MULTIDISCIPLINARY TRENDS IN HUMANITIES, SOCIAL SCIENCES, COMMERCE AND MANAGEMENT RESEARCH VOLUME II

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Multidisciplinary Trends in Humanities, Social Sciences, Commerce and Management Research Volume II

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PREFACE

The evolving landscape of research in Humanities, Social Sciences, Commerce, and Management has led to the emergence of new perspectives, methodologies, and applications. As societies become more interconnected and economies more complex, multidisciplinary approaches are essential for addressing contemporary challenges. This book, Multidisciplinary Trends in Humanities, Social Sciences, Commerce, and Management Research, serves as a platform to explore and analyze the latest developments in these diverse yet interrelated fields.

This volume brings together contributions from scholars, researchers, and professionals who provide insights into critical areas such as cultural studies, economic trends, business strategies, organizational behavior, policy-making, and the socio-economic impact of global transformations. By integrating theories with practical applications, this book aims to foster a deeper understanding of the dynamic interactions between disciplines.

A key objective of this book is to highlight the importance of cross-disciplinary collaborations in generating innovative solutions for societal and economic progress. It showcases research that not only enriches academic discourse but also offers practical implications for businesses, policymakers, educators, and social institutions.

We extend our gratitude to all the contributors whose scholarly work has made this publication possible. Special thanks are also due to the editorial team, reviewers, and institutions that have supported this endeavor. It is our hope that this book will serve as a valuable resource for researchers, academicians, and professionals seeking to enhance their knowledge and contribute meaningfully to their respective fields.

We welcome readers to explore the rich discussions and insights presented in this book and to continue advancing the dialogue on multidisciplinary research in the Humanities, Social Sciences, Commerce, and Management.

- Editors

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QUANTITATIVE TECHNIQUES FOR MULTIDISCIPLINARY RESEARCH: A STATISTICAL PERSPECTIVE

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Abstract:

In the modern era, where data-driven decision-making plays a crucial role in scientific research, quantitative methods have become indispensable tools for scholars across various disciplines. This chapter offers a comprehensive statistical perspective on the application of quantitative methodologies in multidisciplinary research, providing insights into data collection, analysis, interpretation, and inference. The chapter begins by introducing the fundamental principles of quantitative research, emphasizing the necessity of rigorous statistical frameworks to ensure reliable and valid results. It explores descriptive and inferential statistics, underscoring their importance in hypothesis testing, model development, and predictive analysis. Additionally, the discussion extends to probability theory, sampling methods, and experimental design, all of which contribute to the development of strong research methodologies. A significant focus is placed on multivariate statistical techniques, including regression analysis, factor analysis, cluster analysis, and principal component analysis (PCA). Furthermore, the chapter examines structural equation modelling (SEM), time series analysis, and machine learning techniques, illustrating their applications across various domains. Lastly, it addresses key challenges and ethical considerations, ensuring that researchers apply statistical techniques responsibly and effectively in multidisciplinary studies.

Keywords: Quantitative Techniques, Multidisciplinary Research, Statistical Methods, Data Analysis, Descriptive Statistics, Inferential Statistics.

Introduction:

In today's research environment, data-driven decision-making is a fundamental aspect of scientific investigation across various disciplines. With the rapid expansion of data, researchers increasingly depend on quantitative methods to derive meaningful insights, test hypotheses, and make informed conclusions. These methodologies provide a systematic and objective approach to data analysis, ensuring precision, consistency, and reliability in research findings. Quantitative techniques are particularly valuable in multidisciplinary research, serving as a bridge between fields such as social sciences, medicine, engineering, economics, and environmental studies. By

applying statistical tools, researchers can identify patterns, establish correlations, and construct predictive models that enhance the understanding of complex phenomena.

This chapter offers a detailed overview of statistical methodologies within research, encompassing descriptive and inferential statistics, probability theory, sampling methods, experimental design, and advanced statistical modelling. The integration of these approaches with computational tools, including machine learning and artificial intelligence, further extends their utility across diverse research areas.

Objectives of the Chapter

This chapter aims to:

- Introduce fundamental quantitative research methodologies and their practical applications.
- Explore key statistical concepts and techniques necessary for conducting rigorous research.
- Highlight the interdisciplinary role of statistical analysis in various fields.
- Discuss challenges and ethical considerations in the application of quantitative methods.

By offering a statistical perspective on multidisciplinary research, this chapter seeks to equip researchers with essential tools and knowledge to conduct methodologically sound and impactful studies.

Literature Review

The use of quantitative methods in multidisciplinary research has been widely studied across various domains. This literature review presents key contributions from notable researchers regarding statistical methodologies and their real-world applications.

Creswell (2014) outlined the foundational principles of quantitative research, emphasizing the need for structured methodologies and statistical rigor. Bryman (2012) compared quantitative and qualitative research approaches, discussing their respective advantages and limitations. Tashakkori and Teddlie (2010) introduced mixed-method approaches, combining qualitative and quantitative techniques for a more comprehensive analysis. Babbie (2020) highlighted the importance of hypothesis testing and statistical inference in scientific research. Freedman *et al.* (2007) examined measures of central tendency and dispersion, crucial for data analysis. Montgomery and Runger (2018) explored data visualization techniques and their role in exploratory data analysis. Field (2018) provided an in-depth discussion on parametric and non-parametric inferential tests, including t-tests, ANOVA, and chi-square tests. Cohen (1988) introduced effect size measurements, which play a crucial role in interpreting statistical significance. Casella and Berger (2002) presented fundamental concepts of probability theory, including probability distributions and their applications. Lohr (2021) discussed advanced sampling techniques relevant to social science research, while Särndal *et al.* (2003) analyzed survey sampling methodologies. Levy and Lemeshow (2013) explored stratified, cluster, and systematic sampling techniques.

Box, Hunter, and Hunter (2005) explained key principles of experimental design, such as randomization and replication. Fisher (1935) introduced controlled experiments, laying the foundation for modern experimental design. Montgomery (2017) examined factorial and repeated measures designs, widely used in industrial and scientific research. Gelman and Hill (2007) explored statistical modelling and hierarchical regression techniques. Tabachnick and Fidell (2019) provided insights into regression analysis, discussing assumptions and diagnostic procedures. Hair *et al.* (2019) examined factor analysis and principal component analysis (PCA) in high-dimensional datasets. Everitt and Hothorn (2011) explored cluster analysis techniques, demonstrating their applications in medical and social sciences.

James *et al.* (2013) introduced multivariate modeling approaches used in applied statistics. Byrne (2016) provided a detailed account of structural equation modelling (SEM) and its applications in social sciences. Hyndman and Athanasopoulos (2018) offered a comprehensive guide to time series forecasting using ARIMA models. Bishop (2006) explored the role of machine learning in statistical inference and data-driven modelling. Hastie, Tibshirani, and Friedman (2009) examined both supervised and unsupervised learning techniques in data science. Ioannidis (2005) raised concerns regarding reproducibility and bias in statistical research, while Munafò *et al.* (2017) addressed the reproducibility crisis in psychology and biomedical research.

Wilkinson and the Task Force (1999) provided ethical guidelines for statistical reporting and interpretation. Ziliak and McCloskey (2008) critiqued the misuse of statistical significance and emphasized the importance of effect size reporting in research. The analysis of flat and hierarchical routing structures supported by protocols in Mobile Ad-hoc Networks was explained by Nidhya, M. S., *et al.* (2023). Additionally, R. Arumugam and M. Rajathi (2019) discussed the applications of manpower levels in business with various recruitment rates in the system using stochastic models.

Fundamentals of Quantitative Research

1. Definition and Characteristics of Quantitative Research

Quantitative research is a structured approach to investigation that relies on numerical data and statistical methods to analyse patterns, relationships, and trends. It is distinguished by the following key characteristics:

- **Objectivity** – Minimizes personal bias by focusing on measurable data.
- **Replicability** – Ensures consistency and reliability of findings through repeatable methodologies.
- **Structured methodology** – Follows a well-defined research process, including hypothesis formulation, data collection, and analysis.

- **Statistical validation** – Employs probability-based techniques to draw conclusions with precision.

This research approach is widely applied in disciplines such as the natural sciences, social sciences, healthcare, and engineering, where empirical validation plays a critical role.

2. Comparison of Quantitative and Qualitative Research Approaches

Feature	Quantitative Research	Qualitative Research
Nature of Data	Numerical, measurable	Descriptive, non-numerical
Objective	Tests hypotheses, measures variables	Explores concepts, understands experiences
Data Collection Methods	Surveys, experiments, structured observations	Interviews, open-ended surveys, ethnographic studies
Analysis Methods	Statistical methods (e.g., regression, ANOVA)	Thematic analysis, content analysis
Outcome	Generalizable, replicable results	Context-specific, in-depth understanding

While quantitative research offers statistical accuracy, qualitative research provides rich contextual insights. Many contemporary studies integrate both methodologies through mixed-method approaches, ensuring a more comprehensive research framework.

3. Importance of Statistical Rigor in Quantitative Studies

Ensuring statistical rigor is crucial for producing valid, reliable, and generalizable research findings. Essential aspects include:

- **Well-structured research design** – Clearly defining variables, incorporating control groups, and minimizing potential biases.
- **Appropriate sampling techniques** – Selecting representative samples to reflect the target population accurately.
- **Robust statistical analysis** – Choosing analytical methods suited to the characteristics of the data.
- **Error minimization** – Addressing measurement errors, sampling biases, and inconsistencies in data collection.

Without statistical rigor, research findings may lead to inaccurate conclusions, misleading interpretations, and poor decision-making.

4. Key Components: Variables, Data Types, and Measurement Scales

4.1 Variables in Quantitative Research

A variable is any characteristic, quantity, or attribute that can be measured or categorized. Key types of variables include:

- **Independent Variable (IV)** – The factor that is manipulated or classified (e.g., medication dosage).
- **Dependent Variable (DV)** – The outcome being measured in response to changes in the IV (e.g., blood pressure level).
- **Control Variables** – Factors that remain constant to prevent confounding effects.

4.2 Data Types

- **Numerical (Quantitative) Data:**
  - ➢ **Discrete** – Whole-number values (e.g., number of students in a class).
  - ➢ **Continuous** – Can take any value within a range (e.g., height, weight).
- **Categorical (Qualitative) Data:**
  - ➢ **Nominal** – Categories without inherent order (e.g., gender, eye colour).
  - ➢ **Ordinal** – Categories with a meaningful order (e.g., satisfaction levels, education levels).

4.3 Measurement Scales

- **Nominal Scale** – Classifies data into categories without a specific order (e.g., blood type).
- **Ordinal Scale** – Organizes data in a ranked order, though the intervals between ranks are not necessarily equal (e.g., survey ratings).
- **Interval Scale** – Uses a numerical scale with equal intervals but lacks a true zero point (e.g., temperature in Celsius).
- **Ratio Scale** – Similar to the interval scale but includes a true zero, allowing for meaningful comparisons (e.g., height, weight, income).

A thorough understanding of these fundamental concepts is essential for selecting appropriate statistical methods and ensuring the validity of research findings.

Descriptive and Inferential Statistics

Statistical analysis is broadly divided into descriptive and inferential statistics, each serving a distinct purpose in research. Descriptive statistics summarize and organize data, providing insights into its central tendency and variability. Inferential statistics, on the other hand, use sample data to draw conclusions about a larger population through hypothesis testing and statistical inference.

1. Descriptive Statistics

Descriptive statistics simplify raw data into meaningful summaries, allowing researchers to identify patterns, trends, and distributions.

Measures of Central Tendency

These measures indicate the typical or central value within a dataset:

- Mean (Arithmetic Average): Calculated by summing all values and dividing by the total number of observations. It is sensitive to outliers.

- Median: The middle value when data is arranged in ascending or descending order. Unlike the mean, it is resistant to extreme values.
- Mode: The most frequently occurring value in a dataset, particularly useful for categorical data.

  For example, in a dataset of student test scores:
- Mean: (70 + 75 + 80 + 85 + 90) / 5 = 80
- Median: 80 (middle value)
- Mode: If most students scored 85, then mode = 85

Measures of Dispersion

Dispersion measures describe how data is spread around the central tendency:

- Variance: The average of squared differences from the mean, where a higher variance indicates greater spread.
- Standard Deviation (SD): The square root of variance, expressing dispersion in the same unit as the data.
- Range: The difference between the maximum and minimum values; highly sensitive to outliers.
- Interquartile Range (IQR): The difference between the third quartile (Q3) and the first quartile (Q1), representing the middle 50% of the data while minimizing outlier influence.

Data Visualization Techniques

Visual representation enhances data interpretation:

- Histograms: Illustrate the frequency distribution of numerical data, highlighting skewness and modality.
- Boxplots: Display the median, quartiles, and potential outliers, offering a visual summary of data dispersion.
- Scatter Plots: Represent relationships between two numerical variables, aiding in correlation and regression analysis.

By leveraging descriptive statistics, researchers can effectively summarize large datasets, laying the foundation for further inferential analysis.

2. Inferential Statistics

Inferential statistics allow researchers to make predictions, generalizations, and informed decisions based on sample data.

Population vs. Sample

- **Population:** The entire set of individuals or items under study (e.g., all patients in a hospital).
- **Sample:** A representative subset of the population used for analysis (e.g., 200 randomly selected patients).

Using appropriate sampling techniques ensures that findings are applicable to the broader population.

Hypothesis Testing: Null and Alternative Hypotheses

Hypothesis testing is a core component of inferential statistics:

- **Null Hypothesis (H_0):** Assumes no effect or no significant difference (e.g., "A new drug has no impact on blood pressure").
- **Alternative Hypothesis (H_1 or H_a)**: Suggests an effect or difference exists (e.g., "The new drug significantly lowers blood pressure").

Statistical tests determine whether to reject the null hypothesis based on observed data.

Parametric vs. Non-Parametric Tests

Parametric Tests: Require specific assumptions about data distribution (e.g., normality). Examples include t-tests and ANOVA.

Non-Parametric Tests: Used when parametric assumptions are not met. Examples include the Mann-Whitney U test and Kruskal-Wallis test.

Confidence Intervals and Statistical Significance

- **Confidence Interval (CI):** A range of values likely to contain the true population parameter. A 95% CI implies that, if repeated multiple times, 95% of such intervals would capture the true value.
- **Significance Level (α):** The probability of rejecting a true null hypothesis. A common choice is $\alpha = 0.05$, meaning a 5% risk of a Type I error.
- **p-Value**: The probability of obtaining the observed data if H_0 is true. A p-value < 0.05 generally indicates statistical significance, leading to rejection of H_0.

  Common Inferential Tests

- **t-Test**: Compares the means of two groups (independent or paired samples).
- **Chi-Square Test**: Assesses associations between categorical variables (e.g., gender vs. disease prevalence).
- **ANOVA (Analysis of Variance)**: Compares means across multiple groups to identify significant differences.
- Correlation Analysis: Measures the strength and direction of relationships between two continuous variables (e.g., Pearson's or Spearman's correlation).

Inferential statistics equip researchers with the tools to make evidence-based conclusions, assess relationships, and formulate predictions with confidence.

Probability Theory and Sampling Techniques

Probability theory serves as the cornerstone of statistical inference, enabling researchers to quantify uncertainty and make data-driven decisions.

1. Fundamental Concepts of Probability

Probability measures the likelihood of an event occurring, ranging from 0 (impossible) to 1 (certain). Key concepts include:

- **Random Experiment**: An experiment in which the outcome is uncertain (e.g., rolling a die).
- **Sample Space (S)**: The set of all possible outcomes (e.g., {1, 2, 3, 4, 5, 6} for a six-sided die).
- **Event (E)**: A subset of the sample space (e.g., rolling an even number {2, 4, 6}).
- **Conditional Probability (P (A|B))**: The probability of event A occurring, given that event B has already occurred.

2. Sampling Techniques

Sampling is a critical process for selecting representative data while minimizing bias.

2.1 Probability Sampling Methods

Probability sampling ensures that each unit in the population has a known chance of being selected:

- **Simple Random Sampling (SRS)**: Every individual has an equal probability of selection (e.g., lottery method).
- **Systematic Sampling**: Selecting every k-th individual from an ordered list (e.g., every 10th customer in a queue).
- **Stratified Sampling**: Dividing the population into subgroups (strata) and selecting samples from each to ensure proportional representation (e.g., selecting students from different academic grades).
- **Cluster Sampling**: Dividing the population into clusters and randomly selecting entire clusters instead of individual members (e.g., selecting specific schools instead of individual students).

2.2 Non-Probability Sampling Methods

These methods do not guarantee equal chances of selection, which may introduce bias:

- **Convenience Sampling**: Selecting readily available participants (e.g., volunteers in a survey).
- **Purposive Sampling**: Choosing participants based on specific characteristics (e.g., selecting patients diagnosed with a rare disorder).
- **Snowball Sampling**: Identifying participants through referrals (e.g., surveying hard-to-reach populations like undocumented migrants).

Proper sampling is essential to ensure the validity, reliability, and generalizability of research findings.

Experimental Design and Statistical Modelling

Experimental design plays a pivotal role in research, ensuring that results are valid, reliable, and reproducible. It involves structuring studies in a way that minimizes bias and controls variability. Statistical modelling complements experimental design by providing mathematical frameworks to analyse relationships between variables.

1. Principles of Experimental Design

A well-structured experiment follows key principles:

- **Control**: Keeping extraneous variables constant to avoid confounding effects.
- **Randomization**: Assigning subjects or treatments randomly to eliminate selection bias.
- **Replication**: Repeating the experiment multiple times to ensure consistency and improve statistical power.

These principles enhance the accuracy of statistical inferences and improve the credibility of research findings.

2. Control Groups, Randomization, and Replication

- **Control Groups**: A group that does not receive the experimental treatment, serving as a baseline for comparison (e.g., placebo group in drug trials).
- **Randomization**: Ensuring participants are assigned to groups randomly to eliminate bias.
- **Replication**: Conducting multiple trials to strengthen findings and minimize random variations.

For example, in a clinical study evaluating a new drug, researchers might:

1. Randomly assign patients to treatment and placebo groups.
2. Control variables such as age, gender, and lifestyle.
3. Replicate the study in different populations to validate findings.

3. Common Experimental Designs

Different experimental designs are selected based on research objectives:

1. **Completely Randomized Design (CRD)**
   - Subjects are randomly allocated to treatment groups.
   - Example: Assessing three different fertilizers on crop yield by assigning plants randomly to different treatments.

2. **Factorial Design**
   - Investigates multiple factors and their interactions simultaneously.
   - Example: Analysing how diet (low-fat, high-fat) and exercise (regular, none) affect cholesterol levels.

3. **Repeated Measures Design**
   - The same participants undergo multiple treatments at different time points.

- Example: Measuring blood pressure in patients before, during, and after taking medication.

These designs help researchers control variables, enhance efficiency, and detect interaction effects.

4. Statistical Modelling in Research

Statistical modelling involves the mathematical representation of relationships between variables, helping researchers:

- Summarize and interpret data (e.g., regression models).
- Make predictions (e.g., machine learning algorithms).
- Test hypotheses (e.g., t-tests, ANOVA).

Common statistical models include:

- **Regression models** (predicting outcomes based on independent variables).
- **ANOVA models** (comparing means across groups).
- **Time-series models** (analysing trends over time).

The choice of a statistical model depends on research objectives, data type, and underlying assumptions.

Multivariate Statistical Methods

Multivariate statistical techniques allow researchers to analyse multiple variables simultaneously, revealing complex relationships in large datasets. These methods are widely applied in economics, healthcare, engineering, and social sciences.

1. Regression Analysis

Regression analysis examines the relationship between a dependent variable and one or more independent variables.

Simple and Multiple Linear Regression

1. **Simple Linear Regression**: Models the relationship between a single predictor (X) and an outcome (Y).
- Example: Predicting house price (Y) based on square footage (X).
- Model equation: $Y = \beta_0 + \beta_1 X + \varepsilon$, where β_0 is the intercept, β_1 is the slope, and ϵ is the error term.
2. **Multiple Linear Regressions**: Extends simple regression by incorporating multiple predictors.
- Example: Predicting house price based on square footage, number of bedrooms, and location.
- Model equation: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + ... + \beta_n X_n + \varepsilon$

Logistic Regression for Categorical Outcomes

When the dependent variable is categorical (e.g., disease presence: Yes/No), logistic regression is used.

- Example: Predicting whether a patient has heart disease (1 = Yes, 0 = No) based on cholesterol levels and blood pressure.

Model equation (legit transformation): $\log\left(\dfrac{p}{1-p}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots\ldots + \beta_n X_n$

Where p is the probability of the event occurring.

2. Assumptions and Diagnostics in Regression Models

Before interpreting results, researchers must verify regression assumptions:

1. **Linearity**: The relationship between predictors and the outcome must be linear.
2. **Independence**: Observations should be independent (checked using the Durbin-Watson test).
3. **Homoscedasticity**: The variance of residuals should remain constant across values of X.
4. **Normality of Residuals**: Errors should follow a normal distribution.

Regression Diagnostics

- **Multicollinearity Check**: Variance Inflation Factor (VIF) should be <10.
- **Residual Plots**: Used to detect non-linearity or heteroscedasticity.
- **Outlier Detection**: Cook's Distance and leverage statistics help identify influential data points.

Ensuring these assumptions enhances the accuracy and validity of regression models, leading to more reliable research conclusions.

Advanced Statistical Techniques

Advanced statistical techniques extend traditional methods by incorporating complex modelling, forecasting, and machine learning approaches. These techniques enhance analytical precision and enable researchers to extract meaningful patterns from large datasets across multiple disciplines.

1. Structural Equation Modelling (SEM)

Concept of Latent Variables and Path Analysis Structural Equation Modelling (SEM) is a powerful statistical technique used to analyse complex relationships between observed and unobserved (latent) variables. It integrates multiple regression, factor analysis, and path analysis to examine both direct and indirect effects among variables.

- **Latent Variables:** These are variables that cannot be directly observed but are inferred from multiple indicators (e.g., intelligence measured through IQ tests, problem-solving ability, and reasoning skills).

- **Path Analysis:** A component of SEM that visually represents causal relationships among variables using directed arrows.

   Applications in Behavioural and Social Sciences SEM are widely used in psychology, sociology, and education to model constructs such as intelligence, motivation, and consumer behaviour.

Example:

A study analysing student academic performance might include:

- **Latent Variable:** Student engagement (measured through attendance, participation, and assignment scores).

- **Observed Variables:** Study hours, socioeconomic status, and teacher support.

   By applying SEM, researchers can explore the influence of engagement on academic performance while controlling for confounding factors.

2. Time Series Analysis Components of Time Series

   Time series analysis examines data points collected over time to identify patterns and trends for forecasting. Key components include:

- **Trend:** A long-term upward or downward movement in data (e.g., rising global temperatures).

- **Seasonality:** Regular fluctuations that occur within fixed periods (e.g., sales peaks during holidays).

- **Cyclic Patterns:** Variations that occur over longer, variable periods (e.g., economic business cycles).

ARIMA Models and Forecasting Techniques:

   The Autoregressive Integrated Moving Average (ARIMA) model is a widely used statistical technique for time series forecasting. It consists of:

- Auto regression (AR): Predicting future values based on past values.

- Differencing (I): Transforming a time series to make it stationary by removing trends.

- Moving Average (MA): Smoothing fluctuations using past forecast errors.

   ARIMA models are extensively used for predicting stock prices, weather patterns, and economic indicators.

   Applications in Finance, Economics, and Climate Studies Finance: Stock price forecasting and risk management.

- **Economics:** GDP growth prediction and inflation analysis.

- **Climate Studies:** Forecasting temperature and rainfall patterns.

Example:

A central bank may use ARIMA models to predict inflation trends and adjust monetary policies accordingly.

3. Machine Learning Approaches Supervised vs. Unsupervised Learning Machine learning extends traditional statistical methods by enabling automated pattern recognition and decision-making.

- **Supervised Learning:** Models are trained on labelled data (e.g., predicting loan approval based on applicant features).
- **Unsupervised Learning:** Models identify hidden patterns in unlabelled data (e.g., clustering customer segments based on purchasing behaviour).

Applications of Decision Trees, Neural Networks, and Support Vector Machines (SVMs)

- **Decision Trees:** Hierarchical models used for classification and regression.

Example: Predicting disease diagnosis based on symptoms.

- **Neural Networks:** Modelled after human brain functions, these process complex patterns for image and speech recognition.

Example: Detecting fraudulent banking transactions.

- **Support Vector Machines (SVMs):** Effective for high-dimensional classification tasks.

Example: Classifying cancerous and non-cancerous tumours.

Integration of Statistical Methods with AI and Big Data Analytics Machine learning and artificial intelligence (AI) enhance statistical approaches by handling large datasets and making real-time predictions. Techniques such as deep learning, Bayesian networks, and natural language processing further expand quantitative research capabilities.

Example:

In healthcare, machine learning algorithms analyse patient data to predict disease progression and recommend personalized treatments.

Integration of Quantitative Techniques in Multidisciplinary Research:

Quantitative techniques are widely applied across disciplines, combining statistical methods with computational tools to facilitate evidence-based research.

Case Studies in Social Sciences, Medicine, Engineering, and Environmental Research Social Sciences: Survey analysis: SEM is used to assess public perception of government policies. Behavioural economics: Regression models predict consumer spending habits. Medicine: Clinical trials: Experimental design ensures valid drug efficacy testing. Epidemiology: Time series models track disease spread (e.g., COVID-19 cases). Engineering: Reliability analysis: Predicting failure rates of mechanical components. Optimization algorithms: Machine learning enhances manufacturing processes. Environmental Research: Climate modelling:

ARIMA models forecast global temperature changes. Water resource management: Statistical tools optimize irrigation planning.

Challenges and Ethical Considerations in Quantitative Research

Data Quality and Measurement Errors Ensuring data accuracy and reliability is a critical challenge in quantitative research.

Measurement Errors: These arise from instrument inaccuracies, respondent errors, or inconsistencies in data entry.

Example: A poorly calibrated medical device may lead to incorrect patient health assessments.

Data Completeness and Validity: Missing or incomplete data can bias results. Solution: Imputation methods can address missing values. Sampling Issues: A non-representative sample can distort statistical findings.

Solution: Random sampling techniques improve representativeness.

Ethical Issues in Data Collection and Analysis Informed Consent: Participants must understand the study's purpose, risks, and benefits. Confidentiality and Anonymity: Protecting personal data is essential.

Example: Encrypting patient records in medical research safeguards privacy.

Data Manipulation: Altering or selectively reporting data violates research ethics.

Solution: Pre-registration of study methodologies prevents manipulation. Reproducibility and Transparency in Statistical Research Reproducibility ensures that research findings can be independently verified.

Reproducibility Crisis: Many studies fail to replicate due to poor documentation and biased reporting.

Open Data and Code Sharing: Platforms like GitHub, Zenodo, and OSF enhance transparency.

Pre-registration of Studies: Registering research protocols before analysis prevents selective reporting.

Conclusion and Future Directions

Summary of key concepts discussed this chapter has provided an in-depth exploration of quantitative techniques in multidisciplinary research, covering fundamental principles, statistical modelling, machine learning, and ethical considerations.

Emerging Trends: Big Data, AI, and Real-Time Analytics the future of quantitative research is shaped by technological advancements such as:

Big Data Analytics: Managing vast datasets using tools like Hardtop and Spark.

Artificial Intelligence (AI): Enhancing predictive modelling and pattern recognition.

Real-Time Analytics: Utilizing streaming data for instant decision-making (e.g., fraud detection in banking).

Bayesian Statistics: Increasingly used for adaptive modelling and decision-making under uncertainty.

Recommendations for Researchers Stay updated with modern statistical methods through workshops and online courses. Utilize open-source statistical software (e.g., R, Python, SPSS, and MATLAB). Promote ethical research practices to ensure transparency and reproducibility. Integrate computational techniques with AI, machine learning, and big data analytics. Collaborate across disciplines to enhance the application of quantitative techniques in solving real-world problems.

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PREGNANCY GROUP-ORIENTED ATTITUDE TYPE MENTAL HEALTH OF PREGNANT WOMEN

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Abstract:

Pregnancy is a very important stage in a woman's life. During this stage, discussions between groups of pregnant women affect everyone's behavior. Therefore, it is very important for pregnant women to remain mentally healthy during pregnancy. Therefore, the aim of the present study is to study pregnancy group-oriented attitude types of mental health in the context of their involvement in the Tapovan Center of Children's Research University. *This research was an ex-post-facto type of research. A non-probability's purposive sampling method was used to select* 180 *pregnant women.* Collection of data was carried out with the help of mental health inventory. Pregnancy Group Oriented attitudes is a part of the mental health. Hence the test of mental health has been used here. This tool was developed by Prajapati and Gjjar. For analysis of data 'F – Test' was used. The result of the study presented that there was a significant difference in Pregnancy Group Oriented Attitude type mental health of pregnant women in the context of involved and not involved pregnant women in the tapovan center. While, there is no difference between joint and nuclear type family of pregnant women. This proves that the activities performed at the Garbhsanskar (Tapovan) Center have significant impacts on pregnant women's Pregnancy Group-Oriented Attitudes Type Mental Health.

Keywords: Pregnancy Group Oriented Attitudes Type Mental Health, Involvement, Type of Family, Pregnant Women, Garbhsanskar (Tapovan) Centre

Introduction:

The hallmark of a healthy person is that he is mentally healthy. Any action of a person first originates in the mind, and then that action is carried out by the body. Therefore, for any action, every person needs to be mentally healthy. Because if a person is mentally healthy, he can think about constructive aspects. Pregnancy is a very important stage in the life of women. During this time, many changes occur in the physical, mental, social, psychological, and other aspects of pregnant women. At that time, every woman needs love warmth, support, care, happiness, mental health, and all other aspects. But for many women, this is a time of confusion, fear, sadness, anxiety, stress, and depression. Therefore, during this stage, pregnant women should enjoy daily activities. It is also necessary to find happiness in this situation because it is

not only a question of her but also the baby developing in the womb. In this state, a pregnant woman comes into contact with other pregnant women. Therefore, her behavior with other pregnant women at that time affects her mental health. Therefore, the present study aims is to investigate how involvement in prenatal care centers improves the Pregnancy Group Oriented Attitudes type mental health of pregnant women.

Pregnancy Group Oriented Attitude is the part of mental health. Hence, an attempt has been made here to understand the first mental health.

The thought of mental health and adjustment are closely related. A person who possesses sound mental health may be said to be an adjusted person. Mental health is a branch of science that deals with the mental health of individuals. Clifford Beers started the movement of mental hygiene in the first decade of the 20th century with the publication of A Mind That found itself (1908). His book revolutionized the concept of mental health.

Menninger (1945) defined "mental health as the adjustment of human beings to each other and the world around them with a maximum of effectiveness and happiness".

Kaplan and Sadock (1993) define mental health as: "a condition of well-being and the feeling in person when can come to terms with society and personal situation and social features are satisfying for him/ her"

In the words of D B Klein, "Mental hygiene as its name suggests is concerned with the realization and maintenance of the mind's health and efficiency"

In line with E G Boring, "mental hygiene aims to aid people to achieve more satisfying and more productive life through the prevention of anxieties and maladjustments."

Involvement in Tapovan Center: - Those pregnant women who regularly participate in daily activities performed by Tapovan Center of Children's Research University are termed as involvement in the Tapovan Center. When pregnant women do not take regular part in the daily activities performed by Tapovan Center of Children's Research University, they are termed as non-involved in the Tapovan Center.

Garbhsanskar (Tapovan) centre

Prenatal education is a part of the cultural way of life in Indian tradition. It is necessary that the education of a child's excellence begins from its conception and continues all through life. During pregnancy, the child is affected by the physical, psychological, and spiritual well-being of the mother. We need to authenticate this knowledge through a series of research studies. Children's Research University has taken initiative with the help of the two-dimensional concept of the Tapovaan Research Center. These two dimensions are: (1) research in eugenics; and (2) guidance and education of pregnant mothers for giving birth to the best of the children.

Activities of Tapovan Research Center such as Pranayam/Yoga, Showing Film/ Video, Prayer, Prakrtivihar, Meditation, Sanskrit Reading, Garbhasamvad, Personal Counseling, Art

skills/ Paintings, Group Counseling, Games–Intellectual, Mathematical Physical Puzzles, Music, Development of Elocution, Reading/Discussion, Storytelling, etc…

Prajapati (2015) study showed that "whenever pregnant women participated in the activities of the Tapovan Research Center, there was a significant difference in their mental health".

Prajapati, & Purohit, (2017) results of the study showed that "the mental health of pregnant women who participated in activities conducted by the Tapovan Research Center was better than that of pregnant women who did not participate".

"Prajapati and Thaker (2024) found that there was a significant difference of Psychological Counselling needs of pregnant women in the context of involved and not involved pregnant women in tapovan Centre and also found in Urban and Rural area. In which the psychological counselling needs of pregnant women not involved in the Tapovan Center was found to be higher than that of involved pregnant women."

"Prajapati (2024) found that the pregnant women who are involved in the Tapovan Centre have an increase in mental health compared to the non-involved pregnant women."

Objectives of this study:

1. To study the main effect of involvement in Garbhasanskar (Tapovan) centre on pregnancy group-oriented attitude type of mental health among involved and not involved pregnant women in Garbhasanskar (Tapovan) Centre.
2. To study the main effect of types of family on pregnancy group-oriented attitude type of mental health among joint and nuclear families of pregnant women.
3. To study the interaction effect of involvement in Garbhasanskar centre and Types of Family on pregnancy group-oriented attitude type of mental health among pregnant women.

Hypothesis of this study:

1. There will be no significant main effect of involvement in the Garbhasanskar (Tapovan) centre on pregnancy group-oriented attitude type mental health among involved and non-involved Garbhasanskar centre of pregnant women.
2. There will be no significant main effect of types of family on pregnancy group-oriented attitude type mental health among joint and nuclear families of pregnant women.
3. There will be no significant interaction effect of involvement in Garbhasanskar center and types of family on pregnancy group-oriented attitude type mental health in pregnant women.

