. Correlation Analysis—Brand Recall and Brand Awareness—Tier 2 Cities.

		Correlations	
		BARW_TT2	*BARC_TT2*
BARW_TT2	Pearson correlation	1	0.992**
	Sig. (2-tailed)		0.001
	N	5	5
BARC_TT2	Pearson correlation	0.992**	1
	Sig. (2-tailed)	0.001	
	N	5	5

Note: **Correlation is significant at the 0.01 level (2-tailed).

Table 5. Regression Analysis—Brand Recall and Brand Awareness—Tier 2 Cities.

Variables Entered/Removed[a]			
Model	Variables Entered	Variables Removed	Method
1	*BARC_TT2*[b]		Enter

Notes: [a]Dependent variable: *BARW_TT2*.
[b]All requested variables entered.

Model Summary				
Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate
1	0.992[a]	0.983	0.978	4.959

Note: [a]Predictors: (Constant), *BARC_TT2*.

NOVA[a]						
Model		Sum of Squares	df	Mean Square	*F*	Sig.
1	Regression	4,391.021	1	4,391.021	178.547	0.001[b]
	Residual	73.779	3	24.593		
	Total	4,464.800	4			

Notes: [a]Dependent variable: *BARW_TT2*.

[b]Predictors: (Constant), *BARC_TT2*.

Coefficients[a]						
		Unstandardised Coefficients		Standardised Coefficients		
Model		*B*	Std. Error	Beta	*t*	Sig.
1	(Constant)	−22.774	4.517		−5.042	0.015
	BARC_TT2	0.452	0.034	0.992	13.362	0.001

Note: [a]Dependent variable: *BARW_TT2*.

Considering the regression analysis, following equation can be written on the basis of responses received form Tier 2 selected cities as follows:

$$\text{Brand awareness} = -22.774 + 0.452 \times \text{Brand Recall}$$

The analysis in the case of Tier 1 cities showed that the Pearson correlation between brand recall and brand awareness is significant at the 0.05 level, while the same correlation is significant at the 0.01 level in the case of Tier 2 cities. It indicates that there is an association between brand awareness and brand recall in the case of both the brands, that is, Asian Paints and Dr. Fixit, considered together.

H_2: Media creates an impact on customers' buying decisions.

To understand if the impact of media is statistically significant or not for the decision making by customers, we carried out the t-test, with the help of the SPSS tool. The output is presented in Table 6.

Table 6 clearly indicates that both types of customers, that is, from Tier 1 and Tier 2 cities, may be using various medias for getting information about a brand, but they do not make decision on that basis. The independency of media and customers' buying intention may be notified by p values > .05.

The paired sample statistics also highlighted the same (Table 7).

As the p value 1.000 > .05, the hypothesis is rejected. It points out that media is not able to create the expected impact on customers' buying decisions.

Conclusion

It can be stated from the analysis that there is a positive association between brand recall and brand awareness. In the current study, it was understood that only the brand name led to less awareness of the brand, whereas aided awareness (brand name and the image of the actual product available in the market) was found to have a significant relationship with brand recall in the case of both brands (Asian Paints and Dr. Fixit) based on the responses received from selected Tier 1 and Tier 2 cities.

The study was aimed at finding out the impact of media on customers' buying decisions. It was observed that in the case of Tier 1 cities, website, social media and so on are major means for the companies to reach the customers, while in the case of Tier 2 cities, mainly advertisement on TV is found to be the source to reach the customers. But in both types of customers, that is, urban and rural, the media is not the only influential parameter for buying products. It was noted from consumers' views that historical usage experiences and expert views of building contractors or craftsmen help identify and finalise the exact product to buy for usage.

A recent study (Wulandari, 2023) led to outcomes similar to those of our research, suggesting that branding does have statistically significant positive influence on purchase decisions; however, social media alone does not have statistical significance on purchase decisions.

Table 6. Independent Sample Test.

Independent Samples Test										
		Levene's Test for Equality of Variances		t-Test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	*t*	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Media	Equal variances assumed	0.421	0.534	−0.532	8	0.609	−6.000	11.274	−31.998	19.998
	Equal variances not assumed			−0.532	6.696	0.612	−6.000	11.274	−32.906	20.906
Customers' buying decision	Equal variances assumed	0.616	0.455	−0.543	8	0.602	−6.000	11.054	−31.492	19.492
	Equal variances not assumed			−0.543	7.684	0.603	−6.000	11.054	−31.675	19.675

Table 7. Paired Samples Test.

Paired Samples Test									
		Paired Differences							
				Std. Error	95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Mean	Lower	Upper	*t*	df	Sig. (2-tailed)
Pair 1	MediaT1–CBDT1	0.000	27.758	12.414	−34.466	34.466	0.000	4	1.000
Pair 2	MediaT2–CBDT2	0.000	16.733	7.483	−20.777	20.777	0.000	4	1.000

Recommendations

The results of the study clearly indicate that, nowadays, irrespective of the area (urban or rural), customers are well informed about various products or services of various brands. Hence, customers' buying decision is easily not changes due to advertisement in various media. They may be watching it, but they take a call on the basis of their immediate needs, experiences of relatives and friends and reviews by other customers posted on various social media platforms. This situation needs to be taken into account by business houses. The media needs to be chosen wisely to reach the expected audience based on various factors such as geographic location, education status, financial status and requirement of the type of product(s) or service(s). Huge spending on advertising may not always be useful in order to increase the sales. It is necessary that your product(s) or service(s) must appeal to the customer, for future buying. Innovative ways of brand recall may be helpful in creating brand awareness for its long-lasting impact. It may be suggested that the uniqueness in advertising with the provision of effective advertising through media may be able to attract customers for making decision about their purchase.

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Article

Level of Satisfaction in Higher Education L&T Based on VLE Functionalities: A COVID-19 Perspective

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Abstract

The problem of the sudden transition from offline to online due to COVID-19 was not easy and may involve significant challenges; faculty members are critical for the success of any university and their satisfaction does matter for online education. The purpose of this research was to determine the factors influencing the satisfaction of the faculty in the virtual learning environment and to focus on the responses of faculty members to the pandemic and their satisfaction levels due to challenges and benefits that faculty members faced during the initial phase of the COVID-19 outbreak. The six factors include flexibility, training, institutional factors, ease of use, technical factors and personal or psychological factors were utilised to understand the satisfaction levels of the instructors concerning the usage of the virtual instructional platforms. The hypothesis testing of the factors was conducted and different tests, that is, regression analysis, analysis of variance (ANOVA) and Cronbach alpha were utilised for analysing the data. Data were collected from 300 academic staff members from varied colleges and universities of Maharashtra and Madhya Pradesh. The results indicated that all the factors have a significant impact on the satisfaction levels of the academic staff members. Moreover, respondents opined about the challenges faced by the instructors in conducting online classes could be eased out via obtaining adequate training in batches from the academic institutions for the smooth conduct of the online sessions without any hindrances.

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COVID-19, higher education, satisfaction level, student engagement, synchronous learning, virtual learning environment

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Introduction

Learning through only a brick and mortar system or face-to-face medium in a classroom is an age-old phenomenon, which was once the most convenient mode of learning for both the academics and learners but with the increase in the availability of a variety of learning materials over the internet, self-paced learning and convenience have revolutionised the higher education system, leading to a splurge in the growth of the online education, which supplements the traditional education systems that is, the classrooms and tuitions will head towards the advantages of blended learning or hybrid learning. Additionally, due to the increasing use of smartphones and 24/7 accessibility to cell phones has led learners accessing the study material via m-learning commonly known as mobile-learning. Every segment in the education industry wants to capitalise on the growth of the online education industry.

The online education industry is growing at a compound annual growth rate (CAGR) of 9.3% and is expected to grow to USD 319.167 billion by 2025, from US $187.87 billion in the year 2019.[1] While the Indian online education industry is expected to grow at a CAGR of 44% from 2019 to 2024, which will be INR 360.3 billion by 2024 of which the higher education segment is expected to grow by a CAGR of 40.74%, which will be INR 40.63 billion markets by 2024 (Wire, 2020). Some of the Higher Education Institutions (HEIs) have adopted technology for creating virtual learning environments (VLEs) to cater a wider population thus diversifying their businesses and ultimately their income streams.

However, due to the COVID-19 outbreak also known as the coronavirus pandemic that is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) that was first identified in December 2019 in Wuhan China, a Public Health Emergency was declared in March 2020 (Remuzzi & Remuzzi, 2020). It brought the world to a standstill, affecting people, regardless of their age groups. The governments of all the countries announced a lockdown to maintain social distancing amongst people, which affected all the sectors of developed as well as under-developed countries, barring Technology. One of the factors for its boom was the sudden shift of the education model from classroom-type to online-learning (e-learning). Every school, high school and university across the world are figuring out ways to continue with the teaching, thus assuring that the students' learning is least-affected despite an ad-interim arrangement for the completion of the academic year.

The emergence and spread of COVID-19 have disrupted education at a critical time. In India disruptions impacted the second half of the academic year, including the final assessments. The structure of schooling and learning, including teaching and assessment methodologies, were affected by these closures, so there was a

necessity for a shift to a VLE, which became apparent approximately 20 years ago, but the pandemic has become the driving force for the adaptability amongst the faculty members, who earlier held reservations for delivering lectures online (Whalley et al., 2021). The faculties seamlessly transitioned and became resilient to the new method of delivery. The long summer break in the school/post-school education setting provided an opportunity for teachers to prepare for the ongoing changes forced by the COVID-19 pandemic. The academic staff members are now utilising various ways of delivering lectures either through synchronous learning mediums that take place real-time live through Zoom, Google Meet, Microsoft teams and GoToMeeting, and asynchronous methods of learning via providing the video recordings of their teaching sessions, which could serve to be a good point for future reference. The learning advantages of using a blended/hybrid format are improved grades, retention and communication and teamwork (Helms, 2014). Institutions that offer online classes face many challenges in determining the methods to assess the students' knowledge, skill and competency via an internet-based approach (Gupta et al., 2020). As colleges and universities adopt the online environment, it has become evident that this transition may involve significant challenges, not only because of the nature and speed of technological advances it entails, but also because online education can 'strike both fear and joy for faculty members' (Blackmon, 2016) Faculty members represent a critical success factor in university online education (Eom & Ashill, 2016) and their satisfaction does matter for online higher education. It is one of the 'five pillars of quality online education' and faculty satisfaction has direct relevance to outcomes, with a significant impact on students and faculty themselves as well as on entire online initiatives and programmes. The problem is that sudden transition from offline to online due to COVID-19 was not easy and involved significant challenges; faculty members are critical for success of any university and their satisfaction does matter for online education. The purpose of this research was to determine the factors influencing satisfaction of the faculty in VLE and to focus on the responses of faculty members to the pandemic and their satisfaction levels due to challenges and benefits that faculty members faced during the initial phase of the COVID-19 outbreak.

