ISSN 1840-4855
e-ISSN 2233-0046

Original scientific article
http://dx.doi.org/10.70102/afts.2026.1835.424

THE MEDIATING ROLE OF HOUSEHOLD EXPENSE REDUCTION IN THE RELATIONSHIP BETWEEN SUBSIDIZED POLICE CANTEEN AND SAVINGS BEHAVIOUR

M. Manoj Kumar[1*], Dr.B. Devamaindhan[2], Dr.Y. Aysha Fathima[3], S. Akila[4], R. Gayathri[5]

[1]Assistant Professor, Department of Management Studies, Jerusalem College of Engineering, Chennai, Tamil Nadu, India. e-mail: manoj@jerusalemengg.ac.in, orcid: https://orcid.org/0009-0007-2713-3013*
[2]Research Supervisor, Department of Management Studies, University of Madras, Chennai, Tamil Nadu, India. e-mail: deva261073@gmail.com, orcid: https://orcid.org/0009-0009-7099-5158
[3]Associate Professor, Department of Management Studies, Jerusalem College of Engineering, Chennai, Tamil Nadu, India. e-mail: ayshafathimamba@jerusalemengg.ac.in, orcid: https://orcid.org/0000-0002-0902-4418
[4]Assistant Professor, Department of Management Studies, Jerusalem College of Engineering, Chennai, Tamil Nadu, India. e-mail: akilamba@jerusalemengg.ac.in, orcid: https://orcid.org/0009-0004-6219-1081
[5]Assistant Professor, Department of Management Studies, Jerusalem College of Engineering, Chennai, Tamil Nadu, India. e-mail: gayathrirmba@jerusalemengg.ac.in, orcid: https://orcid.org/0009-0000-6770-6700

Received: January 13, 2026; Revised: February 25, 2026; Accepted: April 15, 2026; Published: May 29, 2026

SUMMARY

The presence of subsidized welfare systems is also major determinants of household fiscal behaviour, especially among uniformed employees like police officers, whose choices about finances are determined by organized income distributions and professional limitations. This paper explores how subsidized police welfare canteens affect the financial behaviour with a mediating variable of grocery cost savings among the police personnel in Tamil Nadu. The research is based on the Household Economic Theory and Consumer Utility Theory that describes the way in which lowered costs of consumption can impact financial decision-making. The research design adopted was quantitative cross-sectional and the primary data collected included 131 valid respondents using a structured questionnaire via Google Forms. This was analyzed with the help of Partial Least Squares Structural Equation Modeling (PLS-SEM) with bootstrapping which helped in the evaluation of both direct and indirect relationships. The findings show that frequency of use and price sensitivity are important determinants of financial behaviour affecting the level of savings as well as financial allocation decisions. The savings in groceries were reported to be a partial mediator especially between canteen accessibility and investment allocation. As an example, the frequency of use has a considerable impact on the cost savings of groceries (β = 0.356, p= 0.003), and the cost savings of groceries have a significant impact on investment allocation (β= 0.287, p= 0.010). Nonetheless, the mediating effect was weak in describing the debt repayment behaviour. The research

finds that the subsidized consumption helps to enhance the financial performance, especially in encouraging investment-oriented behaviour among the police officers. It also brings out the existence of a financial stress buffering effect, with households having a lower expense leading to greater financial stability. The results have practical implications to policymakers to develop efficient welfare programs that focus on enhancing financial well-being.

Key words: *subsidized welfare canteens, savings behaviour, grocery cost savings, PLS-SEM, investment allocation, debt repayment, financial stress buffering effect.*

INTRODUCTION

In an era of inflation at its peak and financial uncertainty, saving behaviour has emerged as a crucial component for financial stability in household. Life of Personnels in uniformed services such as police professionals its highly mandatory for them to inculcate effective saving habits to manage their long-term financial needs, investment for future and unexpected emergencies [3]. In spite of having a regular timely salary income it suffers from unexpected expenditure pressure arousing from irregular working hours, stress from job, family commitments [6][7]. These factors make reduction in household expenditure a mandatory healthy habit.

Government supported welfare play a vital role in reducing the financial burden for police personnels [8]. Among various initiatives provided for police department the subsidised police canteens help them in reducing grocery and daily needs expenses [9]. From the Household economic theory, this study know that households allocate income for consumption, savings and investments in order to achieve long-term welfares. On the other hand, Consumer Utility theory summarises how individuals get satisfaction when this study avail price advantages. When expenses are saved the amount is redirected towards savings, investments and debt repayment. Despite these theoretical linkages the grocery cost savings, welfare utilization and saving behaviour are not shown in limelight especially for police.