Variables of this study:

The following variables were treated as independent and dependent variables:

Table 1

No	Type of variable	Name of variable	Level of variable	Name of level of variable
1	Independent	Involvement in Garbhsanskar (Tapovan) Center	2	1. Involved 2. Not Involved
2	Independent	Types of Family	2	1. Joint 2. Nuclear
3	Dependent	Pregnancy Group Oriented Attitudes Type Mental Health	1	Pregnancy Group Oriented Attitudes Type Mental Health

Research Design:

The purpose of the present study is to investigate the main and interaction effects of two variables, namely types of family and involvement of pregnant women in Tapovan Center. A 2x2 factorial design was used for collecting the data which is given below:

Table 2

Variable		Involvement (A) ↓		Total
		Involved (A1)	Not Involved (A2)	
Types of family (B)	Joint (B1)	45	45	90
	Nuclear (B2)	45	45	90
Total		90	90	180

Research Population and Sample:

The present study included involved and not involved pregnant women in Tapovan Centers run by the children's research University as the population. The sample of the investigation was comprised of 180 pregnant women. A Purposive Sampling Technique was used for selecting 180 involved and not involved pregnant women in tapovan center as per the requirement of research design of this study. The sub groups of the sample were distributed as shown in research design of the study.

Tools: Following standardized tools was used for collecting the data.

❖ **Personal Date Sheet:**

A personal data sheet was developed by investigator who used to collect information of pregnant women about involvement in Tapovan Centre, types of family, education, area, age,

income per month, education of spouse, working women, number of Pregnancy, number of children etc.

❖ **Mental Health Inventory for Pregnant Woman:**

In the present study, since Pregnancy Group Oriented Attitude Type Mental Health is a type of mental health, the test of mental health has been taken. For this study to measure the mental health of pregnant woman, the ental health inventory for pregnant woman was developed by A. N. Prajapati & Dharti. N. Gajjar (2023). In which a total of 32 statements have been included. 22 positive and 10 negative. Whose options respectively, agree, neutral and disagree. The present test is divided into 5 sections like 1. Perception of Reality, 2. Integration of Pregnancy, 3. Positive Self-Evaluation, 4. Pregnancy Group oriental Attitudes and 5. Environmental Mastery. Split half reliability of the test was 0.72 and the validity of the presented scale has been discovered by experts at a high level.

Statistic Tool:

The obtained data from 180 pregnant women have been analyzed with adequate statistical techniques of Analysis of variance (ANOVA).

Result and Discussion:

Table 3: Analysis of variance for pregnancy group oriented attitudes type mental health in relation to involvement and type of family

Variables	Sum of Square	df	Mean sum of Square	F	Sig. Level
Involvement (A)	67.600	1	67.600	13.63	0.01
Types of Family (B)	0.044	1	0.044	0.01	NS*
Involvement & Types of Family (A x B)	1.344	1	1.344	0.27	NS*
SS$_W$	872.900	176	4.960		
SS$_T$	951.644	179			
Sig. level: 0.05 = 3.86 : 0.01 = 6.84 * Not Significant					

Looking at Table 3 at the end of the statistical analysis of the data, it is seen that the one main variable, i.e., involvement in the Tapovan center of pregnant women (F=13.63), is significantly impressed the pregnancy group-oriented Attitude type mental health, while the types of family are not found to be significant (F=0.01), and the involvement and types of family are found to be not significant. (0.27)

Main Effects:

Ho₁   There will be no significant main effect of involvement in Garbhasanskar (Tapovan) centre on pregnancy group oriented attitudes type mental health among involved and non-involved in Garbhasanskar centre of pregnant women.

Table 4: Mean score on Pregnancy Group Oriented Attitude Type Mental Health type mental health with regards to involvement

Variables	N	M	F	Sig.
Involved (A1)	90	14.73	13.63	0.01
Not Involved (A2)	90	13.43		
Sig. level: 0.05 = 3.86, 0.01 = 6.70 * Not Significant				

Pregnancy Group Oriented Attitude Type Mental Health

13.43, 48%

14.73, 52%

■ Involved ■ not involved
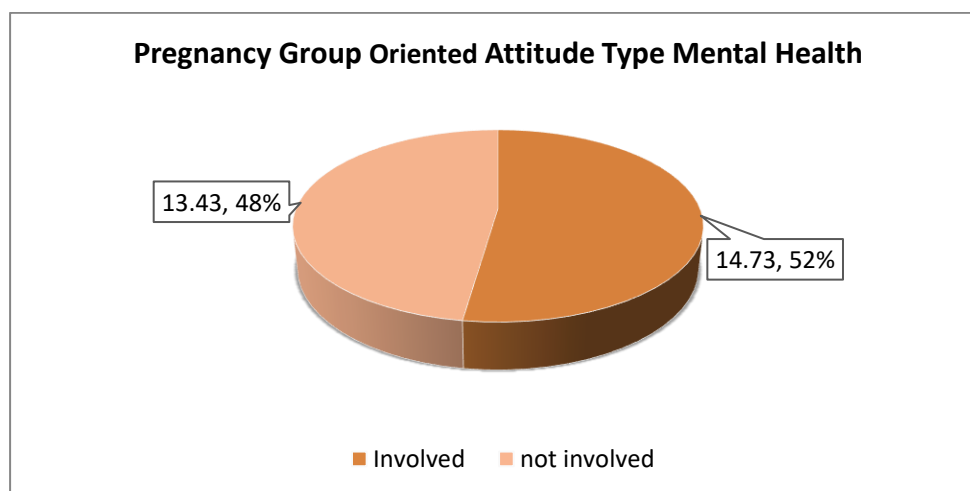
Figure 1: Pie chart of mean scores on pregnancy group oriented attitude type mental health with regarding to involved and not involved in Tapovan center of pregnant women

It is observed that the mean scores in Table 4 and figure 1 reveal that pregnant women involved in Tapovan centres acquire a higher score (M = 14.73) than pregnant women not involved in Tapovan centers (M = 13.43) on pregnancy group oriented attitude type mental health. For testing hypothesis, an f test has been calculated. The f value is 13.63, which is significant. It proves that null hypothesis no. 1 is not accepted.

Ho2   There will be no significant main effect of types of family on pregnancy group oriented attitude type mental health among a joint and nuclear family of pregnant women.

Table 5: Means score on pregnancy group oriented attitude type mental health with regards to types of family

Variables	N	M	F	Sig.
Joint (B1)	90	14.06	0.01	NS
Nuclear (B2)	90	14.09		
Sig. level: 0.05 = 3.86 : 0.01 = 6.70 * Not Significant				

Figure 2: Pie chart of mean scores on pregnancy group oriented attitude type mental health with regard to types of family

It's observed that the mean scores in table 5 and figure 2 revealed that the joint family acquire slightly higher score (M=14.09) than the nuclear family of pregnant women (M=14.06) on pregnancy group oriented attitude type mental health. For testing hypothesis f test has been calculated. The f value is 0.01 which is not significant. It proves that null hypothesis no. 2 is not rejected.

Interaction Effect:

Ho₃ There will be no significant interaction effect of involvement in Garbhasanskar centre and types of family on pregnancy group oriented attitude type mental health in pregnant women.

Table 6: Mean scores on pregnancy group oriented attitude type mental health with regards to involvement & types of family (A x B)

Gender	Involvement		'F'	Sig.
	Involved	**Not Involved**		
Joint	14.80	13.32	0.27	NS
Nuclear	14.65	13.53		
Sig. level: 0.05 = 3.86 : 0.01= 6.70 * Not Significant				

It is evident from Table 6 and figure 3 that the F value (F = 0.27) is not significant, which suggests that the obtained differences among involvement and types of family interaction subgroups are non-significant. To sum up, among the A x B interacting groups, the group with slightly high pregnancy group-oriented attitude type mental health is involved in Tapovan centers and joint family of pregnant women (M = 14.80), and the slightly lower group is not involved in Tapovan centers and joint family of pregnant women (M = 13.32). The result reveals that the mean scores of two groups as regards involvement and types of family are no differ on

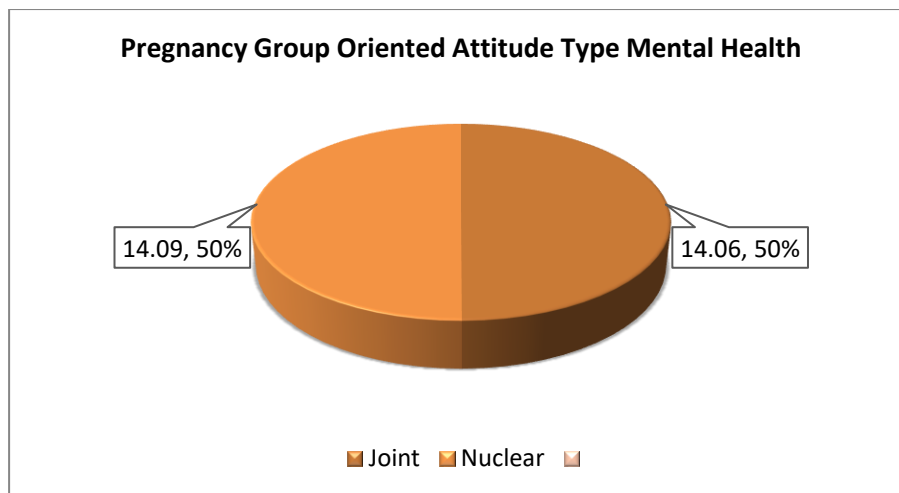pregnancy group oriented attitude type mental health (F= 0.27); therefore, null hypothesis No.3 is not rejected.
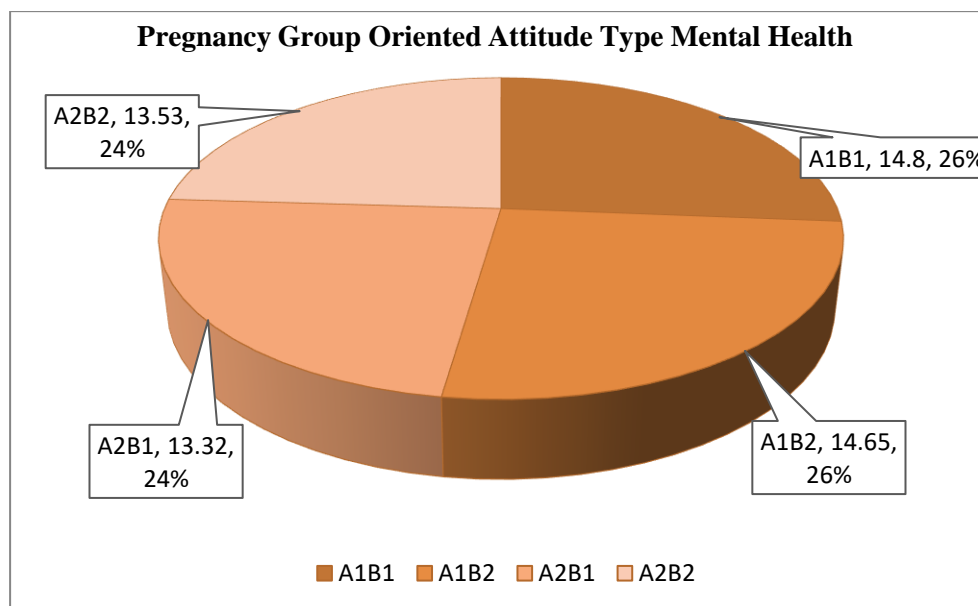
Figure 3: Pie chart of mean scores on pregnancy group oriented attitude type mental health with regard to involvement and types of family

Conclusion:

1. The difference between the pregnancy group oriented attitude type mental health of pregnant women concerning the involvement of the Garbhasanskar (Tapovan) centre was found to be significant (F = 13.63). Therefore, the pre-formed hypothesis is not accepted. This proves that activities like Garbhadhyan, Garbhavsamvad, prayer, music, yoga embroidery, reading, discussion, etc. conducted at Garbhasanskar (Tapovan) Centre increase the pregnancy group oriented attitude type mental health of pregnant women.

2. No significant difference was found between a joint and nuclear family of pregnant women's pregnancy group-oriented attitude type mental health. So that it was concluded that the types of family have no major impact on pregnancy group oriented attitude type mental health in this research. Therefore, the pre-formed hypothesis is not rejected.

3. No significant difference was observed in the pregnancy group-oriented attitude type mental health of pregnant women of Garbhasanskar (Tapovan) center involvement and types of family. Therefore, the pre-formed hypothesis is not rejected.

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THE FINTECH REVOLUTION: TRANSFORMING FINANCIAL SERVICES THROUGH INNOVATION AND TECHNOLOGY

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Introduction:

Fintech, short for "financial technology," is revolutionizing the way we handle money by leveraging digital innovations to offer faster, more efficient, and accessible financial services. From online banking and mobile payment apps to peer-to-peer lending platforms and advanced technologies like blockchain and artificial intelligence (AI), fintech is reshaping personal and business finance, gradually replacing traditional methods.

The sector is experiencing massive growth—just in the first half of 2024, global fintech funding in the payments sector alone reached $21.4 billion, reflecting strong investor confidence in its future. In this discussion, we'll explore how fintech operates, the various products and businesses driving the industry, and the open questions surrounding its long-term impact and evolution.

A.   How Fintech Works: Key Features and Functionality

Fintech is transforming the way we interact with financial services, making banking, investing, and payments more accessible, efficient, and secure. Here are some of the core features that define how fintech companies operate and deliver value to users:

a.   User-Friendly Interfaces

Fintech platforms focus on delivering a seamless user experience with intuitive, mobile-first designs. Whether it's a banking app or an investment tool, these solutions simplify complex financial transactions through personalized dashboards, real-time notifications, and easy-to-navigate interfaces—making financial management accessible to everyone.

b.   Automation & AI-Powered Services

Automation is at the heart of many fintech innovations. Using artificial intelligence (AI) and machine learning, fintech companies provide automated financial advice, personalized investment recommendations, and instant loan approvals. By reducing manual intervention, these technologies make financial processes faster, more cost-effective, and more accurate.

c.   Enhanced Security Measures

Given the sensitivity of financial data, fintech companies employ advanced security protocols to protect users. Features such as biometric authentication (fingerprint or facial recognition), end-to-end encryption, and blockchain technology help safeguard transactions, ensuring data privacy and security.

d.   Real-Time Processing & Transactions

Speed is a major advantage of fintech solutions. Whether it's sending money, approving a loan, or updating account balances, fintech platforms leverage high-speed data processing to provide real-time services. This eliminates long wait times and enhances the overall efficiency of financial operations.

e.   Data Analytics & Personalization

Fintech companies use big data and analytics to gain insights into users' spending habits, credit histories, and investment patterns. By analyzing this data, they can offer personalized financial products, tailored credit offers, and customized wealth management strategies—giving users a more relevant and responsive experience.

f.   API Integration for Seamless Connectivity

Many fintech businesses provide Application Programming Interfaces (APIs) that allow them to integrate with banks, financial institutions, and third-party apps. This interconnected system enables users to manage multiple financial services from one platform, making transactions smoother and more convenient.

g.   Compliance with Financial Regulations

To operate in the heavily regulated financial sector, fintech companies integrate automated compliance features that track and report transactions in accordance with global financial laws. This ensures transparency and helps prevent fraud, money laundering, and other financial crimes.

h.   Blockchain & Smart Contracts

Blockchain technology is revolutionizing financial transparency and security. By using decentralized ledgers, fintech platforms can lower transaction costs and enhance trust. Additionally, smart contracts—self-executing agreements that process transactions only when predefined conditions are met—reduce the need for intermediaries in payments, lending, and trade finance.

i.   Peer-to-Peer (P2P) Platforms

Fintech has enabled P2P lending and investing, where individuals can lend money to others without going through a traditional bank. This allows borrowers to access loans at lower interest rates and investors to earn higher returns—creating a win-win for both parties.

j.   Multi-Channel Access & 24/7 Availability

Unlike traditional financial services that rely on physical branches, fintech companies provide digital solutions that can be accessed from anywhere, anytime. Whether through a mobile app, website, or third-party platform, users enjoy greater convenience and flexibility in managing their finances.

By leveraging these features, fintech companies are reshaping the financial landscape, offering users more control, speed, and security over their financial activities.

B.   Types of Fintech Companies

Fintech companies come in various forms, each specializing in different aspects of the financial industry. From digital-only banks to blockchain-powered innovations, these businesses are reshaping how individuals and businesses manage, transfer, and invest their money. Here's a closer look at the main categories of fintech companies and what they offer:

1. **Digital Banks & Neobanks – Banking Without Borders**

    Traditional banks rely on physical branches, but digital banks and neobanks operate entirely online. They offer essential financial services such as checking and savings accounts, loans, and even investment options—often at lower fees than traditional banks. By leveraging AI and automation, these banks provide a personalized banking experience, with features like instant account setup, budgeting tools, and real-time transaction tracking.

Features

i.   No physical branches = lower operational costs

ii.   AI-powered financial insights and spending recommendations

iii.   Faster loan approvals and seamless digital transactions

2. **Payment Solutions – Making Transactions Seamless**

    Whether you're paying for a coffee using your phone or a business processing cross-border transactions, fintech payment solutions make payments faster, safer, and more efficient. These companies offer everything from mobile payment apps (like Google Pay and Apple Pay) to B2B payment systems that help businesses manage invoices and transactions.

Features

i.   Real-time money transfers with enhanced security

ii.   Simplified payment processing for businesses and individuals

iii.   Global reach with reduced transaction costs

3. **Personal Finance Management (PFM) – Smart Money, Smarter Decisions**

    Managing personal finances can be overwhelming, but fintech tools make it easier. Budgeting apps, financial tracking platforms, and automated savings tools help users monitor their income, expenses, and investments—all in one place. These platforms analyze spending habits and offer insights on how to save more or invest wisely.

Features

i.   AI-driven financial insights tailored to user behavior

ii.   Automated savings and budgeting features

iii.   Easy-to-use dashboards for tracking financial goals

4. **Insurtech – A Digital Revolution in Insurance**

    Insurance has always been seen as complex and time-consuming, but insurtech startups are changing that. They use AI, big data, and machine learning to simplify insurance processes—whether it's buying a policy, filing a claim, or assessing risks. Instead of lengthy paperwork and

manual approvals, insurtech solutions provide instant quotes, automated claims processing, and personalized policy recommendations.

Features

i. Faster claims approval with AI-driven assessments

ii. Personalized insurance plans based on individual data

iii. Usage-based pricing models (e.g., pay-as-you-go car insurance)

5. Wealthtech – Investing for Everyone

Wealth management is no longer reserved for the wealthy. Wealthtech firms democratize investing by offering automated portfolio management, robo-advisors, and AI-driven investment strategies. These platforms help users grow their wealth through smart investing, even if they have little experience in financial markets.

Features

i. Low-cost investing with robo-advisors

ii. Access to diversified portfolios, even with small amounts

iii. AI-powered insights for better investment decisions

6. Lending & Credit Tech – Easier Access to Credit

Getting a loan traditionally involves long wait times, extensive paperwork, and strict credit checks. Fintech lending platforms streamline the process, offering instant loans, peer-to-peer (P2P) lending, microloans, and even crowdfunding options. Many of these platforms use alternative credit scoring models, analyzing non-traditional data such as payment history for rent or utility bills to assess creditworthiness.

Features

i. Faster loan approvals with minimal paperwork

ii. Fairer credit access for underserved populations

iii. More competitive interest rates through P2P lending

7. RegTech (Regulatory Technology) – Keeping Finance Compliant

The financial industry is heavily regulated, and businesses must comply with various legal requirements. RegTech companies provide solutions that help financial institutions stay compliant with regulations by automating processes like identity verification, fraud detection, and financial reporting. This reduces the risk of legal issues and helps prevent financial crimes like money laundering.

Features

i. Automated compliance checks for financial institutions

ii. Advanced fraud detection using AI and big data

iii. Cost-effective regulatory solutions for businesses

8. Blockchain & Cryptocurrency – The Future of Finance

Cryptocurrencies like Bitcoin and Ethereum have introduced a decentralized alternative to traditional finance. Fintech companies in this space use blockchain technology to enhance security, transparency, and efficiency in transactions. Beyond digital currencies, blockchain is also used for smart contracts, decentralized finance (DeFi), and secure identity management.

Features

i.   Secure, transparent, and tamper-proof transactions

ii. DeFi platforms offering loans and investments without intermediaries

iii. Smart contracts that automate and enforce agreements

9. Trade Finance Fintech – Revolutionizing Global Trade

International trade has traditionally been slow, bureaucratic, and expensive. Fintechs in trade finance are tackling these inefficiencies by digitizing letters of credit, supply chain financing, and cross-border payments. These platforms connect buyers and sellers globally, making international trade more transparent and cost-effective.

Features

i.   Faster, digital-first trade financing solutions

ii. Reduced paperwork and fraud risks

iii. Improved access to financing for small businesses

10. Banking Infrastructure & APIs – The Backbone of Fintech

Many fintech startups don't build financial systems from scratch—instead, they rely on banking infrastructure providers that offer APIs (Application Programming Interfaces). These companies enable fintech businesses to quickly integrate banking, payments, lending, and compliance features into their apps, allowing startups to launch financial products without needing a banking license.

Features

i.   Helps startups launch financial products quickly

ii. Enables smooth integration of banking services into apps

iii. Supports innovation in digital banking and finance

C. How Fintech Has Transformed Financial Services

The financial services industry has undergone a massive shift in recent years, thanks to fintech. By leveraging technology, fintech has made banking, investing, and payments more accessible, efficient, and customer-centric than ever before. Here's how fintech is reshaping the financial landscape:

1. More Access, More Inclusion

Fintech has opened the doors of finance to millions of people who were previously left out of traditional banking. In over 98 countries, digital banking services are making it possible for people—regardless of their location, income, or credit history—to open accounts, get loans,

and make payments. Mobile banking apps, online lending platforms, and digital wallets have empowered individuals and small businesses to take control of their financial lives.

Key Transformation

- Instant account setup—no need to visit a bank
- Digital loans available without traditional credit checks
- Seamless payments from anywhere in the world

2. A Better Customer Experience

Gone are the days of waiting in long bank queues or dealing with stacks of paperwork. Fintech has made financial services faster, easier, and more user-friendly. With 24/7 access to banking services, AI-powered financial recommendations, and real-time transaction updates, fintech has raised customer expectations. Now, people demand the same level of speed and convenience in banking that they get from shopping online or ordering food.

Key Transformation

- Simple, intuitive banking apps
- Personalised recommendations based on spending habits
- Always-on customer support via chatbots and AI

3. Faster, Cheaper, and More Efficient Operations

Fintech has helped financial institutions cut costs and simplify operations by automating processes and removing unnecessary middlemen. This has led to lower fees, higher interest rates on savings, and faster transactions. Whether it's instant money transfers, AI-powered loan approvals, or blockchain-enabled smart contracts, fintech is streamlining financial services at every level.

Key Transformation

- No more manual paperwork—everything is digital
- Faster transactions and loan approvals
- Lower costs for banks = lower fees for customers

4. More Control & Transparency for Customers

With fintech, customers have more power over their financial data than ever before. Open banking initiatives allow people to see all their financial accounts in one place, while real-time tracking helps users stay on top of spending, savings, and investments. AI-powered insights give customers personalised advice on managing their money, making financial decision-making simpler and more transparent.

Key transformation

- Customers can track every transaction in real time
- Open banking gives users complete visibility over their accounts
- AI-driven insights help users make smarter financial choices

5. **A Wave of Innovation & Disruption**

Fintech isn't just improving financial services—it's completely redefining them. Traditional banking models are being challenged by new technologies like blockchain, AI, and decentralised finance (DeFi). Robo-advisors provide low-cost investment advice, smart contracts execute agreements without middlemen, and cryptocurrencies offer an alternative to traditional banking. Fintech is constantly pushing boundaries, making finance more efficient, accessible, and innovative.

Key transformation

- AI-driven robo-advisors offer affordable investment advice
- Blockchain-based smart contracts make transactions secure and automatic
- Cryptocurrencies and DeFi create new ways to manage money

6. **A Mix of Collaboration & Competition**

Fintech has created an exciting blend of collaboration and competition. While startups challenge traditional banks, many financial institutions are partnering with fintech firms to stay ahead of the curve. Banks benefit from fintech's agility and technological expertise, while fintech startups gain access to established financial networks and regulatory knowledge. This dynamic is driving the entire industry to evolve faster than ever before.

Key transformation

- Traditional banks are investing in fintech startups
- Fintech companies are integrating with established banking infrastructure
- The financial industry is evolving rapidly with new services and solutions

D. **Challenges and Risks in Fintech**

Fintech is transforming financial services, but it also faces several challenges and risks:

- **Regulatory Uncertainty** – Innovation often moves faster than regulations, making compliance complex, especially across multiple jurisdictions.
- **Cybersecurity & Data Privacy** – Handling vast amounts of sensitive data makes fintech a prime target for cyberattacks, identity theft, and fraud.
- **Financial Stability Risks** – The rapid adoption of new technologies raises concerns about potential systemic risks, where failures in one area could impact the broader financial system.
- **Consumer Protection** – With increasingly complex products, users—especially those with low financial literacy—are vulnerable to misleading practices and hidden fees.
- **Market Competition & Monopoly Risks** – While competition drives innovation, dominant players could limit growth opportunities for new entrants.
- **Operational Disruptions** – Heavy reliance on technology makes fintech firms susceptible to system failures, software glitches, and cyber threats.

- **Scaling Challenges** – Rapid growth can strain resources, leading to inefficiencies and reduced service quality.
- **Intellectual Property Issues** – Innovation is at risk due to difficulties in protecting proprietary technology and preventing unfair competition.
- **Financial Inclusion Gaps** – While fintech expands access to financial services, those without digital access risk being left behind.
- **Ethical & AI Bias Concerns** – AI-driven decision-making in credit scoring and risk assessment can unintentionally reinforce biases, leading to discrimination.

  Addressing these challenges is crucial for fintech's sustainable growth and long-term impact.

Conclusion:

Fintech has revolutionized financial services by making transactions faster, more secure, and widely accessible. Through innovations such as AI, blockchain, and digital banking, fintech has enhanced financial inclusion, efficiency, and transparency. The sector continues to evolve, reshaping traditional banking and investment models while driving economic growth. As technology advances, fintech will play an even more significant role in shaping the future of financial services, offering smarter, more personalized solutions for individuals and businesses worldwide.

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SHIFTING CULTIVATION AMONG THE BONDA TRIBE OF ODISHA: AN ECOLOGICAL AND SOCIO-ECONOMIC PERSPECTIVE

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Abstract:

This paper explores the shifting cultivation practiced by the Bonda tribe of Odisha, which has been a vital aspect of their livelihood for generations. Locally known as *podu chasa*, this agricultural method is deeply connected to the tribe's cultural heritage. The research investigates the historical origins and ecological dynamics of this practice, emphasizing its role in sustaining the tribe's socio-economic structure. Despite facing modern challenges such as deforestation, climate change, and government-imposed restrictions, *podu chasa* remains central to the Bonda people's way of life. The paper also examines the environmental consequences of shifting cultivation, including its contribution to deforestation and biodiversity loss. In response, it proposes sustainable agricultural strategies aimed at reconciling the tribe's traditional practices with environmental conservation. Ultimately, the study seeks to strike a balance between preserving the ecosystem and supporting the tribe's cultural and economic needs, ensuring the long-term viability of both the practice and the environment.

Keywords: Shifting Cultivation, Bonda Tribe, Podu Chasa, Odisha, Indigenous Agriculture, Socio-Economic Impact, Sustainable Farming, Biodiversity Conservation, Traditional Knowledge, Land Management

Introduction:

Shifting cultivation, also known as slash-and-burn agriculture, is a traditional form of subsistence farming practiced by many indigenous communities around the world, including the Bonda tribe of Odisha. The Bonda, one of the most primitive tribal groups in India, primarily inhabit the hilly regions of Malkangiri district in Odisha. Their dependence on shifting cultivation, locally known as *podu chasa*, plays a crucial role in their socio-economic and cultural identity (Mahapatra, 2002). Despite being an integral part of their livelihood, shifting cultivation has been subject to criticism due to its perceived environmental impact.

The practice of shifting cultivation is characterized by a rotational cycle in which a plot of land is cultivated for a few years and then left fallow to regenerate its fertility. This form of agriculture allows the Bonda to adapt to the challenging terrain of the Eastern Ghats, where settled agriculture is difficult due to poor soil quality and undulating topography. Traditionally,

shifting cultivation has provided food security and economic stability for the Bonda, reinforcing their cultural ties with the land and their surrounding environment. However, recent pressures such as deforestation, population growth, climate change, and government-imposed restrictions have significantly altered their traditional farming practices.

Moreover, the transition from shifting cultivation to settled agriculture or alternative livelihoods has not been smooth, as many interventions fail to consider the indigenous ecological knowledge and socio-cultural factors associated with the practice. This research paper aims to examine the historical, ecological, and socio-economic dimensions of shifting cultivation among the Bonda tribe, along with future prospects for sustainable practices. It seeks to provide a balanced perspective on the need for environmental conservation while respecting the traditional knowledge systems that have supported indigenous communities for generations.

Objectives of the Study

1. To analyze the historical evolution of shifting cultivation among the Bonda tribe.
2. To assess the ecological impact of shifting cultivation on soil fertility, biodiversity, and deforestation.
3. To examine the socio-economic significance of shifting cultivation in the livelihood of the Bonda community.
4. To evaluate government policies and interventions affecting shifting cultivation in the Bonda region.
5. To explore potential strategies for integrating modern agricultural techniques with traditional shifting cultivation practices for sustainable development.

Methodology:

This study relies solely on secondary data analysis. Secondary data was collected from various sources, including government reports, anthropological studies, ecological surveys, and previous research articles. The analysis focused on historical records of shifting cultivation practices, land use patterns, government interventions, and ecological impacts. The study also reviewed socio-economic reports on the Bonda tribe's livelihood, land ownership issues, and food security. By synthesizing these existing data sources, the research examines the ecological and socio-economic dimensions of shifting cultivation in the Bonda region.

Historical Background of Shifting Cultivation in Bonda

Shifting cultivation has been practiced in the Eastern Ghats, including the Bonda hills, for centuries. Anthropological studies suggest that this form of agriculture emerged as a response to the region's challenging topography and the community's need for a sustainable food production system (Sahoo & Tripathy, 2015). The Bonda tribe, known for their self-sufficient lifestyle, has relied on this method to cultivate crops such as millets, pulses, and tubers. The Bonda employ traditional tools such as hand-made axes and wooden plows for clearing forest patches.

Following a cyclical pattern, they cultivate the land for a few years before leaving it fallow to restore fertility. They rely on organic manure and intercropping techniques to enhance soil productivity while minimizing resource depletion (Pattanaik *et al.,* 2013). Modernization, deforestation, and governmental restrictions have significantly altered the Bonda tribe's traditional agricultural methods. Policies discouraging shifting cultivation and promoting settled agriculture have led to land alienation and food insecurity among the community (Nayak & Behera, 2020). Additionally, climate change and market influences have further complicated their traditional agricultural cycles.

Ecological Impact of Shifting Cultivation in Bonda

Shifting cultivation, when practiced sustainably, can maintain soil fertility by allowing sufficient fallow periods. However, increasing population pressure has led to shorter fallow cycles, resulting in soil degradation and reduced crop yields (Mishra *et al.,* 2018). Shifting Cultivation has been criticized for contributing to deforestation and habitat loss, as the extensive clearing of forests leads to soil erosion and loss of biodiversity. Reports indicate that continued shifting cultivation in Bonda hills has accelerated the depletion of native flora and fauna, threatening the ecological balance (Panda & Mohanty, 2021). Several sustainable strategies, such as agroforestry, mixed cropping, and controlled burning, have been proposed to minimize the negative ecological impacts of shifting cultivation. Integrating traditional knowledge with modern conservation techniques can offer viable solutions for balancing agricultural needs with environmental protection (Behera *et al.,* 2017).

Table 1: Land Use Pattern in Bonda Region (in hectares)

Year	Total Land	Shifting Cultivation Land	Settled Agriculture Land	Forest Cover Loss
2000	50,000	20,000	10,000	5,000
2010	50,000	18,000	12,000	7,000
2020	50,000	15,000	15,000	10,000

(Source: Forest Survey of India, 2021; Odisha Agricultural Department Report, 2022)

Socio-Economic Aspects of Shifting Cultivation in Bonda

Shifting cultivation continues to be a crucial source of sustenance for the Bonda tribe. It provides food security, employment, and a connection to their ancestral heritage. However, diminishing land availability and restrictive policies threaten their traditional way of life (Singh *et al.,* 2019). The Bonda face multiple challenges, including land ownership disputes, declining soil fertility, erratic weather conditions, and lack of access to alternative livelihoods. Governmental efforts to introduce settled farming often overlook their cultural and ecological

knowledge, creating further hardships (Mohapatra & Sahoo, 2022). Several policies have been implemented to address shifting cultivation, such as land reforms, afforestation programs, and the promotion of settled agriculture. However, these interventions have met with mixed responses due to the lack of community participation and inadequate alternative livelihood options (Patnaik & Das, 2020).

Future Prospects of Shifting Cultivation in Bonda

There is potential for integrating modern scientific methods with traditional Bonda agricultural practices. Techniques such as crop rotation, soil conservation measures, and organic farming could enhance productivity while preserving ecological balance (Dash *et al.,* 2021). Community-led conservation initiatives and participatory land management approaches can contribute to the sustainable future of shifting cultivation. Government support in the form of financial incentives and skill development programs could help the Bonda transition to more resilient farming practices (Mishra & Behera, 2018).

Discussion:

Table 2: Summarizes the shifting cultivation practices and associated issues among several Particularly Vulnerable Tribal Groups (PVTGs) of Odisha

PVTG	Region	Shifting Cultivation Practices	Issues Faced	Authors
Bonda Tribe	Malkangiri district	Primarily dependent on shifting cultivation for crops like millets, pulses, and tubers.	Decreasing land availability, land alienation, deforestation, government restrictions, and climate change pressures.	Mahapatra (2002), Nayak & Behera (2020), Mishra *et al.* (2018), Singh *et al.* (2019)
Dongria Kondh	Rayagada district	Shifting cultivation, growing millets, rice, and pulses.	Land alienation, deforestation, commercial pressures, government policies promoting settled agriculture.	Panda & Mohanty (2021), Nayak & Behera (2020)
Kutia Kondh	Kalahandi, Nabarangpur districts	Practices shifting cultivation, growing millets, rice, tubers.	Land scarcity, declining soil fertility, government policies promoting settled farming, loss of forest cover.	Patnaik & Das (2020), Sahoo & Tripathy (2015)

Lanjia Saora	Ganjam, Gajapati, Rayagada districts	Shifting cultivation, including rice, millet, and pulses cultivation.	Soil degradation, shorter fallow periods, pressure to transition to settled agriculture.	Dash *et al.* (2021), Mishra & Behera (2018)
Soura	Ganjam, Gajapati districts	Shifting cultivation for rice, maize, and millets.	Land fragmentation, pressure for settled farming, environmental degradation, reduced fallow periods.	Behera *et al.* (2017), Pattanaik *et al.* (2013)
Kharia	Sundargarh, Keonjhar districts	Shifting cultivation, primarily for millets, maize, and rice.	Deforestation, land alienation, shorter fallow periods, pressure for agricultural land conversion.	Behera *et al.* (2017), Singh *et al.* (2019)

Comparative Aspects of Shifting Cultivation in Other PVTGs:

- *Shifting Cultivation Land:* Across these tribes, the area under shifting cultivation has been shrinking due to population pressures, deforestation, and government policies promoting settled farming. For instance, tribes like the Dongria Kondh, Kutia Kondh, and Lanjia Saora have seen a reduction in land for shifting cultivation as they face increasing land scarcity.

