

A Study on Consumer Awareness and Utilization of Grievance Redressal Mechanisms in Online Purchases of Smartphones with Special Reference to Chennai City

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Abstract

The rapid growth of e-commerce systems has significantly transformed the shopping habits of urban Indians, and Chennai is emerging as one of the most digitally savvy metros in India. Despite the incredible growth in online smartphone sales, consumer issues ranging from product faults, counterfeit items, misleading listings to poor aftersales service have shown disturbing trends. In the present study, the degree of consumer awareness on grievances redressal mechanisms is investigated and extent of consumer use of grievance redressal mechanisms is examined on the basis of empirical studies on online smartphone users in Chennai. The study uses descriptive and analytical research design based on the statutory measures related to consumer rights in the e-commerce sector. Primary data were collected from 350 respondents across the various strata of the population in Chennai by Stratified random sampling. A structured questionnaire consisting of likert scale, dichotomous and categorical instruments was given to collect the perceptions about consumer awareness, complaints resolution effectiveness and regulatory knowledge. To maintain analytical rigor, some analyses included Reliability Analysis, Descriptive Statistics, Chi-Square Test, One-Way ANOVA, and Pearson's Correlation & Multiple Linear Regression. The results show moderate awareness among the consumers, statistically significant differences in their grievance utilisation based on their different demographics and a strong positive correlation between awareness and effective redressal. The study provides practical suggestions for the policy makers, e-commerce sites and consumer protection organizations and offers valuable insights for the consumer behaviour theory.

Keywords: Consumer Awareness, Grievance Redressal, Online Smartphone Purchases and E-Commerce.

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1. Introduction

India's retail sector has undergone a revolution with the advent of the digital era, and it has created a new frontier of customer interaction with online platforms. The combined power of low-cost internet connectivity, smart phone penetration and the growing middle-class has made India one of the world's fastest growing e-commerce markets and is expected to reach USD 200 billion by 2027 (Kapoor & Kulshrestha, 2019). In this changing scenario, the city of Chennai has become a prominent one. A digital consumer hub, where residents of all age groups, income brackets and types of occupations are increasingly moving towards online platforms for the purchase of consumer electronics, including most notably smartphones. Despite the meteoric rise of online smartphone sales, the corresponding surge in consumer complaints has included poor quality or counterfeit smartphones, inaccurate product descriptions, failure to honour warranties and ambiguous return policies (Agarwal & Mehta, 2015). The Consumer Protection Act, 2019 is a historic outcome of this action with provisions to create institutional mechanisms to solve consumer

disputes and to impose statutory obligations on e-commerce transactions (Sharma & Patel, 2022).

However, there are no consistent empirical findings that there is a significant portion of online consumers with limited awareness of their rights and remedies, that leads to the continuation of exploitation and weakens the effectiveness of the consumer protection framework in practice (Singh, 2012). The area of grievance redressal awareness, the demographic factors and the use behaviour in relation to high value electronics in a south Indian metropolitan area is still largely under-researched. Existing studies have focussed on either consumer satisfaction in e-commerce (Bhatnagar & Ghose, 2004; Pavlou & Fygenson, 2006) or the awareness of consumer rights (Ranjitha & Sundaram, 2017) but the combination of these three factors and its impact on consumer use behaviour in the context of high value electronics in a South Indian metropolitan area is still under-researched. Keeping this background in mind, the present study empirically investigates the awareness and utilization of grievance redressal mechanism among online Smart phone buyers in Chennai with a view to providing meaningful

contribution to the study of consumer behaviour and to the policy of consumer protection by various regulatory agencies, E-commerce platforms and civil society organizations (Kumar & Venkatesh, 2020).

