INTERNATIONAL JOURNAL OF SOCIAL SCIENCES BULLETIN
ISSN: (E) 3007-1917 (P) 3007-1909
Volume 3, Issue 5, 2025

REVERSE LOGISTICS IN SMALL URBAN RETAIL: A QUALITATIVE STUDY OF KARYANA STORES IN PESHAWAR, PAKISTAN

Muhammad Ali

Assistant Professor, Department of Management Sciences, Abasyn University, Peshawar, Pakistan

muhammad.ali@abasyn.edu.pk

Corresponding Author: *
Muhammad Ali

DOI: https://doi.org/10.5281/zenodo.15401127

Received	Revised	Accepted	Published
21 March, 2025	21 April, 2025	06 May, 2025	14 May, 2025

ABSTRACT

This study explores the dynamics of reverse logistics (RL) among small-scale karyana (grocery) sellers in Peshawar, Pakistan. It looks at research area that has received little attention in the present literature, which is primarily concerned with large-scale retail in developed economies. The study used a qualitative, multiple-case methodology, relying on semi-structured interviews with six retailers: three in high-income, less congested locations and three in low/middle-income, congested zones. The investigation demonstrates five key problems that affect RL practices: spatial limits, liquidity management, logistical efficiency, information coordination, and waste management. The findings show that businesses in prosperous locations use superior logistical infrastructure, digital tools, and prioritise high-end products, resulting in more effective reverse logistics. In contrast, individuals in congested, low-income neighbourhoods confront significant logistical challenges, operate within restricted physical space, and rely on manual, cost-driven procedures to preserve their financial well-being. The study emphasises the importance of regional and socioeconomic conditions in determining RL strategies and provides context-specific recommendations for increasing efficiency and customer satisfaction. These findings can help policymakers and practitioners improve the resilience and sustainability of small-scale retail enterprises in developing urban economies.

Keywords: *Reverse Logistics, Karyana Stores, Small Retailers, Peshawar, Urban Retail, Space Constraints, Logistics Efficiency, Developing Economies, Waste Management, Qualitative Research.*

INTRODUCTION

RL is a critical aspect of supply chain management that involves the process of moving goods from their final destination back to the seller or manufacturer for returns, repairs, recycling, or disposal. This practice has garnered significant attention in the field of research, particularly concerning large retail settings in developed countries. However, there is a noticeable gap in literature when it comes to smaller retailers in developing economies, which play a vital role in their respective markets (Sheriff, Gunasekaran, & Nachiappan,2012) In urban centers like Peshawar, Pakistan, small family-owned businesses, particularly karyana stores, are integral to the local economy. These stores, predominantly unorganised and nestled within residential areas, serve as the primary retail outlets for daily necessities in both urban and rural settings. Despite their significant contributions to Pakistan's Gross Domestic Product (GDP), these businesses face numerous challenges, including limited access to financial resources, technological advancements, and business education, all of which hinder their growth and operational efficiency (Ahmed, Ullah, & Paracha,2012) Given the context of

Peshawar's diverse economy and the predominant role of small retailers in the informal sector, understanding the dynamics of RL within these smaller entities is crucial. This understanding could lead to customised strategies that can enhance customer satisfaction, improve operational efficiency, and ensure long-term viability. Research in this area could offer valuable insights that not only benefit the local businesses but also contribute to the broader field of RL by filling the existing research gap in developing countries (Anjum & Chai, 2020) This paper aims to explore the handling of returned goods in karyana stores within Peshawar, examining consumer preferences, marketing tactics, and product standards through the lens of RL. By addressing these areas, the study seeks to provide actionable recommendations that could significantly impact the efficiency and economic resilience of these vital retail players in Peshawar's growing marketplace.

2. Literature Review

2.1. OVERVIEW OF EXISTING LITERATURE ON REVERSE LOGISTICS.

RL is the management of the flow of obsolete materials, such as in-process inventory, finished goods, raw materials, and related information, from the point of consumption back to the point of origin. The goal of RL is to recapture value or guarantee proper disposal in an efficient and cost-effective manner (Sheriff, Gunasekaran, & Nachiappan, 2012). The current body of research primarily addresses return handling methods in larger retail settings in advanced economies, highlighting an important study gap in the context of smaller retailers in developing nations. The discrepancy is particularly evident in the urban centres of Pakistan, such as the city of Peshawar, where small-scale businesses family-owned companies play a crucial role in economic growth. Study such as the one conducted by Anjum & Chai (2020) emphasises this lack and emphasises the importance of conducting focused studies to reveal the distinct difficulties experienced by these little businesses. An investigation of the handling of returned goods by small businesses in Peshawar is thus essential for devising customised strategies that can improve efficiency, customer satisfaction, and long-term viability of these economically significant businesses. This research has the potential to deliver helpful insights that may contribute to the overall resilience of the economy and growth in growing urban market places (Humairoh & Annas, 2023).