Literature Review

As the pandemic looms over us, it has become clear that the transition involves a few challenges for faculty members, mainly due to the dynamic nature of technology. It is thus said that online education could strike both fear and joy among faculty members, depending upon how they cope up with it. In the offline setting, the faculty can rely upon their knowledge of the subject and their teaching skills to impart knowledge to the students, but in the case of online platforms, the need to master teaching via that special medium (Chen et al., 2017; Gay, 2016; Rohland-Heinrich, 2016; Wingo et al., 2017).

Technology Acceptance Model (TAM) and TAM-2 models have been used in the studies to understand the perception of the different users towards the usage of

technology. The TAM model basically shows the perception towards usefulness and ease of use of technology, which determines their attitude towards the usage of technology and their intentions to use it (Davis, 1989; Nair & Mukunda Das, 2012; Stickney et al., 2019; Venkatesh & David, 2000). It has been widely used in understanding the different accepts on online teaching in business schools (Arbaugh, 2000). Two of the main factors, institutional factors and technical factors, have been embedded in our empirical study (Stickney et al., 2019).

Scholars around the globe have studied the perceptions of the faculties towards online learning. Six factors can be used to measure the satisfaction levels based on the review of the literature (Stickney et al., 2019).

Flexibility is one of the most important factors that need to be considered for the faculty to teach online (Arbaugh, 2000). It is one of the most important incentive to teach virtually, as it is considered as one of the factors included in the TAM-2 model (Wingo et al., 2017). The faculties, who are teaching in the distance learning mode often feel that the online teaching provides convenience to them to schedule their sessions keeping in mind other work schedules and at the same time handling household responsibilities, which is missing while conducting offline classes (Chapman, 2011; Larkin et al., 2016). Apart from that, the flexibility of time and location also contributes to the intrinsic as well as the extrinsic motivations of faculty members. An asynchronous mode of learning could also be another advantage of teaching online (Larkin et al., 2016). The students can be easily catered by making the lecture schedule flexible as per their requirements. Further, the faculties felt that the time, which was generally spent for commuting, could be devoted to different pursuits either academic or personal (Stickney et al., 2019; Bolliger & Wasilik, 2009). Certain faculties felt otherwise, as the universities were compensating for teaching online, there were requirements for greater commitment, increasing workload and need for being accessible beyond the normal working hours (Rohland-Heinrich, 2016). Notably, some faculty members felt that the return on investment on online teaching is less than face-to-face teaching as the efforts and time required for designing online courses, as per the specified curriculum was much more, due to there being a need for planning and preparing different activities for each lecture, which led to increasing levels of frustration among faculty members. Providing aims to the students also helped in arranging and organising the activities and assessments. A set of modules learning objectives also helped the faculties deliver better sessions and provided measurable learning objectives and quality checks for the students, that helped them to keep a tab of their progress and make the online learning smoother.

Training is considered as one of the key factors for the smooth conduct and thus helps in mitigating the hiccups of conducting online teaching (Chen et al., 2017). There is a strong need to impart proper training to the faculties to familiarise them with different technology platforms for instructional purposes. It is complemented by the self-belief and usage familiarity as per the TAM-2 model (Venkatesh & David, 2000). It would help the transitioning phase of faculty members towards the online conduction of lectures. For the smooth conduct of the lectures, there is a need for a faculty to gain expertise towards improving the communication between the faculties and the students. There is a need for an online community that assists the faculties for

the smooth functioning of the online sessions (Terantino, 2020). Faculties can gain expertise by practicing the usage of technology over a period of time by themselves, and through the process of exploration and experimentation with a technology medium; although, this may induce a feeling of frustration and lead to a mixed bag of results (Stickney et al., 2019). The training is important to the faculty members as it helps in tackling the unexpected challenges that the faculties face in an online platform like technical glitches, teaching pedagogies and also handling erratic student behaviour (Georgina & Hosford, 2009). Besides the training had to be imparted to the faculties, continuously, for better performance and satisfaction levels of the students. There were mixed views on the correlation between training and smooth conduct of the online lectures (Kane et al., 2016). The factors that are important for the technology training are: (a) it takes a longer time for a faculty to learn new technology; rather than learning a new teaching method, the essence of access to the technology platforms should be available at school as well as in the instructor's houses; (b) the fear of something uncertain happening needs to be tackled; and (iii) the needs for teaching need to be re-examined and should be embedded accordingly (Kim & Bonk, 2006). Training among the faculties itself helps in attaining familiarity with the technology and also in sharing the best practices amongst each other (Schrum, 1999). There is a need for conducting a further empirical study to understand the importance of training in conducting lectures online (Almarashdeh & Alsmadi, 2016; Mayo et al., 2005; Schrum, 1999). Institutional support and organisational support are important elements of effective online teaching (Wingo et al., 2017). Some institutions are very proactive in providing detailed training to the faculty members, while some of the institutions do not give adequate training or support, which results in sub-optimal performance from the faculty and thus limits the performance of the students (Martin, 2015). Faculties believe that the money could be provided by institutions to them for training purposes which could give strong support to them to familiarise themselves with the technology and ultimately boost the satisfaction levels of the students (Golden, 2016). Different resources need to be provided in order to strategize for better student engagements. Mentorship by experienced seniors, colleagues and technical staff could provide for a higher comfort level among the faculties and ease their apprehensions towards online teaching (Golden, 2016). The institutions should give enough time to the faculty members for getting themselves familiar with the technology and for developing their content. Besides, independence should be given to the faculties to decide on the workload and the way in which online sessions need to be conducted (Dieli, 2020). Organisational policies relating to the monitoring and evaluation of the effectiveness of online lectures had an impact on their satisfaction levels (Wingo et al., 2017).

Another element that needs to be understood is the friendliness of the technology platforms and a seamless experience during the conduction of the lecture (Stickney et al., 2019). The user-friendliness of the use of technology platforms also helps in removing uncertainty among the faculty members and ultimately improved satisfaction among them. Besides, the technological system should also be reliable to support the smooth conduction of lectures (Mayo et al., 2005).

As reflected in the TAM-2 model, the perception relating to usefulness of the technology is considered by faculties as a contributing factor for their levels of

satisfaction (Venkatesh & Davis, 2000). Problem-solving services and adequate support should to be provided; in the case, a problem arises, this will result in positive faculty performance (Rohland-Heinrich, 2016; Wingo et al., 2017). If there are any bugs identified in the technology platform, then they need to be addressed immediately. Reliability of the Course Management Systems is too a very important factor for the satisfaction levels among the instructors (Mayo et al., 2005).

Psychological factors are also an important parameter to understand faculty satisfaction. It is extremely important for faculties to develop mastery, or have positive attitude of using the medium, which is supported by and elaborated upon by TAM-2 literature, in the context of the self-belief and experience of the users (Davis, 1989; Wingo et al., 2017).

Some faculties have not accepted the online sessions readily in a manner similar to that of the other stakeholders. The faculties are dissatisfied as a lot of time is spent in the non-academic aspect of their jobs. Additionally, the perception that despite the option being available, no freedom has been given to the faculties for planning their courses has affected their productivity greatly. There was also a lot of resentment as the important decisions about the introduction of technology from the existing technologies used by the instructors were taken without asking their opinions. The pressure and demands from students, along with the expectations of institutions to utilize the latest technology, were perceived by faculty members to be easy to use due to their familiarity with it. However, not all faculty members were able to adjust to the new technology, which added to their dissatisfaction levels and ultimately affected their performance. (Stickney et al., 2019). There are young and tecno-savvy faculties, who felt that the online teaching opened the horizon for them to earn extra income. They took the change as a learning experience that would help them in having additional source of income after the COVID-19 ends.

Research Methodology

Objective of the Study

To understand the satisfaction levels amongst the academics due to migration towards VLE due to COVID-19.

Hypothesis

H_1: The satisfaction of academics is not dependent on flexibility.

H_2: The satisfaction of academics is not dependent on training.

H_3: The satisfaction of academics is not dependent on institutional factors.

H_4: The satisfaction of academics is not dependent on ease of use.

H_5: The satisfaction of academics is not dependent on technical factors.

H_6: The satisfaction of academics is not dependent on personal/psychological factors.