2. Statement of the Problem

The e-commerce industry in India is estimated to reach more than USD 70 billion by 2027 and smartphones are one of the major products sold online in India with millions of units sold every year (National Consumer Helpline, 2024). As smartphones have become popular as an online purchase, so have electronics complaints that consistently make the top three list of complaints received by online shoppers. Although there are statutory provisions in Consumer Protection Act, 2019 available for redressal, a large number of aggrieved consumers are not aware of the ways by which they can get redressal, or doubt about the complexity of the process, time, or faith in the system. (Sharma & Patel, 2022) The diverse Consumer education interventions have been made more complex by the demographic makeup of the online shoppers in Chennai, from students to young working professionals and homemakers to the elderly (Ranjitha & Sundaram, 2017). This study focuses on this critical research gap and empirically investigated the knowledge levels, utilisations behaviour of online smartphone buyers on grievance redressal mechanisms, thus contributing to academic scholarship and policy practice (Rajkumar & Selvaraj, 2023).

3. Review of Literature

Bhatnagar and Ghose (2004) carried out one of the first studies on the perceived risk of consumers shopping online in India and found that there was a strong link between the perceived risk of consumers and the need for developing existing and new grievance redressal mechanisms in online commerce which ultimately affects consumer purchase intention. This theoretical basis Pavlou and Fygenson (2006) claimed that consumer trust, mostly based on platform transparency and the effectiveness of complaint resolution is a key factor in the intention to purchase online and has remained an important part of the research on consumer behaviour in digital markets.

On this theoretical backdrop Singh (2012) has investigated the awareness of Indian consumers on awareness of the Consumer Protection Act 1986, which showed that there was a considerable lack of awareness even among the educated population of urban areas underlining the continuing relevance of institutional arrangements and the need for specific consumer education programmes. Mittal and Sethi (2014) found that, product related grievances, especially in the electronics industry, were most important reasons for post purchase regret, while a lack of a clear complaint escalation system had a significant impact on customer confidence in online platforms.

In the study conducted by Agarwal and Mehta 2015 on post-purchase dissatisfaction of online electronics customers, it was observed that less than 30% of the customers who were dissatisfied formally complained due to the perceived complexity of the procedures and lack of trust in the system. In this vein, Verma and Chaudhary (2016) confirmed the strong relationship between the perceived service quality dimensions (reliability, responsiveness and assurance) and consumers' willingness to formally complain rather than silently leave the platform. The demographic aspects of grievance behaviour were explored in greater detail by the study conducted by Ranjitha and Sundaram (2017) which focused on the grievances of consumers in the e-commerce sector in Tamil Nadu which showed that less than a quarter of the respondents were aware of the existence of the National Consumer Helpline and further noted that education status, occupation and digital literacy were factors.

Kavitha (M) A study on customer experience in E tailing and retailing. The results included in this research about the demographic variables and the determinants of customer experience are focused on hyper and retail markets respectively. This paper provides retailers with specific knowledge of the determinants that the customer considers being most important and significant contributor to an enhanced customer experience. It is suggested that the retailers take note of the significant predictors while developing retail format strategies. It also identifies the demographic characteristics of these customers.

Important determinants of complaint behaviour. To sum up, Goswami and Sharma (2018) concluded that the digitally literate consumers were much more likely to use online grievance portals and pass on unresolved grievances to the regulatory bodies, thereby bolstering the role of digital education in consumer protection.

Based on the findings, Kapoor and Kulshrestha (2019) believed that technological solutions have the potential to enhance the efficiency of redress, but low consumer awareness and digital illiteracy are persistent problems and interventions to overcome this need to be targeted, leveraging a mix of legislative change and consumer education. In line with this argument, Kumar and Venkatesh (2020) studied the grievances of smartphone buyers in Chennai and Hyderabad and discovered that the point of counterfeit products, denial of warranty and delayed refunds were the most commonly reported complaints, with fewer than 20% of the impacted consumers taking their complaints outside the level of platform interaction.