2.2. KARYANA RETAILERS IN PAKISTAN

The emergence of retailing in the South Asia region can be traced to the establishment of Karyana stores (Kannan, 2009). Pakistan's retail sector is dominated by these traditional Mom and Pop shops which are unorganised and exist in small villages with limited quantities of daily items. These stores, usually near residential areas, have an average floor area of 200-500 square feet (Ahmed, Ullah, and Paracha, 2012). According to State Bank of Pakistan (2023) Small and medium companies (SMEs), which encompass karyana retailers, contribute almost 40% to the economy of Pakistan. These small and medium-sized enterprises make up 80% of the non-agricultural GDP in the country. Karyana retailers have an essential part in stimulating the economy and improving local economies in both urban and rural regions. They play a crucial role in Pakistan's retail industry, functioning as small-scale general or specialised stores. They appear in both urban and rural areas and serve a crucial role in the local distribution of fast-moving consumer goods (FMCG). The report published by USAID (Chemonics International Inc, 2022) highlights some major challenges encountered by karyana retailers Pakistan. One of the biggest challenges they face is their restricted access to financial resources, which restricts their capacity to grow and update. In addition, these stores frequently face difficulties when adopting modern technology, which puts them at a disadvantage when compared to bigger rivals who have more advanced technological resources. Their efficiency and development potential are further limited by a lack of specialised business education and training. Furthermore, the process of navigating governmental procedures to get essential permits and adhere to rules can be difficult and time-consuming. These obstacles collectively impede the expansion and operational effectiveness of karyana stores, making it difficult for them to succeed in an increasingly competitive marketplace (Seethamraju & Sundar, 2018).

2.3. BACKGROUND ON THE RETAIL ENVIRONMENT IN PESHAWAR

Based on the 2017 population census of Pakistan, Peshawar is home to 4.27 million inhabitants. These people are distributed among four towns and one Cantonment region, which has an average population density of 3,507 individuals per square kilometer at the district level. The district's population is divided among urban and rural areas, with 46 percent residing in urban areas and 54 percent residing in rural areas (Asian Development Bank, 2023). The female population accounted for 48 percent while the male population accounted for 52 percent. The population density in the urban area is 13,777 inhabitants per square kilometer, while in the rural region it is 2,140.6 persons per square kilometer. Peshawar was the seventh biggest contributor to Pakistan's nominal GDP in 2017, with a value of $6 billion, it accounted for 19% of the Gross GDP of the Khyber Pakhtunkhwa province during the period of 2019-2020. Peshawar's economy is characterised by its variety and dependence on several industries including farming, manufacturing, service sector, and the pharmaceutical industry. Additionally, growth has been seen in the dairy and livestock, housing, tourism, and education sectors Peshawar, as the primary economic hub in the province, has experienced an increase in its contribution to the provincial economy from 16% to 19% between 2005-06 and 2019-20, consolidating its position as an essential economic centre of the Province. A significant proportion of the workforce in Khyber Pakhtunkhwa operates in the informal sector, with 52% of the labour force involved in informal businesses. Notably, 28.2% of the informal labour participates in wholesale, retailing, and car services, highlighting the crucial role of small-scale retail activities in the local economy (Urban Policy & Planning Unit, 2023). Small scale retailers are essential for generating employment opportunities and facilitating economic transactions in Peshawar. Little information is available about the services sector in Peshawar. The International Growth Centre (IGC) performed a survey SMEs in the ancient city of Peshawar. The most prevalent activity in the retail industry is general retail, followed by clothing and other apparel, which accounts for 16.5% of the market Approximately 10% SMEs in the inner city are dedicated to furnishings, food, and accommodation. Among SMEs, more than 54% have a workforce consisting of 1-3 individuals, while an additional 33% employ between 4-6 personnel. These positions may not be remunerated, as 42% of establishments reported one or more family members who were not paid but nonetheless active in day-to-day operations. Therefore little information is available on retail sector volume in Peshawar, their infrastructure (Asian Development Bank, 2022)By analysing the data, it is evident that a significant portion of Peshawar's retail landscape is involved in sectors where the handling of returned goods could significantly impact business operations and customer satisfaction. Particularly notable is the high percentage in categories like 'Clothing, shoes, jewelry, cosmetics' (16.5%), 'Food, beverage, and accommodation' (11.1%), and 'Furnishings, houseware, hardware' (10.1%). However, the focus of this research is karyana retailers. Examining the process of analysing goods that are brought back to karyana stores in Peshawar and how they are handled is crucial for gaining insights into consumer preferences, refining marketing tactics, and elevating product standards through the utilization of feedback provided by customers.