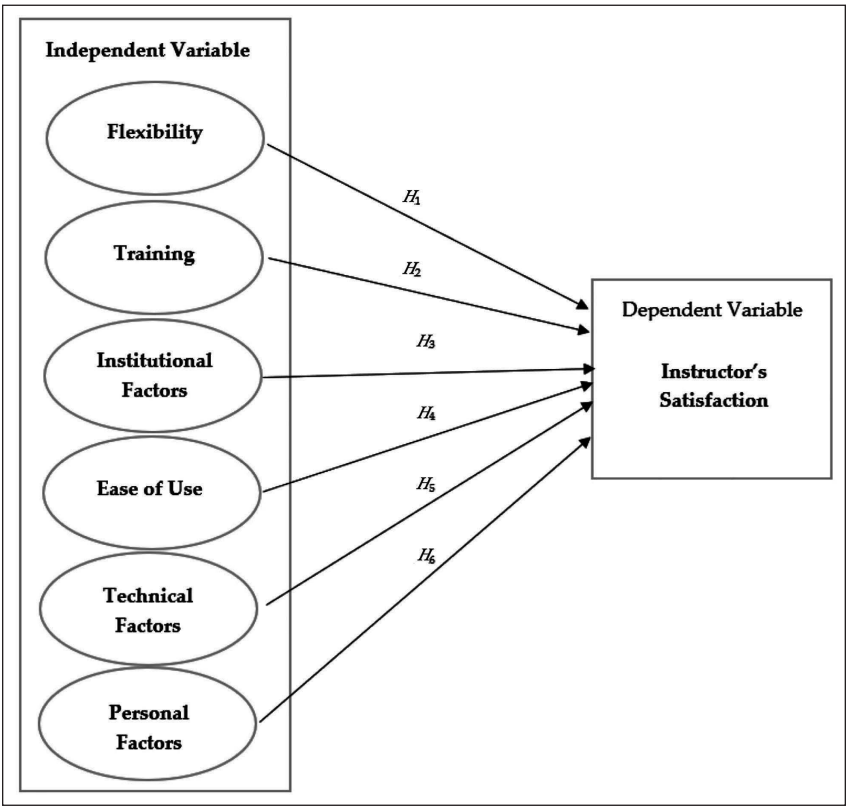

Figure 1. Conceptual Framework.

Methodology

The study was conducted by surveying more than 500 faculty members of various colleges and universities of Maharashtra and Madhya Pradesh who had taught at least one course online during the COVID-19 pandemic, out of which 300 respondents provided complete information. The survey was conducted via Google forms using questionnaire technique.

The questionnaire had total 36 question including 26 questions with 5-point Likert scale ranging from 1 strongly disagree to 5 strongly agree. The questions were based on the results of the literature review (Bolliger et al., 2014; Stickney et al., 2019), which included studies containing factors (flexibility, training factors, institutional factors, ease of use, technical factors and personal/psychological factors) influencing instructor's satisfaction with online teaching. Respectively 3, 4, 4, 5, 5 and 5 items were created based on the construct from the literature. In order to determine the factors influencing satisfaction of the instructor regression analysis was used as it was used in previous research works also (Barbera et al., 2013; Stickney et al., 2019). Figure 1 explains about the independent and dependent variables used in the model.

Table 1. Demographic Characteristics of the Data Collected.

Category	Frequency	%
Gender		
Male	144	48.0
Female	156	52.0
Age		
24–32	81	27.0
33–40	152	50.7
41–48	45	15.0
>48	22	7.3
Stream		
Commerce & management	124	41.3
Engineering	101	33.7
Humanities	49	16.3
Science	26	8.7
Platform Utilised		
Zoom	136	45.3
Google Meet	64	21.3
GoTo Meeting	48	16.0
Microsoft Teams	52	17.4
Designation		
Lecturer/assistant professor	169	56.3
Senior lecturer/reader/associate professor	89	29.7
Professor	42	14.0
Experience		
<5 years	66	22.0
5–10 years	103	34.4
11–15 years	84	28.0
16–20 years	35	11.6
>20 years	12	4.0

In order to determine the internal reliability of the questionnaire, reliability analysis with the use of Cronbach's alpha was performed after the data collection phase.

Results

From Table 1, it can been seen that the demographics demonstrate that nearly half of the faculties are between 33 and 40 years of age, followed by faculties in the age group of 24 and 32 years. Demographics further demonstrate that more than half of the professors/teachers fall into the Lecturer/Assistant Professor category.

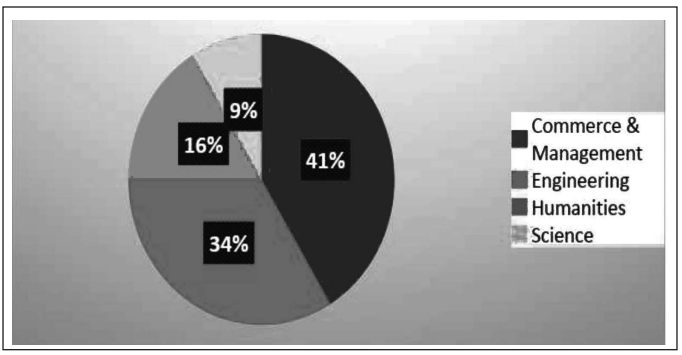

Figure 2. Stream.

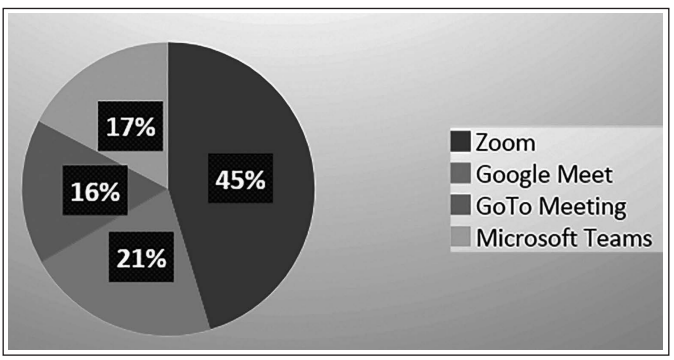

Figure 3. Platform Utilised.

Table 2. Reliability Testing.

Factor	Cronbach's Alpha	No. of Items
Flexibility	0.817	3
Training	0.792	4
Institutional factor	0.912	4
Ease of use	0.898	5
Technical factors	0.871	5
Personal/psychological factors	0.875	5

The demographics suggest that more than 80% of the professors have experience of less than 15 years.

Figure 2 demonstrates that only 25% teachers are in the Humanities & Science streams, with the remaining falling in the Engineering & Commerce streams.

Figure 3 demonstrates the demographics relating to platforms utilised for online instruction. Zoom is the most widely used medium followed by Google Meet with GoTo Meeting being the least utilised medium.

In order to determine the questionnaire's internal consistency reliability, Cronbach's alpha coefficient was calculated. From Table 2, it can be observed that

Table 3. ANOVA.[a]

Model	Sum of Squares	*df*	Mean Square	*F*	Sig.
Regression	145.516	6	20.788	119.790	0.000[b]
Residual	61.953	293	0.174		
Total	207.468	299			

Notes: [a]Predictors (Constant): Flexibility, training, institutional factor, ease, technical and personal.
[b]Dependent variable: Sat.

Table 4. Model Summary.[b]

Model	*R*	R^2	Adjusted R^2	Std Error of the Estimate
1	0.837[a]	0.701	0.696	0.417

Notes: [a]Predictors (Constant): Flexibility, training, institutional factor, ease, technical and personal.
[b]Dependent Variable: Sat.

Table 5. Standardised Regression Coefficients Predicting Satisfaction with Online Teaching.

	Unstandardised Coefficients		Standardised Coefficients			Collinearity Statistics	
Model	B	Std Error	Beta	*T*	Sig.	Tolerance	VIF
(Constant)	−0.290	0.152		−1.906	0.057		
Flexibility	0.199	0.038	0.224	5.191	0.000	0.449	2.226
Training	0.402	0.036	0.453	11.057	0.000	0.498	2.007
Inst_Fac	0.021	0.033	0.124	3.655	0.000	0.621	1.610
Ease	0.131	0.037	0.146	3.575	0.000	0.500	2.000
Technical	0.133	0.032	0.140	4.119	0.000	0.724	1.381
Personal	0.202	0.026	0.259	7.703	0.000	0.738	1.354

Note: [a]Dependent Variable: Sat.

the value of Cronbach's alpha is more than 0.79 for all the factors indicating a high level of internal consistency in the questionnaire.

From Table 3 below, it can be observed that the *F* value is significant as the significance value is 0.000 which is less than 0.05, which means that all the factors jointly affect our dependent variable, that is, the satisfaction level of the academics.

From Table 4, it can be observed the value of R^2 0.701; it indicates that the proportion of the variance in satisfaction is explained 70% by the independent factors taken into this study, that is, flexibility, training, institutional factors, ease of use, technological factors and personal/psychological factors; it also suggest that the model is fitted rightly.

A test for collinearity was conducted by calculating the variance inflation factor (VIF) for each predictor and it can be observed from Table 5 that VIF scores were below the threshold of 5, indicating that collinearity was not a concern in this model (Hair et al., 2010). From Table 5, it can be observed that the β values of flexibility,

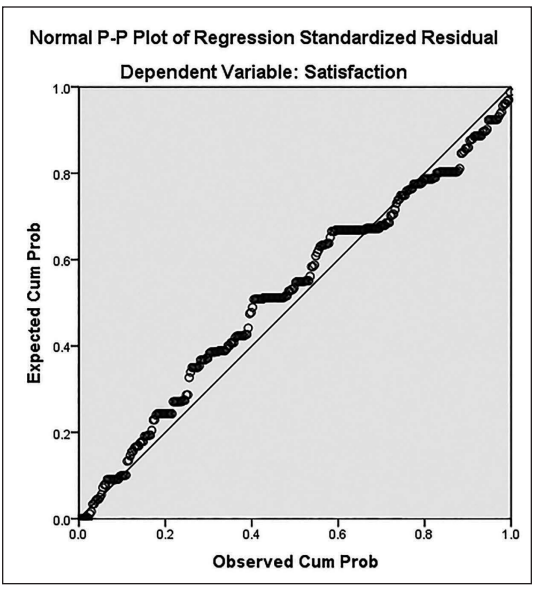

Figure 4. Normal P–P Plot.

training, institutional factors, ease, technical and personal are 0.199, 0.402, 0.021, 0.131, 0.133 and 0.202, respectively. The significance value for all the factors is 0.000, which is less than the 0.01 level of significance, signifying that all the hypotheses H_1, H_2, H_3, H_4, H_5 and H_6 are rejected. So, it can be concluded that satisfaction of academics is dependent on flexibility, training, institutional factors, ease of use, technical factors and personal/psychological factors.