Nair and Gopalakrishnan (2021) highlighted the limitations of informal redressal channels as social media platforms in some instances led to quicker resolution, however, not legally binding and maintaining the need for institutional

mechanisms. Building on this Sharma and Patel (2022) reported that the rate of filing a formal complaint increased significantly after the Consumer Protection Act (CCPA) 2019 was enforced and Rajkumar and Selvaraj (2023) found a positive correlation between the educational attainment of consumers and the utilisation of grievance redressal mechanisms, indicating that the majority of consumers in Chennai were unaware of the Consumer Protection Act and its obligations.

Kavitha M (2021) In 2020 vast majority of the sector was stepped foot in the digitalization. Most people in the world, especially the elderly, have never seen such an impact of COVID-19 event. In this regards, study about crucial situation of COVID-19, digitalization performance, customer satisfaction and some fields turning to digitalization movements.

4. Objectives of the Study

- To measure the consumer awareness and use of grievance redressal mechanisms among the online smartphone buyers in Chennai.
- To study the effect of demographic factors on consumer awareness and utilization of grievance redressal among online smartphone buyers of Chennai city.
- To find out the relationship between awareness of consumers and key variables affecting grievance redressal behaviour among online buyers of smartphones in Chennai.

5. Scope of the Study

The study is restricted to online buyers of smartphones living in the Greater Chennai Corporation (GCC) as well as panchayat unions surrounding the Greater Chennai Corporation (GCC). The research observes only the complaints related to the purchase of smartphones online through e-commerce platforms like Amazon India, Flipkart, Croma Online and the official website of the brands, etc. All types of complaints such as Product Defects, Counterfeit Devices, Delivery issues, Warranty claims and Refunds delays handled by Samsung, Apple, OnePlus and Xiaomi. Additionally, the study aims to narrow its geographical scope to the city of Chennai to provide contextually relevant and focused analysis within the regulatory framework of the Consumer Protection E-Commerce Rules, 2020.

6. Research Methodology

6.1 Research Design

The study is a descriptive and analytical research design, where the descriptive part of the study is used to describe and characterize the level of consumer awareness and the utilization of grievances and the analytical part analyzes the relationship and determinants of the behavior of utilizing grievances with inferential statistical methods.

6.2 Population and Sampling

The target group is all adult age groups (18 years and above) who have bought a smartphone online and are living in the Chennai Metropolitan

Area. Cochran's formula was used to calculate the sample size at 95% confidence level and 5% margin of error which gave 350 respondents. Stratified random sampling was used with strata based on age group, gender, educational qualification and monthly income, to ensure that each age group, gender, educational qualification and monthly income bracket was represented.

6.3 Instrument Design

A structured self-administered questionnaire encompassing four dimensions namely Demographic Profile, Consumer Awareness, Grievance Redressal Utilisation and Platform-Level Compliance was developed and measured through Likert five-point scale, dichotomous and categorical items.

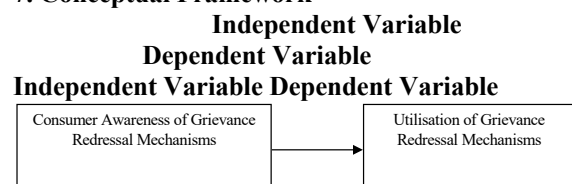
6.4 Data Collection

Primary data were collected through both online and offline modes across consumer electronics retail zones, educational institutions, residential areas and consumer forums in Chennai. Secondary data were sourced from the National Consumer Helpline annual reports, Ministry of Consumer Affairs publications, peer-reviewed journal articles and legal databases.

6.5 Statistical Tools for Analysis

In order to study the consumer awareness and utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai the statistical tools namely Reliability Analysis (Cronbach's Alpha), Descriptive Statistics, Chi-Square Test of Independence, One-Way Analysis of Variance (ANOVA), Pearson Correlation Analysis and Multiple Linear Regression are used.

7. Conceptual Framework



8. Hypothesis Setting

H₀₁: There is no significant association between demographic variables and the utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai.

H₁₁: There is a significant association between demographic variables and the utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai.

