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Original Article

Hidden Costs in Everyday Payments: A Study of Cab Expenditure Among School Students

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Abstract: *People often overlook how small, routine payment behaviours can accumulate into meaningful financial differences over time. While this tendency is common across all age groups, this study focuses specifically on high school students to examine how the choice between cash and digital payments influences cab-related expenditure. Using survey-based data on weekly cab usage, preferred payment modes, and individual rounding tendencies, the study estimates the additional amount paid when using cash instead of exact digital payment methods. The findings quantify this spending difference, offering a clear understanding of how much extra money is unintentionally spent through rounding in cash payments.*

Keywords: *Cash payment, Digital Payment, Cab Fares, Rounding Behaviour.*

I. INTRODUCTION

Over the past decade, transportation has changed rapidly. Cab services have become one of the most important ways for people to travel in major Indian cities. The organised cab industry has grown quickly thanks to technology, and people now often use mobile apps to book a cab from anywhere in the city at any time (Thombre and Sannake, 2021). One of the major groups that rely on cab services is high school students who do not yet have a driver's license. Underage driving is a common challenge in India (Halder and Shetty, 2018), and cab services have helped reduce this issue by providing a safer alternative. A lot of parents don't have time in their busy lives to pick up or drop off their kids at school, so cabs are a good option. Earlier, parents often felt uneasy about their children travelling on two-wheelers because road accidents in Indian cities are quite frequent, and it is common behaviour among older teens to not wear helmets, drive rashly and break safety rules. By avoiding these risks, cab services have become a safer and more reliable option.

Many schools in India follow the tradition of earlier dispersal for senior secondary students and do not offer special school transportation services for them. As a result, the students must wait for other children to get free so that they can go home through school transportation. That is not a feasible option for many senior secondary students due to their tight schedules and extra classes. The common solution these students lean towards is going home via cabs. Hence, cabs are now one of the most widely used travel methods for these students in urban areas.

In daily use, cab fares rarely come as neat, rounded figures. They often show up as amounts like ₹37, ₹54, or ₹98 instead. Digital payment methods let passengers pay the exact amount they owe, which is a much better choice. Passengers often round their cash payments to the nearest ₹5 or ₹10 because it's hard to carry exact change. This rounding off may not seem like a big deal for one ride, but it adds up over time for people who use cabs a lot, like high school students who take several rides a week.

II. LITERATURE REVIEW

Existing research on payment behaviour highlights clear differences between cash and digital transactions. Several studies show that digital payment systems are used to pay the accurate final amount, while cash payments frequently involve small adjustments (Runnemark, Hedman and Xiao, 2015 Other studies have shown that digital modes make it easier for people to settle transactions by reducing the amount of mental work they have to do. This lets users avoid the small mistakes that often happen when handling cash (Chen, Khan, and Turel, 2019). Research on rounding behaviour corroborates these findings. Research in behavioural economics indicates that individuals often round payments to the nearest convenient amount when utilising physical currency, especially in low-value transactions (Gourville, 1998). Similar research has indicated that seemingly insignificant rounding decisions, when consistently applied, result in quantifiable alterations in overall expenditure over extended durations (Thaler, 1980). These findings highlight the role of small, often unnoticed decisions in shaping spending behaviour.

Previous studies have investigated digital payment adoption, rounding tendencies, and transportation-related expenditures in isolation; however, there is a lack of research linking these themes to real-world contexts. Although some

studies explore student travel behaviour or youth mobility patterns (Mitra and Buliung, 2012), none investigate how rounding practices in cash payments influence cab-related spending. This study, therefore, addresses an existing gap by quantifying the financial impact of routine rounding among high school students.

III. METHODOLOGY

A) Research Design

It refers to the philosophical framework employed in a study to explore the topic in a logical and systematic manner. This term refers to selecting an appropriate outline for a research activity with respect to collecting authentic data and analysing it in a systematic way (Tomaszewski, 2020). In this study, a descriptive, survey-based research design has been used. This approach is suitable because the aim is to understand real-life cab usage and payment behaviours among high school students. A survey allows the collection of first-hand, reliable information directly from students. Since rounding practices, cash payment habits, and weekly cab usage differ from person to person, a primary survey is the most effective way to measure the actual difference in expenditure (Prasad, Kumar, and Kumar, 2024). Relevant peer-reviewed studies, research papers and authentic websites have been used for the collection of secondary data. Secondary sources available on standard online databases provide authentic information, as they are based on the key findings of previous scholars and researchers (Mezmir, 2020).

B) Data Analysis

Data analysis is an essential step that helps convert survey responses into clear, meaningful findings (Ravindran, 2019). In this study, the survey responses of 124 high school students were examined to understand their cab-usage patterns and payment behaviours. The analysis focuses on identifying the yearly cab usage of students, their preferred mode of payment, and the rounding practices followed by those who pay in cash. Cab-using students were first separated from the overall sample, followed by calculating their total rides throughout the academic year. Both the mean round-off amount and the average one-way fare were calculated using weighted averages. These are analytical procedures that enable the additional spending resulting from continued rounding in cash transactions over the course of a school year to be quantified. This way of looking at the data provides an overview of how a small difference per ride can add up to be significant for the school community.