Based on the normal P–P Plot in Figure 4, it can be seen that the existing points follow and approach the diagonal line. Thus, it can be concluded that the residual value is normally distributed and regression analysis procedure has been fulfilled.

Discussion

While the world is in turmoil because of the aforementioned pandemic, the online education sector witnesses its golden age with a never seen before number of students and teachers adopting them out of dire necessity to complete the academic term, if nothing else. While the delivery mediums have existed for a long time, it is for the first time that they witness such a surge of users, a paradigm shift so large that it could be compared to the smartphone revolution of the early 2010. Inspired by this, the following study was conducted to delve into and analyse the impact of several variables on the satisfaction level of the faculties conducting the sessions, to determine a data-driven approach for smoother functioning of classes. The variables considered include flexibility, training factors and institutional factors, ease of use, technical factors and personal/psychological factors.

The study investigates factors influencing instructor satisfaction in virtual learning environments, considering various dimensions. First, flexibility emerges

as a crucial factor, with higher satisfaction among faculty perceiving online mediums as conducive to flexible scheduling. However, challenges such as increased workload and frustration are noted, emphasising the need for balanced engagement. Training is identified as essential, impacting satisfaction levels. Adequate training in online teaching positively correlates with higher instructor satisfaction, aligning with previous studies. Institutional factors, encompassing support and policies, significantly affect faculty satisfaction, urging institutions to provide better support. Ease of use of online platforms is subjective but crucial; faculty members who find platforms easy to use report higher satisfaction. Technical factors, including reliable internet and equipment, directly impact satisfaction, requiring institutions to ensure accessibility. Finally, personal/psychological factors, such as comfort with online teaching and home-based work, influence satisfaction levels. The study underscores the importance of addressing these factors for effective virtual education, offering insights for institutions and policymakers.

Conclusion

The purpose of this research was to determine the factors influencing satisfaction of the instructor in VLE. Even though the research was exploratory in nature, it examined 300 instructors and professors, in different career paths and across multiple institutions of higher education from Maharashtra and Madhya Pradesh and across multiple disciplinary areas. For the purpose of the study, the questionnaire was developed based on previous research and instruments (Bolliger et al., 2014; Stickney et al., 2019). The study was conducted by using regression analysis as used in previous research works (Barbera et al., 2013; Stickney et al., 2019) in order to determine the factors influencing satisfaction of the instructor. The findings indicate that flexibility, training factors, institutional factors, ease of use, technical factors and personal/psychological factors significantly affect the satisfaction level of the instructors.

Scope for Future Research

This article mainly covers satisfaction levels of the faculties of HEIs due to challenges and benefits during the COVID-19 outbreak. However, due to the resources and time constraint, the research related to the viewpoint of students, administrators and academic institutions will be undertaken as part of near-future work. The comparative analysis of Google Meet, Zoom, Microsoft Teams, Webex and GoToMeeting could be the other area, the research of which will assist the users in deciding the usage of a particular platform. Besides the receptivity, apprehensions and adaptability of full-time faculty members versus the receptivity of part-time or visiting faculty members is an area that will be addressed. Cell phone usage is becoming an important part of everyone's daily life and hence the m-learning platforms provided by technology companies will play a major role in

learning and teaching practices. Therefore, comfort level and perceptions of all the stakeholders to adopt m-learning along with e-learning must also be investigated comprehensively.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

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Note

1. Global Online Education Market—Forecasts from 2020 to 2025.

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Article

Economic Importance of Hidden Child Labour among Poor Rural Families of West Bengal, India: An Investigation through Field Experiment

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Abstract

This article investigates whether school-going children's participation as 'not directly paid' family labourers in domestic chores and/or economic activities helps their families to improve their livelihood in rural West Bengal. The findings indicate that the likelihood of hidden child labour is greater when the child's father is old, the child is not an infant, the household possesses positive operational assets and the child's mother is part of a self-help group. Parental positive attitude towards their child's education can also reduce the incidence of hidden child labour within the family. The evidence from the two-step treatment effect model further suggests that hidden child labour helped their family earn a higher family income than households without hidden child labour during the reference period.

JEL Classification: C25, C31, I31, J13, R23

Keywords

Hidden child labour, rural households, probit regression, Heckman's two-stage treatment effect model, livelihood

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Introduction

Child labour is a complex and pervasive problem in India. Children between the ages of 5 and 14 are considered child labourers if they supplement their family's income (Basu, 1999; Bhukuth, 2008). According to ILO (1998), a child (in the age group of 5–11 years) who is involved in any economic activity for at least 1 hour per week or an adolescent (in the age group of 12–14 years) who performs either non-hazardous work for at least 14 hours per week or hazardous work for 1 hour per week is defined as a child labourer. Since the 1980s, India has taken several initiatives to eliminate child labour. Policies such as the Child Labour Prohibition and Regulation Act (1986), the National Child Labour Policy (1988) and the International Programme on the Elimination of Child Labour (IPEC) in collaboration with ILO (1991), the Child Labour (Prohibition & Regulation) Amendment Act (2016) and Child Labour (Prohibition and Regulation) Amendment Rules (2017) were adopted mainly to prevent children below 14 years from engaging in in any type of paid job and adolescents (14–18 years) from hazardous occupations and processes. Rehabilitative measures have also been initiated for migrant child labourers through bridge education and pre-vocational training to mainstream the rescued children into the formal education system. Besides, the Right of Children to Free and Compulsory Education Act (2009) was also implemented to provide the right to education to all children, especially the poorer section of children, and protect them from working in hazardous activities and exploitation. All these measures were adopted to prevent full-time paid child labour. But Webbink et al. (2012) identified that many children (below the age of 14) in low middle-income are not engaged in paid employment, but they help the family members with housework and family business work without directly getting any wage in terms of cash. They designated this type of labour as 'Hidden Child Labour'.[1] In this context, UNICEF (2006) defines child labourers as children engaged in domestic chores for four or more hours per day. Anker (2000) and Basu (2000) explained that although household work and childcare are not treated as child labour, long hours of these activities performed by children regularly create an obstacle to their school attendance and learning outcomes. Afridi et al. (2016) have shown that a mother's participation in the labour force in rural households increases her children's time spent in school and leads to better grade progression. Das (2022), based on the Periodic Labour Force Survey unit-level data, proved that children from economically disadvantaged families are more likely to engage in child labour. It is suggested that increasing children's education attainment and providing financial assistance to poor families can effectively reduce the incidence of child labour. Mid-day meal programmes and almost free direct cost of education expenditure have already been implemented in India, and it has percolated into every corner of rural households all over India. Visibly, that has reduced the incidence of paid child labour in the economy. But Kundu and Goswami (2022), based on a household-level survey, identified the importance of the adult equivalent family labour force during the time of deciding leased-in land among the marginal farmer households of West Bengal, and the adult equivalent family labour force also plays a positive role in enhancing the

agricultural income among those marginal farmer households. During the time of calculation of the adult equivalent family labour force, the children of the sample households who are engaged in farming were also considered. Those children are here described as 'Hidden Child Labour'.

Generally, two types of hidden forms of child labourers are observed in poor households: (a) in family work, where children are involved mainly in agriculture and family enterprises, and (b) in housework or domestic chores that comprise childcare, cleaning, washing, cooking, carrying water and shopping among others. In these two types of activities, the work carried out by children remains unpaid and underreported (Putnick & Bornstein, 2016; Webbink et al., 2012). This type of 'hidden form of child labour' has the most vulnerable and marginalised backgrounds, with children experiencing the risk of deprivation in terms of their well-being and overall development. During income shock or health shock in a family, these domestic child labourers become the principal source of family income for the survival of the household, which then impedes their ability to attend classes and fully participate in school activities including games and sports (Galli, 2001; Ravallion & Wodon, 2000). This article will try to explore which situation and under what circumstances adult family members involve their children in unpaid economic activities within the family. Here 'Hidden Child Labour' is defined as a type of child labourer (a) who is directly engaged in a household activity and (b) works as unpaid labour in their family business.

The second section reviews the existing literature to identify the research gaps. The third and fourth sections outline research objectives, data sources, sample design and data analysis. Based on the field investigation, the fifth section uses the probit model to assess possible household-related factors responsible for the existence of 'Hidden Child Labour' within rural poor families. The sixth section examines whether these child labourers contribute to improved family livelihood in these households. The seventh section provides the conclusion, and research limitations and future scope of research are presented in the eighth section.

Literature Review

A hidden child labourer works as an unpaid labourer regularly either in households, on the family farm or in family enterprises (outside the mainstream paid work) (Bullen, 1986; Webbink et al., 2012). The domestic workforce participation of children depends on the parental decisions of the trade-off between cost (foregone costs of schooling such as expenditure of school fees, school uniform and books among others) and benefit (income derived from working in a family farm or business or involving other earning activities) analysis (Woldehanna et al., 2008). The determinants such as low level of per capita income of the family, landlessness, parental attitude towards a child's work and lack of availability of institutional credit, male-dominated households and less accessibility of social capital are the vital factors for children's time allocation on educational attainment, household work involvement and leisure activities (Basu, 1999; Burki et al., 1998; Goswami & Jain, 2006). When a mother of a poor household engages herself as a wage labourer, there is less possibility for a girl child to attend school as she performs

all the domestic chores (Bhalotra, 2007). Galli (2001) found that the participation of children in hazardous or non-hazardous work or as a paid or unpaid family labourer is crucial to meet the subsistence standard of living when a household suffers from any risk of inadequate productivity or shock of adult joblessness. Using the household survey data (1996) of Brazil, Emerson and Souza (2003) observed that children hardly work as family labourers if the household income and parental education are high.