3. Methodology

This study employs a qualitative research methodology utilizing a multiple-case study design, suitable for examining complex, context-specific phenomena within retail supply chain management (Gill et al., 2008). The primary objective is to investigate operational challenges faced by karyana retailers in Peshawar, Pakistan, focusing particularly on how these challenges differ based on socio-economic contexts and spatial separation within urban environments.

A purposive sampling approach was adopted, selecting six retailers equally representing high-income and lower-income areas to ensure diverse perspectives and facilitate comprehensive comparative analysis (Kallio et al., 2016). Spatial separation, a crucial element of this study, highlights the geographical and infrastructural distinctions between retailers operating in distinct socio-economic zones (Figure 1). Retailers in high-income regions, such as those situated around the Peshawar Cantonment area, typically benefit from superior infrastructure,

spacious store settings, reduced congestion, and enhanced logistical operations. Conversely, retailers in densely populated, lower-income areas face significant operational constraints, including limited store space, complex logistics due to congestion, and affordability pressures influencing their inventory and pricing strategies (Han et al., 2019; Luis et al., 2021).

Semi-structured face-to-face interviews were conducted to gather data, leveraging the methodological flexibility necessary to deeply explore these contextual variances (Adams, 2015). The interview protocol included open-ended questions targeting five critical operational dimensions: Space Constraints, Liquidity and Financial Impacts, Logistics Routing Efficiency, Information and Coordination, and Waste Management and Sustainability. Each retailer was asked six questions, facilitating detailed insights into their experiences, strategies, and adaptations across these operational dimensions. Interviews were audio-recorded, transcribed verbatim, and subjected to thematic analysis, which effectively identified recurring themes and operational distinctions between retailers in high- and low-income settings. Data were systematically organized into a comparative summary (Table 1), explicitly illustrating strategies and challenges related to spatial separation and socio-economic conditions. This approach provided both structured and nuanced insights into retailer decision-making processes and their adaptive strategies, essential for understanding operational dynamics within spatially and economically differentiated urban retail environments.

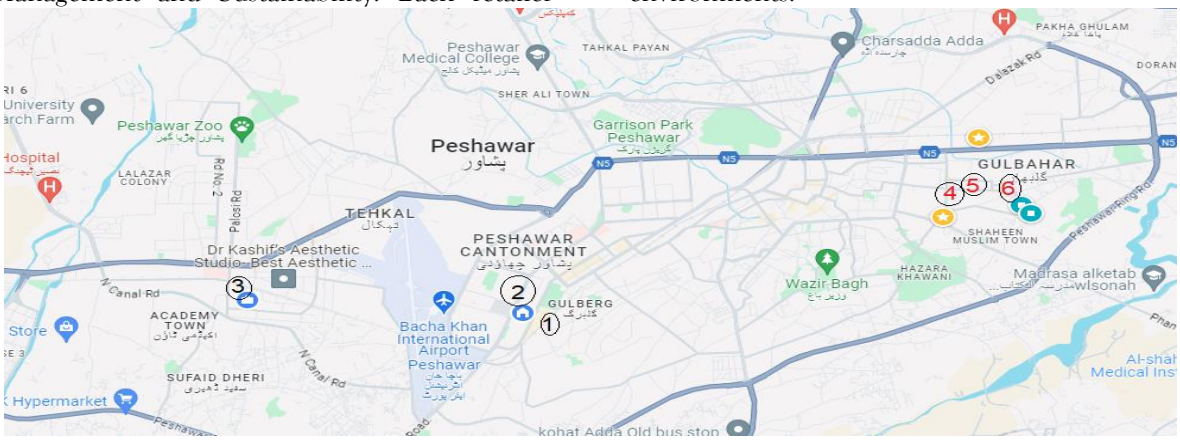

Figure 1. Spatial Distribution of Retail Stores in High-Income and Low-Income Areas of Peshawar