IV. RESULTS

Since the study focuses on the financial impact of cash versus digital payments on senior secondary students who use cabs as their main mode of transport, they were first sorted. Of the 124 high school students who participated in the survey, 73 (58.9%) reported using cabs as their primary mode of transport to and from school. Only these 73 students were included in the expenditure analysis.

- Cab-Riding Frequency: They asked the students how many cab rides they usually take in a week. The average number of times students took a cab was 8 per week, which aligns with the fact that they often used cabs to get to and from school.
- Estimated School Attendance Days: The school's official academic database lists 244 working days this year. With the board's required 75% minimum attendance, the expected annual attendance was calculated as:

$$244 \times 0.75 = 183 \text{ days}$$

This attendance assumption is used to estimate the number of cab journeys students complete annually.

Average Round-Off Amount in Cash Payments: Students who paid cash to cab drivers were asked about their usual rounding behaviour for fare payments. The options were round off to the nearest ₹5, round off to the nearest ₹10, or pay him exactly. The distribution of responses is depicted in Figure 1, and it is typical of the manner in which students deal with small differential amounts paid on regular cash payments.

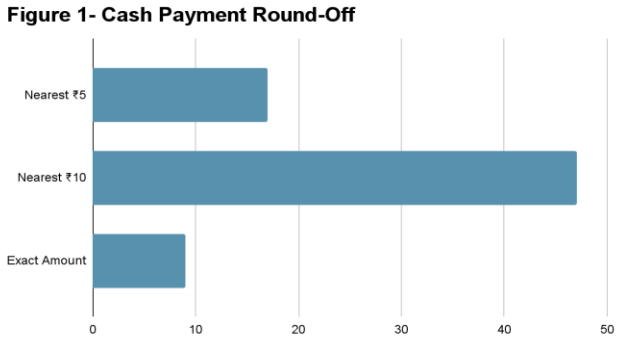

Figure 1. Cash Payment Round-Off

Midpoint numerical values were then assigned to each of these categories for the analysis. The majority of the 73 cab-using students reported that they round off their fare in some manner; most rounded to the nearest ₹10, fewer to the nearest ₹5, and only a few said they typically pay exactly. Based on these figures, the arithmetic mean of the round-off quantity was also calculated as per the above-described arithmetical mean formula:

$$\text{Mean} = (\text{Sum of all values}) \div (\text{Number of values})$$

$$\text{Mean} = \{(17 \times 2.5) + (47 \times 5) + (9 \times 0)\} \div 73 = 277.5 \div 73 \approx ₹3.80$$

This indicates that, on average, students pay an extra ₹3.80 per cab ride when settling the fare in cash.
Weekly and Annual Financial Impact Using the mean round-off of ₹3.80 and the weekly cab-riding average of 8 rides:

$$8 \times 3.80 = ₹30.41 \text{ per week}$$

Applying this to the attendance-based 26.14 school weeks:

$$30.41 \times 26.14 = ₹794.87 \text{ per academic year}$$

Thus, students paying in cash spend an estimated ₹794.87 extra annually due solely to rounding.

Average One-Way Cab Fare Students also reported their approximate one-way cab fare. The 73 responses were grouped into the following brackets:

FIGURE 2- One Way Cab Fare

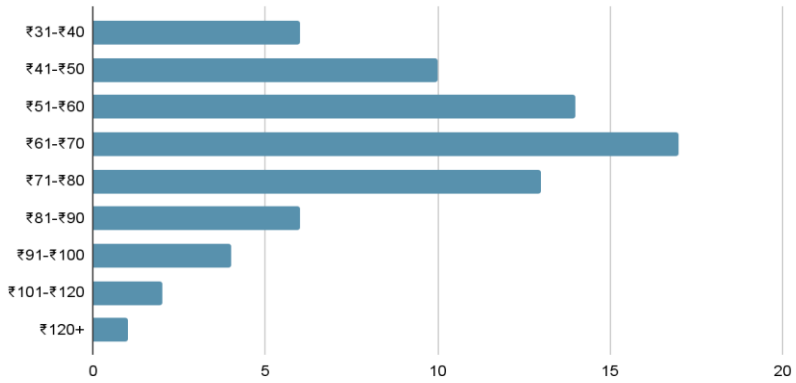

Figure 2. One Way Cab Fare

Using midpoint values for each fare bracket, the average one-way fare is calculated through a weighted mean applied to the distribution of student responses:

$$\text{Mean fare} = \text{Sum of (frequency} \times \text{midpoint)} \div \text{Total number of student}$$

$$\text{Mean fare} = 5028.50 \div 73$$

$$= ₹68.90$$

Therefore, the average one-way cab fare reported by students is ₹68.90.
Overall Financial Comparison: The annual excess expenditure of ₹794.87, compared to the average one-way fare of ₹68.90:

$$794.87 \div 68.90 \approx 11.5 \text{ rides}$$

This indicates that the money lost to rounding in cash payments every year is equivalent to the cost of 11–12 additional cab rides.