H₀₂: There is no significant difference in the level of consumer awareness across different demographic groups among online smartphone buyers in Chennai.

H₁₂: There is a significant difference in the level of consumer awareness across different demographic groups among online smartphone buyers in Chennai.

H₀₃: There is no significant relationship between consumer awareness and the utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai.

H₁₃: There is a significant positive relationship between consumer awareness and the utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai.

9. Data Analysis and Interpretation

The next section reports the results of statistical analyzes on the primary data gathered from 350 online smartphone consumers in Chennai. The data were analyzed using SPSS Version 26.0.

9.1 Reliability Test

For both measurement scales, Cronbach's Alpha reliability coefficient was used to examine internal consistency. George and Mallery's (2003) values are exceeded. A score of 0.80 is considered to have good reliability; scores greater than 0.90 have excellent reliability.

Table 9.1: Reliability Test

Sl. No.	Scale	No. of Items	Cronbach's Alpha (α)
1.	Consumer Awareness of Grievance Redressal Mechanisms	15	0.913
2.	Utilisation of Grievance Redressal Mechanisms	15	0.897
3.	Platform-Level Compliance and Satisfaction	10	0.874

[Source: Primary Data]

It is clear from the above table that all three scales have satisfactory internal consistency with Cronbach's Alpha values greater than 0.87. The alpha for the Consumer Awareness scale was 0.913, the Utilisation scale was 0.897 and the Platform Compliance scale was 0.874. These values are used to see how reliable the measurement instrument is, and thus can be used for subsequent inferential analysis.

9.2 Descriptive Statistics

In order to measure the level of consumer awareness and utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai descriptive statistics is applied.

Table 9.2: Descriptive Statistics of Key Variables

Sl. No.	Variable	Mean	Std. Deviation
1.	Consumer Awareness of Grievance Redressal Mechanisms	3.18	0.872

2.	Awareness of Consumer Protection Act 2019	2.94	0.941
3.	Knowledge of Platform Complaint Procedures	3.42	0.814
4.	Utilisation of Grievance Redressal Mechanisms	2.87	0.963
5.	Satisfaction with Grievance Resolution	2.71	1.042
6.	Digital Literacy for Redressal	3.56	0.788

[Source: Primary Data]

It is inferred from the above table that the mean values of all the variables range between 2.71 and 3.56 which means the level of consumer awareness of grievance redressal mechanisms (3.18) and utilisation of grievance redressal mechanisms (2.87) are at a moderate level. Hence it is proven that despite possessing adequate digital literacy skills online smartphone buyers in Chennai moderately utilise the available grievance redressal mechanisms indicating significant scope for improvement in consumer awareness and redressal behaviour.

9.3 Chi-Square Test of Independence

In order to analyse the association between demographic variables and the utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai the Chi-Square Test of Independence is applied.

H₀₁: There is no significant association between demographic variables and the utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai.

H₁₁: There is a significant association between demographic variables and the utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai.

Table 9.3: Chi-Square Test - Association Between Demographics and Grievance Utilisation

Sl. No.	Demographic Variable	Chi-Square Value (χ^2)	Degree of Freedom	p-value
1.	Gender	12.847	2	0.002*
2.	Educational Qualification	38.624	8	0.000*
3.	Monthly Income	29.413	6	0.000*

A Study on Consumer Awareness and Utilization of Grievance Redressal Mechanisms in Online Purchases of Smartphones with Special Reference to Chennai City

4.	Age Group	21.73 8	6	0.001*
5.	Occupation	18.29 1	8	0.019*

[Source: Primary Data] Note: ** Significant at 1% level; * Significant at 5% level

It is inferred from the above table that all five demographic variables namely gender ($\chi^2 = 12.847$, $p = 0.002$), educational qualification ($\chi^2 = 38.624$, $p < 0.001$), monthly income ($\chi^2 = 29.413$, $p < 0.001$), age group ($\chi^2 = 21.738$, $p = 0.001$) and occupation ($\chi^2 = 18.291$, $p = 0.019$) are significantly associated with grievance redressal utilisation. Hence the null hypothesis H_{01} is rejected and the alternate hypothesis H_{11} is accepted. Educational qualification emerged as the most significant demographic determinant with higher educated respondents demonstrating significantly greater utilisation of formal redressal channels which is consistent with the literature suggesting that education enhances both awareness of consumer rights and the confidence to exercise them.