- *Settled Agriculture Land:* With government initiatives and changes in farming policies, the area under settled agriculture has generally increased for these tribes, similar to the trend observed in the Bonda tribe. This shift is often driven by policies such as land reforms, afforestation programs, and development initiatives.

- *Forest Cover Loss:* Deforestation remains a critical issue across these tribes, with land clearance for shifting cultivation and other forms of land use contributing to loss of biodiversity and ecological balance.

This table provides a comparative look at the shifting cultivation practices and challenges faced by various PVTGs in Odisha, along with the sources of information based on studies and reports on tribal agriculture and land use.

Conclusion:

Shifting cultivation among the Bonda tribe of Odisha is deeply rooted in their history, culture, and livelihood. While modernization and environmental concerns have raised challenges, a balanced approach that integrates traditional knowledge with sustainable practices can ensure the survival of this ancient agricultural system. Recognizing and supporting the Bonda people's right to their land and farming traditions is essential for their socio-economic

well-being and the preservation of their cultural heritage. Moving forward, a collaborative approach involving government agencies, researchers, and indigenous communities is crucial for achieving sustainable development in the region.

Recommendations for Promoting the Benefits of Shifting Cultivation While Mitigating Negative Impacts

1. Strengthening indigenous land rights to ensure community ownership and sustainable use.
2. Implementing agroforestry models that integrate traditional shifting cultivation techniques.
3. Encouraging participatory decision-making in governmental interventions.
4. Enhancing access to education and financial resources for tribal communities.
5. Promoting research on indigenous agricultural knowledge and practices.

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EFFECT OF TRAINING ON EMPLOYEE RETENTION
WITH REFERENCE TO IT INDUSTRY

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Abstract:

This study is all about to know the effect of training on employee retention in which we get to know about the effectiveness of training on retaining employees for longer period of time which enhance the employee productivity, upgrade knowledge and developing skills and we take two variables for my study that is dependent and independent variable that shows the relationship of between each other and it plays a vital role in an organization. This study focuses on the effect of training, job instruction, job rotation and coaching and mentoring on employee retention. Training helps and employee to develop their skills and become expertise in their respective roles. For finding the result of my studies and hierarchical study was performed by IBM SPSS Statistics 27.0 which helps to find the regression, multiple correlation and t-test to find the validation of my data which reflect the cronbach alpha value that exceed 0.05. The results of training that effect on employee retention have positively affected the variables.

Keywords: Employee Retention, Training, Job Instruction, Job Rotation, Coaching and Mentoring.

Introduction:

Worldwide businesses now face employee retention as their primary organizational challenge. Businesses suffering from high employee turnover face several serious performance impacts which include higher recruitment expenses and training expenses and reduced institutional knowledge alongside decreased staff morale. Because of this companies maintain a constant search for approaches which boost employee retention. Research shows employee training stands out as a proven method to increase employee retention rates. Research demonstrates that targeted training programs which provide clear structure build employee skills and generate both job satisfaction and workplace loyalty. Organizations who expand career pathways for their staff members both increase team member commitment and minimize workforce departures.

Research has consistently linked training to higher retention rates yet empirical studies fail to prove how different levels of training quality and frequency impact long-term employee retention. This research investigates how training investments affect employee retention through an analysis of their impact on different industry turnover rates. The main focus of this study evaluates which training procedures and educational methods best sustain employee engagement.

This study investigates how trainee satisfaction interacts with career development openings to shape employee commitment towards their organization's work environment. This research combines survey data with in-depth interviews among workers from multiple specific industries. On the basis of understanding an employee retention is the key aspect based on the training because when the training provide to an employee consistently in the specified time period so the employee productivity can enhance accordingly based upon the training and it is the crucial aspect to understand more and more training can improve the knowledge, skills and capability of work performance in the organisation mainly in the IT Industry the training is must to given in an organization for the upcoming technology to an employee so that they get to know about the updates in an environment .

Training is the best part for retaining employee for a longer period of time in an organization. It gives a potential to an employee to perform better in an organization. It is useful for a top manager to design HR strategies and policies to enhance employee retention it is important to know the strategies that enhance the employee retention such as training methods, as understanding the effect of training on employee retention determine the most suitable training methods to achieve the best retention rate and understand the required knowledge needed for an employee to enhance performance and productivity.

Literature Review

This section reviews the literature on the influence of training practice on employee retention. It covers the theoretical foundation of the study, training practices factors that influence employee retention and empirical studies on training and employee retention.

Cloutier *et al.* (2015) innovative employee retention methods require organizations to construct strategic holistic approaches. The paper examines multiple retention tactics by assessing their respective importance while delivering execution recommendations for organizational implementation. Research results by Cloutier *et al.* confirm that well-designed strategic plans directly improve employee retention which generates workforces that are both engaged and loyal alongside organizational alignment.

Omoikhudu (2019) highlights employee retention as a crucial factor for organizational productivity, performance, competitive advantage, and overall success. The telecommunication sector increasingly understands the value of employee satisfaction and retention methods because improving retention rates has become a principal organizational priority.

Hemakumar (2020) demonstrate that employee retention represents a major priority yet organizations continue to experience obstacles in lowering turnover rates in our current competitive environment. According to the study training and development programs serve as essential tools to increase retention rates because they boost employee competency as well as job satisfaction and employee involvement.

Puteh (2020) confirms employee retention stands as a vital organizational success element that supports competitive edge maintenance and organizational performance enhancement. Human capital has become recognized as an essential organizational resource that makes skilled employee retention necessary for sustained business success.

The public sector acknowledges training as a vital organizational factor which enhances institutional performance Professional research proves that training programs result in better employee commitment and retention and performance outcomes. The analysis examines the fundamental connections between training interventions and their effects on employee conduct together with organizational achievements using theoretical models and scholarly research findings (JC, 2021).

Pathan (2023) his study evaluates "Training effects on employee "Performance, Productivity and Retention" throughout NADRA Sindh Province. The analysts gathered data from NADRA Sindh Province's workers based on the study hypothesis. Research found that training influences both employee performance and retention although NADRA Sindh Province witnesses minor growth in employee productivity rates.

Abdullahi and Jarma (2023) employee retention acts as an essential driver for organizations to maintain their long-term success and market competitiveness in current global labor market conditions. This research investigates employee retention impacts at Global Access Savings and Loans Company Limited (GASL) in Accra Ghana through evaluation of its job training and development schemes.

Omoikhudu (2024) conducted research to analyze how training and coaching affect retention rates of retail workers specially employed at the Dublin Mark and Spencer location. Training and coaching emerged as essential factors for role development and work enhancement according to the research results yet they failed to show any meaningful influence on the retention rates at this organization.

Research Methodology

This section outlines the methodology which explores the effect of training on employee retention in the workplace. In this we used mixed-method approach which includes both quantitative and qualitative approach to collect the data through surveys and in depth interviews which helps me in research as well as collecting the data.

1. Objective of the study

- To identify the significant effect of training on employee retention.
- To explore the relationship between training and its effect on employee retention.

2. Hypothesis of the study

Based on these objectives we find two hypotheses one is null and other one is alternate hypothesis.

Hypothesis 1:

- **Null Hypothesis (H$_{01}$):** There is no significant effect of training on employee retention.
- **Alternative Hypothesis (H$_{a1}$):** There is a significant positive effect of training on employee retention.

Hypothesis 2:

- **Null Hypothesis (H$_{02}$):** There is no significant relationship between training and employee retention.
- **Alternative Hypothesis (H$_{a2}$):** There is a significant relationship between training and employee retention.

3. Purpose of Research Design

The purpose of research design is to systematically plan and structure the study in a way that accurately measure how employee training influences retention rates and ensuring valid and reliable results.

4. Types of Research Design

The quantitative research design is used by using a exploratory approach to examine the relationship between training and employee retention.

5. Sample Design

The target population for this study is employees within an organization in IT Industry. A total of 80 employees were selected from organization that offers various types of training according to their job role on which they employed in an organization.

6. Sampling Technique

Purposive Sampling was used to select organization based on their establish training programs and the size of their workforce.

7. Sampling Unit and Sample frame

The sample unit is an individual within an organization from whom the data is collected and the sample frame are the list of overall employees which could be taking training in an organization.

8. Data Collection

For this study a total of 78 employees were surveyed using a structured questionnaire, which included Likert scale items to measure training satisfaction and perceived career growth. The primary data collected by using a human non interactive source using the questionnaire model.

The questionnaire is based on my base research paper questionnaire according to Ashraf Elsafty (2022) & Mahmoud Oraby (2022). The questionnaire was anchored on a 5-point Likert scale, the response categories ranged from "1 strongly disagree "to" 5 strongly agree" for all the dependent and independent variables.

9. Research Instrument

In this above research study we use various instrument and tools like structured questionnaire, Microsoft Excel and SPSS tool.

Findings and Analysis:

In this research study, the findings of the statistical analysis of the questionnaire data are presented. Statistical procedures were performed using IBM SPSS Statistics 27.0, and statistical significance was set =0.05. Results start with descriptive analysis of questionnaire constructs and items ,followed by reliability, Independent Sample T-test, multiple regression and pearson correlation analyses.

1. Statistical Descriptive Analysis

In total there were 78 respondents and from which 42 were males and 36 were female,54 from age group of 15-25,13 from age group of 25-35,6 from age group 35-45,5 from age group of 45 above. These are the findings of our Age group and Gender the responses which I get from both the group. Mean value of user is 2.38 and standard deviation is 2.31

Among the users there were 5 from Doctorate, 42 from Post Graduate, and 31 from graduate this is all about my educational background group.

Table 1: Descriptive summary of questionnaire constructs and items.

Construct Item	Statistics Mean	Standard Deviation
Training		
I personally see opportunities for promotion in the company.	4.31	2.33
I have the opportunity to use my ability at work.	4.62	2.19
I have many opportunities for developing personal skills and work at through training.	4.68	2.24
I receive good training from the company	4.86	2.13
Employee Retention		
I want to stay with the company for a long time.	4.68	2.32
I feel really satisfied by doing this job.	5.03	2.41
I feel that I am developing my full potential at work through training.	4.28	4.33
I feel that the training of the company enhances skills and expertise.	4.58	2.25

2. Reliability

In this above study we find out the reliability of our data to know whether the data that we collect from the employees of our organization is reliable, validate and accurate or to check the accuracy and validity of our data we find out the reliability value which is .930 of both the

variables that we can take in our study one is Training (Independent) and other one is Employee Retention (Dependent) which exceed the threshold value of Cronbach's Alpha value 0.70.

Reliability Statistics

Cronbach's Alpha	N of Items
.930	8

3. Testing Research Hypothesis

In this study when we apply regression analysis so two hypothesis are concluded one is null and other one is alternate hypothesis in which it says there is no significant effect of training on employee retention but in this case the null hypothesis is rejected which ensures that there is a significant effect of training on employee retention which accept the alternate hypothesis . The overall model was significant, $R^2 = 0.654$, $F(1, 76) = 143.503$, $p < 0.001$. So this the overall hypothesis reflected in my studies.
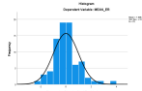
Correlations

		MEAN_ET	MEAN_ER
MEAN_ET	Pearson Correlation	1	.809[**]
	Sig. (2-tailed)		<.001
	N	78	78
MEAN_ER	Pearson Correlation	.809[**]	1
	Sig. (2-tailed)	<.001	
	N	78	78

[**]. Correlation is significant at the 0.01 level (2-tailed).

4. Conclusion of Results

Based on the regression analysis, it was concluded that there is a significant effect of training (ET) on employee retention (ER). Therefore, the alternative hypothesis (H_{a1}), which posits that there is a significant effect of training on employee retention, is supported, while the

null hypothesis (H_{01}), which suggests that there is no significant effect of training on employee retention, is not supported.

Discussion:

Based on the previous studies of our researchers, this paper reached the following findings and results.

In the context of employee retention, the studies highlight the relationship between raining, retention and organizational culture that plays in enhancing employee performance, loyalty and engagement. Cloutier *et al.* (2015) emphasize the importance of adopting the strategies, holistic approaches to retention, noting that organizations benefit when they prioritize employee retention through well-designed plans. Moreover including the studies of Omikhudu (2019) he argues that financial incentives crucial or the organizational goals which also includes non-monetary factors such as career planning and training significant that effect employee satisfaction and retention rates, particularly in telecommunication sectors.

Furthermore research by M&Hemakumar (2020) reinforces the importance of training and development programs are essential tools for increasing employee retention. This programs not only enhance job competencies but also boost employee satisfaction and involovement leading to a decrease in turnover rates. Puteh (2020) assumes that human capital is an important assest in an organization and maintaining a skilled workforce through targeted training methods job rotation, coaching and mentoring is key to long term business success and especially in sectors in telecommunication sectors.

However, while training is widely acknowledged as a powerful retention tool. For example Pathan (2023) reports that while training in NADRA Sindh Province leads to improve employee performance and retention, the growth in employee productivity remains modest, indicating that training alone may not be sufficient to address all retention challenges. Similarly Abdullhai and Jarma (2023) found that, despite positive evaluation of training programs at Global Saving Access and Loans in Ghana, a significant number of employee were still unwilling to stay with the organizations. This suggests that other organizational factors such as employee motivation and broader HR management approach need to complement training initiatives to effectively support retention rates.

In Contrast Omiokhudu (2024) presents a case study from the retail sector, while training and coaching were found to have limited effect on retention This study reflects that employee retention in retail environments is influenced by a combination of financial incentives, non-monetary rewards and supportive environments, and highlighting the need for a comprehensive approach.

Theoretical Implications:

The findings from this research offer several important theoretical implications for the field of employee retention. This study identifies the necessity to build an all-encompassing

theoretical approach which unifies training programs with non-monetary workplace factors for employee retention analysis. Social and economic aspects of employee retention must be recognized apart from the training segment which shows significant results. Organizational behavior theories and motivation models require development to incorporate how financial incentives and career development programs and organizational cultural elements work together with other retention factors.

- Practical implications for managers
- Areas for Future Research

Conclusion:

According to our study and research, we conclude with the responses gained by distributing questionnaires among current employees in the IT Sector. It is clear that most professionals, both men and women want to have job training. In this study, we discovered that job training is necessary for every employee. For the better encouragement and loyalty of employees, organizations should induce reward giving phenomena. In this way, employees are provided with an environment where they are able to embrace career growth and professional skill's development. From the two types of job training, on job training is preferred by employees. Duration of training is also crucial in delivering benefits related to training for the employees. Supervisory support plays a crucial role in increasing the enthusiasm among employees. Every organization must consider job training in their professional conduct as it leads to motivation of the employees. From the read literature, we have determined training, it's types, duration, supervisory support and rewards are the key variables that lead to job satisfaction and employee retention.

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EXAMINING THE INFLUENCE OF SOCIAL MEDIA MARKETING ON CONSUMER BEHAVIOR IN ONLINE DAIRY AND GROCERY PRODUCT

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Abstract:

This research paper provides a comprehensive examination of how social media marketing impact consumer behavior. Through an analytical approach, it investigates various social media marketing tactics and their effectiveness in influencing consumer's purchasing decisions, brand loyalty, brand perception and engagement levels. The methodology adopted in this study was quantitative in order to collect data related to the research topic. Key findings reveal that perceived personalization, perceived trust and privacy concern of social media marketing are significantly correlated with increased consumer interest and its determinants that is purchase intention, brand loyalty brand perception. Additionally, the study explores the role of social media platforms in shaping consumer perceptions. This research contributes to the existing literature by offering a detailed understanding of the dynamic relationship between social media marketing and consumer behavior, providing valuable implications for marketers aiming to enhance their digital presence and consumer engagement.

Keywords: Social Media, Consumer Behavior, Digital Marketing, Trust, Personalization, Loyalty, Social Motivation.

Introduction:

Marketing today includes understanding the depth of the consumer and accurately projecting the consumer's next move, going beyond the simple tools and techniques for promotional goals. Companies that are leading global market trends and possessing deeper knowledge are better able to predict trends with more accuracy and are even creating new trends. One of the best places to observe the effects of these strategies in action is in e- marketing. The study will go in-depth on a variety of e-marketing tools and strategies as well as the impact of consumer buying behavior on them.

Social Media Marketing

Social media has revolutionized communication and commerce, becoming a vital platform for businesses to engage consumers and shape purchasing behavior. This study examines the impact of social media marketing on consumer decision-making, beginning with an overview of its rise and significance in modern commerce, with the shift to digital platforms,

consumers increasingly rely on peer reviews, brand interactions, and targeted advertising to make informed choices.

Social media not only facilitates direct engagement between brands and consumers but also empowers individuals to influence others through product reviews and recommendations. Key factors such as income, motivation, demographics, and shopping preferences further shape purchasing decisions. This research explores these dynamics through a literature review, methodology, and data analysis, concluding with key findings, limitations, and recommendations for future studies on the evolving role of social media in consumer behavior.

The five pillars of social media marketing—Strategy, Content, Engagement, Analytics, and Community Building, guide successful campaigns by aligning with business goals, driving audience interaction, and optimizing performance through data. Building a strong community fosters long-term brand loyalty.

Here are some determinants of Social Media Marketing given below:

- **SMM and Perceived Trust**

Perceived trust is a consumer's belief in a brand's credibility and reliability, shaped by reputation, consistency, transparency, competence, responsiveness, social proof, and security. It plays a crucial role in purchasing decisions, as consumers prefer brands they trust.

- **SMM and Perceived Personalization**

Perceived personalization refers to consumers' belief that a brand tailors products, services, or communication to their needs. Achieved through targeted ads, recommendations, and customized content, it enhances engagement, satisfaction, and loyalty. However, balancing personalization with privacy concerns is crucial for maintaining consumer trust.

- **SMM and Privacy Concerns**

Privacy concerns in social media marketing arise from data collection, targeted ads, and third-party sharing without explicit consent. Users also worry about the effectiveness of privacy settings in controlling their personal information, fearing unintended exposure and misuse.

Consumer Behaviour

Consumer behavior refers to the study of how individuals, groups, or organizations select, buy, use, and dispose of goods, services, ideas, or experiences to satisfy their needs and wants. It involves understanding various factors influencing consumers' decisions, including psychological, social, cultural, economic, and situational factors. Marketers often analyze consumer behavior to develop effective marketing strategies and tailor their offerings to meet consumers' preferences and demands.

Here are some determinants of Consumer Behavior given below:

- **Purchase Intention**

Purchase intention predicts the likelihood of a consumer making a purchase, influenced by various factors. It helps businesses tailor marketing strategies to consumer preferences.

- **Brand Loyalty**

Brand loyalty is the tendency to repeatedly choose a brand due to positive experiences. It drives repeat purchases and business growth, requiring trust and consistent quality.

- **Brand Perception**

Brand perception is how consumers view a brand based on experiences and messaging. Positive perception fosters loyalty and premium pricing, shaped through strategic branding and engagement.

Statement of the Problems

E-commerce and e-marketing have undergone a significant transformation in today's globalization era. Over the past decade, most businesses have embraced technological advancements. The majority of businesses began their operations online as a result of the expansion of broadband connectivity and telecommunications. Nowadays, online purchasing and e-marketing are utilized to enhance marketing effectiveness. In the context of e-marketing (online purchasing), it is critical for businesses to understand how consumers behavior and its determinants affect by social media marketing.

Need of the Study

E-commerce, internet advertising, social media, search, online content, and services related to e-commerce and internet advertising will likely experience a golden period in India between 2020 and 2025 due to phenomenal growth opportunities and secular adoption. We all know that India has a long way to go in e-marketing because, compared to China and the USA, more Indians are spending time online. The study is necessary in order to determine the potential e-marketing solution. The positive influence that e-marketing has on consumer's purchasing decisions and their assistance in making decisions.

Scope of the Study

The study's main focus is on how e-marketing affects consumer's ability to make informed purchasing decisions. At any given time, there are billions of users online, all of whom may become clients for a business that sells goods online. Due to the rapid expansion of the Internet, a company that wants to sell items through its website will continually need to seek for methods to set itself apart from the competitors. Because there are many possible obstacles, it is crucial to comprehend what the consumer wants and needs. This research will assist businesses and marketers in comprehending the various facets of e-marketing that assist consumers in making online purchases. It will highlight the activities that take place prior to, during, and after

the purchase of a product as well as how consumers decide to make purchases. In order to ensure that consumers spend a significant amount of time on their websites in order to make a purchase, businesses will benefit from developing appropriate strategies and selecting the appropriate model.

Objectives of the Study

Examining the effect of e-marketing on consumer's purchase decisions is the study's main goal. Taking this into consideration, the study's precise goals have been established as follows:

- To investigate the effect of Perceived Trust on Purchase intention
- To investigate the effect of Perceived Personalization on Brand Loyalty
- To investigate the effect of Privacy Concern on Brand Perception.
- To investigate the effect of Perceived Trust on Brand Loyalty.
- To investigate the effect of Perceived Personalization on Brand Perception

Research Model

Independent Variable Dependent Variable
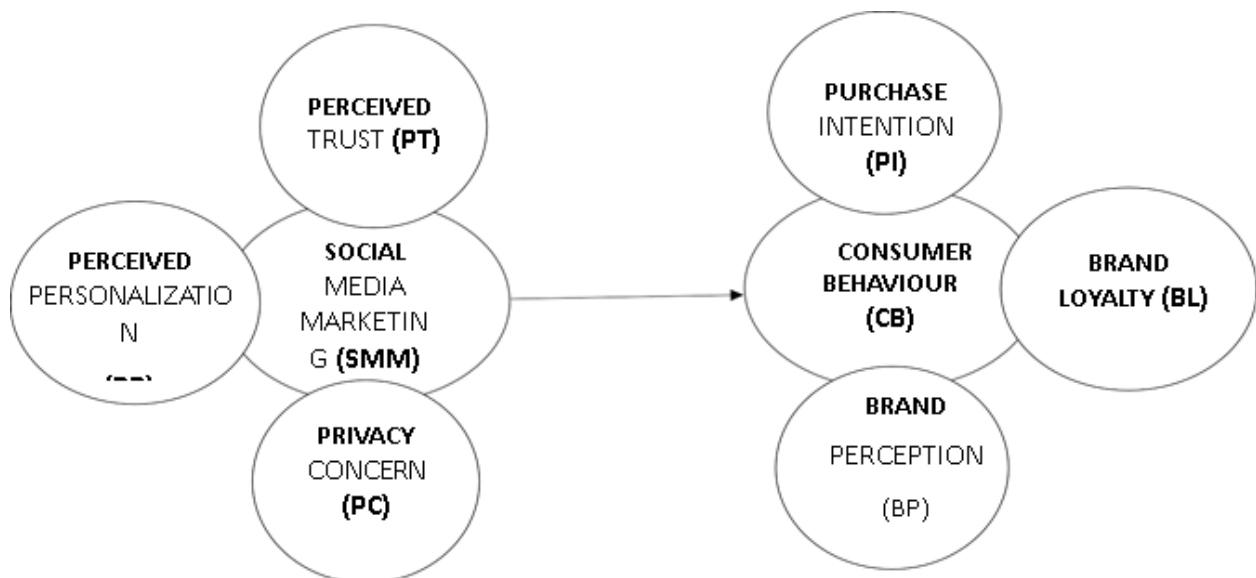
Hypothesis

1. **Perceived Trust on Purchase Intention**

H01 There is no significant effect of Perceived Trust (PT) on Purchase Intention (PI).

Ha1 There is significant effect of Perceived Trust (PT) on Purchase Intention (PI).

2. **Perceived Personalization on Brand Loyalty**

H02 There is no significant effect of Perceived Personalization (PP) on Brand Loyalty (BL).

Ha2 There is significant effect of Perceived Personalization (PP) on Brand Loyalty (BL).

3. **Privacy Concern on Brand Perception**

H03 There is no significant effect of Privacy Concern (PC) on Brand Perception (BP).

Ha3 There is significant effect of Privacy Concern (PC) on Brand Perception (BP)

4. Perceived Trust on Brand Loyalty

H04 There is no significant effect of Perceived Trust (PT) on Brand Loyalty (BL).

Ha4 There is significant effect of Purchase Trust (PT) on Brand Loyalty (BL).

5. Perceived Personalization on Brand Perception

H05 There is no significant effect of Perceived Personalization (PP) on Brand Perception (BP).

Ha5 There is significant effect of Perceived Personalization (PP) on Brand Perception (BP).

Literature Review

- **Aloka Karunasingha & Nalin Abeysekera (2022):**This study explores trust as a mediator between social motivation and online purchase intention in Sri Lanka's fashion industry, finding a positive impact of social motivation on both trust and purchase intention.

- **Saha, R. (2022):** This study examines how brand-generated content on social media affects eco-friendly purchase intentions, highlighting that environmental concern and attitude boost intentions, while trust in the content negatively impacts them. It emphasizes the need for trustworthy content to promote green purchases.

- **Avcı & M. G. (2021):** The study examines how social media influences online grocery shopping, finding that demographics, internet use, and social media interactions affect purchase intentions by boosting brand awareness and communication.

- **Kamalasena *et al.* (2021):** This study finds that e-word of mouth and online communities positively influence brand trust, which in turn increases purchase intention among Generation Y in Colombo.

- **Velčovská *et al.* (2021):** Czech consumers' preferences for online grocery shopping reveal that brand, packaging, price, and quality label significantly impact milk purchasing decisions, with regional brands being preferred.

- **Chauhan *et al.* (2020):** This study explores Indian consumers' changing behaviors during COVID-19, highlighting increased social media use and concerns about product availability, with variations across demographics.

- **Gazdecki *et al.* (2020):** Consumer engagement with food brands increases the likelihood of brand recommendation, suggesting that SMEs should focus on building a reference market through engagement.

- **Kofi Osei-Frimpong *et al.* (2020):** The study reveals that brand knowledge, social pressure, and brand trust significantly influence social media brand engagement (SMBE), with significant interaction effects for brand knowledge and social pressure.

- **Bader M. A. Almohaimmeed (2019):** The study emphasizes that social media antecedents significantly influence social media marketing, brand loyalty, and purchase intention, underscoring their importance for effective marketing.

- **Kofi Osei – Frimpong (2019):** The study finds that intrinsic, integrated, introjected, and external motivations significantly influence consumer participation in social media-based activities.

- **Muhammad Naeem (2019):** The study highlights the frequent use of Facebook groups and WhatsApp for generating service reviews, influencing customers' purchase intentions.

- **Salem & E. A. (2019):** The Integrated Social Media Marketing Model (ISMMM) shows that social media marketing positively affects customer behavior and purchase intention, particularly through social capital and brand knowledge.

- **Nikon Kumar Jain *et al.* (2018):** Brand trust mediates the relationship between customer involvement, commitment, brand loyalty, and word-of-mouth.

- **Young *et al.* (2017):** The study finds that both social media and e-newsletters effectively reduce food waste, with social media having no stronger impact than other interventions.

- **Farr-Wharton *et al.* (2014):** The study identifies factors leading to food waste, suggesting technology could reduce waste by improving knowledge of food supply and location.

Research Methodology & Design

This study uses a descriptive and quantitative design to analyze the relationship between social media marketing and consumer behavior without manipulating variables. Data is collected through surveys or questionnaires for objective measurement and statistical analysis. The cross-sectional sample design collects data from a specific group at one point in time, providing insights into the impact of social media marketing on consumer behavior during that period.

Sampling Method

The study uses the convenience sampling method for selecting participants. This is a non-probability sampling technique where participants are selected based on their availability and willingness to participate. The primary reason for using convenience sampling is that it allows researchers to gather data quickly and efficiently, especially when studying a specific target group, such as social media followers. This method is cost-effective and practical, especially when conducting surveys or questionnaires through online platforms. However, it's important to note that while convenience sampling provides a quick way to collect data, it may introduce bias because the sample might not represent the entire population accurately.

Instrumentation:

Data Collection: Data was collected through primary data sources. It is the data that is collected directly from the respondents through the survey.

Research Instrument: A well-defined structure questionnaire was administrated to the people for the survey purpose. Data was collected during the period of October 2024. A google form questionnaire was designed to conduct a survey and it circulated to more than 248 people out of which the valid data was collected from 148 respondent.

Analysis of the Study

Descriptive Analysis

In total there were 148 respondents and from which 85 were male and 55 were female, 104 from age group of 18-24, 27 from age group of 25-34 and this is big number from whole lot,5 from age group of 35-49 and 4 from under 18 age group, this is the lowest number. Among the users there were 70 were Student, 49 Full Time, 11 were Self Employed, 6 were Part-Time Employed and 4 were Unemployed.

Reliability Test

Table 1: Reliability Test

Reliability Statistics

Cronbach's Alpha	N of Items
.881	23

The Cronbach's Alpha was found to be 0.881 typically indicates a high level of consistency and reliability in the measurements or data collection instrument used in the research.

Factor Analysis

KMO and Bartlett's Test

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Adequacy.	Measure of Sampling		.873
Bartlett's Sphericity	Test of	Approx. Chi-Square	1211.072
		df	253
		Sig.	.000

The dataset's suitability for factor analysis is confirmed by two key statistical measures. The Kaiser-Meyer-Olkin (KMO) value of 0.873 indicates that the sample is highly adequate for factor analysis, as it exceeds the recommended threshold of 0.7. This suggests that there is enough common variance among the variables to perform a meaningful factor analysis.

Correlation

Table 3: Correlation

MEAN_PT			MEAN _PP	MEAN _PC	MEAN _PI	MEAN _BL	MEAN _BP
MEAN_ PT	Pearson Correlation	1	.625**	.430**	.511**	.521**	.424**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	144	144	144	144	144	144
MEAN_ PP	Pearson Correlation	.625**	1	.554**	.707**	.575**	.562**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	144	144	144	144	144	144
MEAN_ PC	Pearson Correlation	.430**	.554**	1	.519**	.321**	.342**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	144	144	144	144	144	144
MEAN_ PI	Pearson Correlation	.511**	.707**	.519**	1	.602**	.611**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	144	144	144	144	144	144
MEAN_ BL	Pearson Correlation	.521**	.575**	.321**	.602**	1	.567**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	144	144	144	144	144	144
MEAN_ BP	Pearson Correlation	.424**	.562**	.342**	.611**	.567**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	144	144	144	144	144	144

Interpretation

Perceived Trust and Purchase Intention: A Pearson correlation analysis indicated a moderate positive correlation between perceived trust and purchase intention, $r(142) = .511$, $p > .05$. However, the correlation was not statistically significant at the 0.05 level.

Perceived Personalization and Brand Loyalty: The correlation between perceived personalization and brand loyalty was moderate and positive, $r(142) = .575$, $p > .05$, but it did not reach statistical significance.

Privacy Concern and Brand Perception: A weak positive correlation was found between privacy concern and brand perception, $r(142) = .342$, $p > .05$. However, this correlation was not statistically significant.

Perceived Trust and Brand Loyalty: The analysis revealed a moderate positive correlation between perceived trust and brand loyalty, $r(142) = .521$, $p > .05$, though the relationship was not statistically significant.

Perceived Personalization and Brand Perception: A moderate positive correlation was observed between perceived personalization and brand perception, $r(142) = .562$, $p > .05$, but it was not statistically significant.

Regression

Perceived Trust on Purchase Intention

Table 4: Perceived Trust on Purchase Intention

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.511[a]	.261	.256	.62723

Predictors: (Constant), MEAN_PT

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.749	1	19.749	50.199	.0
	Residual	55.865	142	.393		
	Total	75.614	143			

a.

Dependent Variable: MEAN_PI

Predictors: (Constant), MEAN_PT

Coefficients[a]

	Unstandardized Coefficients			Standardized Coefficients Beta	t	Sig.
Model		B	Std. Error			
1	(Constant)	1.963	.239		8.211	.000 [a.]
	MEAN_PT	.487	.069	.511	7.085	.000 [b.]
						[c.]

Dependent Variable: MEAN_PI

Results:

Perceived Trust (PT) has a significant effect on Purchase Intention (b=0.487, t(142)=7.085, P= .000). The R2 of the model shows a value of 0.261, which indicates that 26% of the variation of purchase intention is explained by perceived trust. The overall regression model was statistically significant, F(1,142)=50.199, P<0.05,0.000 indicating that purchase trust reliably explains a significant proportion of the variance in purchase intention and supports the model's overall fit.

Interpretation:

As per regression analysis, from the above result it is concluded that there is a significant effect of Perceived Trust on Purchase Intention. So, the alternate hypothesis Ha1 which represents there is a significant effect of Perceived Trust (PT) on Purchase Intention (PI) is failed to reject and the null hypothesis H01 which represents there is no significant effect of Perceived Trust (PT) on Purchase Intention (PI) is failed to accept.

Perceived Personalization on Brand Loyalty

Table 5: Perceived Personalization on Brand Loyalty

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	a.
1	.575[a]	.330	.326	.54112	

Predictors: (Constant), MEAN_PP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.519	1	20.519	70.076	.000[b]
	Residual	41.578	142	.293		
	Total	62.097	143			

a. Dependent Variable: MEAN_BL

b. Predictors: (Constant), MEAN_PP

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	**Std. Error**			
1 (Constant)	1.500	.245		6.132	.00
MEAN_PP	.543	.065	.575	8.371	.00

a.   Dependent Variable: MEAN_BL

Results: Perceived personalization (PP) has a significant effect on Brand Loyalty (b=0.543, t(142)= 8.371, P= .000). The R2 of the model shows a value of 0.330, which indicates that 33% of the variation of brand loyalty is explained by perceived personalization. The overall regression model was statistically significant, F(1,142)=70.076, P<0.05,0.000 indicating that perceived personalization reliably explains a significant proportion of the variance in brand loyalty and supports the model's overall fit.

Interpretation: The regression analysis results indicate a significant effect of perceived personalization (PP) on brand loyalty (BL). Consequently, the alternative hypothesis (Ha2), which posits a significant relationship between perceived personalization and brand loyalty, cannot be rejected. In contrast, the null hypothesis (H02), which asserts no significant effect of perceived personalization on brand loyalty, is not supported.