Many prior studies have dealt with income levels, financial literacy, demographic factors etc. only few studies have investigated the role of subsidised canteens in savings decisions. This research study has investigated the attributes of tamilnadu police welfare canteens such as price subsidy levels, accessibility and frequency of use with grocery savings and how these savings help in investment allocation and repayment of debt.

Research Objectives

This paper will set out to discuss the financial behaviour of uniformed police officers and how it is influenced by subsidized police welfare canteens. In particular, the following objectives are:

- To examine how canteen related factors (price sensitivity, accessibility, and frequency of use) influence grocery cost saving.
- To determine how savings of grocery costs affect investment allocation and debt repayment.
- To examine the mediating effect of grocery savings in the correlation between canteen use and financial performance.
- To know the effects of subsidized consumption on the financial stability of households in police workers.

Research Hypothesis

H1: Grocery cost savings mediates the relationship between accessibility and investment allocation.

H2: Grocery cost savings mediates the relationship between frequency of use and investment allocation.

H3: Grocery cost savings mediates the relationship between price sensitivity and debt repayment.

H4: Grocery cost savings mediates the relationship between price sensitivity and investment allocation.

H5: Grocery cost savings mediates the relationship between accessibility and debt repayment.

H6: Grocery cost savings mediates the relationship between frequency of use and debt repayment.

This research paper contributes to the existing body of work on institutional welfare and household economics in several ways. In the first place, it deals with uniformed employees, a special population, whose income is stable, yet insecure, with stressful work hours, and whose work hours are unstable, which shifts the emphasis of the overall low-income population. Second, it creates a new pathway of subsidy-cost saving-financial behaviour, illustrating how canteen subsidies stimulate investment preference and debt repayment by saving money at the grocery. Third, it presents the financial stress buffering effect which postulates that lower daily expenses enhance financial decision-making. Lastly, through the combination of Household Economic and Consumer Utility theories through PLS-SEM, it offers a serious, stratified explanation of specialized welfare ecology.

The paper is structured in the following manner: Section II discusses the existing literature and determines gaps in research. The conceptual framework is described in Section III. Section IV outlines the research methodology, data collection, and tools of data analysis. The results and discussion are presented in section V. Lastly; Section VI wraps up the research with implications and future research directions.

LITERATURE REVIEW

Numerous research studies have investigated the effect that subsidized welfare assistance programs have on people's financial behaviours, but only a few have considered how institutional welfare assistance programs (e.g., police canteens) affect the financial decisions of uniformed employees. The existing literature is largely limited to examining either general or low-income groups, particularly in terms of the evidence for a direct relationship between subsidies and savings behaviour, as well as the lack of understanding concerning subsidized food consumption within some institutional settings [10][11]. The previous study provided evidence of consumers' behaviour towards food consumed in staff canteens. It provides insights about how subsidised food affects the manner in which employees spend money in these types of settings [1][12]. This is consistent with the broader idea that subsidized food consumption can result in significant savings which could also influence one's overall financial decisions with respect to how one saves and invests [13][15].

A study undertaken by a group of researchers assessed the relationship between self-control and making debt decisions particularly with regard to the use of credit [2][20]. Their conclusion indicates that self-control affects financial decision-making processes (credit repayments) and that the self-control may also be affected by subsidies lowering everyday expenses [14]. The evidence also supports the idea that welfare subsidies not only help reduce financial pressure now but can also positively affect a person's long-term financial decision-making processes with respect to how one saves and invests [16][18].

A systematic review has recently conducted an analysis of studies examining the impact of subsidies in supporting healthier dietary behaviours [4][17]. Overall, this review indicates that providing people with financial incentives, mainly through reduced prices on Food, will change people's behaviour at the point of purchase. As such, this would indicate that by offsetting grocery costs, households will be able to redirect their income away from immediate consumption to either saving or investing [5].

There is also additional empirical support for the use of subsidies for food as a mechanism to increase household financial sustainability derived from the systematic review identified within this study, which specifically looks at how providing subsidies to purchase healthy foods influences consumer purchasing behaviour and in turn impacts household financial sustainability [19].

The findings from these studies illustrate how subsidised welfare programmes have the ability to subjectively enhance financial behaviours within structured environments such as law enforcement agencies, where financial decisions may be negatively affected by erratic working hours, and, due to

stressful job environments, so, due to the scarcity of financial resources, a majority of decisions made will likely favour immediate consumption.

The integration of Household Economic Theory and Consumer Utility Theory creates a framework for comprehending how reducing the cost for households can influence their overall financial outcomes (i.e., savings, investment portfolio, debt repayment).