9.4 One-Way Analysis of Variance (ANOVA)

In order to examine the significant differences in the level of consumer awareness across different educational qualification groups among online smartphone buyers in Chennai One-Way Analysis of Variance (ANOVA) is applied.

H₀₂: There is no significant difference in the level of consumer awareness across different educational qualification groups among online smartphone buyers in Chennai.

H₁₂: There is a significant difference in the level of consumer awareness across different educational qualification groups among online smartphone buyers in Chennai.

Table 9.4.a: ANOVA - Consumer Awareness by Educational Qualification

Source	Sum of Squares	df	Mean Square	F-value	p-value
Between Groups	47.312	4	11.828	17.641	0.000**
Within Groups	231.487	345	0.671		
Total	278.799	349			

[Source: Primary Data] Note: ** Significant at 1% level

Table 9.4.b: Group-wise Mean Awareness Scores by Educational Qualification

Educational Group	N	Mean Awareness Score	Std. Deviation
Below SSLC / High School	28	2.41	0.814
HSC / Diploma	62	2.89	0.792
UG (Bachelor's Degree)	124	3.24	0.841
PG (Master's Degree)	98	3.67	0.762
Professional / Doctorate	38	4.02	0.694

[Source: Primary Data]

The One-Way ANOVA result ($F = 17.641$, $p < 0.001$) presented in Table 9.4.a confirms that consumer awareness levels differ significantly across educational qualification groups, leading to the rejection of H_{02} . Table 9.4.b shows that, there is a definite positive gradient as the respondents who have professional or doctoral degree have the highest mean score of awareness ($M = 4.02$), whereas the respondents who have education less than SSLC have the lowest mean score of awareness ($M = 2.41$). This pattern indicates that the level of education is a crucial moderator in consumer knowledge of grievance redressal mechanisms and thus suggests a need for consumer education with particular focus on less-educated demographic segments.

9.5 Pearson Correlation Analysis

To build up the strength of the relationship between the consumer awareness and utilization of grievance redressal mechanisms among online smart phone buyers in Chennai Pearson correlation analysis is used.

H₀₃: There is no significant relationship between consumer awareness and the utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai.

H₁₃: There is a significant positive relationship between consumer awareness and the utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai.

Table 9.5: Pearson Correlation Matrix

Variable	1	2	3	4	5
1. Consumer Awareness	1.000				
2. Awareness of	0.748**	1.000			

CP Act 2019					
3. Platform Complaint Knowledge	0.682**	0.591**	1.000		
4. Grievance Utilisation	0.831**	0.714**	0.643**	1.000	
5. Satisfaction with Resolution	0.563**	0.487**	0.612**	0.779**	1.000

[Source: Primary Data]

Note:

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

It is inferred from the above table that all variables exhibit statistically significant positive correlations at the 1% level. The strongest correlation exists between Consumer Awareness and Grievance Utilisation ($r = 0.831$, $p < 0.001$) confirming a high degree of relationship between these two constructs hence the null hypothesis H_{03} is rejected and the alternate hypothesis H_{13} is accepted. The correlation between Awareness of Consumer Protection Act 2019 and Grievance Utilisation ($r = 0.714$, $p < 0.001$) further confirms that knowledge of legislative provisions meaningfully enhances complaint behaviour while the correlation between Platform Complaint Knowledge and Satisfaction with Resolution ($r = 0.612$) suggests that consumers familiar with platform complaint procedures are more likely to report satisfactory redressal outcomes.