Privacy Concern on Brand Perception

Table 6: Privacy Concern on Brand Perception

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.521[a]	.272	.267	.56435

a. Predictors: (Constant), MEAN_PT

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.884	1	6.884	18.790	.000[b]
	Residual	52.022	142	.366		
	Total	58.906	143			

a. Dependent Variable: MEAN_BP

b. Predictors: (Constant), MEAN_PC

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.912	.242		12.025	.000
	MEAN_PC	.277	.064	.342	4.335	.000

a. Dependent Variable: MEAN_BP

Results: privacy concern (P) has a significant effect on brand perception (b=0.277, t(142)= 4.335, P= .000). The R2 of the model shows a value of 0.117, which indicates that 12% of the variation of brand perception is explained by privacy cocnern. The overall regression model was statistically significant, F(1,142)= 18.790, P<0.05,0.000 indicating that privacy concern reliably explains a significant proportion of the variance in brand perception and supports the model's overall fit.

Interpretation: As per regression analysis, from the above result it is concluded that there is a significant effect of privacy concern on brand perception. So, the alternate hypothesis Ha3 which represents there is a significant effect of privacy concern on brand perception is failed to reject and the null hypothesis H03 which represents there is no significant effect of perceived personalization (PP) on brand loyalty(BP) is failed to accept.

Perceived Trust on Brand loyalty

Table 7: Perceived Trust on Brand loyalty

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.521[a]	.272	.267	.56435

a. Predictors: (Constant), MEAN_PT

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.872	1	16.872	52.974	.000[b]
	Residual	45.225	142	.318		
	Total	62.097	143			

a. Dependent Variable: MEAN_BL

b.Predictors: (Constant), MEAN_PT

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.986	.215		9.232	
	MEAN_PT	.450	.062	.521	7.278	

a. Dependent Variable: MEAN_BL

Results: perceived trust has a significant effect on brand loyalty (b=0.450, t(142)= 7.278, P= .000).The R2 of the model shows a value of 0.272, which indicates that 27% of the variation of brand loyalty is explained by perceived trust. The overall regression model was statistically significant, F(1,142)= 52.974, P<0.05,0.000 indicating that perceived trust reliably explains a significant proportion of the variance in brand loyalty and supports the model's overall fit.

Interpretation: Based on the regression analysis results, it can be concluded that perceived trust (PT) has a significant impact on brand loyalty (BL). Therefore, the alternative hypothesis (Ha4), which asserts a significant effect of perceived trust on brand loyalty, cannot be rejected, while the null hypothesis (H04), which suggests no significant effect of perceived trust on brand loyalty, is not supported.

Perceived Personalization on Brand Perception

Table 8: Perceived Personalization on Brand Perception

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.562^a	.316	.311	.53256

a. Predictors: (Constant), MEAN_PP

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	2.021	.241		8.390	.000
	MEAN_PP	.518	.064	.562	8.105	.000

a. Dependent Variable: MEAN_BP

b. **ANOVA^a**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.631	1	18.631	65.691	.000^b
	Residual	40.274	142	.284		
	Total	58.906	143			

a. Dependent Variable: MEAN_BP   b. Predictors: (Constant), MEAN_PP

Results: perceived personalization (PP) has a significant effect on brand perception (BP) (b=.518, t(142)= 8.105, P= .000).The R2 of the model shows a value of 0.316, which indicates that 32% of the variation of brand perception is explained by perceived personalization. The overall regression model was statistically significant, F(1,142)= 65.691, P<0.05,0.000 indicating that perceived personalization reliably explains a significant proportion of the variance in brand perception and supports the model's overall fit.

Interpretation: As per regression analysis, from the above result it is concluded that there is a significant effect of perceived personalization (PP) on brand perception (BP). So, the alternate hypothesis Ha5 which represents there is a significant effect of perceived personalization on brand perception is failed to reject and the null hypothesis H05 which represents there is no significant effect of perceived personalization on brand perception.

Findings

- **Perceived Trust and Purchase Intention**

    A moderate positive correlation exists between Perceived Trust and Purchase Intention. However, regression analysis revealed a significant effect of Perceived Trust on Purchase Intention. The model explained 26% of the variance in Purchase Intention, indicating that Perceived Trust is a strong predictor. Hence, Alternative hypothesis (Ha1) is failed to reject and Null hypothesis (H01) is failed to accept.

- **Perceived Personalization and Brand Loyalty**

    A moderate positive correlation was observed between Perceived Personalization and Brand Loyalty. Regression analysis demonstrated a significant effect of Perceived Personalization on Brand Loyalty. The model accounted for 33% of the variation in Brand Loyalty, showing that personalizing experiences strongly influences customer loyalty. Hence, Alternative hypothesis (Ha2) is failed to reject and Null hypothesis (H02) is failed to accept.

- **Privacy Concern and Brand Perception**

    A weak positive correlation was found between Privacy Concern and Brand Perception. Regression analysis confirmed a significant effect of Privacy Concern on Brand Perception. The model explained 12% of the variance, suggesting that while privacy concerns influence brand perception, the effect is relatively modest. Hence, Alternative hypothesis (Ha3) is failed to reject and Null hypothesis (Ha4) is failed to accept.

- **Perceived Trust and Brand Loyalty**

    A moderate positive correlation was identified between Perceived Trust and Brand Loyalty. Regression analysis showed that Perceived Trust significantly impacts Brand Loyalty. The model explained 27% of the variance in Brand Loyalty, indicating trust plays an important role in fostering loyalty. Hence, Alternative hypothesis (Ha4) is failed to reject and Null hypothesis (H04) is failed to accept.

- **Perceived Personalization and Brand Perception**

A moderate positive correlation was observed between Perceived Personalization and Brand Perception. Regression analysis revealed a significant effect of Perceived Personalization on Brand Perception. The model accounted for 32% of the variation, highlighting that personalization enhances how customers perceive the brand. Hence, Alternative hypothesis (Ha5) is failed to reject and Null hypothesis (H05) is failed to accept.

Limitations of the Study

- **Limited Sample Size**

The study was conducted with a relatively small sample size, which may restrict its generalizability to the broader population. As a result, the findings might not fully represent the diverse perceptions and behaviors of consumers engaging with social media marketing (SMM).

- **Limited Geographic Scope**

The research focused on specific geographic locations, Gwalior and Gurgaon, which could constrain the applicability of the findings to other cities, regions, or cultural contexts. Differences in consumer behavior across various areas might influence the results, limiting their universal relevance.

- **Short Time Frame**

The research was conducted within a limited time frame, which may not capture dynamic changes in consumer behavior and perceptions over time. Social media trends and marketing strategies evolve rapidly, and the study might not fully account for these shifts.

- **Potential Language Barriers**

The questionnaire or survey might have been presented in a language not entirely familiar to all participants, potentially affecting their comprehension and ability to respond accurately. This could have influenced the validity of the responses collected.

- **Exclusion of Certain Variables**

While the study examined key variables like perceived trust, perceived personalization, privacy concern, brand loyalty, purchase intention, and brand perception, it did not explore other potentially influential factors such as demographic variations, cultural influences, or economic conditions, which might also impact consumer behavior.

- **Bias in Sampling**

The sampling technique used may have introduced biases, such as overrepresentation or underrepresentation of specific demographic groups, leading to results that do not reflect the broader population accurately.

Suggestion

- **Enhance Personalization**

  Leverage customer data to provide tailored product recommendations and exclusive offers. Use AI and CRM tools to improve personalized customer experiences, increasing loyalty and satisfaction.

- **Address Privacy Concerns**

  Strengthen data protection policies and communicate them clearly to customers. Provide options for customers to control their data, ensuring transparency and compliance with regulations.

- **Develop Loyalty Programs**

  Introduce rewards programs that combine trust-building initiatives and personalized benefits to encourage long-term customer engagement.

- **Promote Social Responsibility Initiatives**

  Emphasize the brand's commitment to social responsibility, such as supporting sustainable farming practices, reducing environmental impact, and contributing to local communities. This can improve brand perception and appeal to socially conscious consumers.

- **Offer More Flexible Subscription Models**

  Given the importance of personalization, Country Delight could introduce more flexible subscription plans that allow customers to customize their orders based on preferences and needs, improving customer satisfaction and retention.

- **Focus on Customer Education**

  Educate customers about the benefits of the brand's products, sourcing practices, and the importance of privacy protection. This could be through blogs, videos, or social media campaigns, helping to build trust and transparency.

Conclusion:

This study aimed to investigate the relationships between perceived trust, perceived personalization, privacy concern, purchase intention, brand loyalty, and brand perception. Based on the results of correlation and regression analyses, several important conclusions can be drawn. This study shows that how consumers feel about a brand, especially in terms of trust, personalization, and privacy, strongly influences their buying decisions and loyalty. Trust plays a huge role, If consumers trust a brand, they are more likely to buy from it and stay loyal over time. This is especially true in online shopping, where personal interaction is limited. Brands need to be honest, reliable, and transparent to build that trust.

Personalization is important, when consumers feel that a brand understands their individual needs and offers products or services tailored to them, they are more likely to stay loyal and think highly of the brand. Brands should use customer data to make the shopping

experience more personal and relevant. Although privacy concerns were not as strong a factor as trust or personalization, they still matter. If consumers feel their data is not being protected or used responsibly, it can negatively affect how they view the brand. Brands need to ensure they have strong privacy policies and communicate these clearly to their customers.

In summary, brands that focus on building trust, offering personalized experiences, and protecting consumer privacy are more likely to win customer loyalty and improve their overall reputation. This is especially important in today's digital world, where consumers expect brands to be transparent, customer-focused, and secure with their data.

- **Perceived Trust and Purchase Intention**

Perceived trust was found to have a significant positive effect on purchase intention. This highlights the importance of building trust among consumers to enhance their willingness to purchase a product or service. Trust plays a crucial role in decision- making, particularly in digital environments where personal interaction is limited.

- **Perceived Personalization and Brand Loyalty**

The analysis revealed that perceived personalization significantly influences brand loyalty. Consumers who feel that a brand provides tailored experiences are more likely to remain loyal. This underscores the value of personalization in fostering long-term customer relationships.

- **Privacy Concern and Brand Perception**

Privacy concern showed a modest yet significant effect on brand perception. While the relationship is weaker compared to other variables, it indicates that consumers' concerns about data privacy can impact their perception of a brand, emphasizing the need for brands to prioritize transparent and ethical data practices.

- **Perceived Trust and Brand Loyalty**

Perceived trust also demonstrated a significant positive effect on brand loyalty. When consumers trust a brand, they are more likely to continue engaging with it and exhibit loyal behavior. This emphasizes trust as a cornerstone for sustaining brand equity.

- **Perceived Personalization and Brand Perception**

A strong and positive relationship was observed between perceived personalization and brand perception. Personalization enhances the way consumers perceive a brand, making it appear more relevant, customer-focused, and valuable.

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A STUDY ON INVESTORS BEHAVIOUR IN CAPITAL MARKET WITH SPECIAL REFERENCE TO RELIANCE SECURITIES GWALIOR

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Abstract:

This research explores investor behavior in the capital markets with a specific focus on clients of Reliance Securities in Gwalior. The study aims to analyze how factors such as the level of awareness and risk tolerance influence investor behavior. Using a quantitative research design, primary data was collected through structured questionnaires distributed to 100 respondents, primarily employees of Reliance Securities. The demographic analysis indicates that the majority of respondents fall within the 18-25 age group, with an almost equal gender distribution.

The findings reveal a significant but weak positive correlation between the level of awareness and investor behavior (Pearson correlation = 0.278), suggesting that increased awareness marginally improves investment decisions. In contrast, a moderate positive correlation exists between risk tolerance and investor behavior (Pearson correlation = 0.321), indicating that individuals with higher risk tolerance are more likely to engage in diverse and active investment activities. The reliability of the measurement instruments is confirmed by Cronbach's Alpha values exceeding the acceptable threshold for most variables, ensuring the consistency and dependability of the results.

The study underscores the importance of enhancing investor awareness and tailoring financial products to varying risk profiles. It suggests that financial literacy programs and personalized investment strategies could further improve investor engagement and behavior. However, the study is limited by its sample size and geographic focus, which may affect the broader applicability of the results. Nonetheless, it provides valuable insights into the behavioral dynamics of investors in Gwalior, contributing to both academic understanding and practical applications in financial advisory services.

Keywords: Investor Behavior, Capital Markets, Reliance, Risk Tolerance, Level of Awareness, Financial Literacy, Investment Strategies.

Introduction:

The behavior of investors in capital markets plays a crucial role in determining the overall dynamics of financial markets. Understanding how investors make decisions, respond to market events, and manage risk is fundamental for both market participants and policymakers. In

the capital markets, which consist of primary and secondary markets for the trading of securities, investor behavior influences stock prices, bond yields, and overall market trends.

Investor behavior refers to the psychological, social, and economic factors that drive an individual's investment decisions. It encompasses various elements, including risk appetite, cognitive biases, emotional responses to market fluctuations, and even herd behavior. Over time, the study of investor behavior has evolved to incorporate insights from behavioral economics, which seeks to explain why individuals sometimes make irrational decisions that deviate from traditional economic models.

Significance of Studying Investor Behavior

1. Market Efficiency: Investor behavior significantly impacts the efficiency of the capital market. Efficient markets assume that all investors have rational expectations and make decisions based on available information. However, irrational behavior, such as overconfidence, loss aversion, or herding, can lead to mispricing of assets, bubbles, and market crashes.

2. Risk and Return: Different investors have varying levels of risk tolerance, which influences their decisions to buy or sell securities. By understanding these behavioral factors, financial advisors and portfolio managers can design investment strategies that align with the investor's goals and risk preferences.

3. Policy Implications: A deep understanding of investor behavior is essential for regulators and policymakers. By recognizing how investors react to policy changes, economic data, or external shocks, authorities can design more effective regulatory measures that protect investors and promote market stability.

4. Behavioral Biases: Investors are often influenced by cognitive biases, such as anchoring, availability heuristics, and loss aversion. These biases can lead to suboptimal investment decisions and inefficiencies in the market. Studying these biases helps investors become more aware of their tendencies and improve their decision-making processes.

5. Market Trends and Volatility: Investor behavior can also affect market trends and volatility. For example, during periods of market uncertainty or crises, investors may engage in panic selling, leading to sharp declines in stock prices. Conversely, excessive optimism can lead to speculative bubbles.

Need for the Study

The study of investor behavior in the context of Reliance Securities, Gwalior, provides significant insights into the local dynamics of the capital market, particularly focusing on how investors in Gwalior interact with the financial markets through Reliance Securities. This research is crucial for various reasons, addressing both the general understanding of investor behavior and the specific dynamics within a particular region.

1. Understanding Local Investor Preferences and Patterns

- **Investor Behavior in Gwalior**: Different regions may exhibit different investment habits and preferences. The study of investor behavior with special reference to Reliance Securities in Gwalior helps identify specific trends, attitudes, and strategies employed by investors in this region.

- **Cultural and Regional Differences**: The behavior of investors is influenced by regional factors, including cultural preferences, economic conditions, and regional market knowledge. Studying Gwalior allows for the exploration of how these factors shape investment choices in the local context.

2. Impact of Reliance Securities on Investor Decisions

- **Role of Reliance Securities in the Market**: As a prominent brokerage firm in India, Reliance Securities plays a crucial role in shaping the investment behavior of its clients. The study will help analyze how investors interact with Reliance Securities, the influence of their advisory services, trading platforms, and educational resources on the decisions made by investors in Gwalior.

- **Services Offered**: The various services provided by Reliance Securities, such as equity trading, mutual funds, wealth management, and research reports, have an impact on how investors approach capital markets.

3. Market Volatility and Local Investor Reactions

- **Volatility Management**: Investor behavior is often most pronounced during periods of market volatility. By focusing on Reliance Securities' clients in Gwalior, the study can explore how investors respond to market ups and downs, economic crises, and other shocks. This will provide valuable insights into the decision-making process during uncertain market conditions.

- **Risk Perception**: Understanding how investors perceive and manage risk is essential for assessing their investment strategies. This study will highlight the risk tolerance levels of investors in Gwalior and whether they align with the services offered by Reliance Securities.

4. Improving Investment Products and Services

- **Tailored Investment Solutions**: By analyzing investor behavior, the study can help Reliance Securities and similar firms refine their offerings. It can guide the development of more personalized investment solutions, such as customized portfolios or advisory services, which cater to the specific needs of Gwalior's investors.

- **Product Education**: Understanding how investors react to various financial products (equities, mutual funds, derivatives, etc.) can help improve financial literacy programs.

Reliance Securities can design better educational tools and seminars that address the gaps in investor knowledge and enhance their decision-making abilities.

Scope of the Study

This study aims to explore and analyse the behaviour of investors in capital markets, focusing on their decision-making processes, risk preferences, and the factors influencing their investment choices. It examines both individual and institutional investors, delving into psychological, economic, and demographic aspects that shape their actions. The research covers a specific time frame and geographical region, providing insights into market trends, investor sentiments, and responses to economic events. Additionally, it identifies patterns and anomalies in investment strategies, contributing to a broader understanding of market dynamics and aiding policymakers, financial advisors, and investors in making informed decisions.

Review of Literature

- **Baker and Nofsinger (2010) -**This study examine the impact of investment ethics on investor behavior and financial satisfaction among capital market investors in South Sulawesi. It finds that investment ethics directly influences financial satisfaction and investor behavior The research also shows that ethical decision-making, influenced by the moral environment, leads to higher financial satisfaction, as investors' actions align with their ethical beliefs.

- **P. Annal Regina (2010)** - The study on investors' perception and behavior towards the capital market reveals key insights, including the importance of understanding demographic and socio-economic factors, setting clear investment goals, and being aware of market dynamics. It highlights the need for investors to grasp profit and risk dynamics, recognize the value of self-monitoring for better decision-making, and adapt their strategies over time.

- **Chen, *et al.* (2011) -** The research paper presented at the International Conference on Industry 4.0 explores investment behaviors in the stock market using a descriptive research methodology. Primary data was collected throuGHquestionnaires from 90 participants, providing insights into investment trends. The study reveals a shift from traditional investment options to the stock market, reflecting a growing willingness among investors to take risks for higher returns.

- **Kahneman and Tversky (2011)** - Behavior Pattern of Individual Investors in Stock Market" examines key behavioral factors influencing individual investors in Ho Chi Minh City, Vietnam. It identifies five major factors: herding, market conditions, prospect theory, overconfidence, and anchoring biases. Based on a sample of 188 investors with a 63% response rate, the study used SPSS software for data analysis, ensuring reliability through techniques like Factor Analysis and Cronbach's Alpha.

- **K Hodnett (2012) -** This paper reviews capital market theories based on market efficiency, including the Efficient Market Hypothesis (EMH), Modern Portfolio Theory (MPT), Capital Asset Pricing Model (CAPM), and Arbitrage Pricing Theory (APT). These theories assume rational investors and efficient markets where asset prices reflect all relevant information.

- **S. Suriya Murithi (2012) -** This study explores investor behavior in India, focusing on identifying optimal investment avenues. It highlights the importance of a well-crafted investment strategy to achieve financial goals with minimal risk. Indian investors are knowledgeable about portfolio allocation and the balance between risk and return, with many preferring low-risk, high-return investments like gold and land, which offer stable appreciation. The study confirms that factors like age and income influence investment

- **Wamae, J. N. (2013) -** The study examines behavioral factors influencing individual investors' decisions in the Nairobi Stock Exchange, focusing on risk aversion, prospecting, anchoring, and herding effects. Using data from 17 investment banks and a sample of 47 respondents, the study employed descriptive statistics via SPSS to analyze findings. It concluded that these significantly influence investment decisions, with herding behavior, risk aversion, and anchoring shaping investor actions based on market trends and past experiences.

- **Ligon and Liu, (2013) -** The phenomenon of stealth trading, where informed investors hide trade information to prevent others from following their transactions in capital markets. The study examines stealth trading (ST) across global markets, revealing inconsistent findings. While research in the Americas and Europe shows mixed results, with some studies indicating price changes linked to ST, others find no evidence, especially in short sales. In Asia, including China, Japan, Korea, and Australia, stealth trading behavior has been observed, though similar inconsistencies persist

- **Ouma, Barrack Otieno (2014) -** This study examines factors influencing investor behavior during Initial Public Offerings (IPOs) in Kenya, focusing on retail investors at the Nairobi Securities Exchange (NSE). It highlights demographic trends such as younger, educated, and wealthier individuals being more willing to invest, with men outnumbering women, and women generally being more risk-averse. Access to information, particularly via the internet, is crucial for informed decision-making.

- **Geetha and Vimala (2014) -** This study investigates factors influencing individual investor behavior, using survey data from bankers in Bartın. Descriptive and factor analyses, along with hypothesis testing, revealed six key factors affecting investment decisions. A strong correlation was identified between "conscious investor behavior" and

"banking and payment behavior." While 11 hypotheses were supported, four were rejected, confirming significant relationships between various factors and investment behavior.

- **Ouma, Barrack Otieno (2014) -** This study examines factors influencing investor behavior during Initial Public Offerings (IPOs) in Kenya, focusing on retail investors at the Nairobi Securities Exchange (NSE). It highlights demographic trends such as younger, educated, and wealthier individuals being more willing to invest, with men outnumbering women, and women generally being more risk-averse. Access to information, particularly via the internet, is crucial for informed decision-making.

- **Fatima Khan (2015) -** This study explores the factors influencing share investment decisions among 270 investors in Khulna City, focusing on socio-economic, cultural, and psychological elements. Key influences include examples of financial success through investments, market and economic factors, and corporate annual reports with financial ratios. Motivational factors like industry attractiveness, historical data, expected dividends, and capital gain prospects play significant roles in decision-making. The research highlights challenges faced by Khulna investors, such as limited access to margin loans and company performance.

- **Angela Filip (2015)** - This paper examines herding behavior among investors in Central and Eastern European (CEE) capital markets at the industry level, using firm-level data and the CSAD statistical method. The study investigates herding behavior during both upward and downward market trends, as well as during the subprime financial crisis. Results show that investors tend to herd, particularly during market declines, and their behavior differs before, during, and after the crisis. The analysis reveals herding behavior across all CEE markets, except Poland.

- **Kahneman and Tversky (2015) -**This study explores the factors influencing individual investors' decision-making in the Indian stock market using structural equation modeling (SEM) with data from 396 participants. It identifies significant psychological and social biases affecting investment choices, such as herding, information cascades, anchoring, representativeness, and overconfidence, with contagion showing no significant impact. The results suggest that Indian investors exhibit irrational behavior, leading to market inefficiency.

- **Saima Rizvi and Amreen Fatima (2015) -** This study explores the relationship between investors' personality traits and their stock market investment behaviour's, challenging traditional financial theories that assume rational decision-making. Using the Big Five personality test, the research evaluates traits such as extraversion, agreeableness, and neuroticism among 100 investors categorized by demographic profiles. It highlights how

irrational behaviours, like herd mentality during market bubbles, contradict conventional models.

- **David Hirshleifer (2016) -** This study explores herd behaviour, social learning, and informational cascades in capital markets, highlighting their implications for investor, firm, and analyst behavior. It emphasizes the fragility and idiosyncrasy of rational observational learning, where decision convergence can abruptly shift due to limited or delayed information. Informational cascades slow or block the flow of new information, leading to precarious market equilibria that are vulnerable to minor shocks. Reputation-based herding, in contrast, explains stable and robust herds and provides insights into dispersion and herding dynamics.

- **J. Jayanthi Grace Ruby (2020)** - The behavior of individual investors in the Indian capital market, specifically in Tiruchirappalli city. It emphasizes the importance of investment for securing financial future needs, noting that attitudes toward investing vary among individuals. These attitudes are shaped by factors like family, peer groups, economic status, and education, and they influence investment decisions. The study concludes that individual investors in Tiruchirappalli are generally aware of the market, and their investment strategies are largely influenced by demographic factors such as income and education.

- **Aris Kartsaklas (2020) -** This study explores the impact of buy and sell trades on stock market volatility in Korea during the 1997 Asian financial crisis and the 2008 global financial crash, focusing on domestic versus foreign and institutional versus individual investors. It finds that buy trades, particularly from foreign and institutional investors, often stabilize volatility, whereas sell trades and individual trading generally increase it. The effects vary across crisis phases, with foreign purchases reducing volatility during the Asian crisis but not during the global crash, where both buy and sell trades had a destabilizing impact.

- **Saeed Ahmad Sabir (2021) -** This study investigates the factors influencing investment behavior in the Pakistan stock market, focusing on the moderating role of financial literacy. It finds that social influence and religiosity affect investment intentions, while financial literacy moderates the relationship between investment intentions and actual investment behavior. The study also reveals that investment intentions mediate the effect of religiosity and social influence on stock investments, but not the effect of attitude toward investment. While contributing to the understanding of investment behavior.

- **Oden (2021) -** This study investigates factors influencing individual investor behavior in the stock market, using data from 100 randomly selected investors in Puducherry. The findings reveal that perceived risk attitudes are largely cognitive, relying on mental

processes like judgment and problem-solving rather than emotional responses. Investment behavior is strong in dimensions like heuristics, prospects, and market analysis, while herding behavior is less significant. Demographic factors and risk attitudes significantly impact investor behavior. The study concludes that income, risk tolerance, and perception influence investment decisions, highlighting the importance of understanding these factors to achieve better outcomes in the stock market.

- **Rangan Gupta (2021) -** This study investigates the impact of the COVID-19 pandemic on investor herding behavior across 49 global stock markets using a newspaper-based index of financial uncertainty. Employing rolling window regressions and probit analysis, the findings reveal a strong link between pandemic-induced uncertainty and herd formation, particularly in emerging markets and European PIIGS economies. The results highlight how herding behavior, driven by pandemic uncertainty, can disrupt

- **Abdulloh Ahmadjonov (2023) -** This study examines the impact of behavioral and psychological factors on the sustainability of the Saudi Arabian stock market through investment decisions. Using data from 358 investors and structural equation modelling, the findings reveal that financial knowledge, herd behavior, overconfidence, risk perceptions, and market efficiency significantly influence investment

- **Ankur Mittal (2024) –** The interplay between capital markets, investor protection, portfolio strategies, and behavioral aspects of investment through a bibliometric analysis of 248 papers from the Web of Science database (2002–2022) using VOSviewer software. Key themes highlight the role of behavioral finance in shaping investment decisions and its deviations from traditional market efficiency models. North America, particularly the United States, dominates contributions, with the Journal of Financial Economics and the National Bureau of Economic Research (NBER) being highly influential.

- **Shafiera Lazuarni (2024) -** This study examines the influence of income, investment knowledge, and motivation on interest in capital market investing among West Java investors. Using a sample of 100 respondents and Smarts for analysis, the findings reveal that income and investment motivation significantly impact investment interest, while investment knowledge does not. The research suggests that governments and institutions should enhance public investment knowledge through training and seminars and design motivational programs to attract more investors.

- **Sree Ram (2024) -** This study explores how investor behavior influences perceptions of equity index performance, analyzing data from 415 equity market investors using Structural Equation Modeling. The findings reveal that while investors collect comprehensive financial information, they also rely on shortcuts, combining rational and irrational decision-making. A strong correlation was identified between investor behavior

and perceptions of stock indices like BSE-SENSEX and NSE-Nifty. The study highlights the importance of managing psychological biases and emotions to improve investment outcomes, offering valuable insights for investors, professionals, and asset managers in crafting effective and profitable equity investment strategies.

- **Anne Putri & Aries Tanno (2024) -** This qualitative study investigates financial market dynamics, asset pricing, market efficiency, and the influence of information on investment decisions. Through interviews and textual analysis with investors, analysts, and regulators, it highlights the impact of investor sentiment, economic indicators, regulatory changes, and technological advancements on market behavior. Behavioral biases like herd mentality and overconfidence challenge traditional models like the efficient market hypothesis (EMH), revealing inefficiencies.

- **M. Padmavathy (2024) -** Behavioural finance challenges traditional finance by exploring the impact of biases, emotions, and irrationality on financial decision-making and market anomalies. This study highlights cognitive biases such as anchoring, overconfidence, and loss aversion, as well as emotional factors like fear and greed, which distort investor behaviour and contribute to phenomena like herd mentality and market bubbles. It underscores the transformative potential of integrating behavioural insights into investment strategies, enhancing decision-making, risk management, and client-advisor dynamics. By examining psychological influences and frameworks like Prospect Theory, the research provides valuable perspectives for navigating complex financial environments and advancing finance practices.

Research Methodology

Introduction:

A research methodology describes the techniques and procedures used to identify and analyze information regarding a specific research topic. It is a process by which researchers design their study so that they can achieve their objectives using the selected research instruments. It includes all the important aspects of research, including research design, data collection methods, data analysis methods, and the overall framework within which the research is conducted.

Objective of the study:

- To identify the relationship between the level of awareness of investors on their investment behavior.
- To explore the relationship between Risk tolerance on their investment behavior.

Hypothesis:

- Ha1: There is a significant relationship between the level of awareness of investors on their investment behaviour.

- Ho1: There is a no significant relationship between the level of awareness of investors on their investment behaviour.
- Ha2: There is a significant relationship between Risk tolerance on their investment behaviour.
- Ho2: There is no significant relationship between Risk tolerance on their investment behaviour.

Research Model:

To analyse the research objectives, a following model was constructed and the variables are generating form past research papers. The model demonstrates the hypothetical association among Investors Behaviour.

Research Model:

Capital Market

(Independent Variable) (Dependent Variable)
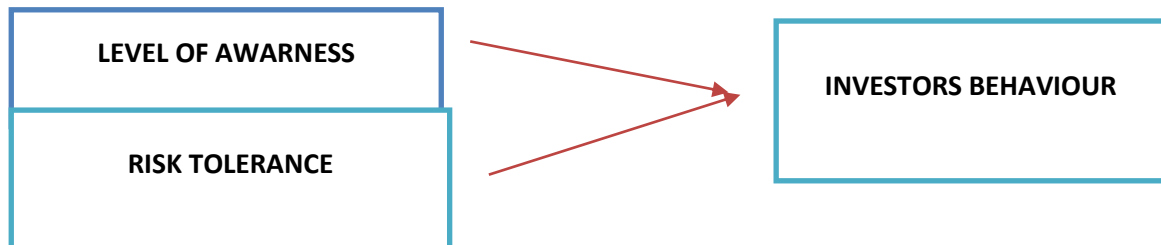
Research Design

For this study, use quantitative research design. It includes gathering and interpreting numerical data. It can be used to identify trends and averages, formulate hypotheses, examine causality and predict findings to larger populations. Quantitative research helps to generate knowledge and create understanding about the company's environment. Because it mainly concerns with the how individual feels about current job situation and generalized concept more widely, predict future results and investigate the effect between variable.

Sources of data collection-

In this study, Primary data is used because the company's data are to be collected on first time.

Data collection Instrument-

Data is collected through a structured questionnaire. Respondents were asked to rate their agreement or disagreement levels with each of the factors that consist the 5 point of Likert scale like: strongly disagree, disagree, neutral, agree and strongly agree.

Sampling Frame-

Employees who work in Reliance Securities are the sampling frame of study.

Sampling Size-

100 sample size for this study.

Sampling Method-

Convenient Random Sampling method is used from non-probability sampling method.

 Research Tools-

In this study, Reliability test and correlation used.

Analysis of the Study

Descriptive Analysis

Illustrates that approximately **81.6%** of the sample consisted of individuals under 18-25, while **8.7%** belong to the 26-30 years age bracket. Those following within the 30-40 years age category constituted **4.9%** of the sample, and **4.9%** belong to the Above 40 years age bracket.

Age of Respondents: (Source: Primary Data)

S.No	Age Groups (In Years)	Frequency	Percentage in the sample
1	18-25	84	81.6%
2	26-30	9	8.7%
3	30-40	5	4.9%
4	Above 40	5	4.9%
Total		103	100

Age
103 responses
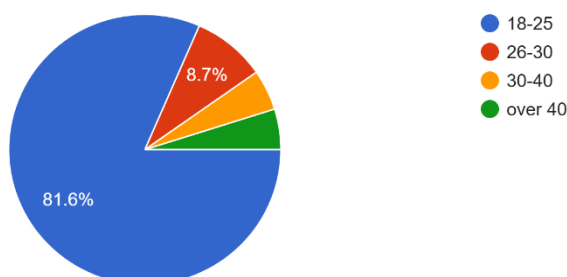
Gender of the Respondents: Data for the study was collected both from males and female's respondent. Table 1 displays the gender of the respondents. Male respondents composed the 50.5 of the sample whereas 49.5 of the sample was represented by female respondents.

No.	Gender	Frequency	Percentage in the Sample
1	Female	51	49.5
2	Male	52	50.5
Total		103	100

Gender

103 responses

● Male
● Female

49.5%

50.5%
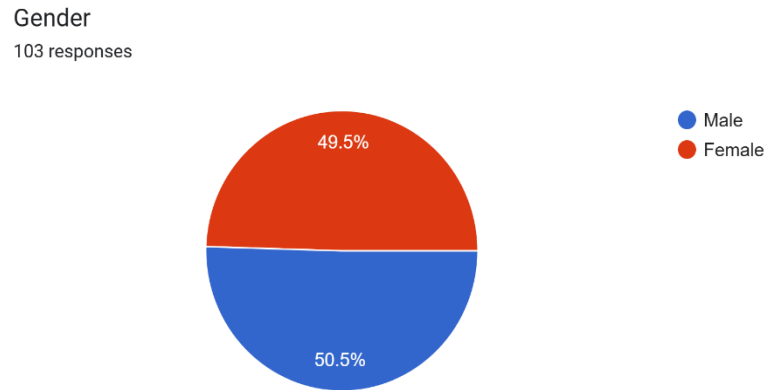
Reliability Test

A reliability test in research assesses the consistency and stability of measurements or data collection tools used in a study. It evaluates whether the same results would be obtained if the measurement were repeated under similar conditions. This test is crucial because it ensures that the findings of the research are dependable and trustworthy. It helps researchers determine if their instruments or methods are producing consistent results over time and across different settings, increasing the credibility and validity of their research findings.