Based on the Ghana Living Standards Survey (1987–1992) and ILO Child Labour Survey (1996), Canagarajah and Coulombe (1997) investigated the relationship between the probability of school attendance and working children in households. The multinomial logit model shows that school participation enhances children's welfare but imposes an extra financial burden on poor families. Based on data from the Egypt Market Survey, Sakamoto (2006) captured the parental attitudes by their decision towards the well-being of their children. The high cost of school education and the greater bargaining power of the father in the family significantly influenced the household decision towards children's involvement in work. Using the World Bank survey data for rural Ghana and Pakistan, Bhalotra and Heady (2003) estimated that nearly 50% of school children (7–14 years old) engage in housework, and only 7% of working children can attend school regularly. Udry (2006) opined that the poor functioning of the financial market and the difference between the immediate benefit from education and the long-term cost of children's school education are the key factors to increase the incidence of hidden child labour among poor households. Ravallion and Wodon (2000) studied the combined effect of enrolment subsidy on children's schooling and household working time in rural Bangladesh. Subsidised school education lessens unpaid domestic child labour and increases school enrolment. Guarcello et al. (2010) assessed whether income risk and vulnerability of the households have an impact on children's unpaid work participation and schooling decisions. Their study reveals that credit rationing helps to increase household income, which boosts investment in human capital for children's development. Bhalotra and Heady (2003) and Basu et al. (2010) explained the wealth paradox that the relationship between land ownership of a household and unpaid domestic child labour is an inverted U-shape; that is, the labour force does not monotonically decline with the increase in land. Bandara et al. (2014) analysed the impact of income shock (agricultural shock) and non-income shock (parental death) on family child labour. The study reveals that crop shock enhances children's work and responsibility for domestic chores and agriculture, whereas sudden parental death raises their family liability.

India has already banned 'child labour'. It has kept the direct cost of education almost zero at the elementary and post-primary levels. The mid-day meal programme was also initiated, which has spread in all parts of rural India (Biswas & Kundu, 2022). But still today, sometimes the prevalence of a child working as a family labour force is observed in rural West Bengal. This article wants to investigate possible reasons behind this and will also investigate whether the existence of a hidden form of unpaid child labour can give economic benefit to the household or not.

Research Objectives

Although numerous research papers have focused on the determinants of child labour and its policy measures, attention has not been paid to the existence of a daily unpaid hidden child workforce among rural families. The conventional methods for measuring the incidence of child labour often ignore the school children's work participation in domestic chores and/or economic activities as domestic workers for long hours daily during their late childhood (6–12 years) to early adolescence (12–14 years). In the research papers, 'Hidden Child Labourers' are in the age group of 6–14 years who are pursuing school education as well as supporting their adult family members physically by working as 'not directly paid' family labourers. The research objective is to investigate whether a child's participation in hidden child labour within the household even after attending school significantly contributes to their family income. To investigate that we have to take the help of a 'field experiment' where initially it is required to identify the socio-economic factors which prompt a household to engage its child in hidden child labour.

Sample Design and Field Investigation

The field experiment was conducted in the district of Purba Medinipur of West Bengal. Out of 25 blocks of the district, the Bhagawanpur-1 block was chosen, which is not only the biggest block but also one of the economically backward blocks. Based on the Human Poverty Index (Sen & Anand, 1994), the incidence of poverty in this block is shown at 27.81% (Census of India, 2011). As per the Census of India (2001), the district has contributed 4.1% of child labour of the total child labour of West Bengal.

Among the 10 Gram Panchayats (GPs) of the block, two large GPs of the district—Mahammadpur-I and Mahammadpur-II—were considered for our investigation. Nine out of 22 villages of these two GPs were selected randomly. The survey was conducted among the rural households who are landless[2] and marginal landholders[3] (up to 1 bigha[4] operational landholdings). According to the definition of 'Hidden Child Labour', the labourers are engaged only as a 'not directly paid' family labour force (Webbink et al., 2012). As per Kundu and Das (2022a), a significant portion of marginal farmers and landless agricultural labour households are economically poor. Consequently, the existence of 'Hidden Child Labour' is anticipated within these households. Target households are first identified from the information of local people, GP and teachers and students of primary and secondary schools, and an approximate number of rural households having children (6–14 years) are obtained in the reference period (past 60 days from the point of data collection). Finally, sample households were drawn randomly from the above-mentioned households.

To address the research questions in the study, a well-structured questionnaire was constructed based on the pilot survey in two villages of Mahammadpur GP-1 of Bhagawanpur block. After eliminating the irrelevant data, missing data and

duplicate data, the final sample size became 380 households,[5] which were categorised into two groups:

1) 128 landless households
2) 252 marginal households which possessed up to 1 bigha operational landholding.

Out of 380 sample households, 353 have at least one child aged 6–14, with 161 girls and 192 boys in this age group.[6] Face-to-face interviews were conducted with the respondents to gather information on demographic characteristics related to family income, parental education, employment, health, family wealth and credit facilities. Specific questions were also asked about the children's activities during the reference year, including the nature and duration of their work, as well as their current school attendance status. Additionally, information was collected from the sample children regarding the time they sacrificed for work as 'Hidden Child Labour'.

This field experiment was conducted between April and May 2019. Therefore, the reference period for the primary survey was from April 2018 to March 2019.

Here, initially, the probit regression is used to identify the possible household-related factors which are responsible for the existence of 'Hidden Child Labour' among sample rural households. Probit is considered here because the dependent variable is binary. Next, it is required to investigate whether there exists any economic benefit to the rural households that engage their children in domestic, not directly paid economic activity. To do that, the Heckman's Treatment effect model is adopted. Here, the considered outcome variable is the average monthly income of the household. In this context of regression analysis, the outcome variable is assumed to follow the normal distribution. The challenge is to censor normal distribution, which is observed here. In this situation, the key factor is the inverse Mills' ratio, which is considered as a hazard factor and denoted as λ here. Heckman's sample selection model uses λ to estimate the outcome variable. It is also used to tackle the problem of sample selection bias, which is very important in a field experiment. Here, the outcome variable is observed both for the treatment group (the households where the existence of hidden child labour is observed) and for the control group (the sample households where there is no existence of hidden child labour). As the treatment variable in this field experiment is the existence of hidden child labour in the sample household, which itself is endogenous, the two-step treatment effect model is appropriate for this investigation.

Data Analysis

Table 1 presents the distribution of 353 sample children concerning their education and work status within their households. These children are divided into two categories, as mentioned in the table. We primarily focus on the second category of rural households, where 177 school-aged children are identified as 'Hidden Child Labour'. They assist other earning members of the family in economic

Table 1. School Education and Working Status of Children (in the Age Group 5–14 Years) of the Sample Children (in Percentage).

Work Status of Children in Rural Households	Number of Households	Households (%)
Children attend school regularly and do not actively involve in family work or household work	176	49.85
Children either assist their parents in economic activities (a part of the family labour force) or perform domestic chores (housework) or both after attending school	177	50.15
Total	353	100

Table 2. Gender Distribution of 177 School Children (98 Boys and 79 Girls) Engaged in Various Domestic and Economic Activities in Rural Households.

Type of Work	Children Who Engage in Either Economic Activity of the Family or Household Work or Both	Percentage[a] of Girls	Percentage of Boys
Family work	Engage in economic activity as family labourers in agriculture	35.44	64.56
	Work in allied activities in agriculture (such as livestock rearing, betel leaf and vegetable cultivation, fisheries etc.)	45.14	54.86
	Perform tasks in hair processing[b]	61.02	38.98
	Help other adult-earning members of the family in local market shops, rickshaw pulling etc.	33.67	66.33
Housework	Take responsibility for household chores as unpaid domestic workers (such as cooking, cleaning, washing, fetching water, collecting fuel wood, taking care of siblings, shopping etc.)	75.05	24.95

Notes: [a]The percentage of school-going children who perform different earning activities and/or domestic chores is more than 100. Here, double counting happens as these children involve in one or more than one activity every day.

[b]**Extremely** hazardous work. In the long term, unhygienic working environment poses a threat to their health hazards, such as asthma, lungs infections, skin allergies and other breathing problems etc. Most of the children report that they work on it 1–2 hours every day before or after school hours as hair processing is one of the key sources of income of their family.

activities and/or performing domestic activities to support their mothers each day beyond school hours. Among these 177 'Hidden Child Labourers', 98 are boys and 79 are girls. Field surveys revealed that both boys and girls in this category devote at least 2–3 hours (outside their school hours) to domestic chores or other income-generating activities for the economic benefit of their families.

Table 2 displays the gender-specific distribution of work types for our sample 'Hidden Child Labourers'. Female children are primarily engaged in housework

Table 3. Gender Distribution of the Time Spent by the 'Hidden Child Labour' Daily.

Opportunity Time Cost of Involving in Daily Domestic Activities	Percentage[a] of Girls	Percentage of Boys
Self-study/homework from school	51.27	43.82
Outdoor playing/arts and crafts	11.72	35.74
Leisure and recreational activities (listening to music/ gaming on mobile/watching TV/gardening etc.)	36.79	32.53
Reading story books/socialising	14.85	17.42

Note: [a]The percentages for girls and boys exceed 100 as children from sample households confirmed that they might have the opportunity to engage in a wide range of quality activities while contributing as family labourers.

and hair processing, while male child labourers are involved in farm-related and market work.

Table 3 outlines the daily home-based work (family and house-related tasks) carried out by 177 children aged 6–14 years and their associated opportunity time spent on these tasks. Approximately 51% of girls and 44% of boys reported that their engagement in home-based activities came at the expense of their self-study or homework time. Similarly, nearly 37% of girls and 33% of boys mentioned that they sacrificed their leisure and recreation time including game time to engage in allied activities. Additionally, they mentioned that the average duration of family work per day during the reference year was approximately 2–3 hours or even longer, beyond their school hours. According to the Parliamentary Standing Committee on Labour (2013–2014), engaging school-going children in domestic chores could potentially hinder their academic progress, as leisure and recreational activities are essential for developing both their mental and physical well-being (George & Panda, 2015).