9.6 Multiple Linear Regression Analysis

In order to identify the key determinants influencing the utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai Multiple Linear Regression Analysis is applied with Consumer Awareness, Awareness of Consumer Protection Act 2019, Platform Complaint Knowledge, Digital Literacy and Monthly Income as independent variables and Grievance Utilisation as the dependent variable.

H₀₃: Consumer awareness and demographic variables do not significantly predict the utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai.

H₁₃: Consumer awareness and demographic variables significantly predict the utilisation of grievance redressal mechanisms among online smartphone buyers in Chennai.

Table 9.6.a: Model Summary

Model	R	R Square (R ²)	Adjusted R Square	Std. Error of Estimate
1	0.887	0.787	0.783	0.4462

[Source: Primary Data]

Note: Predictors: Consumer Awareness, CP Act 2019 Knowledge, Platform Complaint Knowledge, Digital Literacy, Monthly Income

Table 9.6.b: ANOVA (Model Fit)

Model	Sum of Squares	df	Mean Square	F-value	p-value
Regression	224.831	5	44.966	225.837	0.000**
Residual	68.381	344	0.199		
Total	293.212	349			

[Source: Primary Data]

Data]

Note: ** Significant at 1% level

Table 9.6.c: Regression Coefficients

Variables	Unstandardised Coeff. (B)	Std. Error	Standardised Coeff. (β)	t-value	p-value
(Constant)	0.312	0.187		1.669	0.096
Consumer Awareness (X ₁)	0.418	0.041	0.437	10.195	0.000**
CP Act 2019 Knowledge (X ₂)	0.231	0.038	0.241	6.079	0.000**
Platform Complaint Knowledge (X ₃)	0.187	0.043	0.189	4.349	0.000**
Digital Literacy (X ₄)	0.163	0.047	0.158	3.468	0.001**

A Study on Consumer Awareness and Utilization of Grievance Redressal Mechanisms in Online Purchases of Smartphones with Special Reference to Chennai City

Monthly Income (X ₅)	0.094	0.036	0.097	2.611	0.009**
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[Source: Primary Data]

Note: ** Significant at 1% level; USC = Unstandardised Coefficient; SC = Standardised Coefficient

The model summary in Table 9.6.a reveals an R value of 0.887, indicating a very high degree of multiple correlation between the independent variables and grievance utilisation. The R² value of 0.787 indicates that 78.7% of the total variance in grievance redressal utilisation is explained collectively by the five predictor variables. The remaining 21.3% is due to factors not measured in the current model. The overall regression model is statistically significant ($p < 0.001$), which means that H₀₄ is rejected.

The regression coefficients in Table 9.6.c indicate that Consumer Awareness ($\beta = 0.437$, $p < 0.001$) is the most important predictor of grievance utilisation, suggesting that each unit increase in consumer awareness is related to a 0.418 unit increase in grievance redressal utilisation, while the other variables remain constant. The second most important predictor is CP Act 2019 Knowledge ($\beta = 0.241$, $p < 0.001$), highlighting the realworld significance of legislative awareness. Platform Complaint Knowledge ($\beta = 0.189$, $p < 0.001$), Digital Literacy ($\beta = 0.158$, $p = 0.001$), and Monthly Income ($\beta = 0.097$, $p = 0.009$) are also statistically significant predictors. The OLS regression equation is thus:

$$\text{Grievance Utilisation (Y)} = 0.312 + 0.418X_1 + 0.231X_2 + 0.187X_3 + 0.163X_4 + 0.094X_5 + \varepsilon$$

10. Findings and Suggestions

10.1 Major Findings

The study made the following conclusions based on the statistical analyses carried out:

- Consumer awareness of grievance redressal mechanisms among online SM buyers in Chennai is at moderate level with $M = 3.18$, which means that there is a significant number of consumers in the city who are aware of that but not fully.
- Grievance redressal utilisation, too, is on the moderate level ($M = 2.87$), with satisfaction with redressal being at the lowest level ($M = 2.71$), indicating that the existing redressal channels are underutilised and ineffective.
- The five demographic variables such as gender, level of education, income, age and occupation were tested for association with grievance redressal utilisation among online smartphone buyers in Chennai and Chi-Square analysis shows that all the five demographic variables were found to be significantly associated

with grievances redressal utilisation among the online smartphone buyers in Chennai at $p < 0.05$ level of significance.