The current study aims to fill a gap in knowledge about the welfare canteens provided by police departments in Tamil Nadu, India, which represent a form of institutionalized welfare that has not been adequately investigated by researchers. In addition to analysing both the impact of grocery cost reductions as a potential mediator in previous subsidy-related studies, this research also includes new factors specific to the institutional environment of police officers to build upon prior work and to contribute to the larger body of literature that examines how subsidized welfare can contribute to promoting financial security for police officers. As a result, this study will provide useful information to policymakers about how to design institutional welfare programs that lead to long-term financial security for uniformed personnel. Additionally, many literature reviews to date have summarized related explanatory studies regarding institutionalized forms of welfare and how affect an individual's financial behaviours, and while doing so, provided a larger theoretical rationale that is consistent with the theoretical framework used in this study.

BACKGROUND OF THE STUDY AND CONCEPTUAL FRAMEWORK

This study uses Household economic theory and Consumer Utility theory, which explains the mechanism of utilization of welfare canteens by Tamil Nadu police and their rational allocation of income between consumption expenses and savings. Price subsidy levels, accessibility, and frequency of use are the sub-variables under Tamil Nadu police welfare canteens. Price subsidy levels refer to the price at which the grocery items and daily needs are available for police, Accessibility refers to the ease of reach which denotes availability and location. Frequency of use reflects as how many times it visits and purchases the items available in welfare canteens. These three are connected to grocery cost savings which acts as a mediating variable and represents the amount which is saved through reduced spending. One of the dependent variables in the study are investment allocation, which denotes the investment avenues where the saved costs are parked and the other dependent variable is debt repayment which reflects utilization of the funds towards repayment of debt. The debt repayment increases financial stability and lowers stress.

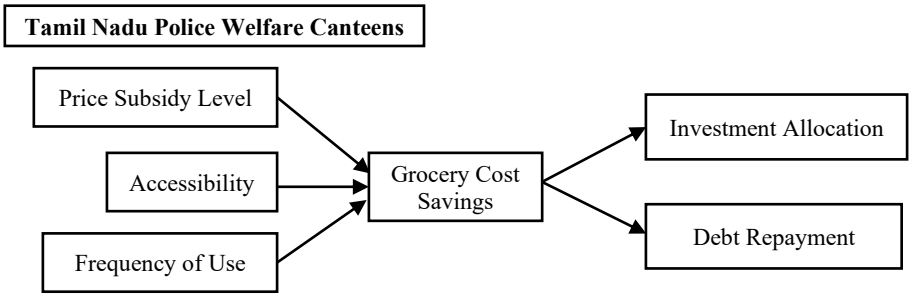

Figure 1. Conceptual framework of subsidized police canteen utilization and financial outcomes

Figure 1 shows the proposed research model where price subsidy level, accessibility and frequency of use of Tamil Nadu police welfare canteens can affect the savings of the grocery costs. This variable mediates, directing the impacts of canteen use to important financial results, i.e. investment allocation and debt repayment, hence showing a better management of household finances.

Research Methodology

In this research, a quantitative cross-sectional research design is used in order to test the relationship between the use of subsidized police canteens and savings behavior among the police officers in Tamil

Nadu, India. In particular, the study is focused on the mediating variable of grocery cost savings, which affects investment allocation and debt repayment.

Study Area and Institutional Context

In this study, the sources of data were Tamil Nadu Police staff, mostly based in Chennai and other districts. The institutional dimension refers to the government-subsidized police welfare canteens, where the subsidized grocery goods and daily necessities are offered only to the police employees and their relatives.

Data Collection and Sampling

The structured questionnaire was used as the primary source of data in this research because Google Forms is accessible and simplifies the management of the data. The survey was done in three months. A non-probability purposive sampling method was used to focus on the participants who had certain characteristics that were of interest to the research objectives.

A total of 140 responses were obtained in the first distribution. After the data cleaning process which included the screening of incomplete entries, repeated responses, outliers, etc., 131 responses were considered as valid and included in the final analysis. This is a fine sample size which forms the foundation of the statistical analyses in this study.

Inclusion Criteria

The research applied a certain list of inclusion criteria to make sure that the respondents had the required expertise and life experience to answer the purpose of the research. In particular, the sample was confined to the serving and retired Tamil Nadu police personnel that evidenced active involvement in the police welfare canteens. The participants had to be the key or active stakeholders in the financial decision-making processes within their households in order to put into perspective the practical consumer behavior which was the objective of the research. A strict validation stage was carried out to ensure the integrity of the dataset; any submissions with incomplete information or that lacked logical consistency were removed systematically out of the ultimate analysis.

Measurement of Variables

All constructs were measured using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

Let:

- A= Accessibility
- F= Frequency of use
- P= Price Sensitivity
- G= Grocery Cost Savings (Mediator)
- IA= Investment Allocation
- DR= Debt Repayment

Structural Equation Model

Partial Least Squares Structural Equation Modeling (PLS-SEM) is used to analyze the relationships between the variables of the study. There are two outcome equations and one mediating equation in the model.