Identification of Causes Behind the Existence of Hidden Child Labour in Rural Households

To identify the causes behind the existence of hidden child labourers among rural households, we consider a set of potential key factors and provide their explanation with appropriate theoretical justifications below.

1. Caste of the *i*th households (Caste_i): The incidence of child labour is observed more in the socially backward (such as SC, ST and OBC) households as they experience a higher incidence of poverty than the upper caste households (Goswami & Jain, 2006). Therefore, it is required to examine whether caste is a responsible determinant for hidden child labour.
2. The gender of children of the *i*th households (Gender_i): It is required to investigate whether poor rural parents prefer a girl child over a boy in family (or household)-related work or not. It is treated as a dummy variable

and takes the value 1 if the sample 'Hidden Labour' is a girl and value 0 if it is a boy.

3. Children's age in the *i*th households (Cage_i): It is expected that children's work participation in poor families may enhance with the increase in their age (Cockburn & Dostie, 2007; Webbink et al., 2012). Hence, older children might take higher work responsibility by assisting adult members in the households and contributing to the family income indirectly.
4. The father's age in the *i*th households (Fage_i) : An elderly father may not be able to earn sufficient income to meet minimum family expenses. Adolescents (10–14 years old) are sometimes obliged to help their fathers in diversified farm and non-farm activities.
5. The total number of members in the *i*th households (HHsize_i) : A greater number of household members are expected to be involved in several earning activities which help to increase the household's income and lessen the domestic work burden on school-going children (Sakamoto, 2006).
6. The father's education in the *i*th households (Fedu_i): Educated fathers always want to educate their children as they know the value of schooling and higher expected returns from education in future (Mukherjee & Das, 2008).
7. The mother's education in the *i*th households (Medu_i): An educated mother's greater bargaining power influences the household's decision positively to invest more money in a child's education (Emerson & Souza, 2003).
8. Parental attitudes in the *i*th households (Pattitude_i): Sakamoto (2006) considers parental concerns towards the educational attainment of children. Parental attitude is captured by the ratio of annual money spent on children's education to the annual family income. The higher value indicates that parents want to augment healthy and productive lives by increasing children's quality education by reducing their work engagement within and outside the family and investing in human capital to become better-paid skilled workers in their adulthood (Burki et al., 1998; Webbink et al., 2012).
9. The total number of unemployed days of a father (Unemplydys_i): It is measured by the total number of person-days of the father (or the main earning member of the household), who remains unemployed in the entire reference year. It is expected that the possibility of participation of a child as hidden child labour will be higher if their father (or the main earning member of the household) remains unemployed for more person-days in the entire reference period.
10. Health expenditure of the family (Hexp_i): The higher average monthly health expenditure of the family possibly increases the domestic work burden on the children.
11. Possession of operational landholdings (in decimal) by the *i*th households (Opeland_i): The relationship between work participation of children and the household's wealth might be non-linear as child labour increases with

the increase in a household's possession of landholdings first and then it declines (Basu et al., 2010; Webbink et al., 2012). On the contrary, Bhalotra and Heady (2003) show the 'wealth paradox'—children are more involved as family labourers in households with possession of land and livestock. In this context, this study examines whether children belonging to families with operational landholdings (owned and leased-in land) increase their work burden as hiring a labour is very expensive at the harvesting time (Woldehanna et al., 2008).

12. The mother's membership in a self-help group (SHG_i): Higher accessibility of microcredit of the household raises the domestic work burden on the child as the mother and adult members of the family are engaged in household enterprises (Hazarika & Sarangi, 2008). Hence, it is important to examine whether mothers' membership in self-help groups creates any impact on the incidence of hidden child labour in rural families.
13. Accessibility of institutional credit of the *i*th households ($\mathrm{Inscredit}_i$): Less accessibility to formal loans could be a critical factor in the prevalence of hidden child labour. Due to restrictions of collateral, poor families are unable to receive institutional credit, which is a constraint either to invest in making any income opportunities or to offset any income shocks that may enhance children's domestic responsibilities (Beegle et al., 2003; Ranjan, 2001).

During the selection of rural households, only poor marginal farmers and landless agricultural labour households were chosen, as they rely on labour-intensive, diversified occupations for survival (Kundu & Das, 2022b). These households are aware of the 'ban on child labour' and cannot send their children to the job market to supplement family income (Basu, 1999). However, some of them involve their children in domestic economic activities due to the need for an additional family labour force. Hence, in this investigation, the 'income of the household' cannot be treated as a major cause behind the existence of 'Hidden Child Labour'.

The outcome variable, 'Hidden Child Labour (ICL)', is binary, and takes the value 1 if the sample child worked as 'Hidden Child Labour' in the reference period and 0 otherwise. The probit regression equation is expressed as follows:

$$\begin{aligned}\mathrm{ICL}_i = {} & \alpha_0 + \alpha_1(\mathrm{Caste}_i) + \alpha_2(\mathrm{Gender}_i) + \alpha_3(\mathrm{Cage}_i) + \alpha_4(\mathrm{Fage}_i) + \alpha_5(\mathrm{HHsize}_i) \\ & + \alpha_6(\mathrm{Fedu}_i) + \alpha_7(\mathrm{Medu}_i) + \alpha_8(\mathrm{Pattitude}_i) + \alpha_9(\mathrm{Unemplydys}_i) + \alpha_{10}(\mathrm{Hexp}_i) \\ & + \alpha_{11}(\mathrm{Opeland}_i) + \alpha_{12}(\mathrm{SHG}_i) + \alpha_{13}(\mathrm{Inscredit}_i) + \mathrm{u_i}\end{aligned} \quad (1)$$

Before going to the probit regression analysis, we examine the multi-collinearity problem among the explanatory variables. The variance inflationary factor $\left(\mathrm{VIF} = \frac{1}{1-R^2}\right)$ values show that the two three of explanatory variables—(a) possession of operational landholdings ($\mathrm{Opeland}$), (b) accessibility of institutional credit ($\mathrm{Inscredit}$) and (c) parental attitudes towards the children's education ($\mathrm{Pattitude}$) and parental education (Fedu and Medu)—suffer from the

multi-collinearity problem as their values are more than 4. To reduce the multi-collinearity problem among the mentioned explanatory variables, we have applied two separate probit regression models as follows:

$$\mathrm{ICL}_i = \alpha_0' + \alpha_1'(\mathrm{Caste}_i) + \alpha_2'(\mathrm{Gender}_i) + \alpha_3'(\mathrm{Cage}_i) + \alpha_4'(\mathrm{HHsize}_i) + \alpha_5'(\mathrm{Pattitude}_i) + \alpha_6'(\mathrm{Hexp}_i) + \alpha_7'(\mathrm{Opeland}_i) + \alpha_8'(\mathrm{SHG}_i) + \mathrm{u}_{1i} \quad (2)$$

$$\mathrm{ICL}_i = \alpha_0'' + \alpha_1''(\mathrm{Caste}_i) + \alpha_2''(\mathrm{Gender}_i) + \alpha_3''(\mathrm{Fage}_i) + \alpha_4''(\mathrm{Fedu}_i) + \alpha_5''(\mathrm{Medu}_i) + \alpha_6''(\mathrm{Unempldays}_i) + \alpha_7''(\mathrm{Inscredit}_i) + \mathrm{u}_{2i} \quad (3)$$

The summary statistics of the explanatory variables and the dependent variable considered in Equation (1) are described in Table A1 in Appendix A.

The results of the probit model mentioned in Equations (2) and (3) are presented in Table 4.

Table 4. Possible Reasons Behind the Existence of Hidden Child Labour ('ICL') in Rural Households.

	Model 1		Model 2	
Observations	353		353	
Variables	Coefficient Value	Average Marginal Effect $\left(\frac{\partial p_i}{\partial x_i}\right)$	Coefficient Value	Average Marginal Effect $\left(\frac{\partial p_i}{\partial x_i}\right)$
Caste	0.013 (0.088)	0.0051	0.009 (0.089)	0.0033
Gender	0.023 (0.021)	0.0042	0.024 (0.023)	0.0043
Cage	–	–	0.291*** (0.023)	0.007***
Fage	0.024*** (0.008)	0.009***	–	–
HHsize	–0.194*** (0.062)	–0.073***	–	–
Fedu	–	–	0.016 (0.019)	0.0062
Medu	–	–	0.005 (0.018)	0.0019
Pattitude	–0.316*** (0.081)	–0.119***	–	–
Unemplydys	–	–	−0.0007 (0.002)	−0.0003
Hexp	−0.0002 (0.0002)	−0.0007	–	–
Opeland	–	–	0.0109** (0.0049)	0.0043**
SHG	–	–	0.2955** (0.1271)	0.1146**
Inscredit	0.0791 (0.1153)	0.0299	–	–
Constant	0.5338*	–	0.2181*	–
Pseudo R^2	0.253	–	0.287	–
χ^2	33.69***	–	13.97**	–

Notes: *** indicates a 1% level of significance, ** indicates a 5% level of significance and * indicates a 10% level of significance. Standard errors of the coefficients are written in parentheses.

Discussion

Table 4 shows that sometimes children are compelled to take responsibility for family work due to their ageing father. The possibility of putting domestic work burden on children increases with their increasing age. Higher operative (owned and leased-in) land increases the possibility of the children of that farm household to be considered as a member of family labourers, especially during the harvesting seasons. In our analysis, the size of cultivatable land including the leased-in land is associated with a higher incidence of hidden child labour. This phenomenon is known as the 'wealth paradox' (Bhalotra & Heady, 2003). If farm households, particularly those with marginal farmers, experience a substantial labour demand during the harvest season, they may engage their children, particularly boys, to augment the family workforce. This can give rise to the potential presence of 'Hidden Child Labour'. Our evidence further illustrates that especially the possibility of a 'hidden form of child labour' increases if the mother is an SHG member.[7] Here, the dominance of girl children is observed who directly help their mothers in income-generating activities through devoting their time in labour. This possibly allows their mothers to participate in self-employment opportunities after getting micro-credit for income-generating activities from self-help groups (Galli, 2001; Rosenzweig, 1977). The total absence of gender preference is observed among rural poor families during the time of engaging them in any type of economic activity within the family. But the factor which can mostly reduce the incidence of 'Hidden Child Labour' is positive parental attitude, that is, spending more on human capital accumulation for their children.