4. Analysis

The table 1 summarises the features and methods of six shops, which are divided into two categories based on region type: high-income, less congested places and congested, low/middle income areas. The table addresses significant obstacles for each store, such as space limits, liquidity management, logistics, coordination, waste management, and other relevant problems, providing insights into how these variables influence retail operations in various situations.

Retailers 1, 2, and 3 operate in high-income, less congested locations, allowing for more efficient logistical operations and better processing of returned items. Retailer 1 has essential renting prices, which makes space management challenging. To counteract this, it provides high-end goods that help to keep stability. The favourable logistics circumstances allow trucks to park conveniently, facilitating the handling of returned products. The shop also uses electronic devices for inventory control, which ensures effective administration. Retailer 2 uses smart layout strategies to make the best use of premium room. Innovative solutions are used to account for returned items, which aids in managing high costs and liquidity through inventory control. With fewer traffic, restocking is quick and efficient. The business tracks inventory using digital tools, which helps identify waste and reduce surplus inventory. The adoption of sustainable measures, such as prohibiting plastic bags, is consistent with local government policy. Retailer 3 maximises its wider space to deliver a luxury shopping experience for high-income customers. It employs fiscally sound tactics to manage premium stock while maintaining liquidity. The less cluttered atmosphere promotes effective delivery routing, which improves the handling of returned goods.

This retailer also benefits from tight partnership with a small number of suppliers, who help manage returns. Waste management is simple, with frequent pickups by local governments. Retailers 4, 5, and 6 operate in congested, low-income neighbourhoods, which present distinct issues in terms of space, logistics, and trash management. Retailer 4 makes the most of its restricted space for effective inventory management, putting cash flow ahead of RL. Due to traffic congestion, suppliers make fewer shipping, typically transporting products, including returns, on motorcycles or small trucks. The store uses manual record-keeping, indicating a low level of information technology usage. Waste reduction is low, but informal trash pickup is widespread. Retailer 5 utilises space effectively and has a high stock turnover to maintain its financial health in a busy region. It emphasises cost-effective ways for maintaining liquidity while overcoming logistical obstacles. The usage of local networks and simple digital tools helps to coordinate inventory and supplier contacts. To address the substantial amount of waste in the neighbourhood, the retailer uses waste management initiatives that prioritise safety and cleanliness in order to build customer trust.Retailer 6 makes the most of every square metre of storage and display space, focussing on cost-effective cash flow management tactics. It is able to replenish supplies efficiently despite the busy conditions by working closely with local entities. To address the issues created by the congested urban setting, the shop promotes community involvement in sustainable practices while prioritising security and hygiene.

Table 1. Challenges and Strategies of Retailers in High- and Low-Income Areas of Peshawar

Retailer	Area Type	Space Constraints	Liquidity and Financial Impacts	Logistics Routing Efficiency	Information and Coordination	Waste Management and Sustainability	Other Issues
Retailer 1	High-Income, Less Congested	Given the high rent it is difficult to manage space for returned products	Balances liquidity by offering customer high quality premium products.	Benefits from less congestion for smoother logistics. Therefore trucks can be parked in front of store and they can manage returned goods.	Uses digital platforms that are installed at POS for inventory control and keep track of sales for FBR.	Implements recycling and promotes eco-friendly products due to policy guidelines of cantonment board Peshawar.	N/A
Retailer 2	High-Income, Less Congested	Uses strategic layout to utilise space effectively. As space is expensive limited therefore innovative strategies have to be adopted to adjust the returned goods.	Manages high costs and liquidity through inventory control. This is done by offering customer high cost limited range of products.	Ensures quick restocking and fresh product availability which is made possible due to easy and swift access of transportation trucks to the retail store.	Manages real-time stock levels with digital tools. Barcode tags are used to keep track of the inventory. This helps in identification of waste and products that are in less demand or need to be returned.	Adopts sustainable waste practices by not allowing usage of plastic bags in compliance with policy of local government authority. This enables minimisation of waste.	N/A
Retailer 3	High-Income, Less Congested	Optimizes large space for luxury shopping	Implements robust financial strategies for	Less congested area facilitates efficient delivery routing.	Coordinates efficiently with suppliers and customers due	Store is kept clean and the waste that is generated is	N/A