Mediator Equation

$$G = \beta_1 A + \beta_2 F + \beta_3 P + \epsilon_1 \qquad (1)$$

Equation 1 shows how the mediator, Grocery Cost Savings (G), is affected by the factor of Accessibility (A), Frequency of Use (F) and Price Sensitivity (P). It describes the role of canteen-related aspects in decreasing household expenditures.

Outcome Equations

$$IA = \beta_4 A + \beta_5 F + \beta_6 P + \beta_7 G + \epsilon_2 \quad (2)$$

Equation 2 expresses the effect of factors of canteen utilization and savings in groceries to Investment Allocation (IA) that is, how the savings are diverted to financial investments.

$$DR = \beta_8 A + \beta_9 F + \beta_{10} P + \beta_{11} G + \epsilon_3 \quad (3)$$

This equation 3 represents the impact of the same variables on Debt Repayment (DR) as lower costs play a role in the management of financial obligations.

Mediation Effect

The mediation effect of Grocery Cost Savings (G) is determined by looking at the indirect effect of independent variables on outcome variables. The indirect effect is computed to be equation 4:

$$\text{Indirect Effect} = (\beta_{X \to G}) \times (\beta_{G \to Y}) \quad (4)$$

This is as far as the Accessibility (A), Frequency of Use (F) and Price Sensitivity (P) affect Investment Allocation (IA) and Debt Repayment (DR) via the mediator.

Where:

- $X \in \{A, F, P\}$= Independent variables
- $Y \in \{IA, DR\}$= Dependent variables

The bootstrapping with 5000 resamples is applied to assess the significance of the indirect effects with the help of the confidence intervals and the p-values with the help of which the mediation is defined.

Algorithm 1: Proposed PLS-SEM Model Algorithm

Input:

Survey dataset D containing observed variables for A, F, P, G, IA, and DR

Output:

Path coefficients (β), indirect effects, and significance levels

BEGIN

Step 1: Data Input and Preprocessing

1.1 Load dataset D

1.2 Remove incomplete or invalid responses

1.3 Encode Likert scale responses (1–5)

Step 2: Construct Definition

2.1 Define independent variables:

A (Accessibility), F (Frequency), P (Price Sensitivity)

2.2 Define mediator:

G (Grocery Cost Savings)

2.3 Define dependent variables:

IA (Investment Allocation), DR (Debt Repayment)

Step 3: Measurement Model Evaluation

3.1 FOR each construct in $\{A, F, P, G, IA, DR\}$ DO

a. Compute Cronbach's Alpha

b. Compute Composite Reliability (CR)

c. Compute Average Variance Extracted (AVE)

d. IF (CR < 0.70) OR (AVE < 0.50) THEN

Modify or remove weak indicators

ENDIF

END FOR

Step 4: Structural Model Specification

4.1 Define structural equations:

$$G = \beta_1 A + \beta_2 F + \beta_3 P + \varepsilon_1$$

$$IA = \beta_4 A + \beta_5 F + \beta_6 P + \beta_7 G + \varepsilon_2$$

$$DR = \beta_8 A + \beta_9 F + \beta_{10} P + \beta_{11} G + \varepsilon_3$$

Step 5: Model Estimation

5.1 Apply PLS-SEM algorithm

5.2 Estimate path coefficients (β values)

5.3 Compute coefficient of determination (R^2) for G, IA, and DR

Step 6: Bootstrapping

6.1 Set number of resamples = 5000

6.2 FOR each resample DO

a. Re-estimate the model

b. Store β values, t-statistics, and p-values

END FOR

Step 7: Mediation Analysis

7.1 FOR each independent variable X in $\{A, F, P\}$ DO

FOR each dependent variable Y in $\{IA, DR\}$ DO

a. Compute indirect effect: $(\beta_{(}X \rightarrow G_{)} \times \beta_{(}G \rightarrow Y_{)})$

b. Assess significance using confidence intervals

END FOR

END FOR

END

Algorithm 1 details the sequential process of the analysis of the proposed model with the help of PLS-SEM, including the preprocessing of data, verification of the measurement model, estimation of the structural model, and testing of the mediation with the help of bootstrapping.

RESULTS AND DISCUSSIONS

The analysis of the data was performed with the help of Smart PLS of Partial Least Squares Structural Equation Modeling (PLS-SEM). Both the measurement model and structural model were assessed using the software with the reliability, validity, path coefficients, and mediation effects. Moreover, preliminary data cleaning and organization were performed with the help of Microsoft Excel.