Why Do Some Parents Want to Engage Their Children in 'Hidden Child Labour'?

It has been proven that the engagement of a child in 'Hidden Child Labour' is endogenous. We now aim to explore whether there exists any economic benefit for the families who engage their children in 'Hidden Child Labour'. To investigate this, the average monthly family income of the sample households (AMIH) is considered as the outcome variable, which serves as a proxy for livelihood. To calculate the annual income of the sample households, initially, the field study captured the information regarding the earning details of each working member of the family from diverse activities in the farm and non-farm sectors (Kundu & Das, 2022b) during the entire reference period, average annual savings (institutional as well as non-institutional banks) and the amount of money needed to repay their loans with the rate of interest during the reference period (from April 2018 to March 2019). The net annual income of the households can be obtained by subtracting annual savings and the amount spent for repayment of loans during the entire reference period from the total annual income of the households. Dividing that by 12 one can get the average monthly income of a sample household.

The outcome variable is the average monthly income of the household, and it is calculated among the households where 'Hidden Child Labour' is present and the sample households where it is not present. The first type of rural household belongs to the 'treatment group', and the second type belongs to the 'control group'.

In this context, the existence of 'Hidden Child Labour' within the sample of rural households is regarded as an 'intervention'. However, other potential control factors that may play an important role in enhancing the livelihood of rural households are described below with theoretical justifications.

1. Participation of the *i*th sample household in the National Rural Employment Guarantee Programme in the entire reference period (MGNREGP_i): The primary objective of the MGNREGP is to enhance livelihood security by creating 100 days of employment opportunities among poor households, especially during the off-season of agriculture in a financial year. In the programme, at least one adult member in a household can participate in this unskilled manual work for 100 days a year. Hence, we examine whether the work participation of MGNREGP of the household head or other adult members of the family plays a vital role in improving the livelihood of these households.
2. Agricultural experience of a household's head or other earning members of the *i*th households (agriexp_i): In the study region, mostly adult members of the households cultivate the farm and perform allied activities on their own and/or leased-in land as well as work on another person's land as a hired agricultural labourer during the reference year. Some earning members of the sample households report that they migrate to other states as agricultural labourers during the harvesting seasons as they are highly paid with kind (boarding and lodging) at that time. Hence, agricultural experience is crucial to get more employment opportunities in the farm sector inside and outside the study region, which is expected to enhance the livelihood of these families.
3. Other sources of income of the *i*th households (Difinco_i) : Apart from the principal source of income (from the diversified farm and non-farm sectors) of the households, other sources of income consist of income from leasing land, selling agricultural or non-agricultural land, tree, equipment and animal (cow/goat) or receiving any transfer income (such as compensation from government sources for drought and flood, scholarship from Kanyashree, old age pension, widow pension, unemployment allowances or assistance from charities), among others. The higher level of different sources of income[8] (other than agriculture and non-agriculture income) in the entire reference year may enhance the living standard of the sample households.
4. Accessibility of informal loans of the *i*th households (Inforloan_i): Due to lack of acceptable collateral poor households (especially landless households), they are unable to access institutional credit. They have to access loans at a high rate of interest from informal lending institutions to

cope with health risks and income shocks (Kundu & Das, 2022a). It is therefore needed to examine whether the accessibility of informal loans has any impact on improving their livelihood.

5. Financial Literacy Index[9] of the i^{th} households (FLI_i): Financially literate persons are more aware and able to make the right decision towards financial transactions by using their financial skills and knowledge. Being financially literate members of the households, they possibly access more institutional credit and invest money in income-generating activities that might help in increasing their annual family income.

Now, the summary statistics of explanatory variables in Equation (5) and the outcome variable, AMIH, are described in Table A2 in Appendix B.

In this field experiment, the two-stage treatment effect model by Heckman (1979) is used to address sample selection bias and endogeneity issues associated with the presence of ICL. Heckman's two-step treatment effect model has been applied in this field experiment. For Heckman corrections in our study, we consider the original and selection equations in the model.

The original equation can be written as follows:

$$\mathrm{AMIH}_i = \sum_{i=1}^{6} \beta_i \mathrm{X}_i + \mathrm{u}_i \tag{4}$$

Where AMIH_i represents the average monthly income of all types of sample households. The original equation can be expressed as follows:

$$\begin{aligned}\mathrm{AMIH}_i = \beta_0 + \beta_1\left(\mathrm{ICL}_i\right) + \beta_2\left(\mathrm{MGNREGA}_i\right) + \beta_3\left(\mathrm{Agrexp}_i\right) + \beta_4\left(\mathrm{Difinco}_i\right) \\ + \beta_5\left(\mathrm{Inforloan}_i\right) + \beta_6\left(\mathrm{FLI}_i\right) + \mathrm{u}_i\end{aligned} \tag{5}$$

Equation (5) is the prime equation, and mainly its parameter estimation of 'ICL' is important to understand whether children's participation in economic activities and domestic work as family labourers truly helps to improve the living standard of rural households by generating extra family income. There are a few possible factors which are responsible for the existence of 'Hidden Child Labour' in the sample households. All possible factors are mentioned in the selection equation.

To investigate the possible determinants of hidden (or domestic) child labourers in rural households, the selection equation (considered as a proxy of intervention) expressed in Equation (6) will be estimated by the probit regression equation:

$$\mathrm{ICL}_i = \delta_0 + \delta_1 \mathrm{HHSize}_i + \delta_2 \mathrm{FAge}_i + \delta_3 \mathrm{PAttitude}_i + \delta_4 \mathrm{SHG}_i + \delta_5 \mathrm{Opeland}_i + \varepsilon_{1i} \tag{6}$$

Now we rewrite Equation (5), which contains the original explanatory variables as well as an additional explanatory variable, known as the inverse Mill's ratio, $\hat{\lambda}$, predicted from the estimated co-efficient of the selection Equation (6), which can be described as follows:

$$\begin{aligned}\widehat{\mathrm{AMH}}_i = \beta_0 + \beta_1\left(\mathrm{ICL}_i\right) + \beta_2\left(\mathrm{MGNREGA}_i\right) + \beta_3\left(\mathrm{Agrexp}_i\right) + \beta_4\left(\mathrm{Difinco}_i\right) \\ + \beta_5\left(\mathrm{Inforloan}_i\right) + \beta_6\left(\mathrm{FLI}_i\right) + \left(\hat{\rho}\widehat{\sigma_u}\right)\hat{\lambda} + \hat{\mu}\end{aligned} \tag{7}$$

Table 5. Result of Heckman's Two-step Treatment Effect Model: Outcome Variable—Average Monthly Income of the Households (AMIH).

Observations	353
Variables	Value of the coefficient
ICL	2,004.69* (1,355.75)
MGNREGA	−5.70 (7.57)
Agrxep	74.92** (36.28)
Diffinco	0.9464*** (0.32)
Inforloan	239.07 (490.93)
FLI	436.11** (182.43)
$(\hat{\lambda})$	499.90***
Wald χ^2 (6)	42.61 ***

Notes: *** indicates 1% level of significance and ** indicates 5% level of significance. Standard errors of the coefficients are written in parentheses.

Where ρ is the correlation between two errors terms[10]—unobserved determinants of hidden child labour (ε) in Equation (6) and unobserved determinants of average monthly income of the households (u) in Equation (5)—and σ_u is the standard deviation of u and $\sigma_u > 0$, and the parameter estimator of $\hat{\lambda}$ is $\left(\widehat{\rho}\widehat{\sigma_u}\right)$.

Equation (7) illustrates that sample selection can suffer from the omitted variable bias, as conditional on both X and λ. Hence, Equation (7) can be estimated by substituting μ from the probit estimates from the selection Equation (6) and then constructing the $\hat{\lambda}$ term and using it as an additional explanatory variable. If $\widehat{\rho} = 0$, the coefficient on $\hat{\lambda}$ is also equal to 0, showing that the null hypothesis is accepted, explaining that there is no existence of selectivity bias in the investigation and the problem can be addressed with the help of simple OLS (ordinary least square) analysis.

To investigate whether the presence of 'Hidden Child Labour' can help the rural households to improve their livelihood, the two-step treatment effect model is here applied, whose result is presented in Table 5.

Discussion

Table A2 shows that the application of Heckman's two-step treatment effect model in this field experiment is appropriate as the parameter estimate of $\hat{\lambda}$ is positive and statistically significant. If the average monthly income of the rural household (AMIH) is considered an indicator of its livelihood, after correcting the selectivity bias, it is proven that the existence of hidden child labour helps families to maintain a better livelihood than the families where it is absent. It explains that

the existence of hidden child labour can substantially increase the family labour force through participating in domestic activities and/or contributing to the household's income-generating activities. Sacrificing their leisure, playtime or study time, they help their parents do household work so that the mother or father or both can have some benefit of time, which can help them engage in other economic activities or give them some physical rest. Hidden child labourers are not school dropouts. They attend their schools regularly. But still, they work as unpaid family labour in their households. Their active working hours directly or indirectly serve as a means of supplementary income for the family by reducing wage-related costs. This additional income plays a vital role in making ends meet and covering unforeseen financial demands. Though this micro-level study has been done in rural West Bengal, still it can be observed in other parts of West Bengal and India. This article establishes the economic importance of hidden child labour among poor rural households, and surprisingly, no possible policy prescription can be suggested to remove it. The study further exhibits that different sources of income other than farm and non-farm earnings of the family, the agricultural experience of the household heads and the financial literacy of the adult members of the households also play an important role in enhancing the livelihood of the sample rural households.