Reliability Test on Level of Awareness

Reliability Statistics	
Cronbach's Alpha	N of Items
.787	2

Interpretation: For Perceived Trust, two items were tested, The Cronbach's Alpha was founded to be 0.787. this value exceeds the minimum threshold of 0.7, indicating that the items for Perceived trust are internally consistent and reliable

Reliability Test on Investors Behaviour

Reliability Statistics	
Cronbach's Alpha	N of Items
.613	3

Interpretation: For Perceived Personalization three item were tested,yielding.The Cronbach's Alpha was founded to be 0.613. This is reliable**.**

Reliability Test on Risk Tolerance

Reliability Statistics	
Cronbach's Alpha	N of Items
.862	3

Interpretation: For Perceived Concern, three items were tested, with a Cronbach's Alpha was found to be 0.862. This value exceeds the minimum threshold of 0.7.

Correlation:

Correlation is a statistical measure that indicates the extent to which two variables are related to each other. It describes the strength and direction of the relationship between two variables. Strength of correlation indicates how closely the variables are related. A correlation coefficient close to +1 or -1 suggests a strong relationship, while a coefficient close to 0 indicates a weak relationship. Direction of correlation indicates whether the variables move together in the same direction (positive correlation) or in opposite directions (negative correlation).

Correlation

- **Ha1**: There is a significant relationship between the level of awareness of investors on their investment behavior.
- **Ho1:** There is a no significant relationship between the level of awareness of investors on their investment behavior.

Level of Awarness on Investors Behaviour

Correlations		MEAN_LA	MEAN_IB
MEAN_LA	Pearson Correlation	1	.278**
	Sig. (2-tailed)		.005
	N	102	102
MEAN_IB	Pearson Correlation	.278**	1
	Sig. (2-tailed)	.005	
	N	102	102
**. Correlation is significant at the 0.01 level (2-tailed).			

Interpretation

- A correlation Pearson value is 0.278 for "Level of awareness" and "Investors Behaviour'' suggests a week positive correlation between these two variables.
- The significance value is 0.005 = 0.005. so Alternate hypothesis failed to reject.
- Ha1: There is a significant relationship between the level of awareness of investors on their investment behavior is accepted.

Investors Behaviour on Risk Tolerance

- **Ha2**: There is a significant relationship between Risk tolerance on their investment behavior.
- **Ho2**: There is no significant relationship between Risk tolerance on their investment behavior.

Correlations		MEAN_IB	MEAN_RT
MEAN_IB	Pearson Correlation	1	.321**
	Sig. (2-tailed)		.001
	N	102	102
MEAN_RT	Pearson Correlation	.321**	1
	Sig. (2-tailed)	.001	
	N	102	102

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

- A correlation Pearson value of 0.321 for "Investors Behaviour'' and "Risk tolerance'' suggests a moderate positive correlation between these two variables.
- The significance value is 0.001<0.05. so Alternate hypothesis failed to reject.
  Ha2: There is a significant relationship between Risk tolerance on their investment behavior is accepted.

Findings:

- The reliability test results indicate that the level of awareness has a Cronbach's Alpha of 0.787, exceeding the threshold of 0.7 and confirming internal consistency and reliability. Investor behavior has a Cronbach's Alpha of 0.613, which is slightly below the ideal threshold but still acceptable, suggesting reasonable reliability.
- Risk tolerance demonstrates high reliability with a Cronbach's Alpha of 0.862, well above the 0.7 threshold. In the correlation analysis, the level of awareness and investor behaviour show a weak positive correlation (Pearson correlation = 0.278) with a significance value of 0.005, confirming a statistically significant relationship.
- Consequently, the null hypothesis (Ho1) is rejected, and the alternative hypothesis (Ha1) is accepted, affirming a significant relationship between these variables. Similarly, investor behavior and risk tolerance exhibit a moderate positive correlation (Pearson correlation = 0.321) with a significance value of 0.001, also confirming statistical significance.
- The null hypothesis (Ho2) is rejected, and the alternative hypothesis (Ha2) is accepted, indicating a significant relationship between risk tolerance and investor behaviour.

Suggestions

1. **Focus on Younger Investors (18-25 Years)**:
- Since 81.6% of respondents belong to the 18-25 age group, Reliance Securities should tailor their investment products and marketing strategies to cater to this demographic. Emphasize educational tools, mobile-friendly platforms, and gamification of investment to attract and retain younger investors.

2. **Gender-Specific Strategies**:
- With an almost equal gender split (50.5% males and 49.5% females), Reliance Securities should develop gender-inclusive financial products and consider campaigns targeting female investors, as this demographic shows increasing participation in financial markets.

3. **Improve Awareness Campaigns**:

- The weak positive correlation (0.278) between awareness and investor behavior highlights the need for better awareness programs. Reliance Securities can invest in financial literacy campaigns, webinars, and content marketing to help investors understand market dynamics and make informed decisions.

4. **Enhance Risk Tolerance Support**:

- The moderate positive correlation (0.321) between risk tolerance and investor behavior suggests that investors with higher risk tolerance are more engaged. Reliance Securities could develop tools like risk profiling and personalized portfolio suggestions to cater to varying levels of risk appetite.

5. **Strengthen Investor Behavior Reliability**:

- The Cronbach's Alpha for investor behavior (0.613) is slightly below the ideal threshold of 0.7. Reliance Securities should review the items used to measure investor behavior and refine them for better reliability and actionable insights.

6. **Leverage Technology for Personalized Services**:

- Use digital tools to enhance personalization, especially for younger investors who prefer tailored investment recommendations. AI-driven investment advisors and interactive dashboards can improve user experience and decision-making.

Limitations of the study

- The sample Size 102 participants limit the generalizability to the entire workforce at Reliance securities Gwalior.
- The findings are context –specific and may not apply to other industries locations.
- The study focuses on selected variables, overlooking factors like level of awareness, Investors Behaviour, Risk tolerance.
- Time constraints restricted deeper analysis and limited the incorporation of longitudinal data.
- The geographic focus on Gwalior effects the broader applicability of results.

Conclusion:

The study reveals a significant but weak positive relationship between the level of awareness and investor behavior, indicating that as investors become more informed, their behavior improves, although the effect is not particularly strong. Additionally, a moderate positive correlation exists between risk tolerance and investor behavior, suggesting that individuals with higher risk tolerance are more likely to engage in active and diverse investment practices. The reliability of the instruments used to measure these constructs is confirmed by satisfactory Cronbach's Alpha values. Furthermore, the demographic analysis highlights that the sample is predominantly composed of younger individuals aged 18-25, with an almost equal distribution of males and females, reflecting a youthful and diverse participant base.

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THE EFFECT OF TRAINING & DEVELOPMENT ON EMPLOYEE RETENTION WITH REFERENCE TO GODREJ CONSUMER PRODUCT LTD. (GCPL)

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Abstract:

Any organization's human resources are a vital resource. Companies need to concentrate on long term employee retention in addition to attracting and maintaining talented and trained workers if they want to stay competitive. This study looks at research results to investigate the relationship between employee retention and training & development by using the Regression analysis and factor analysis research method. Enhancing corporate performance and increasing staff retention are two important goals of training and development. However, due to perceived dangers and expense concerns, many firms are reluctant to make sufficient training investments. Using information gathered from Godrej Consumer Product Limited (GCPL) via surveys, including 100 number of responses gathered from the organization, this study examines the impact of training & development on employee retention. The findings shows that data is credible with Cronbach's alpha values of 0.783 for training & development and 0.904 for employee retention i.e. (Cronbach's $\alpha > 0.7$). Regression analysis revealed a significant positive relationship between training & development and employee retention ($R^2 = 0.441$) indicating that as training & development efforts increase, employee retention also improves. Through factor analysis Employee Engagement (job happiness, potential utilization, training) and Employee Development (career progression, quality training, skill-building) are determined to be critical elements.

Introduction:

Dependent Variable (Employee Retention)

The ability of a company to retain its workforce and lower turnover by fostering a happy and encouraging work environment is known as employee retention. By addressing elements that affect employee satisfaction, such as competitive pay, opportunities for professional advancement, work-life balance, recognition, and a healthy corporate culture, the idea aims to keep a steady workforce. It is the capacity of a company to retain its workforce over an extended period of time through the provision of competitive benefits, career advancement opportunities, a positive work environment, and job satisfaction. A steady workforce is indicated by strong employee retention, whereas frequent hiring and resignations are suggested by high staff

turnover. Retention tactics that work save hiring expenses, boost output, and preserve institutional knowledge.

Independent Variable (Training & Development)

Training is the process of enhancing employees' job-specific skills. Development is the broadening of individuals' talents for future positions and responsibilities. A conceptual framework for training and development in businesses usually includes several essential parts that work together to improve employee performance, skills, and knowledge.

Training focuses on providing the specific skills or knowledge required for a job. It is usually short-term and aims to improve present performance. Development is a larger, long-term process that focuses on personal and professional growth while preparing individuals for future positions and responsibilities. T&D programs enhance productivity, engagement, and retention while keeping employees up to date with industry trends.

In a global setting, employee retention is crucial because turnover statistics are frequently used to evaluate businesses. While low turnover shows that businesses are effectively keeping talented workers by creating a positive work environment that improves individual performance, high turnover can have a detrimental effect on organizational performance. Prioritizing human resources within firms has become crucial for increasing productivity and maximizing resource utilization in the fast – paced commercial world of today. As a result, although it has grown more difficult businesses are concentrating more on keeping their best workers. In order to give workers the abilities and information they need to fulfil job requirements, training is essential.

Given the connection between training and employee retention, this study looks at how training is a crucial retention tactic. This study intents to assist firms that struggled with high turnover rates in keeping their workers by identifying retention characteristics and comprehending the influence of training and development. According to research companies use a variety of strategies to keep workers, such as providing competitive pay, training, and fostering a happy work atmosphere. In order to retain skilled workers, addressing labour shortages continues to be a top priority. Employee development and retention are greatly aided by training, which is a component of HRM practices. To improve employee's skills and dedication, many training formats are frequently used, including specialized training, vocational training and on-the- job training.

Literature Review

Din (2000), stated that staff training improves organizational performance and growth by increasing productivity and employee commitment. Organizations invest in training as a retention strategy because it improves skills, knowledge, and attitudes, resulting in increased productivity and retention.

Mousa (2003) argues that training improves skills, knowledge, and attitudes, making it critical for job performance and global competitiveness. Researchers define training as acts taken to convey key job-related competencies.

Waleed Hassan *et al.* (2013) emphasize the close relationship between job training and employee retention. Based on a survey of telecom professionals, their findings show that both men and women appreciate the need of workplace training for career advancement and retention.

Chen Mengjun (2014) investigates the relationship between employee retention and training. Training improves corporate performance, builds trust among employees, and promotes human capital development. It also minimizes turnover and enhances management trust.

Haider & Maqsood *et al.* (2015) offer managerial insights into how to improve employee retention. Their research focuses on the telecom industry's ability to retain personnel and underlines the importance of training in improving performance and maintaining talent.

Aleem Muhammad *et al.* (2020) stated that the study's conclusion unequivocally shows that employee commitment and retention are significantly impacted by training and development.

Damei Mohamed Yusuf (2020) proposes that firms improve employee performance and retention by establishing training strategies. The study discovered that job training improves employee retention in chosen telecom enterprises in Mogadishu, Somalia.

Ume Amen *et al.* (2021) discovered that training and development had a significant impact on job satisfaction and employee retention. The study also investigated limitations, consequences, and future research prospects, with an emphasis on educational institutions.

Dietz Daniel *et al.* (2022) argue that credible and visible training improves retention and productivity. Their study, which included substantial employer-employee data, indicates that training has a favourable impact on staff retention.

Research Methodology

Research Objectives

- To identify the factors resulting in employee turnover / retention in the organisation after training.
- To explore the gap between employee`s expectations and organization`s retention efforts by providing training.

Research Model
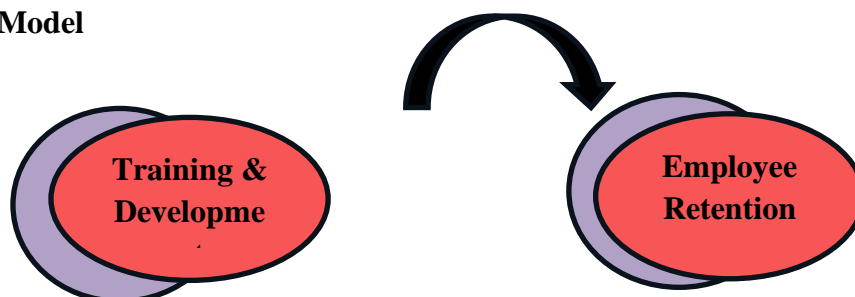
❖ **Hypothesis**

- H01: There is no significance effect of training and development on employee retention
- Ha1: There is a significant effect of training and development on employee retention.

❖ **Research Design:** A quantitative, exploratory research design is used to identify potential factors influencing employee retention. A questionnaire was created in order to gather information about how training & development, an independent variable, affected employee retention, a dependent variable.

❖ **Data Collection**

- Primary Data Sources: Structured questionnaire was used to measure training & development and employee retention.
- Method: Online surveys using Google Forms.

❖ **Sample Design**

- **Sample Size:** 100 respondents to ensure credibility
- **Sampling Frame:** The employees working in the Fast Moving Consumer Goods (FMCG) sector.
- **Sampling Unit:** The employee database of Godrej Consumer Products Limited.
- **Sampling Technique:** Purposive sampling technique is used to select relevant respondents.

❖ **Research Instrument**

- **Questionnaire Design**
  o Section 1: Demographics (Name, Gender, Age, Qualification, Experience, Level of management)
  o Section 2: Training & Development (4 questions)
  o Section 3: Employee retention (4 questions)
- **Type of Questions:** Comprised of closed ended questions with Likert scale (from 1-5, where 5- Strongly agree, 4- Agree, 3- Neutral, 2- Disagree and 1- Strongly Disagree.)
- **Justification:** Questionnaires promote efficiency, standardization, and anonymity, resulting in honest responses and quantitative data for statistical analysis.

❖ **Research Tools**

- **Reliability Test:** The internal consistency and dependability of the research tools are directly addressed by reliability testing. Cronbach's Alpha is used to quantify internal consistency.
- **Regression Analysis:** Regression analysis is used to determine the relationship between employee retention (a dependent variable) and training & development (an independent variable).
- **Factor Analysis:** Factor analysis is a statistical method used to identify underlying relationships or patterns among a set of observed variables.

Data Analysis

❖ **Reliability Analysis**

The term reliability refers to the consistency of a measure it provides consistent measurements over time which means the results of the test can be trusted. Training & development and Employee Retention are two constructs that are measured by items on a questionnaire that correlate. High dependability indicates that results are reliable and that respondents can endorse real-world practice applications in the GCPL with assurance.

- **Reliability test of Independent variable Training & Development**

Reliability Statistics

Cronbach's Alpha	N of Items
.783	4

A 4-item scale's internal consistency was examined using reliability analysis. The 4-item scale's internal consistency produced a Cronbach's alpha of 0.783, indicating good reliability. This leads one to the conclusion that the scale's items assess the same underlying theoretical notion quite consistently.

- **Reliability test of Dependent variable Employee Retention**

Reliability Statistics

Cronbach's Alpha	N of Items
.904	4

A 4-item scale's internal consistency was examined using reliability analysis. The 4-item scale's internal consistency produced a Cronbach's alpha of 0.904, indicating good reliability. This leads one to the conclusion that the scale's items assess the same underlying theoretical notion quite consistently.

- **Reliability test of both variable**

Reliability Statistics

Cronbach's Alpha	N of Items
.893	8

The four items have been concluded from employee retention and four items from training and development in this study. Following the reliability test, the Cronbach alpha shows that staff retention is 0.904 and training and development is 0.783, also the combined reliability of both of which are higher than 0.7 i.e. 0.893, indicating that all of the data gathered is trustworthy.

❖ **Regression Analysis**

Regression analysis is a set of statistical method used for the estimation of relationships between a dependent variable and one or more independent variable. The percentage impact of training & development components on retention is measured by linear regression. During the investigation, key metrics for evaluating the predictive power and important factors were assessed, including slope, intercept, R^2, and P-values. The report offers practical insights into HR initiatives aimed at boosting GCPL staff retention.

For example, you might guess that there's a connection between how much you eat and how much you weigh, regression analysis can help you quantify that.

- H01: These is no significant effect of training and development on employee retention.
- Ha1: There is a significant effect of training and development on employee retention.

Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.664[a]	.441	.434	.67328	.441	61.517	1	78	<.001	1.714

a. Predictors: (Constant), MEAN_TD

b. Dependent Variable: MEAN_ER

The regression analysis revealed a reasonably positive correlation between Mean Training & Development (MEAN_TD) and Mean Employee Retention (MEAN_ER), with mean satisfaction values predicting turnover (p<0.05). Nonetheless, the regression model accounted for only around 44% of the variance in retention, with an R-squared value of 0.441 and an adjusted value of 0.434. The Durbin-Watson statistic score of 1.714 indicates that no gross autocorrelation was performed on residuals.

ANOVA[a]

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.886	1	27.886	61.517	<.001[b]
	Residual	35.357	78	.453		
	Total	63.243	79			

a. Dependent Variable: MEAN_ER

b. Predictors: (Constant), MEAN_TD

The ANOVA findings show that the regression model associating Mean Employee Retention with Mean Training & Development is significant: F(1,78)=61.517,p<0.001. The model explains the variance in retention with regression SS=27.886, residual SS=35.357, and total SS=63.243. Training & Development is a significant indicator of employee retention.

Coefficients[a]

<div align="center">Coefficients[a]</div>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.183	.377		3.135	.002
	MEAN_TD	.719	.092	.664	7.843	<.001

a. Dependent Variable: MEAN_ER

The coefficients indicate a substantial positive association between Mean Training & Development (MEAN_TD) and Mean Employee Retention (MEAN_ER) (B=0.719, p<0.001). A one-unit increase in training & development increases retention by 1.184 units. The intercept (B=6.809, p<0.001) represents the expected turnover rate when job satisfaction is zero. Job satisfaction has a significant negative impact on turnover (standardized coefficient = -0.664, t = -7.852, p < 0.001).

❖ **Factor Analysis**

Factor analysis is a statistical method used to identify underlying relationships or patterns among a set of observed variables. It reduces a large number of variables into a smaller number of factors by grouping together variables that are highly correlated.

KMO and Bartlett's Test

<div align="center">KMO and Bartlett's Test</div>

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.822
Bartlett's Test of Sphericity	Approx. Chi-Square	397.252
	df	28
	Sig.	<.001

The KMO measure of sampling adequacy for this dataset is 0.82, indicating good sampling adequacy. Additionally, Bartlett's Test of Sphericity is significant (p < 0.001), suggesting that the variables are correlated and suitable for factor analysis. These results confirm that factor analysis is appropriate for this dataset

The factor analysis identifies two critical dimensions: employee engagement and development. Employee engagement, with high factor loadings (0.867-0.724), emphasizes job happiness, commitment, and the perceived influence of training on skills. Employee Development, with factor loadings of 0.898 to 0.598, prioritizes career advancement, quality training, and skill development opportunities. These data indicate that successful training programs improve employee retention and career advancement.

The factor analysis resulted in the extraction of two factors based on the data.

Factor Name	Question/Variable	Factor Loading
Factor1: **Employee** **Engagement**	Q1: I feel that I am developing my full potential at work.	0.867
	Q2: I want to stay with the company.	0.835
	Q3: I really feel satisfied doing this job.	0.830
	Q4: I feel that the training and development programmes of the company enhance skills and expertise.	0.816
	Q5: I have the opportunity to use my ability at work.	0.724
Factor 2: **Employee** **Development**	Q6: I personally see opportunities for promotion in the company after training.	0.898
	Q7: I receive good training from the company.	0.829
	Q8: I have many opportunities for developing personal skills at work.	0.598

Findings

- Through reliability test it was founded that the data which was taken from the questionnaire is reliable for the research as Cronbach alpha indicate that the value of training & development and employee retention is more than 0.7 (threshold limit). So, the data is reliable.

- From the above result it is found that there is a significant relation between the training & development and employee retention as regression analysis showing the value of r=.441 showing the impact between two variable.

- The analysis reveals two factors: Employee Engagement and Employee Development. Engagement is driven by employees' ability to utilize their potential, job satisfaction, and effective training programs, while development is influenced by opportunities for career progression, quality training, and skill-building opportunities. To enhance both, organizations should focus on growth plans, robust training, and clear career advancement pathways.

Suggestions

- The study suggests tailoring training to address the distinct needs of male and female employees, organizations can enhance engagement, satisfaction, and loyalty, potentially leading to improved retention rates.

- The study suggests designing age-specific training programs to address the unique learning needs and career goals of different age groups, enhancing engagement, satisfaction, and retention across the workforce.

- It is suggested to expand this study across the entire Godrej Group to analyze the impact of tailored training programs on employee retention at a broader level.
- Include diverse job roles and departments to assess how tailored training impacts retention across different functions.
- Align the study with Godrej's organizational goals to ensure the outcomes contribute to strategic workforce planning.

Conclusion:

The purpose of this study was to look into how training and development affected employee retention at Godrej Consumer Products Limited (GCPL). The study found a strong correlation (R^2 = 0.441) between training and development and employee retention. The study highlighted two main elements influencing retention: employee engagement (work satisfaction, potential utilization, and training efficacy) and employee development (career advancement, quality training, and skill-building opportunities).

The findings demonstrate that structured training programs improve employees' abilities, job satisfaction, and organizational commitment, hence lowering turnover. The reliability analysis verifies the data's credibility, with Cronbach's alpha values greater than 0.7 suggesting strong internal consistency. To boost employee retention, firms should customize training programs for different demographics, integrate training activities with career advancement possibilities, and broaden training research across departments. Businesses that engage in excellent training and development initiatives can cultivate a motivated workforce, increase productivity, and reinforce their competitive advantage in the FMCG sector. Future study can look at larger sector comparisons, evaluate the long-term impact of training programs, and use qualitative insights to supplement quantitative findings. Finally, this study highlights the importance of training and development in improving employee retention and organizational success.

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THE ROLE OF JOB SATISFACTION IN PREDICTING EMPLOYEE TURNOVER WITH REFERENCE TO WAREHOUSING INDUSTRY

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Abstract:

Employee turnover poses significant challenges for the warehousing industry, given its labor-intensive nature, fluctuating demands, and operational pressures. This study explores the role of job satisfaction in predicting employee turnover by examining factors such as compensation, work environment, leadership, and work-life balance. Using a quantitative approach, data were collected from 80 warehousing employees through structured questionnaires. Reliability analysis demonstrated high internal consistency, with Cronbach's alpha values of 0.826 for job satisfaction and 0.908 for turnover intentions. Regression analysis revealed a significant negative relationship between job satisfaction and turnover intentions ($R^2 =$ 0.441), indicating that higher job satisfaction reduces turnover risks. The study emphasizes the importance of enhancing job satisfaction through improved compensation, supportive leadership, and work-life balance to mitigate turnover. Despite limitations such as sample size and cross-sectional design, the findings provide actionable insights for HR professionals in the warehousing sector, with recommendations for future research involving larger and more diverse populations.

Introduction:

Employee turnover is remarkable pain point for organizations in all sectors, but particularly the warehousing and distribution industry as it grapples with cyclical demand, labor shortfalls, and operational confines. Frequent turnover undermines workflow, raises recruitment and training expenses, and adversely affects employee morale and productivity. During times of adversity, employee job satisfaction becomes vital in their decision to stay or leave their organization.

Job satisfaction involves multiple aspects, such as the work environment, compensation, relationships with coworkers and supervisors, opportunities for career advancement, and work-life balance. People are also more likely to stay with organizations that meet these needs, adding to long-term stability. On the other hand, dissatisfaction in these aspects usually causes disengagement, followed by eventual turnover.

So, this study will identify the correlation of job satisfaction and employee turnover in warehousing industry. The objective is to discover which variables are most relevant in determining job satisfaction and how these relate to turnover intentions. The study, therefore,

deliberately focuses on the warehousing sector, as this will adequately give insight into such practical strategies organizations can adopt to retain their employees and motivate them towards a more dedicated workforce.

As warehouses become more and more central to the supply chain, lowering turnover becomes one way to achieve operational effectiveness. The study puts emphasis on the need to attend to employees' satisfaction to take care of turnover. This improves both organizational and individual accomplishments.

Literature Review

Research has consistently emphasized the pivotal role of job satisfaction in predicting turnover intentions across diverse industries and contexts. Atchison and Lefferts (1972) identified dissatisfaction with hygiene factors, such as supervision and organizational policies, as primary drivers of turnover, while motivators influenced performance but not retention. Carsten and Spector (1987) revealed that lower unemployment rates strengthened the link between dissatisfaction and turnover, highlighting behavioral intentions as stronger predictors than job satisfaction. Similarly, Tett and Meyer (1993) found that job satisfaction and organizational commitment independently predicted turnover intentions, with turnover intentions mediating attitudinal effects on actual turnover. Hellman (1997) reinforced these findings, noting a negative relationship between job satisfaction and turnover intent, moderated by factors like age and tenure. Ghiselli *et al.* (2001) explored intrinsic and extrinsic job satisfaction, showing their respective short- and long-term effects on turnover decisions. Harrington *et al.* (2001) and Coomber and Barriball (2007) emphasized emotional exhaustion, workplace stress, and poor leadership as significant predictors of turnover in specialized fields, such as the military and healthcare. Oliveira and Najnudel (2022) added to this by highlighting how abusive supervision negatively impacts work engagement and increases turnover intentions, further underlining the importance of leadership quality.

The interplay between organizational culture, job satisfaction, and turnover intention has also been extensively studied. Emami *et al.* (2012) highlighted how a supportive learning culture enhances job satisfaction and reduces turnover, while Yucel (2012) demonstrated similar effects of job satisfaction on organizational commitment in manufacturing. Studies like those by Oosthuizen *et al.* (2016) and Skelton *et al.* (2020) underscored work-life balance and job embeddedness as critical factors in turnover prevention. Demographic influences, such as age and tenure, were explored by Siddiqui *et al.* (2012) and Kabungaidze and Mahlatshana (2013) in the education sector. Rafiq *et al.* (2019) and Lazarri (2022) focused on engagement, trust, and predictive modeling to understand turnover dynamics in evolving industries. Kanuto (2024) emphasized the mediating role of engagement in the relationship between job satisfaction and turnover intentions, particularly in the banking sector, reinforcing the need for strategies that foster engagement and improve work environments. Collectively, these findings highlight

turnover as a multifaceted issue influenced by job satisfaction, leadership, organizational culture, and work-life dynamics.

Research Methodology

- **Research Objectives**

  To analyze the relationship between job satisfaction and employee turnover.

- **Research Model**

❖ Independent Variable: Job satisfaction (dimensions like compensation, work environment, leadership).

❖ Dependent Variable: Employee turnover (measured via intention to leave or actual turnover).

- **Hypotheses**

❖ H01: No significant relationship exists between job satisfaction and employee turnover.

❖ Ha1: A significant relationship exists between job satisfaction and employee turnover.

- **Research Design**: A quantitative, causal-comparative design is used to establish a causal relationship that leads from job satisfaction to turnover. The structured tools-one or subsequ."--questionnaires-were used to gather information threaded numerically and analyzed in a statistical manner for trends, correlations, and causality.

❖ **Justification for Design**: Quantitative research ensures objective measurement, statistical precision, and generalizability, while causal analysis explores how job satisfaction influences turnover using techniques like regression. Together, they provide robust insights into the study's objectives.

- **Data Collection**

❖ Primary Data Sources: Structured questionnaires measuring job satisfaction and turnover intentions.

❖ Method: Online surveys using Google Forms.

- **Sample Design**

❖ Target Population: Warehousing industry employees.

❖ Sampling Frame: Employees across various roles in warehousing and logistics.

❖ Sampling Technique: Purposive sampling to select relevant respondents.

❖ Sample Size: 80 respondents to ensure generalizability.

- **Research Instrument**

❖ Questionnaire Design:

o Section 1: Demographics (Name, Age, Gender, Experience).

o Section 2: Job Satisfaction (5 questions).

o Section 3: Employee Turnover Intentions (3 questions).

❖ Type of Questions: Closed-ended with Likert scales (1 = Strongly Disagree, 5 = Strongly Agree).

❖ Justification: Questionnaires ensure efficiency, standardization, and anonymity, encouraging honest responses and generating quantifiable data for statistical analysis.

- **Research Tools**

❖ Reliability Test: Reliability testing deals directly with the internal consistency of and reliability upon the research instruments. The internal consistency is measured by means of Cronbach's Alpha, allowing formulating the degree to which all of the various items on a questionnaire correlate in their measurement of a given construct- job satisfaction and turnover. High reliability suggests that outcomes are trustworthy and respondents can confidently support genuine practice applications within the warehousing industry.

❖ Regression Analysis: Regression analysis is exploited to find out how job satisfaction (independent variable) relates to employee turnover (dependent variable). Linear regression measures how job satisfaction elements (for example: salary, work environment) influence turnover in percentage. Important measures such as slope, intercept, R^2, and P-values for assessing the predictive ability and critical drivers were evaluated in the course of the analysis. The analysis provides actionable insights into HR actions taken toward reducing turnover in the warehousing industry.

Data Analysis

- **Reliability Analysis**
❖ **Job Satisfaction**

Reliability Statistics

Cronbach's Alpha	N of Items
.826	5

A reliability analysis was conducted to investigate the internal consistency of a 5-item scale. Internal consistency of the 5-item scale yielded Cronbach's alpha of 0.826, exhibiting good reliability. This provides a conclusion that these items in the scale measure the same underlying theoretical construct with some considerable consistency.

❖ **Employee Turnover**

Reliability Statistics

Cronbach's Alpha	N of Items
.908	3

A reliability analysis was conducted to identify the internal consistency of the scale containing 3 items. The analysis returned a high value of Cronbach's alpha (0.908),

indicating very good reliability. This means that the items in the scale measured the same underlying theoretical dimension with some consistency.

- **Regression Analysis**

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.664[a]	.441	.434	1.01290	.441	61.657	1	78	<.001	2.039

a. Predictors: (Constant), MEAN_JS

b. Dependent Variable: MEAN_ET

The results of the regression analysis showed a somewhat visible and moderately strong negative relationship between Mean Job Satisfaction (MEAN_JS) and Mean Employee Turnover (MEAN_ET) with mean satisfaction values predicting turnover $p<0.05$. Nevertheless, the regression model only totalled for about 44% of the variance in turnover: in other words, an R-squared value of .441, and an adjusted value of .434. Regarding the Durbin-Watson statistic, the score of 2.039 indicated that no gross autocorrelation was done on the residuals.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63.258	1	63.258	61.657	<.001[b]
	Residual	80.025	78	1.026		
	Total	143.283	79			

a. Dependent Variable: MEAN_ET

b. Predictors: (Constant), MEAN_JS

The ANOVA results confirm that the regression model predicting Mean Employee Turnover with Mean Job Satisfaction is significant: $F(1,78)=61.657, p<0.001$. The model explains the variance in turnover, Regression SS=63.258, Residual SS=80.025, Total SS=143.283. Job satisfaction indeed is a meaningful predictor of employee turnover.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.809	.553		12.311	<.001
	MEAN_JS	-1.184	.151	-.664	-7.852	<.001

a. Dependent Variable: MEAN_ET

The coefficients show that there is a significant negative relationship between Mean Job Satisfaction (MEAN_JS) and Mean Employee Turnover (MEAN_ET)(B=−1.184,p<0.001), such that a one-unit increase in job satisfaction reduces turnover by 1.184 units.

The intercept is the expected value of turnover when job satisfaction is zero and is equal to B=6.809,p<0.001. The standardized coefficient of-0.664 (t=−7.852,p<0.001) suggests that job satisfaction has a strong negative impact on turnover.

Findings

1. **Reliability:** Cronbach's alpha for job satisfaction is 0.826 (good reliability), and for employee turnover intentions (excellent reliability), it is 0.908. This means that the questionnaire items used are internally consistent throughout its multiple measures of the intended constructs.

2. **Job Satisfaction and Employee Turnover:** Overall the regression analysis highlighted that a strong negative relationship was found between job satisfaction and employee turnover. Job satisfaction accounts for the variance in turnover intentions for 44.1% ($R^2=0.441$), implying this may be a key predictor.

3. **Predictive strength:** One unit increase in job satisfaction decreases turnover intentions by 1.184 units. The results of the ANOVA show that the regression model is significant ($F(1,78)=61.657, p<0.001$).

Suggestions

1. **Enhancing Job Satisfaction:** Focus on improving keyaspects: compensation, work environment, and leadership quality. Develop initiatives topromote better work-life balance to increase employee commitment**.**

2. **Employee Engagement:** Encourage programs toassist with engagement and organizational commitment, with the goal of reducingturnover.

3. **Leadership Development:** Train managers and supervisors to demonstrate supportive and ethical leadership practices. Since leadershiphas considerable influence over job satisfaction and retention, such training is greatly valuable.

4. **Tailored Retention Strategies:** Frame different retention approaches for varied employee groups onthe basis of demographic insights and specific dimensions ofsatisfaction.

5. **Regular Feedback Mechanisms:** Conduct periodic surveysto assess job satisfaction and address dissatisfaction.

Limitations

1. **Sample Size:** The study useda sample of 80 respondents; it is rather difficult to generalize thefindings for the whole warehousing industry.

2. **Sampling Method:** The purposive samplingtechnique may bias the findings due to the reason that it may not cover a wider range of the employee's population.

3. **Scope of Variables:** The study, however, basicallytends to examine the most common job satisfaction dimensions. Hence, there are high chances of otherinfluential factors like external economic conditions or industry moodsbeing overlooked.

4. **Cross-Sectional Design:** The study iscross-sectional; it collects data at a specific point in time and does notprovide much insight into turnover dynamics or trends over time.

Conclusion:

This study established a significant negativerelationship between job satisfaction and employee turnover intentions in thewarehousing industry. Enhancing job satisfaction through improved compensation, leadership, and work-life balance is crucial to decreasing turnoverrates. While the overall findings provide actionable insights, limitationsof the study indicate that there is a need for widespread research withlarger samples, varying populations, and longitudinal designs in order toget a better grasp of turnover dynamics.