This dataset is made up of primary data gathered with the help of the Tamil Nadu police officers using a structured questionnaire that will be administered using Google Forms. 140 responses were first recorded and 131 valid responses were retained after screening. The dataset consists of demographic variables and major constructs that are price sensitivity, accessibility, frequency of use, savings on grocery costs, investment allocation and debt repayment measured in a 5-point Likert scale.

The standard parameters settings were applied in the PLS-SEM analysis. To test the significance of path coefficients and mediation effects, a bootstrapping process was used with 5000 resamples. The evaluation criteria were Composite Reliability (CR > 0.70), Average Variance Extracted (AVE > 0.50) and t-statistics (>1.96) and p-values (<0.05). These thresholds guarantee reliability and validity of the measurement and structural models.

The research has respondents total of 140 responses and among them only 131 were police welfare canteen users of tamilnadu. The questionnaire is divided into two parts i.e., section A demographic details of tamilnadu police canteen users including age, gender, income, designation etc, and Section B includes the debt repayment and investment allocation based on the grocery cost savings are shown in table 1.

INFERENCE: The sample is predominantly young, with 63.36% of respondents aged between 21–30 years, followed by 20.61% in the 31–40 category. Females constitute 55.73% of the sample, and the majority of respondents hold undergraduate (40.46%) or postgraduate (41.98%) qualifications, indicating a well-educated group. More than half of the respondents (55.73%) earn between ₹20,000 and ₹30,000 per month. Nearly half hold the rank of Inspector and above (49.62%), while 33.59% are Sub Inspectors. A greater proportion are single (57.25%), and most belong to families with five or more members. Overall, the demographic composition reflects young, mid-income, actively serving personnel with moderate to large family responsibilities, which provides relevant context for understanding their financial management and savings behaviour.

Table 1. Demographic profile of respondents (N=131)

Characteristics	Items	n	percentage
Age	21-30	83	63.36
	31-40	27	20.61
	41-50	1	0.76
	51-60	4	3.05
	above 60	1	0.76
Gender	Male	58	44.27
	Female	73	55.73
Education	School	8	6.11
	UG	53	40.46
	PG	55	41.98
	Above PG	15	11.45
Monthly income	20000-30000	73	55.73
	30001-40000	21	16.03
	40001-50000	24	18.32
	50001-60000	0	0.00
	Above 60000	13	9.92
Designation	Sub inspector	44	33.59
	Inspector and above	65	49.62
	Retired from service	22	16.79
Marital Status	Single	75	57.25
	Married	56	42.75
Family size	3 Members	12	9.16
	4 Members	30	22.90
	5 Members	46	35.11
	Above 5 members	43	32.82

Reliability and Validity Results

Table 2. Reliability and convergent validity assessment of measurement model

Constructs	Cronbach's Alpha	Loading values	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Accessibility	A1	0.296	0.866	0.908	0.712
	A2	0.283			
	A3	0.290			
	A4	0.318			
Frequency	F1	0.355	0.848	0.906	0.763
	F2	0.403			
	F3	0.386			
Groceries	G1	0.263	0.898	0.928	0.762
	G2	0.294			
	G3	0.293			
	G4	0.295			
Investment	IA1	0.383	0.844	0.904	0.759
	IA2	0.360			
	IA3	0.404			
Price	P1	0.274	0.89	0.923	0.75
	P2	0.288			
	P3	0.302			
	P4	0.291			
Repayment	R1	0.384	0.864	0.917	0.786
	R2	0.375			
	R3	0.369			

The measurement model was examined in terms of internal consistency reliability and convergent validity for the constructs of Accessibility, Frequency, Groceries, Investment, Price, and Repayment, as shown in table 2. All reliability measures satisfied the recommended threshold. Cronbach's alpha values exceeded 0.70, while Composite Reliability ranged from 0.904 to 0.928, and rho_a values varied between 0.844 and 0.898, indicating strong internal consistency across constructs.

Convergent validity was confirmed as the AVE values ranged from 0.712 to 0.786, exceeding the minimum benchmark of 0.50. This suggests that each construct explains a substantial proportion of the variance in its respective indicators. Overall, the findings support the adequacy of the measurement model in terms of reliability and convergent validity of the measurement model.