		experience. Customers come from a high income background they demand quality products. Even the FMCGS that are kept are of premium quality.	premium stock keeping.	Allow better handling of returned goods.	to their limited number. Further, suppliers offer support in handling of returned goods for example they pick up water dispenser re-fill bottles.	dumped at a point near by where town committee trucks come regularly and pick up the waste.	
Retailer 4	Congested, Low/Middle Income	Maximizes limited space for efficient use. There is limited space inside the store to keep boxes in which inventory is delivered.	Keeps prices affordable while managing cash flow. Mainly FMCGs are purchased from local manufacturers and have limited profit margin. The focus is on cash generation rather than on handling of Reverse logistics related issues.	Precise coordination needed for logistics in traffic. As the shop is located in the congested area there are fewer drops from the suppliers on daily basis and they have limited space in their motorbikes or small trucks to carry returned, damaged goods.	There is limited use of technology and most of the dealing, record keeping is done on paper. A book is maintained to keep track of suppliers and the stock that is making	There is less focus on waste reduction and recycling programs. There is less awareness of it. However, there are garbage pickers in the area who regularly pick up the waste.	Manages security and hygiene issues are of concern. The waste that is produced at the shop if not disposed off properly causes issues that produces flies mosquitos.
Retailer 5	Congested, Low/Middle Income	Manages space efficiently with high stock turnover	Focuses on cost-effective solutions for financial stability	Manages logistical challenges due to congestion	Leverages local networks and digital tools for coordination	Implements critical waste management programs in dense areas	Addresses safety and cleanliness for customer trust
Retailer 6	Congested, Low/Middle Income	Maximizes every square meter for storage and display	Maintains steady cash flow with cost-effective strategies	Ensures efficient restocking despite congestion	Coordinates with local entities for effective information flow	Encourages community involvement in eco-friendly practices	Prioritizes security measures and maintains hygiene standards

5. CONCLUSION

This study examines RL activities in karyana outlets across several economic environments in Peshawar, Pakistan. It indicates significant variations in how small shops handle returned goods based on their location and economic situation. High-income, less congested places allow for smoother RL operations, with merchants using enhanced transportation infrastructure, technology, and premium product strategies for effectively handling returns. In contrast, stores in congested, low/middle-income communities have more acute space and logistical constraints, forcing them to use cost-effective solutions and manual practices to maintain cash and operational stability. These findings highlight the importance of spatial and economic aspects in determining the success of RL practices for small shops in Peshawar. The study underlines the need for personalised tactics to

assist karyana retailers in addressing their unique challenges. Retailers can include increasing technological use, strengthening logistical assistance, and encouraging sustainable waste management methods. Both policymakers and practitioners ought to collaborate to create an environment of support that improves the operational efficiency and economic resilience of small merchants, particularly in developing countries. Further studies might extend on this study by employing a quantitative approach to evaluate the influence of RL practices on financial performance and consumer satisfaction in small retail environments. Furthermore, studying other growing urban areas with similar socioeconomic conditions would provide comparative insight. Further research into the impact of governmental regulations, community involvement, and technological innovation on enhancing RL practices may yield more comprehensive methods for increasing small retailers' competitiveness. Finally, longitudinal studies could help in understanding how RL practices develop over time as they react to changes in market dynamics and the regulatory structures.

RFERENCES

Ahmed, M., Ullah, S., & Paracha, Z. U. H. (2012). The retail food sector in Pakistan. *International Journal of Academic Research in Business and Social Sciences, 2*(12), 122–128.

Anjum, S., & Chai, J. (2020). Drivers of cash-on-delivery method of payment in e-commerce shopping: Evidence from Pakistan. *SAGE Open, 10*(3), 1–14. https://doi.org/10.1177/2158244020917392

Adams, W. C. (2015). Conducting Semi-Structured Interviews. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey (Eds.), Handbook of Practical Program Evaluation (4th ed., pp. 492-505). Jossey-Bass.