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IS UNITY IN DIVERSITY A MYTH? RE- EXAMINATION OF PARTITION OF INDIA THROUGH AMBEDKAR'S PARADIGM

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 Abstract:

India and Pakistan have been fiercely competitive since the beginning. The antagonism between the two has fluctuated between geographical disputes and clashes of national identities, ultimately shattering the ideological framework of 'unity in diversity'. Their relationship has always been a vicious cycle, and with the turn of the twenty- first century, the two turned into deadly nuclear adversaries. Even while both nations' acquisition of nuclear weapons has avoided a catastrophic conflict, minor conflicts such as the Kargil Crisis, Pulwama Attack, and Balakot Strike have occurred. The iron barrier existing between them prevents them from developing a shared knowledge base about one another, thereby leading to their rivalry relationship as unresolvable the aim of this paper is to put the readers at the crossroads of history and utlize their wisdom to re-examine the partition of Indian subcontinent, drawing on the works of Dr. Bhimrao Ramji Ambedkar, one of India's finest thinkers. His groundbreaking work, *Pakistan or the Partition of India* offers a nuanced understanding of the forces that shaped the subcontinent's division. It traces the political, social, and cultural underpinnings of Partition, exploring how colonial policies, religious nationalism, caste dynamics, social inequalities, and leadership failures fractured a pluralistic society. Drawing on post- Partition nation building efforts in India, Pakistan, and Bangladesh, the study examines the challenges of forging unity in the face of regionalism, communal tensions, and identity politics. Ultimately, this paper redefines unity not as homogeneity but as a mosaic of coexistence and mutual respect, urging a rethinking of historical narratives and contemporary policies. By reimagining unity in diversity as a dynamic, evolving process rather than a static ideal, this paper envisions a path toward reconciling diversity with collective identity in deeply divided society.

Keywords: Communalism, Conflict, Contemporary Scenario, Partition of India, Post- Colonial Identity, Unity in Diversity

Research Question:

- How did the Partition of 1947 challenge the ideological framework of 'unity in diversity?
- To what extent were the causes of Partition rooted in colonial policies versus indigenous communal tensions?
- What alternative frameworks can help reconcile diversity with national identity?

Methodology:

This paper is analytical in nature, and would employ historical analysis; and literary analysis with the use of interdisciplinary approach.

Expected Outcomes:
- A deeper understanding of the legacy of Partition
- Reevaluation of Nation building efforts
- New framework for pluralism

Introduction

B. R. Ambedkar: Brief overview of his life

One of the influential figures of modern India, Dr. Bhimrao Ramji Ambedkar (1891-1956) was born in Mhow to Ramji Maloji Sakpal and Bhimabai Sakpal. Being born into Mahar caste, he faced bitter experiences. From not allowing him to drink water from public well to not allowing him to sit with other children, he had to endure a lot. Rather than giving up, he decided to fight against it. He turned all these sorts of hindrances into positivity by becoming a polymath. He served as the first Law Minister of independent India, and became the chief architect of Indian Constitution. Besides, he has played multi diverse roles in shaping the nation, be it social, political, economy or legal:

- As a social reformer, his primary goal was to eradicate caste- based discrimination.
- He, therefore fought against untouchability, and led the Mahad Satyagraha in 1927.
- His fight for human rights laid the foundation for an inclusive democracy.
- As the architect of Indian Constitution, he borrowed the three principles- equality, fraternity, and liberty from the French Revolution. His vision also included secular ethos in order to ensure the mingling of religion and governance.
- As a political leader, he tried to secure political safeguards for the Dalits, and consequently it led to reservation system. He founded Independent Labour Party (1936) and later the Scheduled Castes Federation (1942), which laid the groundwork for the Republican Party of India (1956).
- As a Law Minister, he introduced the Hindu Code Bill to reform Hindu personal laws, granting women rights in inheritance, marriage, and divorce.
- As an economist, he highlighted land reforms, currency, and economic planning. To improve employment as well as productivity, he advocated for large scale industrialization. His Ph.D. thesis, "The Problem of the Rupee," and his work on the National Water Policy contributed to policies on dam construction and river valley projects.
- As an educationist, he always believed that knowledge is the key to empowerment.
- So, he founded the People's Education Society (1945) and established institutions like Siddharth College and Milind College.

- As a religious thinker, he was always disappointed by the rigid caste based oppression. Towards the end of his life, he embraced Buddhism finding it more egalitarian and rational.

Apart from these major expertise, his views on Partition of 1947 are deeply analytical, and pragmatic that resonates still today. He never saw it as a political tragedy, but rather considered it as inevitable outcome of historical Hindu- Muslim conflicts, and the failures of both Congress and Muslim League leaders to find common ground for existing together, despite being sharing communal harmony for ages. His remarkable work, *Pakistan or The Partition of India* (1940, revised in 1945) is a detailed and in-depth analysis of the issues existed at that point of time, offering an unbiased document of the causes for the Partition. Although written a long ago, but a deeper understanding would provide in reconciling between the two communities and to achieve 'unity in diversity' in real terms. .

Pakistan or The Partition of India: A Brief Overview

Initially published in 1940 (revised in 1945), *Pakistan or The Partition of India* can be regarded as a seminal text that offers a critical, analytical, and profoundly historical examination of the Hindu- Muslim question in colonial India. Despite being written before Partition, this work provides an unbiased objective documentation, and thereby sets it apart from other existing historical narratives. It descriptively highlights the failures of both the organizations existing then, viz. the Indian National Congress and the All India Muslim League which subsequently led to devastating political turmoil post Lahore Resolution (1940) where Muslim League under the leadership of Md. Ali Jinnah demanded a separate Muslim state- Pakistan. Ambedkar sought to assess the viability and implications of such a demand while critiquing the communal policies of both Hindus and Muslims. Therefore, the work, being unique, offers the pragmatic analysis by Ambedkar that is based on historical realities rather than ideological aspirations. He was critical of both Hindu majoritarianism and Muslims separatism, seeing both as symptomatic of deeper social and political failures in British India.

Hindu-Muslim unity, according to Ambedkar, was not a historical fact but rather a myth. He rejected the nationalist notion that Muslims and Hindus had lived in harmony for millennia. Rather, he noted that the social structures, traditions, and political goals of the two societies were essentially different. His assessment of Muslim political identity was closely linked to religious conservatism and a strict caste structure that Hinduism later softened to bring the two populations together and improve their relationship—conditions that still hold true today.

Ambedkar examined the Muslim League's demand for Pakistan and questioned whether Muslims were truly a separate "nation" as Jinnah claimed after providing his 14 points. He scrutinized the League's justifications on the following grounds:

 ○ The Two-Nation Theory – Ambedkar found the theory problematic in the sense that it reduced Indian history to a religious binary, ignoring the complexity of regional, linguistic, and caste-based identities.

 ○ Muslim Grievances – He acknowledged that Muslims feared Hindu domination but argued that their grievances were often exaggerated and politically motivated.

While he recognized the legitimacy of Muslim concerns, he was skeptical about whether Pakistan would actually solve their problems or merely create new ones.

However, Ambedkar also criticized Gandhi and the Indian National Congress. Instead of tackling the issues of power sharing, he believed Gandhi's strategy was one of appeasement. The inability of the party to create the necessary unity was caused by their refusal to see that practical answers, not sentimentalism, were needed to solve the issue. The Muslim League moved closer to independence as a result of the immediate rejection—rather than careful consideration—of separate electorates for Muslims, as called for in the 1932 Communal Award. Gandhi and Ambedkar's ideologies might occasionally be very different. Despite his opposition to the strict caste-based segregation, he thought Gandhi was contradictory since he did not address how caste influenced Hindu-Muslim relations.

The most notable section to be considered in this book is to justify whether Pakistan can be a viable nation? Ambedkar analyses pragmatically by considering economic, military as well as internal struggles by tabulating the data and comparing between the scenario going to visible post- Partition. He doubted that newly found Pakistan could not be able to sustain itself economically without dependence on India. Similarly, a divided India would lead to persistent border conflicts, a prediction that became reality in Kashmir and later IndoPakistani wars. He also considered the internal struggles that would happen in Pakistan, and later on it became reality seen in the Bangladesh Liberation War (1971).

Although he concluded that Pakistan might become a reality, but would not be able to solve the communal conflict, which is evident in present day bilateral relationship between the countries. To relate his analysis in contemporary scenario, many found to be true, be it his warning of Pakistan's struggles with economic dependence, military dominance and internal ethnic conflicts. Moreover, his deeper concerns for caste as well as religion perpetuates still today, making them politically charged issues.

The unique perspectives offered by Ambedkar in this work, thus, stand out as deeply analytical as it was rooted in realism. Ultimately, he critiqued the faults of both the religion based organizations as he foresaw that Partition would consequently let individuals grapple with identities. So, a reading of this book offers critical insights, forcing readers to re- examine the history of Partition, and how it tampered the notion of 'unity in diversity,' and its relation in terms of the future of democracy, secularism, and identity politics in South Asia.

Partition Discourse and his Relevance

Apart from his other major roles throughout the shaping of modern India, Dr. Ambedkar's views on Partition are noteworthy. Being different from other historical narratives, his work provides an in- depth analysis which remains pivotal in understanding the contemporary geopolitical landscape. He not only critiqued the British colonial rule, but also pointed faults prevalent within the Nation. He always strive for India to become an egalitarian society, and therefore he was critical of social hierarchies perpetuated in Indian society. His vision of India long year back has not yet achieved, which is evident in the form of identity crisis, social hierarchies and discrimination as well as nationhood in the post-colonial era.

No doubt India got its independence, and Pakistan was created as per the demands from the communal organizations, but a humanistic approach highlights the horrors faced by the individuals in the wake of such political decisions that shattered the lives of many. To Ambedkar, the creation of Pakistan is nothing, but a betrayal of India's notion of secular and pluralistic ethos, i.e. a tampered 'unity in diversity.' As he foreshadowed, such a creation hasn't been able to solve the communal gap, on the contrary, widened. Thus, his critique of communalism and religious fundamentalism continues to be relevant in the context of contemporary debates on nationalism and identity politics.

Significance of the study

⭕ **Understanding Historical Context**

Re- examining the 1947 Partition would help to know the multiple causes so as to help us to avoid such repetitions. A nuanced study of this event would enable the minds to trace the impact level of colonial policies as well as the internal conflicts. Ultimately, an overall grasp in this context would probably help in reconciling between the communities affected by the Partition.

⭕ **Addressing Communalism and Religious Intolerance**

One of the undeniable consequences of the Partition is the extreme rivalry between India and Pakistan as it cemented the communal divisions. Revisiting the Partition would help in challenging the polarized narratives that fueled religious intolerances. By letting know the importance of secularism, this study would provide insights into overcoming sectarian conflicts, while critically analyzing the legacy helps in healing the inter- community relationships.

⭕ **Uncovering Marginalized Narratives**

A re- examination of the Partition of 1947 through marginalized voices rather than the dominant ones would uncover Indo- Pakistan Relations as it help in grasping comprehensive understanding of Partition.

○ **Indo- Pakistan Relations**

The lingering effects of Partition is still relevant in shaping contemporary India- Pakistan relationship as it will help in understanding refugee crisis and Kashmir issue. Studying Partition would therefore help in fostering peace and strengthening diplomatic relationship.

○ **Exploring Ambedkar's Vision**

B. R. Ambedkar's influential work, *Pakistan or Partition of India?* offers critical insights into the majority- minority relationship by highlighting the attitudes of Hindu dominant class. Thus, his critical exploration on this event remains relevant in contemporary scenario also, and hence once can address the ongoing communal conflicts, and ensuring equitable governance. Therefore, re- examination can help in assessing socio- political challenges.

○ **Revisiting for Social Justice**

The migration and displacement happened during Partition created trauma in the individuals who faced the harsh time. Re- examining it through a social justice framework allows for an acknowledgement of historical injustices. Addressing these injustices can lead to better refugee rehabilitation of refugee policies, and other initiatives.

○ **Strengthening Unity in Diversity**

No doubt an illogical line was created to demarcate the people based on communities, but once they shared the relationship of brotherhood due to shared cultural and historical heritage. Re- examining this period can help promote interfaith harmony and counter divisive politics, thereby reclaiming their shared histories, and can work toward a more cooperative and less confrontational relationship.

○ **Academic and Cultural Inquiry**

Partition Studies remain a pivotal area of study as it encourages critical reflection which allows for a deeper understanding of its long term impact. Literature, cinema, and oral histories humanize the tragedy making it more accessible for contemporary generations. Connecting younger audiences with these narratives ensure that the lessons derived remain relevant in today's socio- political climate.

Discussion:

Peter T. Coleman was right when he highlighted that 95 percent of the world disputes can be resolved by various means, but India- Pakistan rivalry relationship comes under the 5 percent unsolvable disputes. Their clash initially started with national identities, and now its effect is seen on territorial disputes, and in the contemporary scenario they've become nuclear rivals.

It has been rightly claimed that India- Pakistan relationship in recent times is a sort of communal riot disguised in armour. Both the countries, although independent from colonial rule, but are being colonized by their own prejudices. The Indian RSS believes Pakistan as unacceptable entity that pose challenge to the civilized existence of India, and on the other hand,

the Pakistan alleges that India wants to militarily crush Pakistan and its existence. The three core geostrategic issues affecting the relationship between two includes Kashmir, water sharing and Siachen glacier.

Kashmir has remained one of the princely states during colonial rule. After the 1946 memorandum, it was solely dependent on such princely states whether they want to join Pakistan, India or else remain independent. The main problem arise in Kashmir was due tot the fact that it's a Muslim majority area ruled by a Hindu monarch, Hari Singh. A detailed historical overview shows how Pakistani troops disguised as tribesmen entered Kashmir to annex it to Pakistan, and subsequent request of Hari Singh to India to support him with arms and troops. Meanwhile Kashmir has not acceded towards either India, or Pakistan, but upon

Lord Mountbatten's suggestion, Nehru decided to help Hari Singh, and to this Pakistan react by claiming the accession as a fraud. This led Nehru to submit the report to UN to restore peace by following appropriate law and order, which led the Security Council to adopt Resolution 39. The situation being sensitive took various measures until they were able to sign an agreement with India and Pakistan in Karachi in 1949 which led to drawn of a ceasefire temporarily between Kashmir territory left with India and Pakistan occupied Kashmir (PoK). But the rivalry continued to take worse turns in the coming days.

The General Election 1970 in Pakistan created again another unfavorable condition when power sharing issue came as Awami League led by Sheikh Mujibur Rehaman won in East Pakistan, while Pakistan People's Party (PPP) swept the polls in West Pakistan. Upon reaching deadlock, the supporters of the former started to leave country and migrated to West Bengal consequently leading to refugee influx. India decided to deal with this diplomatically but as usual no favorable results came out, and finally India, supporting Sheikh Mujibur Rehaman seceded East Pakistan from the West leading to the birth of Bangladesh, which proves Dr. Ambedkar's warning that there's the possibility of conflict withing the people of Pakistan itself. In the coming days, although Shimla Agreement took place and Pakistan agreed to resolve Kashmir issue bilaterally, but according to critics India lost an opportunity in 1972 to make the LoC as an international border, leading to failure of stabilize Kashmir. Many a times, be it US or China, used Pakistan as a base to create troubles for India. Again the tensions escalated between India and Pakistan in 1998 with the test of nuclear weapons. However, under the ministership of Atal Bihari Vajpayee and Manmohan Singh, India tried to re- establish peace with Pakistan but the Kashmir issue remained unsolvable. The Peace Process derailed in 2006 with blasts of Mumbai local trains and in 2007, the bombing of Samjhauta Express. Although investigations found it the acts of Hindu terrorists. But 26/11 attack altogether halted the peace process.
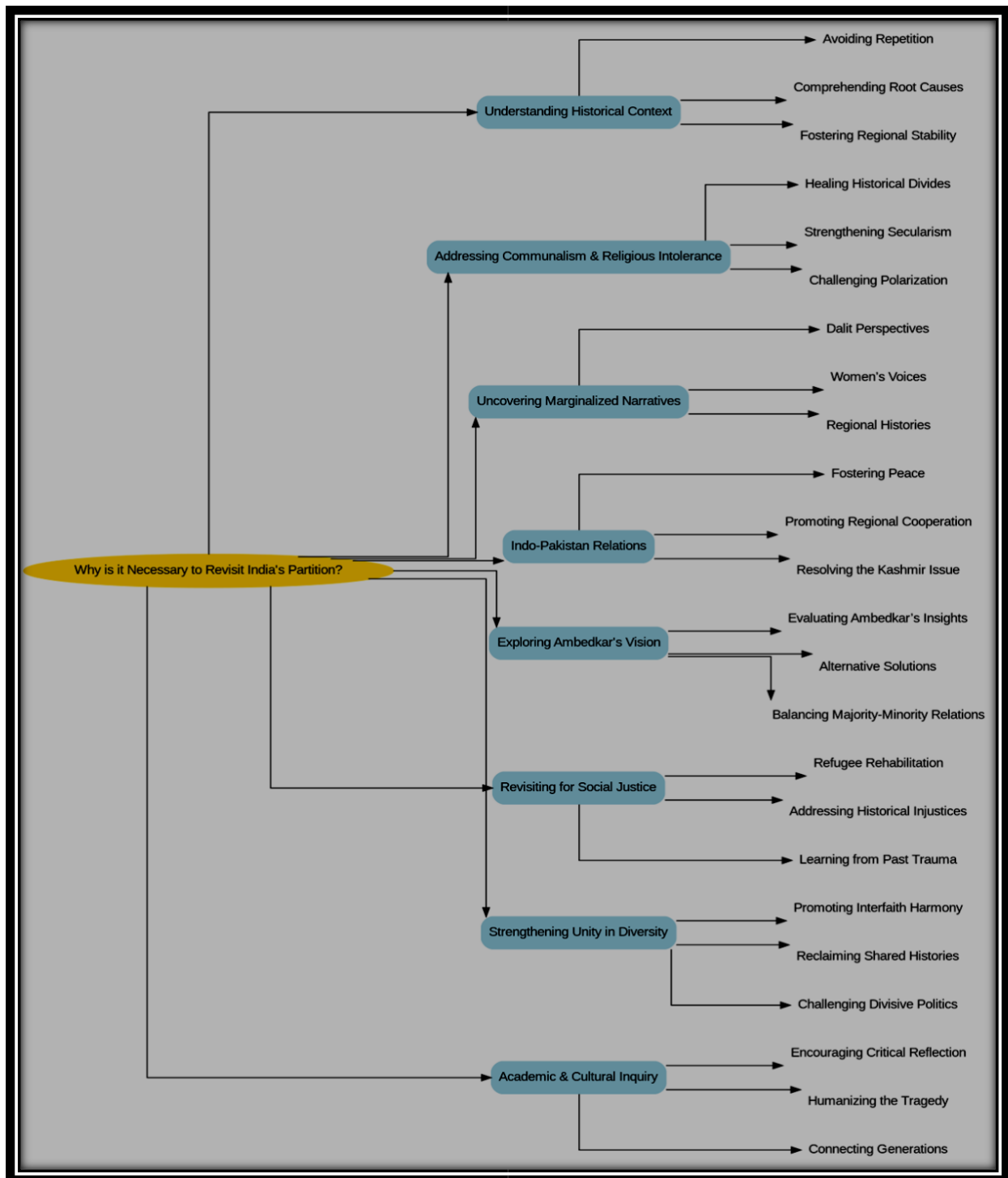
Causes of Partition

- Colonial Policies and the British Rule: The introduction of Divide and Rule Policy plays a significant role. The loose relationship among the various relationships paved way for the British to expand it further which would benefitted them greatly.

- Rise of Communal Politics: The complex relationship between the politics and religion is another significant factor. It always led to increase tensions and consequently igniting religious politics.

- Failures of cooperation: The 14 points proposed by Md. Ali Jinnah and the subsequent rejection from Congress led to failure of cooperation despite being coexisting harmoniously for ages. This failure not only escalated communal gap, but also led to outbreak of worse riots.

- Religious and Socialized Polarization: the introduction of religion based organizations like RSS and Muslim League injected religious lines in the minds of the individuals and hence led to intensified violence during 1940s in various parts of Bengal, Punjab, and Bihar.

Consequences of Partition

The consequences of 1947 Partition were manifold. Although a line exists as a demarcation between the countries, but the identity crisis still prevails in the contemporary period. The diversified impacts were profoundly illustrated in literary works like *Train to Pakistan*, and "Toba Tek Singh." The former is a work by Khushwant Singh that highlights the aftermath of Partition by representing the human costs for it. Set in a place where there existed communal harmony and how the rise of communal politics and subsequent Pakistan shattered the coexistence. The image of the train from Pakistan with countless dead bodies sheds light on how the notion of brotherhood shattered within a night. The novel focuses on the human cost in the wake of rush political decisions made solely by the elites. As Dr. Ambedkar discussed in the *Pakistan or the Partition of India* how the failure of coexistence led to face the brunt consequences by the common people. The latter is a short story by Saddat Hassan Manto that exposes the senselessness of dividing people based on religion. The question, "Where is Toba

Tek Singh?" itself proves this fact. Ultimately, the protagonist dies at no man's land, which symbolically represents the feelings of the victims of post- Partition.

Although constitution introduced some measures to make stand appear as a country of 'unity in diversity' but some case studies show this notion being tampered. Article 25 states 'Freedom of Religion' to all Indians, but in reality the various incidents of communal riots and mob violence as well as politicization of religious identities weaken secularism. It proves that constitutional rights are there but societal realities often prevent its full realization. For example, Delhi Riots of 2020, Babri Masjid Demolition and its consequences etc.

Key findings

- The mingling of politics and religion always has devastating consequences.
- Divisions on any ground exploit governance.
- Misinformation spread by media triggers violence.
- Inclusivity should be adopted for providing citizenship, and being careful dealing with sensitive cases.
- Diplomatic talks are necessary to forget the horrific past.
- Education and cultural exchanges should be there to foster reconciliation.
- External manipulation can have catastrophic consequences.

Conclusion:

B. R. Ambedkar was not just a leader for Dalits but a visionary who shaped the very foundations of modern India. His roles as a social reformer, constitutional architect, political leader, economist, educationist, and religious thinker collectively contributed to India's transformation into a more just and inclusive society. His ideas continue to inspire movements for equality and justice, making him a timeless icon in India's struggle for human rights. His views on Partition were based on realism rather than sentiment. He saw the division of India as an unfortunate but necessary step to resolve Hindu-Muslim tensions. Unlike Gandhi, who sought unity at any cost, or Jinnah, who demanded Pakistan as a Muslim homeland, Ambedkar approached the issue from a practical perspective. His advocacy for a population exchange, his critique of Congress' appeasement politics, and his warnings about the dangers of a theocratic Pakistan remain relevant even today. His insights continue to shape discussions on communal harmony, minority rights, and national integration in India.

Ambedkar's advocacy for the rights of marginalized communities resonates with the experiences of those who were marginalized and displaced during the Partition. As a leader of the Dalit community, Ambedkar understood the importance of addressing social inequalities and injustices that contribute to conflict and division. His vision of a more equitable and inclusive society offers a framework for reconciliation and healing in the aftermath of the Partition.

The Partition discourse also raises questions about the legacy of colonialism and imperialism in shaping the identities and boundaries of nation-states in South Asia. The arbitrary drawing of borders by British colonial authorities has had far-reaching consequences for the political and social dynamics of the region, leading to ongoing territorial disputes and conflicts. The scars of partition continue to haunt the region, fueling communal tensions and nationalist rivalries.

Ambedkar's critique of colonialism and imperialism underscores the need to challenge dominant narratives and power structures that perpetuate inequality and injustice. His call for social and political transformation resonates with the struggles of marginalized communities in South Asia who continue to face discrimination and marginalization. Ambedkar's legacy as a social reformer and human rights advocate offers a beacon of hope for those seeking to build a more just and inclusive society in the aftermath of the Partition.

In conclusion, the Partition discourse and the relevance of Ambedkar offer valuable insights into the complex dynamics of identity, nationalism, and social justice in the context of postcolonial South Asia. The legacy of the Partition continues to shape the political and social landscapes of India and Pakistan, underscoring the enduring impact of colonialism and communalism on the region. Ambedkar's vision of a more equitable and inclusive society provides a powerful antidote to the divisions and injustices that continue to plague the region, offering a path towards reconciliation and healing for those affected by the traumatic events of the Partition. By engaging with the Partition discourse and drawing inspiration from Ambedkar's commitment to social justice, we can work towards building a more just and inclusive future for all communities in South Asia.

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HIGHER EDUCATION SYSTEM AND THE SIGNIFICANCE OF NEW EDUCATION POLICIES

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Abstract:

This paper deals with the most significant of new education policy in higher education. With the goal of giving everyone access to high-quality schooling and higher education with the expectation of comprehensive and research-oriented advancement, NEP-2020 is a creative and forward-thinking plan with both good and negative features.

Keywords: New Education Policy 2020, Higher Education System, Implementation Strategies, Research and Innovation Focus.

Introduction:

For nations all throughout the world, 2020 has been a remarkable year. Aside with COVID-19, the creation of the New Education Policy (NEP) 2020 was one of the significant developments in India. Researchers have become interested as a result of the numerous committees' recommendations to raise the budgetary allotment for education to 6% of GDP.

Enhancing the quality of higher education in India is the goal of the National Education Policy (NEP) 2020. It seeks to create well-rounded people with abilities appropriate for the twenty-first century and set them up for professional success. Additionally, the strategy seeks to increase the flexibility and accessibility of higher education.

The National Education Policy (NEP) 2020 seeks to improve the inclusiveness, innovation, and holisticity of India's higher education system. The NEP aims to give students the skills they need for the modern world and raise the standard of higher education institutions (HEIs).

The Government of India proposed and distributed the first NPE in 1968; the second policy followed in 1986; and the current Indian Prime Minister, Narendra Modi, introduced the third significant reformative policy in 2020 (Govt. of India, 2020).

NEP-2020, the National Educational Policy In order to meet the fourth Sustainable Development Goal (SDG) of the UN, which is to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030, India must support developmental imperatives in order to overcome its challenges and become a developed nation.

India thinks it can accomplish this aim by 2040 at the latest with its new national education strategy 2020, giving everyone, regardless of social or economic background, fair access to high-quality education. By improving education at every level and developing a new ideal system through the revision and revamping of the current education structure, including policies, regulations, and control systems, the new policy NEP-2020 is designed with the goal of creating a platform to provide high-quality school and higher education to every citizen of the nation with Indian ethos and values, transforming the nation into an equitable and vibrant knowledge society and global knowledge superpower.

By offering top-notch education to everyone, this National Education Policy aims to create an education system with roots in Indian culture that directly contributes to making India—that is, Bharat—a global knowledge superpower and transforming it sustainably into an egalitarian and dynamic knowledge society. According to the Policy, our institutions' curricula and pedagogy should foster in students a profound respect for the Constitutional principles and Fundamental Duties, a sense of national pride, and an understanding of one's own duties and responsibilities in a changing global environment.

NEP 2020:

Realizing one's full potential, creating a just and equitable society, and advancing national progress all depend on education. The foundation of India's ongoing rise and leadership in the world in terms of economic expansion, social fairness and equality, scientific breakthroughs, national integration, and cultural preservation is the provision of universal access to high-quality education.

The greatest approach to use our nation's abundant resources and abilities for the benefit of each person, society, the nation, and the globe is to provide universal access to high-quality education. Over the next ten years, India will have the largest youth population in the world, and our capacity to offer them access to top-notch education will define our nation's destiny.

Goal 4 (SDG4) of the 2030 goal for Sustainable Development, which India accepted in 2015, reflects the global goal for education development and aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by the year 2030. In order to accomplish all of the important aims and goals (SDGs) of the 2030 Agenda for Sustainable Development, it will be necessary to restructure the whole educational system to promote and encourage learning.

Rapid changes are occurring in the world's knowledge landscape. With the advent of big data, machine learning, and artificial intelligence, among other dramatic scientific and technological advancements, many unskilled jobs around the world may be replaced by machines. At the same time, there will be a growing need for a skilled workforce, especially in the fields of mathematics, computer science, and data science, as well as multidisciplinary skills in the social sciences, humanities, and sciences. The way we meet the world's energy, water,

food, and sanitation needs will change significantly as a result of climate change, rising pollution, and the depletion of natural resources. This will necessitate the need for additional skilled labor, especially in the fields of biology, chemistry, physics, agriculture, climate science, and social science. The necessity for interdisciplinary learning is increased by the increasing occurrence of epidemics and pandemics, which will also necessitate cooperative research in the management of infectious diseases and the creation of vaccines, as well as the ensuing societal problems. The need for art and the humanities will increase as India develops into one of the world's three largest economies and a developed nation.

Higher Education:

In order to create India as envisioned in its Constitution-a democratic, just, socially conscious, cultured, and compassionate country that upholds liberty, equality, fraternity, and justice for all - and to promote human and societal wellness, higher education is crucial.

The nation's economic growth and sustainable livelihoods are greatly aided by higher education. As India transitions to knowledge - based economy and culture. Higher education is anticipated to be a goal for an increasing number of young Indians. An established set of values and abilities must be integrated into every learning level, from preschool to higher education, in order to build whole persons.

The following significant adjustments to the present system are part of the policy's vision:

- ✓ Transitioning to a higher education system with a significant number of multifunctional universities and colleges, at least one in each district, and more HEIs throughout India that provide programs or teaching in local or Indian languages.
- ✓ Advancing an undergraduate education that is more interdisciplinary.
- ✓ Moving towards faculty and institutional autonomy.
- ✓ Reworking student support, curriculum, pedagogy, and evaluation to improve student experiences.
- ✓ Through merit-based hiring practices and career advancement based on service, research, and teaching, the integrity of academic and institutional leadership roles is being reaffirmed.
- ✓ Enhanced access, equity, and inclusion through a variety of initiatives, such as more chances for exceptional public education; scholarships from private or charitable institutions for underprivileged and disadvantaged students; online learning and Open Distance Learning (ODL); and all facilities and educational resources accessible to students with disabilities.
- ✓ Creation of a National Research Foundation to actively promote research in colleges and universities and to provide funding for exceptional peer-reviewed studies.
- ✓ HEIs are governed by highly competent independent boards with administrative and academic independence.

✓ One regulator's "light but tight" rules for higher education.

Key features of NEP 2020 for higher education:

A. **Multidisciplinary education:**

By 2030, the goal of the policy is to have interdisciplinary colleges and universities in every district. Students will be able to enroll in classes from several streams as a result.

B. **Flexible learning:**

Numerous program outcomes, including advanced diplomas, bachelor's degrees, bachelor's of research, and certificates, are available to students. Additionally, they can take a sabbatical and come back later to finish their degree.

C. **Vocational education:**

Vocational education is incorporated into undergraduate programs by the policy.

D. **Internationalization:**

By forming alliances with foreign universities, promoting faculty and student exchanges, and attracting international students, the policy seeks to boost internationalization.

E. **Academic Bank of Credits (ABC):**

Students can keep and move their credits across colleges using this digital repository.

F. **Teacher recruitment:**

The goal of the policy is to hire instructors through open procedures and advance them according to their qualifications.

G. **Lifelong learning:**

The goal of the strategy is to increase system flexibility in order to promote lifelong learning.

The National Education Policy (NEP) of 2020 has some disadvantage points for higher education, including:

A. **Implementation challenges:**

Due to a lack of infrastructure, qualified instructors, and money, the policy's lofty objectives could be challenging to meet.

B. **Implementation**:

A number of teachers are concerned about how the policy will be implemented, particularly at schools that have historically prioritized specialist fields.

C. **Teacher-to-student ratio**:

The ratio of teachers to students could be problematic.

D. **Teacher shortages:**

To carry out the policy, there could not be enough qualified educators.

E. **Difficulty adopting new teaching practices**:

Encouraging instructors to embrace innovative teaching methods can be challenging, particularly in rural locations.

F. Digital divide:

Although the strategy places a strong emphasis on digital education, not all students have equal access to digital devices, the internet, or online learning tools. This may make educational disparities worse.

G. Student pressure:

The policy may increase pressure and competition for students.

H. Infrastructure and resource constraints:

Resource and infrastructural limitations could exist.

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HURDLES IN INDIA'S FOOD PROCESSING SECTOR:
KEY ISSUES AND STRATEGIC SOLUTIONS

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Introduction:

Promoting food processing is seen as a way to enhance farm incomes in India, as it raises the demand for agricultural products for further value addition (Ghosh, 2014). Value addition to food has assumed critical importance in the last decade due to socio-economic and industrial factors.

As per research conducted by *Food and Beverages News* (2022), the annual production of the food processing industry is $7 trillion, making it one of the largest global sectors. The food crops, which were once confined to specific regions, are now available globally, thanks to globalization. People are becoming increasingly aware of various types of foods available worldwide. The global food processing market growth rate is projected to be 7.60% until 2030. The global food processing market value was $99.68 billion in 2020, and it is poised to touch $134.7 billion by 2030.

India, an agriculture-dominant country, ranks first in the production of milk, spices, and livestock. It is the second-largest producer of food, vegetables, fruits, and fish (IBEF, 2022) and is ranked fifth in terms of production, consumption, exports, and expected growth (Singh, P., 2012; Hussain & Yadav, 2016; Sakina, M., 2019).

As per the *Annual Survey of Industries 2019-20*, the food processing industry accounted for 15.8 percent of factories, 8.9 percent of wages paid to workers, and 12.38 percent of employment in registered factories, whereas the unregistered sector provides employment to 5.1 million workers. It is expected that the output of the Indian food processing industry will reach US$ 535 billion by 2026.

Furthermore, it has been observed that due to changing consumption patterns, rising urbanization, an increase in food consumption, and changes in the gender composition of employees, the country now prefers multiple food options in addition to traditional Indian foods. Due to these factors, the revenue of the Indian food processing industry is expected to reach US$ 1.2 trillion by 2026 (IBEF, 2022).

Although India is a large producer of many agricultural products and has significant potential for food processing, the processing level is still less than 10 percent compared to other

countries—USA (65 percent), the Philippines (78 percent), and China (23 percent). This is a concerning issue for India, as a significant amount of its agricultural output is wasted.

According to a *Food and Agricultural Organization (FAO)* assessment, 40 percent of the food produced in India each year is lost due to food fragmentation and an ineffective supply chain structure. Ironically, this loss occurs even before the food reaches consumers. In fact, India wastes more grains than Australia produces and more fruits and vegetables than the entire United Kingdom produces. Food produced in India is wasted annually to the tune of Rs. 50,000 crores, according to the Ministry of Agriculture, which is roughly 1 percent of India's GDP.

Despite having a substantial raw material base, India has not been able to fully realize its processing potential due to several issues that are impeding the expansion of this industry. To advance this industry, these challenges must be addressed. Increasing the processing of perishable goods will help reduce waste, create jobs, bring lucrative pricing for farmers, and contribute to the government's goal of doubling farmers' income.

Under this chapter, an attempt has been made to understand the problems faced by the Indian food processing industry at both the national and state levels. To achieve this, the chapter has been divided into two parts:

- Part 1 highlights the general problems and challenges faced by the Indian food processing industry.
- Part 2 focuses on the problems encountered by the food processing sector at the state level.