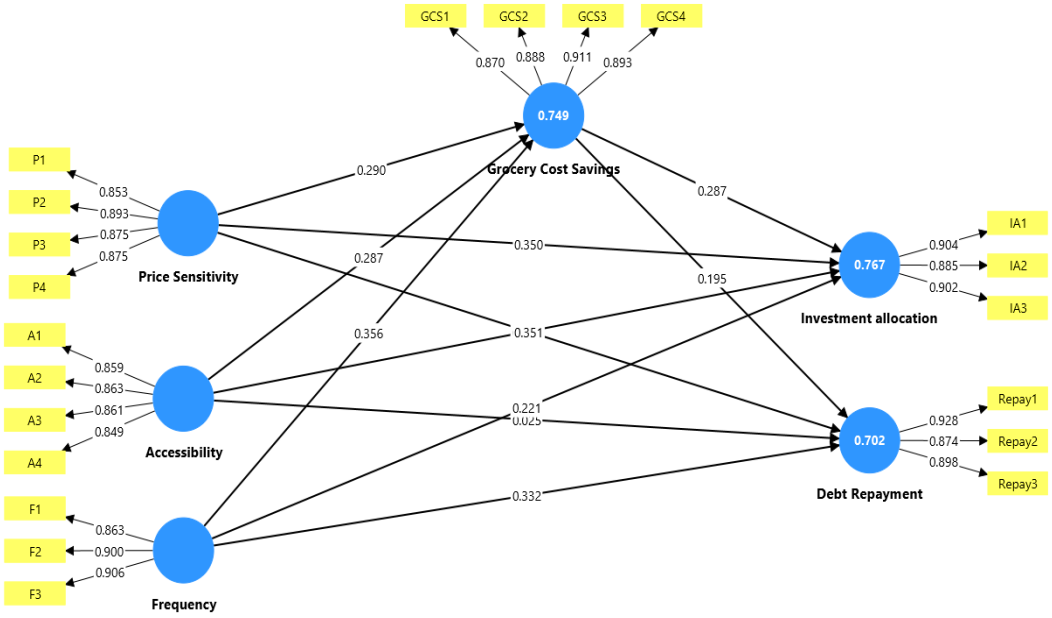

Figure 2. PLS-SEM structural model of subsidized canteen utilization and financial behaviour

Figure 2 depicts the PLS-SEM structural model representing the associations between price sensitivity, accessibility and frequency of use and the grocery cost savings, investment allocation and debt repayment. Grocery cost savings is a mediating variable, which affects financial outcomes. The model reflects path coefficients, factor loadings, and the values of R2 of the endogenous constructs which reflect the explanatory power of the model in predicting the investment allocation and debt repayment of police personnel.

Table 3. Structural model path coefficients and hypothesis testing results

	Original sample (O)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Accessibility -> Debt Repayment	0.025	0.115	0.216	0.829
Accessibility -> Grocery Cost Savings	0.287	0.1	2.881	0.004
Accessibility -> Investment allocation	0.089	0.116	0.76	0.447
Frequency -> Debt Repayment	0.332	0.124	2.687	0.007
Frequency -> Grocery Cost Savings	0.356	0.118	3.004	0.003
Frequency -> Investment allocation	0.221	0.108	2.052	0.04
Grocery Cost Savings -> Debt Repayment	0.195	0.125	1.551	0.121
Grocery Cost Savings -> Investment allocation	0.287	0.111	2.583	0.01
Price Sensitivity -> Debt Repayment	0.351	0.113	3.094	0.002
Price Sensitivity -> Grocery Cost Savings	0.29	0.121	2.405	0.016
Price Sensitivity -> Investment allocation	0.35	0.118	2.967	0.003

Bootstrapping results (Table 3) indicate that Accessibility does not significantly influence Debt Repayment ($\beta = 0.025$, $p = 0.829$) or Investment Allocation ($\beta = 0.089$, $p = 0.447$), but it significantly affects Grocery Cost Savings ($\beta = 0.287$, $p = 0.004$). Frequency shows significant positive effects on Debt Repayment ($\beta = 0.332$, $p = 0.007$), Grocery Cost Savings ($\beta = 0.356$, $p = 0.003$), and Investment

Allocation ($\beta = 0.221$, $p = 0.040$).Grocery Cost Savings significantly influences Investment Allocation ($\beta = 0.287$, $p = 0.010$) but not Debt Repayment ($\beta = 0.195$, $p = 0.121$).Price Sensitivity significantly affects Debt Repayment ($\beta = 0.351$, $p = 0.002$), Grocery Cost Savings ($\beta = 0.290, p = 0.016$), and Investment Allocation ($\beta = 0.350, p = 0.003$).Overall, Frequency and Price Sensitivity emerge as strong predictors of financial outcomes, while Accessibility primarily impacts Grocery Cost Savings.