Cumulative Financial Impact Within the School Using the annual excess expenditure of ₹794.87 per student, the total difference in spending for all 73 cab-using students in the school is calculated as follows:

$$73 \times 794.87 = ₹58,025.51$$

This shows how a seemingly small difference of ₹3.80 per ride accumulates into a substantial figure of **over ₹58,000** when repeated regularly over the course of the academic year by students in a single school.

V. LIMITATIONS

While the study provides meaningful insights, several considerations should be kept in mind when interpreting the findings:

- The sample was taken from just one school, so it may not fully show how students from other schools or areas travel or pay.

- The study relies on self-reported data, meaning the rounding habits or fare amounts provided by students may not perfectly reflect their actual day-to-day behaviour.
- Fare values were sorted into groups and looked at using midpoint estimates. This introduces a small degree of approximation.
- We used the minimum attendance requirement of 75% to estimate how often students used the cab each year. This may not be the same as how often each student actually attended.
- External factors such as surge pricing, shared rides or occasional fare fluctuations were not included in the analysis and may also influence students' cab expenditure.

VI. CONCLUSION

Small additions to daily spending often pass unnoticed, particularly when they occur in routine transactions such as cab rides. A few extra rupees added on to cash payments may not seem like much at first, but these small amounts add up quickly when students travel several times a week. Over the course of a school year, what seems small in each moment adds up to a big difference in how much money is spent. The study found that when students at the same school pay in cash more than once, they spend more than ₹58,000. This amount shows how small, regular extra payments can add up to big financial results when you look at a lot of rides and a lot of students. The results make clear that digital payments offer a meaningful financial advantage in this setting, as they allow fares to be paid with complete accuracy and avoid the routine round-offs inherent in cash transactions. This precision ensures that students pay only the actual fare, preventing the gradual accumulation of unintentional extra spending.

VII. REFERENCES

[1] Thombre, Kailas A., and A. Sannake. 2021. *Cab in India: A Case Study of Ola and Uber*.

[2] Excel Journal of Engineering Technology and Management Science https://assets.ctfassets.net/i04n7zkruwte/37Tu5giH6s5KzsHdZVpECZ/ad78f29f124954e3c1f8b80a20b6905e/Dr-Kailas-Arjunrao-Thombre-Dr.-Sannake-A-1.pdf

[3] Halder, D., & Shetty, A. (2018). *Regulating Road Traffic Violation by Youth in India: A Therapeutic Jurisprudential Approach.* SSRN. https://ssrn.com/abstract=3230604

[4] Runnemark, E., Hedman, J., & Xiao, X. (2015). *Do consumers pay more using debit cards than cash?* Electronic Commerce Research and Applications. https://www.sciencedirect.com/science/article/pii/S1567422315000149

[5] Chen, X., Khan, S., & Turel, O. (2019). *Digital payment adoption and consumer spending behaviour.* Journal of Retailing and Consumer Services. https://ideas.repec.org/p/hhs/lunewp/2014_021.html

[6] Gourville, J. (1998). *Pennies-a-Day: The effect of temporal reframing on transaction evaluation.* Journal of Consumer Research. https://doi.org/10.1086/209517

[7] Thaler, R. (1980). *Toward a positive theory of consumer choice.* Journal of Economic Behavior & Organization. https://bear.warrington.ufl.edu/brenner/mar7588/Papers/thaler-jebo1980.pdf

[8] Mitra, R., & Buliung, R. (2012). *Children's independent mobility and school travel: Examining the influence of social and physical environments. https://www.sciencedirect.com/science/article/pii/S0749379723005020*

[9] Tomaszewski, Larisa E., Jason Zarestky, and Enrique Gonzalez. 2020. "Planning Qualitative Research: Design and Decision Making for New Researchers." *International Journal of Qualitative Methods* 19: 1609406920967174. https://journals.sagepub.com/doi/abs/10.1177/1609406920967174.

[10] Prasad, Nidhi, Vikash Kumar, and Sanjay Kumar. 2024. "Survey Research — Concept and Development." *Journal of Indira Gandhi Institute of Medical Sciences* 10 (2). https://doi.org/10.4103/jigims.jigims_10_24

[11] Mezmir, Ermias A. 2020. "Qualitative Data Analysis: An Overview of Data Reduction, Data Display, and Interpretation." *Research on Humanities and Social Sciences*. https://core.ac.uk/download/pdf/356684456.pdf.

[12] Ravindran, Vinitha. 2019. "Data Analysis in Qualitative Research." *Indian Journal of Continuing Nursing Education* 20. https://doi.org/10.4103/IJCN.IJCN_1_19