Part I

Problems Faced by Indian Food Processing Industry

Diverse and difficult obstacles face the food distribution, processing, and preservation industries. These issues must be resolved to support the expansion of the agricultural and food processing industries.

Poor Infrastructure - Poor roads and an intricate interstate transportation system have already caused significant damage to produce. Double taxation and congested traffic jams further exacerbate the problem. Additionally, checkpoints within states can occasionally halt transit completely, complicating an already convoluted system.

Accidents and vehicle breakdowns are also highly common due to a lack of properly trained drivers and inadequate vehicle upkeep. Inadequate infrastructure ensures that an additional 10-15% of food is lost during transportation. Even if the harvest makes it to the warehouse or market, it often has little to no shelf life remaining.

(i)   Shortage and Misallocation of Infrastructure - Inadequate infrastructure for storage, sorting, grading and post -harvest management, road connectivity, sea ports, airports, information and marketing linkage, electricity and cold chain are the biggest constraints for Indian food processing Industry. Cold storage facility plays a crucialrole for perishables such as

fruits, vegetables milk and milk products (Dharni & Sharma, 2008). As per the Horticulture Board, In India, there is a 90% shortage of cold storage facilities. Gujarat, West Bengal, UttarPradesh, and Punjabaretheonlystatesin which 60% of all of India's cold storage facilities are found. States like Tamil Nadu have access to fewer than.03% of the country's 6500 cold chain warehouses. Most ofthe cold storage facilities used for potatoes are also utilised to store other mixed crops and vegetables. This refers to the inefficient use of the available resources. Additionally, some of these "cold storages" merely have air conditioning.

(ii)   High Cost of Establishing and Maintaining Cold Chain- In India, it is exceedingly costly to create and maintain a cold chain. India requires a cold storage facility for roughly 6000 metric tonnes of food, which would cost about $773,000 to start. Although the GOI has programmes to assist the cold chain industry, the total cost of establishing and maintaining the cold chain is very high. Plans to lower manufacturing and the cost of constructing a cold chain system should exist. Despite being supported by the GOI, running a cold chain warehouse is still expensive.

(iii)   Poor Quality and Improper Cold Chain Transport - Due to their perishable nature, dairy, meat, and poultry are given top priority in the cold chain. The above- mentioned products would be almost impossible to find on the market if their transportation was not temperature-controlled. Additionally, this indicates that 90% of the products are being transported outside in subpar packaging using non-refrigerated systems. The produce is typically transported in overloaded trucks, often suffering damage before it even reaches the warehouse or the market.

The annual harvest of expensive fruits and vegetables, India's second-largest export, is severely hampered by the allocation of 10% of the transit infrastructure.

(iv)   Lack of Awareness and Trained Manpower - According to the FICCI survey on skill demand in the food processing industry, the majority—58% of businesses—were unhappy with the abilities of the trained labor available. Additionally, 72% of firms were dissatisfied with employees' proficiency in using modern tools, equipment, and technologies required for their tasks. At each step of the value chain, serious technical support and knowledge gaps were found. In our nation, cold chain is another name for air-conditioned spaces. To help the business, more education and training on the cold chain are required. Without these, no matter how much money is pushed into the system, the firm will always appear unappealing. 90% of cold chain warehousing and logistics are in short supply, according to research.

(v)   Lack of an All-Encompassing National Policy for the Food Processing Industry- There are so many Acts, says Piruz Khambatta, Chairman & Managing Director of Rasna International, "that it will bewilder a novice entrepreneur in the food market" (Pradhan, 2017). Instead of a single comprehensive policy, the food processing sector is subject to a number of legislations at the state and federal levels. In the past, they were developed to work in

conjunction with one another to achieve comprehensive food sufficiency, safety, and quality. However, this strategy produced contradictions in the regulatory environment for the food industry (Rais *et al.,* 2013).

(vi)　　Problems in Implementation Food Safety Regulations- Food safety regulations are not being implemented properly, so the Indian government unified eight laws into the 2006 Food safety and Standards Act (FSSA). However, a FICCI poll found that food safety rule implementation was difficult. Due to the high expense of obtaining international certifications, it has been noted that it is exceedingly difficult for smalland medium exporters of processed and fresh foods to execute all worldwide food safety procedures. As a result, exports from India become more expensive, and possibilities for doing business abroad are lost (Mahajan *et al.,* 2014).

Obstacles in the Supply Chain- The food processing industry's supply chain is very lengthy and fragmented, which results in high wastage and high costs. Because it comprises perishable items, numerous minor parties, and intermediaries, the agri-food supply chain is extremely complicated. There is virtually little infrastructure in India that links various minor stakeholders, including farmers, distributors, processors and manufacturers, retailers, etc. Because of the supply chain's extreme fragmentation, it is difficult to plan collectively and change the system as needed (Aggarwal & Srivastava, 2016). Additionally, the seasonal, varied, and perishable character of agriculturaloutput makes projections dubious.

(vii)　　Access to Credit- Units that process food require significant capital investment. Farmers' inability to obtain financing restricts their access to operating money, which in turn inhibits their ability to invest in technology and high-yielding inputs.

(viii)　　Lack of Research and Development- The food processing sector in India is dominated by small and medium-sized businesses. They are unable to finance R&D. R&D is now the duty of the government. According to international standards, Indian R&D institutions have not been able to create novel goods, procedures, or equipment. The main causes of this include the separation of academic and practical research, poor industry connections, a lack of a strong commercial orientation, and a lack of cross- border cooperation.

(ix)　　Low Adherenceto Quality Standards- processed foods from India are frequently rejected in US and EU markets because they don't adhere to Codex and HACCPcriteria.

(x)　　Taxation Issues- The norm for taxing food products in the majority of developed nations is oneor two rates. In nations like Dubai orSaudi Arabia, foodproducts arenot subject to taxes Even in Singapore, the tax rate on food items is only 4%. While the GST rates for Indian food products are 0%, 5%, 12%, 18%, and 28%. This decision may have been made with the intention of lowering the GST on basic goods purchased by low-income consumers, but it has complicated the process of determining the pricing of processed foods. For instance, blended condiments and seasonings draw 28% of the market, whereas many preserved vegetables (such

as tomatoes, mushrooms, and nuts) fall into the18%range. Thecost forprocessedpackaged foodssuchinstant mixes for idlis (rice cakes), dhokla, and mixtures for soups, chilli sauce, garlic ginger mixes, idlis (rice cakes), dhoklas (a batter snack), and other items are 18%. Additionally, different milk kinds, such as full cream, double-toned, and toned milk, are taxed at varying rates ranging from 0% to 18%. It has to be properly clarified. According to Mr. Khambatta, managing director of Rasna, "Higher taxes will impede the growth of the food processing business, resulting in a reduction in agricultural growth

(xi)   Higher Cost of Packing- In the case of processed food products in India, the packaging cost represents asignificant portion of theconsumer price. The priceis up to 20% for fruit juice and potato chips. In addition, a lot of food is sold in small packs, which drives up packaging costs as a percentage of overall expenses (Dharni and Sharma, 2008). Additionally, the majority of the packaging is sourced from China.

(xii)   Raw Material Problems – The food processing industry uses seasonal, perishable, and erratic raw materials. Therefore, a significant restriction for this industry is the availability of the needed amount and quality of raw materials at the appropriate time.

Part II

Problems Faced by Food Processing Industry in Punjab State

Under this Part, an attempt has been made to study the problems faced by the food processing industry at the state level. The problems have further been sub-divided into two categories viz general problems faced by the food processing industry in the state and specific problems. Further, the specific problems have in turn been analysed on the basis of surveys conducted on respondents of selected units from the perspectives of investors, policy makers and management of the business enterprises. Finally, an attempt has been made to analyse the problems related to financial management practices based on self-structured questionnaire. For the collection of primary data, the employees of Finance Departments were primarily approached and out of 60 units, concerned employees of only 50 units responded positively and their responses have been used for further analysis. To study the problems, linear and non-linear models were created by using a statistical software SPSS24. All the financial management practices were taken as predictor variables and performance and growth indicators were taken as response variables. Further, the problems related to financial management practices have been analysed into three sections viz Section I covers the problems related to overall selected food processing units. Section II covers sector wise analysis of problems and Section III deals in comparative analysis of problems faced by the three sectors.

General Problems Faced by Food Processing Units in Punjab

There is good potential for the establishment of agro-processing units in Punjab due to the higher level of agricultural productivity and production in the state. According to MOFPI, about 7.31% of the total registered factories in the Food Processing Industry (FPI) sector in the country are in

Punjab. In this regard, Punjab holds the 4th highest share, surpassed only by Andhra Pradesh, Tamil Nadu, and Telangana.

According to a KPMG report, however, processing capacity is concentrated in a small number of states because the top five states—Maharashtra, Gujarat, Uttar Pradesh, Karnataka, and Tamil Nadu—account for more than 50% of the country's gross domestic product (GVA), while historically stronger states like Maharashtra, Madhya Pradesh, Punjab, and Haryana are seeing a decline in GVA share. Further examination of the processing capabilities of the various stages reveals that the expansion is restricted to a small number of segments and to some states only.

Though Punjab has a strong raw material base, it has been unable to tap the real potential for processing because of certain challenges that hinders the growth of this sector in the state. These challenges need to be addressed to take this sector to the next level in state. Various researchers and industrial expert highlighted various problems which are summed up below:

i) As reported by BS Ghuman in his article that due to locational disadvantages and central government's tax holidays, various units moved out to neighbouring hill states.

ii) Between 1960 and 1990, Punjab led all other states in terms of economic growth and per capita income, with the commercialized agriculture industry serving as the main driver of this success. However, due to the almost stagnant output of two important crops, paddy and wheat, the original engine of growth has run out of fuel. Punjab's second engine, driven by industry, has sadly not yet taken off. The misalignment of these two engines encapsulates the state's "growth collapse" syndrome.

iii) The majority of the agricultural output from Punjab is sent to the main pool. The majority of agricultural inputs are also imported from other states. It is necessary to review the current export and import composition. The promotion of high-tech food processing enterprises and businesses that provide agricultural inputs lacks a sound plan. Transportation costs are also seen as the main issue hindering Punjab's food processing industry's performance. The perishable quality of the food stuff shortens shelf life because Punjab State is in a sub-tropical climate where temperatures canrange from below zero to above forty in different seasons. The organisations must pay more for transportation utilising ice blocks or refrigerated trucks. Transporting bothraw materials and finished goods to markets comes at a cost.

iv) The issue of high tax rates was one that affected all businesses. Some businesses believed that governmental constraints also prevented them from realising their full business potential. Companies with a high volume of processing believed poor distribution and a lack of customer awareness of the quality of unprocessed food are also significant issues.

v) Agricultural produce's value chain and supply are highly splinter and largely dominated by middleman, due to which the benefits of production do not pass to the either to producers

and consumer.

vi) Production of high value items, which have high potential of processing, fluctuates due to shortage of value chains.

vii) Supply of optimum quantity of quality raw produce is another issue which is hampering the food processing industry. Contract farming is viewed as a feasiblechoice to resolve this issue. Yet, contract cultivating model has not fostered the way it was expected. It is most important that contracted price be adjusted with market price depending upon the demand-supply condition to ensure that the contracts are not go against and economic interests of both processor and producer are watched in case of deficit or surplus situations.

viii) Lack of Collection centres with pre-cooling facilities like that for milk should be more established for fruits, vegetables and other perishables.

ix) Power plays a pivot role for the growth and development of anykind of industry. Its adequacyfor uninterrupted supplyand availabilityat reasonable rates has to be ensured for establishment and development of food processing industry. But Punjab has lack in this case.

x) Scarcityin Some basic infrastructures, which are essential for processing, require to be strengthened. Some examples are refrigerated vans, pre-cooling chambers, quality testing labs and grading and standardization facilities.

xi) Land prices are very high in some states of the country like Punjab and thus, it is quelling the development of processing industry. When the land happens to be expensive, in such situations industrialists naturally get fascinated to other areas where low priced land is available Other problem is that Some states, like Punjab, are land-locked that is also badly affecting the growth and development of industry since shipment of processed produce to the world market is costly which makes the industry in that state globally less competitive. Thus, mechanism requires to be developed in respect of freight subsidy to improve economic competitiveness of the processed items.

xii) Theconsumer behaviouris anotherissuethatneeds toberegularlymonitored.

xiii) Another problem which is faced in Punjab is Quality and safety issues relating to processed and raw food products in relation to international standard need to be strictly attached and enforced. Increasing adulteration in foods and rising consumer awareness about quality of food have create a serious challenge and problems to the monitoring agencies.

xiv) Lack of optimum mega food parks and agri-export zones in accordance with agriculture produce is another serious problem faced by the food processing in thestate.

Specific Problems Faced by Food Processing Units in Punjab on the Basis of Survey Conducted

Primary open based administered survey was conducted to gather the opinions of managerial persons by filling up a survey form. Responses on problematic issues faced by food

processing units in the state were gathered. Responses collected from employees were taken on investors view point, management/ institutional view point and policy makers view point for all sectors. Responses from the concerned administrativeemployees of selected units were collated sectorwise and all of these are discussed as under as per their observations and opinions:

InvestorsPointof View

i) Public Sector: The main problems faced by public sector

- Policy hindrances: The industrial policy in general and policy for the food processing sector has been inconsistent over the year. To quote an instance, there has been no incentive for exports in the food processing sector under the industrial policy of the state of Punjab. Hassles are faced in securing funding for the expansion of plants. Finance is key for business expansion for any unit. The state of Punjab, like most other states in India, has an initiative called Invest Punjab' headed by a senior bureaucrat in the capacity of Chief Executive Officer and functioning like a full-fledged Department is dedicated to processing the requests for investment subsidies to new as well as existing industrial units in the state of Punjab.

ii)   Private Sector:

- High rate of interest on capital has been one of the bottlenecks for new and existing units.
- Lower returns compared to capital invested have been a reason for stagnant growth in the food processing sector in the state.
- Lack of talent availability in the state, especially trained personnel for the food processing industry.
- Lack of qualitative raw material at a reasonable price within the state, leading to procurement from outside Punjab.

iii)   Co-operative Sector:

- Among the co-operative sugar mills, for making payments to farmers for purchase of cane, aid is given by the state govt by way of loan against interest instead of subsidy or grants-in-aid. As a result, interest accruing year on year piling up the debt on sugar mills.

Management / Institutional Point of View

i) Public Sector:

- Liasoning with government departments has been the one of the hindrances faced. There are a number of government departments involved in granting various approvals for setting up new food processing units. Liasoning with so many departments lead to unwarranted delays.
- Availability of quality raw material is another drawback in realising the true growth potential of the food processing sector. Without appropriate raw material, any industry cannot flourish. Moreover, non-availability of raw material with standard quality is even

more pronounced.

ii) Private SECTOR:

- Availability of quality raw material is also a bottleneck for the private sector food processing units Moreover, the price of raw material like milk is souringin the recent past dueto which the cost of production has also gone up drastically.

- Further, the sale price has not been marked up in consonance with the production costs due to obvious reasons, thereby shrinking the profit margins and making the food processing sector unviable.

- High power and fuel costs.

- High cost of labour

i) DEPENDENCYON MIGRANT LABOURWHICH LEADS TO LABOURINSTABILITY CO-OPERATIVESECTOR:

The major problems described by co-operatives specially sugar mills that;

- One of the major reasons for co-operative sector lagging behind the public and private sector units is the technological advancement. Outdated machinery, dating back to 1970s-1980s seriously deters specially in sugar mills, the crushing capacity of the co-operative sugar mills. While the public and private sector has funding available for technological upgradation, the co-operative is at the mercy of the state government.

- The gap between State Advised Prices (SAP) of Rs 380/ Quintal offered for sugarcane to farmers and Fair Remunerative Prices (FRP) of Rs 282/ Quintal given by the Government of India on such purchases makes the co-operative sugar mills perennially unviable.

- Averagecost ofsugarproduction comes to Rs 5800/ Quintal whereas Minimum Support Price (MSP) notified by the government on sale of sugar is Rs 3100/ Quintal since 2020. Production costs include seeds, purchase of urea and pesticides, labour costs and fuel for the machinery.

- Due to restricted monthly sugar sales quota by Government of India, blockage of sugar stock halts the cash flow of co-operative sugar mills. Further, storage and carrying costs of Rs 50 Cr per year adds to burden on the sugar mills.

    Besides, the problems faced by other co-operative units' Management / Institutional Point of view issues include:

    Availability of quality raw material is also a bottleneck for the co-operative sector food processing units.

- Bureaucratic hassles have also been an issue for co-operative food processing units. For any major critical management decision, the approval file go through a full hierarchy of official machinery often leading to delays in decisionmaking.

- Competitive rates from other exporting countries like Pakistan in the export of canned food

(e.g., Saag) has dented the chance of domestic co-operative food processing units in the state.

Policy Makers Point of View

i) Public Sector:

- High rates of indirect Good and Services Tax.

ii) Private Sector:

- Thereshould be no GST on food items.

- Too many legal compliances which should be shifted to self-declarationsinstead of sworn affidavits duly attested by notary or executive magistrates.

- Single window of clearance has not been in reality. As of now only on paperand involving multiple agencies for clearance of new projects/expansion of existing projects.

Other Problems

- The effects of COVID-19 pandemic took a huge toll on sales.

- High cost of land in the state makes the setting up of new industrial units as unviable.

- Slow decision making

- Severe crunch of technical and qualified staff or manning the Mills

Suggestions for Improvement in the Overall Performance and Growth in Food Processing Units in Punjab

- From the survey the different sector' respondents suggest different suggestions for improvement the growth and performance of food processing industry in Punjab which were explained as follow Govt should reduce GST on juices and food items.

- Government should take serious action against those who make adulteration in food items so that quality items should get reasonable price.

- Policy makers should frame policies conducive for exports from Food processing units

- Single window clearance should be introduced wherein the industrialist / entrepreneur has to submit only one application to one authority and all permissions / clearances from various departments should come within time bound period without the entrepreneur having to follow up with different departments individually to send the consent to the centralized department.

- State should acquire the land and make the same available to the industry on subsidized rates.

- Government may work upon promoting availability of raw material at cheaper costs from ports and take corrective measures for the enumerated problems.

- The government may provide a subsidy or grants-in-aid for the ₹90 gap between SAP and FRP

- Nature of loans provided at 12 per cent to Mills may be changed, so as tochange the net

worth of mills. This will enable mills to approach banks for funding.

More funding should flow from the govt for expansion and upgradation of technology in sugar crushing.

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ROLE OF SOCIAL MEDIA IN BUSINESS GROWTH

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Introduction:

Social media has become an indispensable tool in modern business strategies, profoundly influencing growth and success. Its role spans various facets, including marketing, customer engagement, brand development, and data analytics. By leveraging social media platforms, businesses can reach a vast audience, foster direct interactions with customers, and gain valuable insights into market trends and consumer behavior. This dynamic environment enables companies to build brand awareness, cultivate customer loyalty, and drive sales, thereby contributing significantly to overall business growth.

In today's digital age, social media has become an indispensable tool for businesses seeking to drive growth, increase brand awareness, and engage with customers. With over 3.8 billion people using social media platforms worldwide, businesses can no longer afford to ignore the potential of social media. From small startups to large corporations, social media has become a critical component of business strategy, enabling companies to reach new customers, build brand loyalty, and drive revenue growth.

The role of social media in business growth is multifaceted. Social media platforms provide businesses with a range of tools and opportunities to connect with customers, share information, and build brand awareness. Through social media, businesses can engage in two-way communication with customers, respond to feedback and concerns, and build trust and loyalty. Social media also provides businesses with a range of analytics and metrics, enabling them to track engagement, measure ROI, and refine their marketing strategies.

Scope of Social Media in Business Growth

1. **Global reach**: Social media platforms have a vast user base, allowing businesses to reach a global audience.

2. **Diverse platforms:** Multiple social media platforms (e.g., Facebook, Twitter, Instagram, LinkedIn) offer various features and opportunities for businesses to engage with customers.

3. **Cost-effective marketing:** Social media advertising can be more cost-effective than traditional advertising methods.

4. **Real-time engagement:** Social media enables businesses to interact with customers in real-time, responding to queries and building relationships.

5. **Data-driven decision making:** Social media analytics tools provide valuable insights into customer behavior, preferences, and demographics.

Objectives of Social Media in Business Growth

1. To examine the impact of social media on business growth: Investigate the relationship between social media usage and business growth metrics such as revenue, customer acquisition, and brand awareness.

2. To identify the most effective social media platforms for business growth: Analyze the performance of different social media platforms (e.g. Facebook, Twitter, Instagram, LinkedIn) in driving business growth.

3. To determine the key social media metrics that influence business growth: Investigate the relationship between social media metrics (e.g. engagement, reach, clicks) and business growth metrics.

4. To explore the role of social media in customer engagement and loyalty: Investigate how social media can be used to build customer relationships, increase customer loyalty, and drive customer retention.

5. To examine the challenges and limitations of using social media for business growth: Identify the common challenges and limitations that businesses face when using social media for growth, and explore potential solutions.

6. To provide recommendations for businesses on how to effectively leverage social media for growth: Based on the findings, provide actionable recommendations for businesses on how to use social media to drive growth and improve performance.

Significance of the Role of Social Media in Business Growth

Strategic Significance

1. Competitive advantage: Social media can provide businesses with a competitive advantage by enabling them to reach a wider audience, build brand awareness, and engage with customers.

2. Market leadership: Effective use of social media can help businesses establish themselves as thought leaders in their industry.

3. Business transformation: Social media can drive business transformation by enabling businesses to innovate, experiment, and take risks.

Economic Significance

1. Increased revenue: Social media can drive business growth by increasing revenue through online sales, lead generation, and customer acquisition.

2. Cost savings: Social media can help businesses reduce costs by enabling them to reach a wider audience without incurring traditional advertising expenses.

3. Improved customer retention: Social media can help businesses improve customer retention by enabling them to engage with customers, respond to feedback, and build loyalty.

Social Significance

1. Customer engagement: Social media enables businesses to engage with customers, respond to feedback, and build relationships.

2. Community building: Social media can help businesses build online communities around their brand, products, or services.

3. Social responsibility: Social media can enable businesses to demonstrate their social responsibility by promoting social causes, charitable initiatives, and environmental sustainability.

Technological Significance

1. Digital transformation: Social media can drive digital transformation by enabling businesses to adopt new technologies, innovate, and experiment.

2. Data-driven decision making: Social media analytics can provide businesses with valuable insights into customer behavior, preferences, and demographics.

3. Integration with other technologies: Social media can be integrated with other technologies, such as CRM systems, marketing automation tools, and e-commerce platforms.

Future Significance

1. Artificial intelligence and machine learning: Social media will increasingly incorporate AI and ML to enable businesses to personalize customer experiences, predict customer behavior, and automate marketing tasks.

2. Virtual and augmented reality: Social media will increasingly incorporate VR and AR to enable businesses to create immersive customer experiences, simulate product demonstrations, and enhance customer engagement.

3. Block chain and crypto currency: Social media will increasingly incorporate block chain and crypto currency to enable businesses to create secure, transparent, and trustworthy online transactions.

Benefits of Social Media in Business Growth

1. Increased brand awareness: Social media platforms provide businesses with an opportunity to showcase their brand, products, and services to a vast audience.

2. Improved customer engagement: Social media enables businesses to interact with customers, respond to queries, and build relationships.

3. Lead generation: Social media can be used to generate leads by sharing valuable content, running targeted ads, and engaging with potential customers.

4. Competitive advantage: Businesses that effectively leverage social media can gain a competitive advantage over their rivals.

Challenges of Social Media in Business Growth

1. Competition: With millions of businesses on social media, the competition for attention and engagement can be fierce.

2. Content creation: Creating high-quality, engaging content can be time-consuming and resource-intensive.

3. Measuring ROI: Measuring the return on investment (ROI) of social media efforts can be challenging.

4. Negative feedback: Businesses may face negative feedback or criticism on social media, which can harm their reputation.

Best Practices for Social Media in Business Growth

1. Define your target audience: Understand who your target audience is and create content that resonates with them.

2. Create high-quality content: Develop a content strategy that includes a mix of promotional, educational, and entertaining content.

3. Engage with your audience: Respond to comments, messages, and reviews in a timely and personalized manner.

4. Monitor and measure performance: Use analytics tools to track your performance and adjust your strategy accordingly.

Findings from Research Papers on the Role of Social Media in Business Growth

1. Social Media Adoption and Usage: Research has shown that social media plays a crucial role in the digital transformation of businesses. A study on B2B companies found that social media adoption and usage can lead to improved business performance and growth.

2. Impact on Business Growth and Performance: Another study focused on the impact of social media on business growth and performance in India. The research highlighted the importance of social media in small organizations and its correlation with business growth.

3. Social Media Theories and Frameworks: A research paper summarized three social media theories, including the honeycomb framework, latent factors, and business process performance self-assessment. These frameworks can help businesses understand the impact of social media on their performance.

4. Social Media Marketing Essentials: research paper emphasized the importance of social media marketing in the business industry. The paper highlighted the benefits of social

media marketing, including enhanced brand awareness, customer engagement, and sales growth.

Conclusion:

Social media has become an essential tool for businesses, offering numerous benefits for business growth. By understanding the benefits and challenges of social media and implementing best practices, businesses can leverage social media to increase brand awareness, generate leads, and drive sales.

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PROBLEMS IN CREATING HEALTHY AND ACTIVE YOUTHS/STUDENTS FROM RURAL AREA

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Introduction:

India is a rural country. It is flooded with small villages, beautiful countryside scenes and rural culture. The word 'rural' itself brings the villages cultures, old traditions, traditional professions, folk arts and so on. Rural India has lion's share in the development of total India. The most remarkable aspect in respect of these rural part of the country is its 'remoteness' Though the world is making technological progress and getting closed the very aspect mentioned above is getting lapsed. Newspaper, electronic medias like T.V., mobile, Internet, social websites have been explored as providing immense access to the information throughout the world. Rural parts are basically known for their originality, natural scenery, closeness among the people, old structures, cultures, arts etc. Because of the facilities above mentioned rural parts are also getting influenced by the very ideas of the urbanization. Mobile phones and Internet have almost reached to every hand even in small villages. Areas like education, health, sports, social welfare etc. have got subsequently changed by the ideas of outside people. The strength of the rural people lies in their originality and hard work. Since they are close to the nature, they receive fresh and pure air, nutritious diet, pure water. The rural people are also away from the effects of urbanization, they lead also healthy and long life. Their physical and psychological strengths are more durable than the former. Stress bearing capacity is also at high level comparting with the people residing in urban areas. The rural players are more focused on theirs aims than the urban players. In spite of all this, rural players have got some problems. They are as under-

1. **Unavailability of Scientific Coaching**

    The first, primary and grass-root problem is unavailability of scientific and technical coaching. The problem refers to the 'offering of the required guidance to the players regarding sports, its fields, related problems- prevention and solution, scope of the particular game, limitations challenges etc. at the required stage in the required extent. We hardly get the scientific technical and specific coaching for specific games in rural regions. So many times, the term 'sports' is generalized and coaching is provided on the basis of this bias. So, the rural players are deprived of the specific and particular coaching. They lag behind even if having all the suitable qualities for a specific game.

Most of the rural players don't know some games at all. Their ignorance becomes the reason for the deprivation and ultimately, failure.

2. **Prejudice and Attitude of the Rural People**

In advanced world like today as well most of the rural people underestimate the importance of sports in life. They have till today the prejudiced attitude towards sports. People think that playing is in vain as they are totally unknown about the career paths in the field of sports. The case is not only of illiterate people but of literate one also. They won't even believe on the same if told and convinced. Exercise is also misunderstood with physical work. Rural players required to struggle this very concept rooted in the brains of their parents have to start from the there. So, Counselling of the parents of the players is needed to differentiate the above-mentioned concept. By this they may get their attitudes changed and it may decrease the level of mental stress of the people.

3. **Lack of Modern Equipments**

Modern equipments are lacked in villages. As villages are away from the urban area's modern sports equipment's are hard to reach there in short time. People tend to buy luxurious things but not modern equipments required to play. Modern sport equipments are very costly so parents of the sportsmen hardly attend to buy it. Lack of sponsorship is another reason for it. For.eg. If rural sportsman wants to get advanced bicycle, he may not have enough budget for the same.

4. **Lack of Nutritious Diet**

Rural people are hardly aware about scientific and nutritious diet. They think that they absorb healthy food. But the problem is it may not meet their physical requirements, which will give them energy, strength and required vitamins, proteins, carbohydrates etc. for the particular game. For e.g. weightlifters required more proteins but they rely only on homemade food.

5. **Lack of Professional View**

India is an agricultural country. Here most of the people live in rural parts. So, they don't have an idea that their children are able to make their careers through sports also. They tend to pressurize the son to continue their own business or to get in most safe zone by achieving a job.

6. **Economical Problems**

Most of the parents are economically backward compared to urban area. In spite of having strong will and wish they don't manage to continue their children in the flow of sports. Due to high prices of sports equipments, advance coaching, sports diet etc. they quit in middle and continue the earning.

7. **Lack of Proper Pre-Assessment of Sport-Man**

   Rural general coaches or instructors are unable to identify the suitability of the sportsman for the particular game. By doing so they fail to assess the sportsman's qualities suitable to the particular game. Meanwhile the sportsman loses his age, strength, time, money, career as well interest from the sports and finally quit. Therefore, the field losses the best sportsman for the particular game.

8. **Lack of Sponsors and Awards**

   Rural people are hardly interested in any other games than wrestling in Indian context. So, they don't sponsor monetary fundings and awards for the rural sportsman compared to urban areas. So, such a case sportsman loses his interest from the game and his/her best qualities are suppressed.

9. **Gender Discrimination**

   Rural parts are gender sensitive. In advance age like 21st century rural people are of the view that girls must do household duties and are not permitted to play on the ground. In case of even a sports-girl, she is not allowed to wear proper sports kit. The conditions are not kept the boys compared to urban areas. Till today they are stuck with old, traditional and outdated views. So, most of the boys and girls are away from the sports.

10. **Early Aged Marriages/ Child Marriages**

    This is one of the most important factors that affects rural sportsman participation. Villages are of traditional and orthodox views in comparison with urban areas. Most of the parents get their children married in the early ages. Some of them even make their child marriage. The sports career is between the age of 16-25. But because of their marriage sportsman loses the chance even if having capacity.

11. **Lack of Motivation**

    Rural sportsmen are not motivated during their early ages. In the primary education they should be given the proper motivation to play, encouraged to do physical activities like drills, warm up etc. But because of lack of motivation from the teachers and parents most of the students waste the leisure time in chit-chatting, looking televisions etc. if for e.g. Parents or any teacher motivates the students for sports, he/she can make higher careers in sports. We may take the example of Rahi Sarnobat who belongs to a small village Ghalwad. Now she is called as 'golden queen' of India.

12. **Ignorance about Government Sports Policies**

    Most of the rural people at all don't know that govt. is also investing in the field of sports. They don't even care to take the information about govt. sports policies. So, they don't show any interest to be in the field. Media can play a vital role in taking these policies to the rural people and to attract them to the sports.

13. The Issues of Safety

Rural parents are very much careful about the physical safety of their children. They are very alert in case of female students' safety. So, they don't send them on the playgrounds for the particular game and time. They don't even can depend on anybody for the same.

14. Lack of Modern Facilities

Rural people are unaware about modern facilities. They don't get it easily as they are costly compared to urban areas. E.g. In comparison with urban areas the rural players don't get facilities like swimming pool, mats, indoor halls, synthetic tracks etc. So, they lag behind.

In spite of all the above-mentioned problems faced by rural players, they are trying to step up in the field of sports. By doing so they are also trying to be in the flow of urban sportsman.

Active Youths:

The term **'Active youths'** refers to the concept of physically and mentally active youths wholly focusing on the way of goal achievement. The term has a positive approach. Coming over the threats and difficulties contributes towards the success or achievement of the goal. Active youths are divided into identified and un-indentified areas of difficulties. Identified active youths play very important role in bringing them to the success. If, identified, worked out and preferred to take over at right time, they play vital role in making out the person. Active youths are related with fact, facilities, fear and focus. Because active youths overcome if proper facilities provided and may get the person successful. Because they show the path for the future. Active youths/students are prone to -

a. Advance Technology & Knowledge

Though rural sportsmen are having the problem mentioned above and strong will to play and win they can't escape from the use of advance technology in the sport, which is not easily available in rural area. For. E.g. Kabaddi played on the mat, wrestling is also played on the mat in urban areas.

b. Advanced Coaching

The true potential lies in rural sportsman. Even if having good strength, qualities, capacity they don't get advanced coaching. So, they are beaten by urban sportsman. So, they don't have any alternative without getting advanced coaching. High-cost advanced coaching has become a challenge for them.

c. Offensive Attitude

Urban players are highly offensive in comparison with rural player. But actually, rural player is firm enough to end the game. But offensive attitude doesn't lie within them. So, to have offensive attitude is a challenge for them.

d. Application of Electronic Media in Sports.

Rural players are unknown about application of electronic media in sports. Computer, Internet and social website are playing vital role in bringing up the sports events. Since filling up forms to getting results everything is done online. Internet facilities may not be available in rural areas compared to urban. Rural players sometimes don't have knowledge of the same.

e. Remoteness from Urban Areas

Rural areas are away from urban areas. So, sports news, sports events, awards, sponsors, equipments, new trends in sports are out of reach of rural sportsman. Remoteness of the area has become the challenge for rural players.

f. Proper Use of Equipments

Rural players needed to be guide about the proper of use of sports and related equipments. Most of the time they don't know the way and method of using equipments. So, they fail to use and waste their time or misuse the equipments.

g. Modern Lifestyles of Players

Rural regions are basically depended on agriculture. So rural player has to work in the farms after and before practice. So, their muscles don't get enough rest. They are stretched and don't get relax. It has become the challenge for them.

In spite of all the above-mentioned problems faced by rural players, they are shining brighter than the athlete from urban areas who are getting all the facilities.

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SOCIAL SUPPORT SETS WOMEN UP FOR SUCCESS AT WORK

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Abstract:

Social support plays a pivotal role in women's workplace success by providing emotional, instrumental, and informational resources. This support can come from family, friends, colleagues, mentors, and professional networks. It fosters confidence, resilience, and career advancement, allowing women to overcome workplace challenges and achieve their goals. Social support also enhances work-life balance, creating a more inclusive environment. By promoting gender equality and offering mentorship programs, organizations can bolster social support, setting women up for sustained success in their careers.