Conclusion

This article examines the determinants of the existence of hidden child labour among rural labour households and its impact on family income and livelihood. It is observed that a larger family size reduces the child's domestic work burden, while older children are more likely to be involved in such tasks. Young fathers or household heads are willing to participate in a diverse set of farm and non-farm activities that smoothen their consumption by lowering income shocks and helping to reduce the incidence of hidden child labour within the households. Accessibility of micro-credit through self-help groups creates self-employment opportunities that raise the household workload on children as mothers are engaged in the family business or self-employment activities. But the existence of such 'hidden child labour' can be reduced if the parents give more importance to human capital accumulation for their children. The evidence from the two-step treatment effect model developed by Heckman further suggests that families with the presence of hidden child labour can have a better livelihood than the families where it is absent. However, other factors such as the different sources of earnings, the agricultural experience of a father and financial literacy among the household members also have a positive impact on the livelihood of all types of rural households.

Limitations and Further Scope of Research

This article is a micro-level study. Though this research objective is still not addressed properly in the Indian context, this type of unpaid child labour is observed among rural households in different parts of India. It is required to

investigate whether the parents prefer their girl children to engage in unpaid domestic work over their boys or not. An inter-state comparison can be done in this area because the socio-economic and cultural beliefs among rural people in a patriarchal society like India are different. It can be done using NSSO's Time Use Survey.

Appendix A: Summary Statistics of the Variables in Equation (1)

Table A1. Summary Statistics of the Explanatory Variables Including Outcome Variables.

Variables	Variable Descriptions	Mean	Std. Dev	Max	Min
ICL	= 1 if school-going children are involved in domestic or economic activities = 0, otherwise (if they attend school regularly and do not engage in such activities)	0.551	0.398	1	0
Caste	= 1 for general caste = 0, otherwise (SC or OBC)	0.734	0.442	1	0
Gender	= 1 if the child is a girl = 0, otherwise	0.691	0.315	1	0
Cage	Children's age (in years)	12.099	3.576	14	5
Fage	Father's age (in years)	47.42	8.367	70	28
HHsize	Total family members in HHs	4.224	1.085	8	2.5
Fedu	Father's education (in school years)	8.351	3.296	17	0
Medu	Mother's education (in school years)	6.905	3.637	13	0
Pattitude	Parental attitude towards children's education.	0.055	0.029	0.292	0.05
Unempldays	Total number of father's unemployment days during the reference year	27.27	21.96	180	0
Hexp	Monthly health expenditure of the family (₹) during the reference year	843.33	426.35	3733.33	350
Opeland	Possession of operating landholdings (own and leased-in) (in decimal)	43.49	10.99	105	10
SHG	= 1 if any female of the family accesses the self-help group loan during the reference year = 0, otherwise	0.753	0.432	1	0
Inscredit	=1 if any households access institutional credit during the reference year = 0, otherwise	0.627	0.484	1	0

Appendix B: Summary Statistics of the Variables in Equation (5)

Table A2. Summary Statistics of Regressors and the Regressand—Average Monthly Income of the households (AMIH).

Variables	Variable Descriptions	Mean	Std. Dev	Max	Min
AMIH	Average monthly income of the households (₹)	9,123.08	4,889.2	29,708	2,738
MGNREGA	Number of person-days the household head (or other adult members) works in MGNREGA during the entire reference period	38.71	31.67	100	0
Agrexp	Household head's agricultural experience (in terms of years)	20.99	7.23	40	3
Difinco	Different sources of average monthly earnings (₹) of the sample household in the entire reference period other than farm and non-farm incomes	2,939.85	1,784.14	33,400	0
Inforloan	= 1 if the households access the informal loan0 = otherwise	0.592	0.461	1	0
FLI	Financial Literacy Index	2.069	1.301	5	0

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Notes

1. In this context, it is important to clarify the distinction between hidden child labour and paid child labour. Hidden child labourers are children whose labour activities remain unnoticed, unacknowledged and officially unrecognized. They are engaged in various forms of activities, including domestic chores, agricultural tasks within the family, forced labour as victims of child trafficking and participation in informal sectors (Webbink et al., 2012). In contrast, paid child labour is considered as the employment of children below the legally minimum working age that deprives them of their childhood, potential and dignity [Minimum Age Convention of International Labour Organization (ILO) (1978, No. 138)].
2. The adult members of the landless households mainly work as hired labourers in other people's agriculture and allied activities (such as betel leaf cultivation, fisheries and livestock etc.) as well as involve in several diversified activities (as hair processer,

carpenter, brick fielder, bidi binder, MGNREGA worker etc.) for generating subsistence level of income during the reference period (Kundu & Das, 2022a).

3. The earning members of the households cultivate paddy mainly during Kharif and Rabi seasons on their land and/or leased-in land and involve other allied activities in agriculture such as betel leaf and vegetable cultivation, fisheries and livestock. Besides, they engage in diversified low-skilled activities like landless households during the off-season of cultivation.
4. 1 bigha = 53.33 decimal.
5. Our 353 sample households satisfied the sample adequacy test by Cochran's two-step method.
6. When a household had more than one child in the suggested age group, we randomly selected one child to collect information to avoid overlapping and double counting.
7. On the basis of the value of marginal co-efficient mentioned in Table 4, membership of women (mostly mother) members of the sample household in SHG was the most dominant cause of the existence of hidden child labour within the poor households.
8. Different sources of income are not included in the average monthly income of the households (AMIH).
9. For a detailed calculation of FLI, see the paper by Kundu and Das (2022a).
10. It is assumed that the random terms ε and u follow the joint normal distribution.

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Book Review

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Satish Modh, *Discover the Arjuna in You: An 18 Step Guide for Self-Awareness*. Jaico, 2015. 204 pp., ₹350, ISBN: 978-8184957358

This 18-step guide to self-awareness is an enlightening self-help book by Professor Satish Modh and published by Jaico. It throws light on the significance of discovering ourselves in our journey of life to become our best selves. The author has authored several pioneering books in the field of management and has vast knowledge about the Bhagavad Gita. One can find a reflection of all his knowledge and experience in the writings of this book.

Arjuna, the character from one of the greatest epics of India: Mahabharata, is claimed to be the best archer in the history of Indian mythology. The author takes Arjuna, the best, to set the bar that one needs to become like. The author believes that everyone can become the best at what they do, the only need is the search for Arjuna (the hero) in themselves. Arjuna is characterised by his focus, dedication and integrity. In the instance of Arjuna, what made him a hero was how he dealt with an ethical dilemma when faced one on the battlefield of Kurukshetra.

The author tries to convey that just like Arjuna, all we human beings are faced with similar situations of ethical dilemmas at various stages of life. The only way to deal with it is to stay focused and determined and take decisions as deemed fit to one's principles and morals. The author advocates that to stand a strong ground in such instances, one must be aware of themselves thoroughly. Knowing one's strengths and weaknesses beforehand may provide an opportunity over the threats.

This 18-step guidebook flows smoothly from one step to another giving a new learning to take away at each step. Every step gives a deeper insight into themselves and compels one to introspect.

At every step, one can relate in some way or the other to the message given in the step, as the author has kept a very realistic approach in his process of writing. The mentioning of dilemmas and situations are based on real-life scenarios that all of us face in our life. The 18 steps one after the other answer the queries arising in the mind of the readers regarding attaining the state of being self-aware. The steps discussed follow through with each other. Each step brings us one step closer to self-discovery and knowledge of our true potential.

The author has, in each step, used the character of Arjuna very wisely. The depiction of Arjuna, the situations he faced, the dilemma he was in and his journey of resolving them and not the least, connecting all this to today's reality makes the book a good read. The quoting of texts from the Bhagavad Gita, explaining the verses, the conversations of Arjuna and Lord Krishna and small stories from Mahabharata adds

to the aesthetics of the book. Connecting all these stories to today's reality makes this book more relatable to the reader and compels them to take further interest, as they feel it is they who are being addressed through these characters.

The two major chapters that I found the most intriguing and enlightening were 'Step 2: Don't Worry about the Result' and 'Step 18: Work as Worship'.

'*Karmanye vadhikaraste Ma Phaleshu Kadachana, Ma Karmaphalaheturbhurma Te Sangostvakarmani*' translates to 'You have the right to work only but never to its fruits. Let not the fruits of action be your motive, nor let your attachment be to inaction'. This is mentioned in Step 2, the main thought of step. This chapter also talks about the human tendency to procrastinate due to various factors, the importance of a mentor, Karma, one's duty and so on. The big learning of this chapter is that one should not be driven by the results; rather, the driving force should be one's responsibility towards their duties, and action should be taken as per their role and duty.

Step 18: Work as Worship emphasises the TRIGUNA framework to designate the aspects to work into three classifications: Sattvic, Rajasic and Tamasic, where Sattvik is the highest order of attainment. The use of tabular representation and detailed description of each aspect in each classification provides a deep insight and base for introspection and analysis of ourselves and gives a definitive direction to reach the highest order. Worship in its spiritual nature, in the form of Yajna, charity and so on, is important, and it is equally important to worship our work. This step classifies the work into four categories and further divides it into the Sattvic, Rajasic and Tamasic classifications of each category. This is the step that guides us with how the work is to be done so that it is no less than worship.

The author has not limited his scope to just Mahabharata, its characters and Gita, rather he has taken into account references from other mythologies, various real-life people around us and other cultures for illustration. As a part of being from a management background, there are various instances where the author has mentioned various aspects used in management that factor in and can be utilised for self-awareness as well. The writing flows and the language is not very technical, making it easier to understand for the reader. The best part about the book is it presents an action plan after each step for us to work.

This book is highly recommended for ambitious people who aspire to excel in their lives. This is a book for people of all ages, from teens to the elderly. The reader is guaranteed lifelong learning. This self-help book is inspiring in its own way and is a helpful guide. The young minds are recommended this book, as it will have a great impact in their future building. To conclude, it is a good read, which is full of insights, experiences and guidance.

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