Table 4. Mediation analysis results of grocery cost savings in financial outcomes

	Original sample (O)	**Standard deviation (STDEV)**	**T statistics (|O/STDEV|)**	**UL**	**LL**	**P values**	**Remarks**
Accessibility -> Grocery Cost Savings -> Investment allocation	0.117	0.059	1.972	0.016	0.246	0.049	Supported
Frequency -> Grocery Cost Savings -> Investment allocation	0.1	0.06	1.681	0.006	0.239	0.093	Not Supported
Price Sensitivity -> Grocery Cost Savings -> Debt Repayment	0.06	0.042	1.409	-0.022	0.149	0.159	Not Supported
Price Sensitivity -> Grocery Cost Savings -> Investment allocation	0.081	0.051	1.566	-0.011	0.189	0.117	Not Supported
Accessibility -> Grocery Cost Savings -> Debt Repayment	0.086	0.055	1.575	-0.011	0.206	0.115	Not Supported
Frequency -> Grocery Cost Savings -> Debt Repayment	0.075	0.065	1.152	-0.007	0.238	0.249	Not Supported

The mediation analysis assessed the indirect effects of Accessibility, Frequency, and Price Sensitivity on Investment Allocation and Debt Repayment through Grocery Cost Savings, as demonstrated in table 4.

The results reveal that Grocery Cost Savings acts as a mediator for the relationship between Accessibility and Investment Allocation ($\beta = 0.117$, $t = 1.972$, $p = 0.049$). The confidence interval ($LL = 0.016$, $UL = 0.246$) does not include zero, confirming the presence of a statistically significant indirect effect at the 5% level. Hence, this hypothesis is supported.

In contrast, the indirect effect of Frequency on Investment Allocation ($\beta = 0.100, p = 0.093$) is not statistically significant at the 5% level, although it approaches marginal significance. Therefore, this mediation is not supported.

CONCLUSION

The research evaluated how subsidized police welfare canteen use influences financial behaviour; specifically, whether grocery cost savings mediates the effect of using canteen among Tamil Nadu police officers (N = 131). The results will be valuable empirical evidence on the effect of consumption based on subsidies on household financial performance. The results of the structural model show that frequency of use and price sensitivity are both important predictors of financial behaviour. Frequency of use shows a strong positive effect on grocery cost savings ($\beta = 0.356, p = 0.003$), investment allocation ($\beta = 0.221$, $p = 0.040$), and debt repayment ($\beta = 0.332$, $p = 0.007$). Similarly, price sensitivity significantly influences grocery cost savings ($\beta = 0.290$, $p = 0.016$), investment allocation ($\beta = 0.350$, $p = 0.003$), and debt repayment ($\beta = 0.351$, $p = 0.002$). Conversely, access has a considerable impact on the savings in grocery costs only ($\beta = 0.287$, $p = 0.004$), but not direct financial results. Moreover, savings in grocery costs have a considerable effect on the allocation of investments ($\beta = 0.287$, $p = 0.010$), but not debt repayment ($\beta = 0.195$, $p = 0.121$), which can be regarded as a selective effect on financial decisions. The mediation analysis indicates that only accessibility and investment allocation have a statistically significant indirect impact, mediated by grocery cost savings ($\beta = 0.117$, $p = 0.049$), but not other direct and indirect impacts. These results to some extent support the mediation framework proposed and emphasize the small yet significant role of cost savings. In general, the research confirms

the financial stress buffering hypothesis, in which decreased household spending increases investment-related financial behaviour. Future studies can build on this study by using longitudinal designs, adding extra variables like financial literacy and behavioural biases, and comparative studies across various regions or welfare systems to enhance the ability to generalize and the theoretical richness.

REFERENCES

[1] Czarniecka-Skubina E, Górska-Warsewicz H, Trafiałek J. Attitudes and consumer behavior toward foods offered in staff canteens. International journal of environmental research and public health. 2020 Sep;17(17):6239. https://doi.org/10.3390/ijerph17176239

[2] Fernández-López S, Castro-González S, Rey-Ares L, Rodeiro-Pazos D. Self-control and debt decisions relationship: evidence for different credit options. Current Psychology. 2024 Jan;43(1):340-57. https://doi.org/10.1007/s12144-023-04251-7

[3] Ouyang C, Joseph M, Zhang Y, Naveed K. The interplay of financial safety nets, long-term goals, and saving habits: A moderated mediation study. International Journal of Financial Studies. 2025 Mar 20;13(1):47. https://doi.org/10.3390/ijfs13010047

[4] Huangfu P, Pearson F, Abu-Hijleh FM, Wahlich C, Willis K, Awad SF, Abu-Raddad LJ, Critchley JA. Impact of price reductions, subsidies, or financial incentives on healthy food purchases and consumption: a systematic review and meta-analysis. The Lancet Planetary Health. 2024 Mar 1;8(3):e197-212. https://doi.org/10.1016/S2542-5196(24)00004-4

[5] Yin Y, Huang LA, Han Q. Urban-rural consumption differences among the elderly in developed regions: Evidence from Zhejiang, China. Plos one. 2025 Nov 26;20(11):e0335231. https://doi.org/10.1371/journal.pone.0335231