Keywords: Women, Social Support, Work

Introduction:

The importance of social support in empowering women to succeed at work cannot be overstated. Social support encompasses a broad range of resources, relationships, and networks that contribute to a person's ability to navigate the complexities of professional life. This chapter explores the multifaceted nature of social support, highlighting its role in fostering women's career success, resilience, and growth. From family and friends to mentors and professional networks, the various sources of social support work in tandem to set women up for success in the workplace. Social support encompasses the essential experiences that individuals need to maintain physical and mental health, receive appropriate assistance and comfort, and integrate ethically and behaviorally within their community or society. The beneficial impact of social connections has been recognized since ancient times. Although social support is widely acknowledged as a key component of a healthy life, there's still a great deal to explore about its theoretical foundations, conceptual frameworks, and ways to measure it.

Cultural standards, economic opportunity, educational attainment, and family responsibilities all influence women's engagement in the labour force. In many communities, women continue to bear a disproportionate share of household and caregiving tasks, which might limit their ability to fully participate in the workforce. To overcome these barriers, a strong social support system is required.

A system like this includes accessible childcare services, flexible work arrangements, family-friendly company policies, and community support networks. These components work together to create an environment in which women can pursue their career goals without

jeopardising their family duties. Furthermore, education and training programmes focused at improving women's skills and employability are critical for economic empowerment and social inclusion. A well-developed social support system has far-reaching benefits for women and their families. These programmes help to boost economic growth and eliminate poverty by encouraging women to work. Furthermore, they advocate for a more inclusive and fair society in which different viewpoints and talents are respected and utilised.

What is Social Support?

Social support refers to the assistance, resources, and encouragement provided by others, which helps individuals cope with stress and achieve their goals. In the workplace context, social support can take many forms, such as emotional support, informational support, and instrumental support. These types of support can come from a variety of sources, including family, friends, colleagues, mentors, and professional networks. Understanding the different types of social support is key to appreciating their impact on women's careers.

- **Emotional Support**

Emotional support involves providing empathy, encouragement, and reassurance to help someone deal with stress and challenges. For women in the workplace, emotional support can be instrumental in boosting morale and fostering resilience. When women feel emotionally supported, they are more likely to take risks, pursue leadership roles, and navigate workplace challenges with confidence.

- **Informational Support**

Informational support refers to providing advice, guidance, and knowledge to help someone make informed decisions. In the workplace, informational support can be crucial for women seeking career advancement or navigating complex organizational structures. Mentors, colleagues, and professional networks often play a significant role in offering informational support.

- **Instrumental Support**

Instrumental support involves tangible assistance, such as providing resources, helping with tasks, or offering financial aid. For women in the workplace, instrumental support can make a significant difference in managing work-life balance and overcoming barriers to career success. This type of support often comes from family, friends, and supportive organizations.

- **Sources of Social Support for Women**

Women can receive social support from various sources, each offering unique benefits. The following sections delve into the different sources of social support and explore their impact on women's success at work.

- **Family and Friends**

Family and friends often form the core of a woman's support system. A supportive family can provide the emotional and instrumental backing needed for women to pursue their careers

with confidence. This support might include help with childcare, encouragement during stressful times, and shared responsibilities for household chores.

Friends also play a crucial role in providing emotional support and companionship. They offer a sense of belonging and understanding, which can help women manage work-related stress and maintain a positive outlook. Women with a strong network of friends are better equipped to cope with the demands of their careers.

- **Mentors and Role Models**

Mentors and role models are invaluable sources of social support in the workplace. A mentor can guide women through career-related decisions, offer insights into navigating workplace dynamics, and provide constructive feedback. The mentor-mentee relationship can be instrumental in building confidence and fostering professional growth.

Role models serve as sources of inspiration, showing women what is possible in their careers. Observing successful women in leadership positions can encourage women to pursue their own career aspirations with determination and resilience. Role models also provide a tangible representation of success, offering a pathway to emulate.

- **Colleagues and Work Teams**

Colleagues and work teams can significantly influence the workplace experience for women. A collaborative work environment where colleagues share ideas and encourage one another fosters a sense of community. When women feel supported by their peers, they are more likely to contribute effectively to their teams and seek opportunities for career advancement. In addition to emotional support, colleagues can offer instrumental support by helping with tasks or providing valuable feedback. This collaborative atmosphere can reduce workplace stress and create a more inclusive environment.

- **Professional Networks and Organizations**

Professional networks and organizations are essential for women's career development. These networks offer opportunities to connect with industry experts, participate in training programs, and access career-enhancing resources. Women who engage with professional networks can build valuable relationships that lead to new career opportunities and mentorship.

Organizations dedicated to women's empowerment in the workplace, such as Lean In Circles or Women in Technology, create a sense of community where women can share experiences, seek advice, and find support. These organizations also advocate for gender equality and work toward creating a more inclusive workplace culture.

The Impact of Social Support on Women's Careers

In today's quickly changing professional scene, the function of social support in defining career paths is receiving increased emphasis. Social support is especially important for women. Historically, women have faced specific hurdles in their professional careers, such as gender bias, work-life balance issues, and limited access to networks and mentorship. Social support,

which includes emotional encouragement, practical assistance, and professional advice from family, friends, mentors, and coworkers, is critical in overcoming these obstacles. Social support can profoundly impact women's careers, influencing their confidence, work-life balance, and career advancement opportunities. The following sections explore these effects in greater detail.

- **Increased Confidence and Self-Esteem**

Social support can boost women's confidence and self-esteem by providing encouragement and validation. When women know they have a support system behind them, they are more likely to take risks, pursue leadership roles, and challenge workplace norms. This increased confidence can lead to improved job performance and greater career satisfaction.

- **Enhanced Work-Life Balance**

Achieving work-life balance is a significant challenge for many women, especially those with caregiving responsibilities. Social support from family and friends can help women manage these responsibilities more effectively, allowing them to focus on their careers without sacrificing their personal lives. This balance is crucial for maintaining well-being and sustaining career growth.

Flexible work arrangements, remote work options, and family-friendly benefits contribute to a healthier work-life balance. By promoting these practices, organizations can create a supportive environment where women can excel without feeling overwhelmed by competing demands.

- **Greater Career Advancement Opportunities**

With strong social support, women are more likely to seek out career advancement opportunities and take on new challenges. Mentors and professional networks can guide women toward promotions, leadership roles, and career development programs, increasing their visibility and success in the workplace.

Additionally, organizations that prioritize gender equality and offer mentorship programs create an environment where women are encouraged to advance in their careers. This type of organizational support can lead to a more diverse leadership team and a workplace culture that values and promotes women's contributions.

- **Improved Resilience and Stress Management**

Workplace stress and challenges are inevitable, but social support can help women build resilience and cope with these pressures more effectively. Supportive colleagues, mentors, and family can offer encouragement during difficult times, reducing stress and fostering a positive mindset. This resilience can be crucial for overcoming workplace obstacles and achieving long-term success.

- **Challenges and Barriers to Social Support**

While social support is crucial for women's success at work, there are challenges and barriers that can limit access to these support systems. The following sections explore some of

these challenges and discuss potential solutions. Individual well-being relies heavily on social support, which provides emotional, instrumental, informational, and evaluation assistance as needed. Despite its importance, many people find substantial difficulties in getting and utilising social support successfully. These barriers can come from a variety of sources, including personal, social, cultural, and structural issues, all of which create unique challenges to the establishment and maintenance of supportive relationships.

- **Societal Expectations and Gender Roles**

Societal expectations and traditional gender roles can create barriers to social support for women. Women are often expected to prioritize family and caregiving responsibilities, which can limit their access to professional networks and career development opportunities. To address this challenge, it's essential to promote gender equality and challenge traditional norms that restrict women's career advancement.

Promoting gender equality requires a collective effort from organizations, governments, and society at large. By addressing gender-based stereotypes and creating equal opportunities for all genders, women can access the social support they need to succeed at work.

- **Workplace Culture and Discrimination**

Workplace culture can also play a role in limiting social support for women. Discriminatory practices and a lack of diversity can create a hostile environment, discouraging women from seeking support. To overcome this barrier, organizations must foster inclusive cultures that value diversity and provide equal opportunities for all employees.

Addressing workplace discrimination involves implementing anti-discrimination policies, promoting diversity training, and creating a safe space for employees to voice their concerns. Organizations should also ensure that women have equal access to leadership positions and career development opportunities.

- **Limited Access to Mentorship and Networking**

Some women may face barriers to mentorship and networking due to limited access or a lack of awareness of available resources. Organizations and professional networks should work to create accessible mentorship programs and networking events, ensuring that women from all backgrounds have equal opportunities to connect with mentors and industry experts.

To bridge the mentorship gap, organizations can establish formal mentorship programs that pair experienced professionals with emerging talent. Networking events and industry conferences can also provide valuable opportunities for women to build connections and expand their professional networks.

- **Strategies for Enhancing Social Support for Women**

To maximize the benefits of social support for women's success at work, several strategies can be implemented. These strategies aim to create a supportive environment that fosters women's career growth and development. Social support is essential for women's well-

being and empowerment. It includes a variety of emotional, educational, and practical resources that can have a substantial impact on women's health, personal growth, and overall quality of life. In today's quickly changing social context, increasing social support for women is more crucial than ever. This entails not just recognising the specific obstacles that women confront, but also applying effective ways to create a supportive workplace.

- **Promoting Gender Equality and Inclusion**

Organizations should prioritize gender equality and inclusion by implementing policies that support women's career advancement. This can include offering flexible work arrangements, promoting women to leadership positions, and ensuring equal pay for equal work. By creating an inclusive workplace culture, organizations can enhance social support for women.

Promoting gender equality also involves addressing unconscious biases and discriminatory practices. Organizations can offer diversity training and create accountability measures to ensure that all employees are treated fairly and equitably.

- **Establishing Mentorship Programs**

Mentorship programs are a valuable tool for providing social support to women in the workplace. Organizations can establish formal mentorship programs that pair experienced professionals with emerging talent, facilitating knowledge transfer and career guidance. These programs should be accessible to all women, regardless of their role or experience level.

Mentorship programs should also encourage diversity and inclusion by pairing women with mentors from different backgrounds and experiences. This approach fosters a broader understanding of workplace dynamics and provides women with a more comprehensive support network.

- **Encouraging Networking and Professional Development**

Professional networking is essential for women's career success. Organizations and industry associations should encourage women to participate in networking events and training programs. This can involve offering financial support for conference attendance, hosting internal networking events, and promoting participation in industry-specific organizations.

By encouraging networking and professional development, organizations can create a culture that values continuous learning and growth. This, in turn, benefits both individual employees and the organization as a whole.

- **Supporting Work-Life Balance**

Organizations should implement policies and practices that support work-life balance, allowing women to manage their personal and professional responsibilities effectively. This can include flexible work hours, remote work options, and family-friendly benefits. By promoting work-life balance, organizations can create an environment where women feel supported and valued.

Support for work-life balance can take many forms, such as offering paid parental leave, providing on-site childcare, and promoting flexible work arrangements. These practices not only benefit individual employees but also contribute to a more inclusive and equitable workplace culture.

Role of Employers in Promoting Work-Family Balance

In today's fast-paced and demanding world, many professionals are finding it increasingly difficult to strike a work-life balance. The lines between work and personal responsibilities frequently blur, resulting in stress, burnout, and decreased general well-being. Recognising the crucial relevance of work-family balance, companies may play a significant role in creating settings that meet their employees' requirements both at work and at home. Employers who implement complete policies and procedures that prioritise work-family balance can not only improve their workforce's quality of life, but also benefit from greater productivity, employee retention, and job satisfaction. This essay investigates the different techniques businesses might adopt to improve work-family balance, and the good impacts these measures can have on both. Employers have an important role in encouraging work-life balance, which can lead to better job satisfaction, lower stress, and higher productivity among employees. Here are some important ways employers can support work-family balance:

- **Flexible Work Arrangements:** Offering working from home, flexible working hours, reduced workweeks, and job sharing helps employees manage their personal and family responsibilities.

- **Parental Leave Policies:** Offering generous and inclusive parental leave policies, such as maternity, paternity, and adoption leave, assists employees in meeting the demands of a new kid.

- **Childcare support:** Employers can help working parents by providing on-site childcare facilities, childcare subsidies, or forming relationships with local daycare providers.

- **Employee Assistance Programmes (EAPs):** Its provide counselling and support services to employees struggling with personal or family concerns, such as stress management, mental health support, and family counselling.

- **Health and Wellness Programs:** Wellness programmes, fitness centres, and mental health days can all help employees maintain a healthy work-life balance. Employers can establish a supportive culture by investing in comprehensive health and wellness programmes, which not only improves employee well-being but also contributes to the organization's overall performance and productivity.

- **Clear limits and Expectations:** Promoting a culture in which employees are not expected to be available at all times, as well as establishing clear limits between work and personal time, can help prevent burnout.

- **Manager Training:** Teaching managers how to recognise and assist their workers' work-family balance demands can help to foster a more sensitive and understanding workplace culture.

  Paid Time Off (PTO): Providing adequate paid vacation, sick leave, and personal days allows employees to take necessary time off without incurring financial penalties.

- **Creating Family-Friendly Work Environments:** Employers can foster a culture that values work-family balance by promoting family-friendly policies and practices. This includes offering flexible work options, providing on-site childcare, and supporting employees' efforts to balance work and family commitments.

- **Providing Career Development Opportunities:** Supporting women's career development through mentorship programs, training opportunities, and equitable promotion practices can help women achieve their professional goals while managing family responsibilities.

Conclusion:

Social support plays a pivotal role in setting women up for success at work. By fostering strong support systems from family, friends, mentors, colleagues, and professional networks, women can overcome barriers and achieve their career goals. Organizations play a crucial role in promoting social support by implementing policies that prioritize gender equality, mentorship, and work-life balance.

The impact of social support on women's careers is profound, leading to increased confidence, enhanced work-life balance, greater career advancement opportunities, and improved resilience. By addressing the challenges and barriers to social support and implementing effective strategies, organizations can create a more inclusive and equitable workplace that empowers women to thrive. Ultimately, when women succeed at work, it benefits not only them but also their families, communities, and society as a whole. Organizations that prioritize social support for women contribute to a more diverse, innovative, and successful workforce, paving the way for a brighter and more equitable future.

THE RADICAL REFORM IN EDUCATION SECTOR - ESSENCE OF THE NATIONAL EDUCATION POLICY, 2020 (PROBLEMS AND PROSPECTS)

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Abstract:

National Education Policy 2020 is a very important milestone in the field of education. The present research paper was written to understand various features of NEP, 2020 its need in today's context and problems as well as prospects of NEP, 2020. The study is based on secondary data in form of policy documents, research papers by various authors, researchers, policy makers, newspapers through various databases like Google scholar, Web of Science, Elsevier etc. The problems and findings showed various lacunas that needs to be overcome in form of digital divide in urban and rural population, fragmentation of population, inadequate infrastructure, technology etc. The opportunities discussed are like establishment of Higher Education Commission of India, reduction in present curriculum load, vocational training, redesign of curriculum etc.

Keywords: National Education Policy, India, Challenges, Problems, Opportunities

Evolution of Education Sector in India

Education is always considered as pivotal and fundamental for attaining the human potential, developing an equitable society, and encouraging the comprehensive development of the nation (Mishra, 2020). Even according to the leaders of freedom struggle, education was a central aspect of civil development. Specifically, Mahatma Gandhi was the trailblazer who advocated the idea of "Buniyaadi Shiksha" i.e. Basic Education (Adhikari& Mete, 2015). After independence, the modern India has also focused on education sector through commissions such as the Radhakrishnan Commission (University Education Commission), 1948 commissioned under the leadership of Dr. SarvepalliRadhekrishnan and Kothari Commission, 1964 under the Chairmanship of Daulat Singh Kothari (Naik, 1982). These commissions are solely for the development of Indian education system. Providing superior universal education is the greatest way forward for the holistic development of the individual, community, nation, and eventually the world (Rai, 2023).

Need for New Education Policy in India

It is universally acknowledged that life is dynamic and it needs continuous transformation for survival. However, it's been more than three decades since the latest education policy came into existence in India. Moreover, in these three decades especially since 1992, colossal and rapid changes took place in the country (Naik, 1982). For instance, population in India has a huge growth of about 65%, and since 1992, country has been liberalized. There is a significant shift in each and every sector all over the globe while the growth in education system in India remained sluggish attributed by the issues such as lack of reach and quality, unprofessionalism that eventually leads to poor outcomes, gaps and loopholes in practical teaching and enormous imbalance in private-public and rural-urban educational sectors (Praveena, 2020). Therefore, in this context, there is a need to bring reforms in the education system as per the needs of 21st century (Sarta, 2022).

On the backdrop of these challenges, National Education Policy proposed back in 2019 is a revolutionary policy that will bring radical reforms in education sector in India and will act as the cornerstone to modify the policies as per technological advancements and growing market in multifaceted dimensions. The incorporation of ICT based learning, machine learning and the artificial intelligence have the potential to replace the conventional in-person classroom blackboard teaching. In this policy, the government emphasized on making education more inclusive, advanced and experimental along with plethora of options to choose from in the varied domains such as arts, literature, language and humanities (Praveena, 2020).

Objectives

Following are the core objectives of the research paper-

  i. To understand and examine the fundamentals of National Education Policy, 2020 in terms of its provisions.

 ii. To analyze the key features and opportunities of the policy in various segments of education system.

iii. To identify the problems and prospects in the implementation of the policy.

 iv. To give suggestions and recommendations for the superlative implementation of the policy so that it can achieve its intended targets.

Methodology

The paper covers the analysis of theoretical discussion on the main idea of National Education Policy, 2020, wherein highlighting the main segments of the policy such as opportunities and main challenges. Further, it sheds light on the importance of the proposed education policy with respect to the targets of Sustainable Development Goals by United Nations. The research is established from the reliable secondary sources such as peer-reviewed journals and articles, books and edited book chapters, conference papers and proceedings etc.

The main purpose is basically to critically analyze the reverberation of National Education Policy in the edification sector.

Prelude to National Education Policy, 2020

National Education Policy came up with an objective to transform the system of education in India and the policy was approved by the Union Cabinet on 29th July 2020. This policy has replaced the former National Policy on Education, 1986 which was amended in 1992. This policy provides the complete framework starting from elementary education to the higher education. It also focused on vocational studies in both rural and the urban areas (Venkateshwarlu, 2021).

The main cornerstone behind the policy is to bridge the gap in the incumbent education system and learning (Praveena, 2020). The focus areas of the policy are skill, innovation, equity and quality in learning. It has also included the culture, values, tradition, and ethos to convert the nation into a vibrant and equitable knowledge society (Sarta, 2022). The government has given broad guideline on the language policy that is advisory in nature as it states that it will depend upon the institutions and states to whether implement it or not as it says that nobody will be forced to study any specific language and that the instruction medium will not be shifted from English to any other local language (Sarta, 2022).

In this context, Himachal Pradesh is the first state to implement this policy and the it should be implemented all over the nation by 2022 (Venkateshwarlu, 2021).

To recapitulate, it is a praiseworthy and an optimistic step by the government to re-imagine the India's education system into contemporary, progressive and sustainable (Sarta, 2022).

NEP and Sustainable Development Goal

According to the development agenda on global education, the Sustainable Development Goal 4 (SDG-4) of 2030 agenda, intends to *"ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"* by 2030. It is adopted by India in 2015. This goal has five keystone pillars such as access, equity, affordability, quality and accountability (Panditrao, 2020).

However, in order to achieve this lofty goal, the entire education system need to be reconfigured to support this goal and expedite the learning. Therefore, this policy has been aligned to the SDG-4 in order to provide equitable access to the education for all and making it inclusive on par with the global standards which is the main striking feature of the policy (Panditrao, 2020). There is a certainty that through this reform, India will be able to achieve the intended targets under the policy by 2040 (Panditrao, 2020).

Problems

There are certain problems with NEP 2020 which have been discussed in detail below:

- The NEP 2020 suggests that mother tongue/ local language /regional language should be used as a medium of instruction till class 5 preferably till class 8. This will widen the gap between those who can communicate in English and those who cannot (Soni, 2022). Also, the Southern states or non-Hindi speaking has clarified it will be left to the states to decide (Tiwari, 2021). Also, if one gets transferred to non-Hindi speaking state, it will be difficult for the student to adjust in the Dravidian languages.

- According to NEP, 2020 there will be widespread use of technology in instruction and learning, eradicating language barriers, expanding accessibility for Divyang students, and educational planning and development (MoHRD, NEP, 2020). This would require huge initial investment. NEP does not talk about the funding mechanism from where revenue will be generated for the investment in technology. Digital Infrastructure for Knowledge Sharing and Analysis (DIKSHA) is discussed in NEP 2020 (MoHRD, NEP, 2020). How will this be accomplished given the significant digital gap in rural India. Creating digital technology demands a significant amount of infrastructure, such as online classrooms and professional-based teaching methods. Digital technology will be difficult to implement in rural regions of the nation without internet (Tiwari,)

- Exceptional research is a prerequisite for exceptional education and growth, both of which are absent in many colleges and institutions (MoHRD, NEP, 2020). The NEP does not reflect on research funding mechanisms and how it will be revived in many colleges and institutions.

- Districts and areas that are socio-economically disadvantaged will be prioritized but it is unclear how will they will receive special attention (MoHRD, NEP, 2020).

- According to the NEP 2020, India is now experiencing a learning crisis, with an estimated 5 crore primary school kids not having acquired fundamental literacy and numeracy, or reading and numeracy the capacity to perform basic addition and subtraction using Indian numbers, as well as the ability to read and interpret basic language (MoHRD, NEP, 2020). According to estimates, the NEP 2020 targets to achieve 100% Gross Enrollment Ratio in school education by 2030. Even if the GER is achieved 100 %, and the basic fundamental learning is not achieved due to lack of teacher training or inadequate number of trained staffs, the NEP will fail its purpose to overcome the learning crisis. The present Gross Enrollment Ratio is just 25% due to limited access to higher education, particularly in the most disadvantaged districts (Tiwari, 2021). How the NEP 2020 is going to fulfill the gap in case of Higher Education is still ambiguous with no clear motives.

- NEP 2020 discusses about the re- enrollment of drop outs. It's unclear how dropouts from elementary and higher secondary schools will be re-enrolled (MoHRD, NEP, 2020). How the information will be distributed to rural migrants, children of construction workers, and the children of informal sector workers who are large part of the economy

- Insufficient financing plans for the initial investments in technology upgradation, opening of schools, colleges and universities. Up gradation of infrastructure in schools, colleges and Universities require huge amount of funding, there is no clear instructions where the funds will be generated from. (Smitha, 2020)

- Insufficient preparation for instructors and institutional independence to take creative actions to draw in more students to higher education (Tiwari,2021)

- Since India has roughly 1000 universities spread throughout the country, building a university each week is a major undertaking. The goal of doubling the gross enrollment ratio in higher education by 2035 confirms the aforementioned remark. The largest difficulty will be to open a university per week for nearly 15 years starting in 2035, according to Tiwari (2021).

- India has the world's second biggest education system, with over 15 lakh schools, 25 crore pupils, and 89 lakh instructors. The higher education system is also huge in scope. According to the AISHE 2019 report, 3.74 crore students are enrolled in roughly 1,000 universities, 39,931 colleges, and 10,725 stand-alone institutions in India's higher education system. As a result, the implementation of this mega education strategy will be a massive undertaking involving several stakeholders at the state, district, sub-district, and block levels. Creating a sense of shared responsibility and ownership among key players, including the corporate sector, at the state and district levels would be a big task (Sahoo, 2021).

- The nation has struggled for months with lockdowns brought on by COVID in the year when NEP 2020 was launched. The policy required legislative discussion; it needs to have gone through an appropriate parliamentary debate and consideration of many points of view (insightoninida.com).

- Increasing the expenditure budget from 4.6% to 6% of GDP is extremely tough and would cost around INR 2.5 lakh crores per year (Soni, 2022). Despite 52 years since the recommendation, India barely spends 3.1% of its GDP on education, according to the 2019-20 Economic Survey. Since 2014-15, overall education spending has increased from 2.8% to a meager 3.1% in 2019-20, although it has remained stable at roughly 10.5 percent of total government spending budget (Soni, 2022).

- According to the NEP 2020, all children shall take required vocational courses including as crafts, carpentry, cooking, and gardening beginning in sixth grade. Providing

vocational training to at least 50% of students by 2035 would be exceedingly challenging (Tiwari,2021). Second, there is a shortage of suitable resources such as educated employees, adequate infrastructure, and a significant initial investment (Soni, 2022). It is unclear which agency will bear the increased expenditure and costs. Students from underprivileged groups may begin looking for work after mastering the skill in the middle (Soni, 2022).

- Opening a university every week is a huge task in a country with about 1000 universities, so doubling the Gross Enrollment Ratio in Higher Education by 2035 means the above statement that opening a university every week for about 15 years will be the greatest challenge (Tiwari,2021).

- The NEP Drafting Committee, chaired by K. Kasturirangan, correctly said that India's education system is underfunded, overly bureaucratized, and lacks potential for innovation and scale up. Internal capacities within education ministries (both central and state) and other regulatory agencies are woefully inadequate to guide the amount of reforms envisioned in the NEP. Moving away from a rigid content-driven rote learning system to experiential learning and critical thinking, for example, would necessitate nothing less than a revolutionary shift in the attitudes of those in charge of the education system, let alone changes in the attitudes of teachers, students, and parents(Sahoo, 2021).

- In terms of levels, institutions, and disciplines, India's higher education institutions are highly divided, resulting in artificial rigid silos from multiple sources of knowledge (Singh, n.d., p3).The unchecked growth of private institutions, including self-financed private colleges, has resulted in a huge number of schools with inadequate facilities, fewer competent professors, and low higher education quality (Singh, n.d., p3) HEIs provide poor teaching and learning, resulting in a large number of jobless graduates across the country (Singh, n.d., p3).

- The private sector's participation, particularly in dealing with the higher education system, is crucial for realizing the NEP's inclusionary objective. It should be emphasized that the private sector operates up to 70% of higher education institutions (colleges and universities). Significantly, around 65-70 percent of current students are enrolled in private higher education institutions. Aside from that, the private sector contributes much-needed financial resources and innovation (Smitha, 2020). As a result, it is critical for the government and regulatory organizations to develop viable institutional frameworks to harness the private sector's participation and identify it as an equal partner in the NEP process (Sahoo, 2021).

- Most universities have placed less emphasis on research. Because of a lack of competitive peer-reviewed research funding across areas, the overall quality of education has worsened

- There are hundreds of schools and colleges would require capacity building and reorientation in order to undertake a massive plan with several experiential goals. In summary, the ministry's current organizational structure and ecosystems will need to be completely overhauled (Khatak, 2022). While the NEP document has laid out a comprehensive roadmap for overhauling the existing regulatory system, and the education ministry is in the process of bringing out legislation to facilitate the establishment of a Higher Education Commission of India (in place of existing regulatory bodies, primarily the UGC, AICTE, and National Council for Teachers Education), one must wait for the new institutional architecture to emerge out of legalism (Sahoo, 2021).

- A governance structure and regulatory framework are necessary to be integrated into the system (Singh, n.d, p3).

- The NEP would be heavily reliant on the level of collaboration between the Centre and the states. While the Union government created the NEP (with participation from numerous stakeholders, including state governments), its execution is primarily dependent on the states' active involvement. This is because state governments are in charge of the majority of service-related education. In summary, the Centre must manage the ideals of cooperative federalism and decentralization while implementing critical programmes. And with the recent deepening of political divisiveness and obvious breakdown of trust between the Centre and states, this is not an easy act to pull off. A number of opposition-ruled governments have raised serious concerns about many major elements of the NEP and the Protocol. Numerous Opposition-ruled states have expressed significant opposition to numerous major aspects of the NEP and the way in which they are being implemented. The more concerning issue is that Tamil Nadu's recent decision not to adopt the NEP may inspire other Opposition-ruled states to follow suit. Thus, regulating federal mathematics is important to the NEP's realization (Sahoo, 2021).

- Poor work habits and intellectual progress among institutional executives (Tiwari,2021)

- Poor administration, low levels of governance and leadership in higher education institutions (Tiwari,2021).

- An unjust system that promotes fake institutions while allowing phoney colleges to flourish (Tiwari, 2021)

- Inadequate professors and their training, as well as institutional autonomy to do novel things to attract more students in Higher Education (Tiwari,2021)

- Inadequate job practices and intelligence advancement with institutional leaders (Tiwari, 2021).

Opportunities

Following are the main opportunities that the new National Education Policy proposes-

- **Structure System-** The major highlight of the new education policy is that it replaces the earlier 10+2 structure with the 5+3+3+4 structure and as per the policy it is mandatory for public and private institutions to follow these guidelines (Saidapur, 2020). 5+3+3+4 structure corresponds to ages from 3 to 8, 8 to 11, 11 to 14, and 14-18 respectively (MoHRD, NEP, 2020).

- **Linguistic Policy-** The mother tongue (local or regional language) will be the medium of instruction up to Class 5 in all the schools. Under the NEP 2020, Sanskrit will be offered at all levels and foreign languages from the secondary school level (Kumawat and Sharma, 2020).

- **Examination System-** Earlier, the exams were conducted every year, whereas under the policy, the exams will be conducted only in class 3, 5 and 8. However, the assessment in other years will be done with the regular and formative style to promote conceptual clarity and critical thinking (Rani, 2022). On the other hand, the board exams will continue in the former pattern i.e. in 10th and 12th standards. A new national assessment center PARAKH-Performance Assessment, Review, and Analysis of Knowledge for Holistic Development will establish standards for the same (MoHRD, NEP, 2020).

- **Paving Path for Foreign Universities-** The policy also opens up the gates for the foreign universities to establish their campuses in India, and vice versa, Indian institutions will be encouraged to go worldwide (NEP, 2020 and Kumar, 2022).

- **Reducing Curriculum Load-** The new policy also focuses on plummeting the curriculum load on the children and encouraging them to become "multi-lingual" and "multi-disciplinary".

- The policy proposes the inclusion of arts and humanities subjects for the students in the higher education institutions like the IITs (Indian Institute of Technology) studying science subjects, and vice versa (MoHRD, NEP, 2020).

- **Higher Education Council of India-** The policy will set up Higher Education Council of India (HECI) in order to regulate the higher education; and it will act as a sole umbrella body for the whole higher education, however, excluding legal and medical education. The HECI will include 4 independent parts such as (NEP, 2020)-
  - National Higher Education Regulatory Council (NHERC),
  - General Education Council (GEC),
  - Higher Education Grants Council (HEGC),

- o National Accreditation Council (NAC).
- **Lifelong Learning-** The policy encourages research and lifelong learning in order to avoid humans from becoming outdated in the society in context of skills, knowledge, practical's and experience to lead a comfortable life in a sustainable manner (Soni, 2022).
- **National Research Foundation-** The National Research Foundation will be created for promoting the research culture and upgrading the research capacity in higher education.
- **Teacher Centric to Student Centric-** A student-centric approach will be developed to replace the existing teacher-centric approach, in which the students will have the choice to select the subjects they want to learn which is indeed a revolutionary shift (Kumar, 2022).
- **National Educational Technology Forum -**The education policy recommends a National Educational Technology Forum (NETF) which provides the stage for the exchange of ideas totally free of cost on the use of technology in order to enhance learning, assessment, planning (Rani, R.). A concentrated determination will be put in to promote contemporary subjects such as Data Analytics, Artificial Intelligence and Machine Learning which are being advertised as the career of the future (Kumar, 2022).

Findings:

- All stakeholders engaged in the effective implementation of the Policy should be made fully aware of their respective roles (Sarta, 2022).
- The coordination and cooperation between the Centre government, States, and Local organizations is much needed for the successful implementation of the policy (Sarta, 2022).
- More attention should be paid to teacher training and equipping them with the necessary skills (Sarta, 2022).
- To make this idea a clear winner for enhancing India's entire educational environment, more funding should be allocated to education (Sarta, 2022).
- The policy documents make it clear that the privatization of education will receive increasing attention. Privatization appears to be a significant barrier to the execution of the programme in a nation like India where the cost of education is still the main problem. Although the NEP refers to the necessity for openness in fee structures, it makes no indication of how it plans to conceal the rising fees of private institutions and transform how they operate so that utilitarianism, rather than profit maximization, will be the main consideration (Sarta, 2022).

Discussion and Analysis:

According to Rai, (2023 of Telegraph) the NEP-2020 programme provides vocational education beginning in primary schools with the goal of fusing traditional knowledge with contemporary thinking. It focuses on the use of technology in education and aims to change how

lessons are planned, taught, and assessed. However, a sizable portion of pupils lack access to such tools. How would the new ways of learning benefit these excluded students? (Rai, 2023).

There is a huge digital divide between urban and rural areas. The rural areas and remote locations in various parts of India do not have access to internet and technology as mentioned earlier. The Ministry of Human resource and Development needs to work on strategies for addressing these gaps at remote areas of different parts of the country (Khatak, 2022).

A successful implementation of the policy will also depend on timely feedback from parents, students, and the business community (Sarta,2022).

A road map and mechanism for implementation at various levels Centre, State, District, Tehsil (Taluka), Block and Village at rural level and Centre, State, and Local at Urban areas to implement by the Ministry as well as Department of Education.

Due to COVID 19, many rounds of discussions were not held in Parliament as discussed by many researchers and policy makers and all the stakeholders were not involved. The NEP 2020 can again be discussed and each state can give its comments.

A detailed strategic and financing plan for the upgradation of schools, colleges and universities can be prepared by various experts across the country. This will be helpful by various experts in financing who can prepare the financing of infrastructure, upgradation of technology through Public Private Partnership. Also, private institutions can also be made a party since 70% students are enrolled in private institutions nowadays.

Regular capacity building, training, and skill development of teachers at all levels should be undertaken like school, colleges, and Universities. A strategic plan for regular training should be worked out. Teacher's trainers at various levels both International and National level should be identified so that the level of faculty can be upgraded. Incentives in form of cash prizes and awards at various levels can be given to encourage their performance and help them in their motivation.

Conclusion:

NEP 2020 is a welcome step in recognizing education and will bring revolution in Indian education system if implemented properly. Hence, seeing the problems as well as potentials or opportunities it can change the scenario of Indian education system and if implemented properly with the help of private organizations, India can become a global hub of knowledge and education which was once there during the time period of Nalanda and Taxila of Ancient India. If the disadvantaged groups or under privileged groups in our country can get quality education and prioritized, this can change the shape the future of economy.

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Multidisciplinary Trends in Humanities, Social Sciences, Commerce and Management Research Volume II

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