Ahmed, M., Ullah, S. and Paracha, Z.U.H. (2012) 'The Retail Food Sector in Pakistan', International Journal of Academic Research in Business and Social Sciences, Vol. 2, No. 12, December, pp. 122-128.

Asian Development Bank (2022). Technical Assistance Report: Project Number 49050-001 [PDF]. Retrieved from https://www.adb.org/sites/default/files/project-documents/49050/49050-001-tacr-en_1.pdf

Asian Development Bank. (2023). *Regional: Establishing a platform for climate-resilient and low-carbon urban development Peshawar District, Pakistan: Climate risk and vulnerability assessment* [Online]. Available at: https://www.adb.org/sites/default/files/project-documents/52304/52304-001-tacr-en_4.pdf [Accessed April 22, 2024].

Chemonics International Inc. (2022). *USAID Small and Medium Enterprise Activity, Annual Performance Report FY 2022* [PDF]. Washington, D.C.: United States Agency for International Development. Available at: https://pdf.usaid.gov/pdf_docs/PA00ZTBP.pdf [Accessed May 3, 2025].

Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of Data Collection in Qualitative Research: Interviews and Focus Groups. British Dental Journal, 204(6), 291-295. https://doi.org/10.1038/bdj.2008.192

Han, Z., Cui, C., Miao, C., Wang, H., & Chen, X. (2019). Identifying Spatial Patterns of Retail Stores in Road Network Structure. *Sustainability*, *11*(17), 4539. https://doi.org/10.3390/su11174539

Humairoh, H., & Annas, M. (2023). Shipping, tracking, and returned goods: The determinants of sustainable e-commerce supply chain and logistics operation. *Jurnal Manajemen, 14*(3), 471-491. https://doi.org/10.32832/jm-uika.v14i3.14282

Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic Methodological Review: Developing a Framework for a Qualitative Semi-Structured Interview Guide. Journal of Advanced Nursing, 72(12), 2954-2965. https://doi.org/10.1111/jan.13031

Kannan,S.(2009) 'Retail Marketing', Directorate of Distance Education, Sikkim Manipal University of Health, Medical & Technological Sciences, India.

Luis, E., Ferro-Diez., Norha, M., Villegas., Javier, Diaz-Cely., Sebastian, G., Acosta. (2021). Geo-Spatial Market Segmentation & Characterization Exploiting User Generated Text Through Transformers & Density-Based Clustering. IEEE Access, 9, 55698-55713. Available from: 10.1109/ACCESS.2021.3071620

Seethamraju, R., & Sundar, D. (2018). Adoption of Digital Payments by Small Retail Stores., 41. https://doi.org/10.5130/acis2018.as.

Sheriff, K.M.M., Gunasekaran, A. and Nachiappan, S. (2012) 'Reverse Logistics Network Design: A review on strategic perspective', International Journal of Logistics Systems and Management, 12(2), p. 171. doi:10.1504/ijlsm.2012.047220.

State Bank of Pakistan. (2023) Research Report on 'Supermarkets and Retail Shops' Segment. [pdf] Karachi: State Bank of Pakistan. Available at: http://www.sbp.org.pk/reports/annual/arFY2023/Supermarkets-Retail-Shops.pdf [Accessed 21st April, 2025].

Thang, D., & Tan, B., 2003. Linking consumer perception to preference of retail stores: an empirical assessment of the multi-attributes of store image. Journal of Retailing and Consumer Services, 10, pp. 193-200. https://doi.org/10.1016/S0969-6989(02)00006-1.

Urban Policy & Planning Unit. (2023). *Khyber Pakhtunkhwa Urban Policy 2023–2030* [PDF]. Planning & Development Department, Government of Khyber Pakhtunkhwa. Available at: https://urbanpolicyunit.gkp.pk/wp-content/uploads/2022/10/Draft-KP-Urban-Policy-Clean-version.pdf?__cf_chl_tk=sdNgKO4nvwLHwAwZ9nHFcXc1ZcTxrESEACgeUt3QYcM-1690259827-0-gaNycGzNDG [Accessed 3rd May, 2025].

Vandell, K., & Carter, C. C. (1992). Retail store location and market analysis: A review of the research. Journal of Real Estate Literature, 1(1).https://doi.org/10.1080/10835547.1994.12090037.