- One-Way ANOVA shows that there is a statistical difference between the four groups of educational qualification in their consumer awareness level ($F = 17.641$, $p < 0.001$) with post-graduate and professionally qualified respondents showing significantly higher consumer awareness level.
- Pearson correlation analysis revealed that consumer satisfaction and grievance redressal utilisation have a significant positive correlation ($r = 0.831$, $p < 0.001$), which indicates that consumer awareness is an important factor in relation to grievance behaviour.
- Among the variables, Consumer Awareness ($\beta = 0.437$) was found to be the most important predictor on grievance redressal utilisation followed by Consumer Protection Act 2019 Knowledge ($\beta = 0.241$), Platform Complaint Knowledge ($\beta = 0.189$), Digital Literacy ($\beta = 0.158$) and Monthly Income ($\beta = 0.097$), and the model accounted for 78.7% of the variance in grievance redressal utilisation.

10.2 Suggestions

Based on the empirical findings the following suggestions are made to different stakeholders:

- Ecommerce companies like Amazon and Flipkart should make grievance redressal information visible at various consumer touchpoints like product pages, order confirmation emails and delivery notifications, and made simple.
- Complaint filing guides in regional languages, in particular, Tamil should be enforced.
- Central Consumer Protection Authority and the Tamil Nadu Consumer Affairs Department should conduct focused awareness programmes in educational institutions, residential welfare associations/ public spaces in Chennai on specific issues regarding the provisions of Consumer Protection Act 2019 along with the E- Commerce Rules 2020.
- Consumer rights education should be incorporated in academic curricula and community programmes especially for the less educated and those belonging to the lower income group that have shown the least consumer rights awareness scores and lowest utilisation scores.
- Adoption of AI driven multi-lingual chatbots for complaints, online tracking systems of complaints, and digital consumer courts can help save the

complexity of the processes currently being followed and boost the formal redressal process for consumers.

- vi. Original equipment manufacturers like Samsung, Xiaomi, Apple and OnePlus must make sure that grievance redressal is communicated at the point of sale and in product documentation, which includes warranty terms and authorised service centre information as well as escalation procedures.

11. Conclusion

The present study employed the Reliability Analysis, Descriptive Statistics, Chi-Square Test, One-Way ANOVA, Pearson's correlation analysis and Multiple linear regression techniques to empirically examine consumer awareness on grievance redressal mechanism and its consumer utilisation among online smart phone buyers of Chennai city. The analysis indicates that although the smartphones users in the city are digitally engaged, their awareness of the steps to take if a complaint arises, and their willingness to take formal steps to resolve an issue, are low, especially among the less educated, lower income and older segment of the population. Consumer awareness is the strongest determinant of grievance utilisation, highlighting the importance of consumer education and the provision of information to improve the effectiveness of consumer protection. The study makes a theoretical contribution by adding the under-studied area of high-value electronics, e-commerce and urban Indian consumers to the study of consumer behaviour and consumer protection; it adds a methodological contribution by showing the usefulness of multi-tool statistical analysis in explaining the complexity of consumer grievance behaviour and practically with actionable recommendations for platforms, regulators and consumer advocacy groups. The framework could be expanded to Tier-2 and Tier-3 markets and could also be applied to additional products besides smartphones, or longitudinal designs could be used to assess the immediate effect of regulatory measures on consumer awareness and redressal practices and their long-term impact.

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