[6] Padhiary KR, Sharma A. Financial health & profitability: examining accounting practices in cuttack's wholesale vs. retail sector. International Journal for Research in Social Science and Humanities. 2026 Jan 27;12(1):1-7. https://doi.org/10.53555/ssh.v12i1.2476

[7] Comini LD, Lopes SO, Rocha DM, Silva MM, Hermsdorff HH. The effects of subsidies for healthy foods on food purchasing behaviors, consumption patterns, and obesity/overweight: a systematic review. Nutrition reviews. 2025 Jul;83(7):e1722-39. https://doi.org/10.1093/nutrit/nuae153

[8] Gingell T, Murray K, Correa-Velez I, Gallegos D. Determinants of food security among people from refugee backgrounds resettled in high-income countries: A systematic review and thematic synthesis. PloS one. 2022 Jun 2;17(6):e0268830. https://doi.org/10.1371/journal.pone.0268830

[9] Chouhan N, Jaiswal P, Raien SB. A Comparative Study of Determinants of Revenue and Profitability of Local Grocery Stores of Indore and Pune. In The Transdisciplinary Research Approach 2025 Dec 4 (pp. 71-90). Routledge India. https://doi.org/10.4324/9781003348498-6

[10] Berggreen-Clausen A, Pha SH, Alvesson HM, Andersson A, Daivadanam M. Food environment interactions after migration: a scoping review on low-and middle-income country immigrants in high-income countries. Public health nutrition. 2022 Jan;25(1):136-58. https://doi.org/10.1017/S1368980021003943

[11] Agudelo-Suárez AA, Gil-González D, Vives-Cases C, Love JG, Wimpenny P, Ronda-Pérez E. A metasynthesis of qualitative studies regarding opinions and perceptions about barriers and determinants of health services' accessibility in economic migrants. BMC health services research. 2012 Dec 17;12(1):461. https://doi.org/10.1186/1472-6963-12-461

[12] Sarría-Santamera A, Hijas-Gómez AI, Carmona R, Gimeno-Feliú LA. A systematic review of the use of health services by immigrants and native populations. Public Health Reviews. 2016 Dec 3;37(1):28. https://doi.org/10.1186/s40985-016-0042-3

[13] Yu X. The political economy of anti-food-waste in China: From anti-corruption to enhancing food security. InFood Loss and Waste Policy 2022 Oct 7 (pp. 174-190). Routledge. https://doi.org/10.4324/9781003226932-15

[14] Nie H, Zhou T, Lu H, Huang S. Evaluation of the efficiency of Chinese energy-saving household appliance subsidy policy: An economic benefit perspective. Energy Policy. 2021 Feb 1;149:112059. https://doi.org/10.1016/j.enpol.2020.112059

[15] Heřmanová M, Kuralová K, Prokop M, Pilař L. The attractiveness of employee benefits in agriculture from the perspective of Generation Z. Agriculture. 2024 Jul 22;14(7):1204. https://doi.org/10.3390/agriculture14071204

[16] Silva-Cortés A, Gallego JL, Rodríguez-Ramos H, Botero-Botero S, Montoya-Restrepo IA. The Adoption of Telework in Organizations and Its Effects on the Colombian Energy System and CO2 Emissions. World. 2025 Nov 14;6(4):155. https://doi.org/10.3390/world6040155

[17] Farmer S, Weber R. Education reform and financialization: Making the fiscal crisis of the schools. International Journal of Urban and Regional Research. 2022 Nov;46(6):911-32. https://doi.org/10.1111/1468-2427.13137

[18] Afshin A, Peñalvo JL, Del Gobbo L, Silva J, Michaelson M, O'Flaherty M, Capewell S, Spiegelman D, Danaei G, Mozaffarian D. The prospective impact of food pricing on improving dietary consumption: a systematic review and meta-analysis. PloS one. 2017 Mar 1;12(3):e0172277. https://doi.org/10.1371/journal.pone.0172277

[19] Padmaja R, Nedumaran S, Jyosthnaa P, Kavitha K, Abu Hatab A, Lagerkvist CJ. COVID-19 impact on household food security in urban and peri-urban areas of Hyderabad, India. Frontiers in public health. 2022 May 13;10:814112. https://doi.org/10.3389/fpubh.2022.814112

[20] Waterlander WE, Steenhuis IH, de Boer MR, Schuit AJ, Seidell JC. Introducing taxes, subsidies or both: the effects of various food pricing strategies in a web-based supermarket randomized trial. Preventive medicine. 2012 May 1;54(5):323-30. https://doi.org/10.1016/j.ypmed.2012.02.009