“A Decidedly Rural Strategy”: DOLLAR GENERAL’s Impact on Food Access in Iowa

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Introduction

Dollar General (DG) is the most numerous chain store in the United States with over 20,000 locations [1]. The dollar store chain has accepted SNAP/EBT benefits since the early 2000s [2], and 78% of DG’s sales come from food [3]. Fresh produce became available in some DG stores beginning in 2023 [4]. With more than 75% of DG stores located in communities of fewer than 20,000 people [3], the store’s “decidedly rural strategy” [5] creates direct competition for rural grocery stores [6]. As such, the chain is a key industry trend to consider in rural and small-town food landscapes.

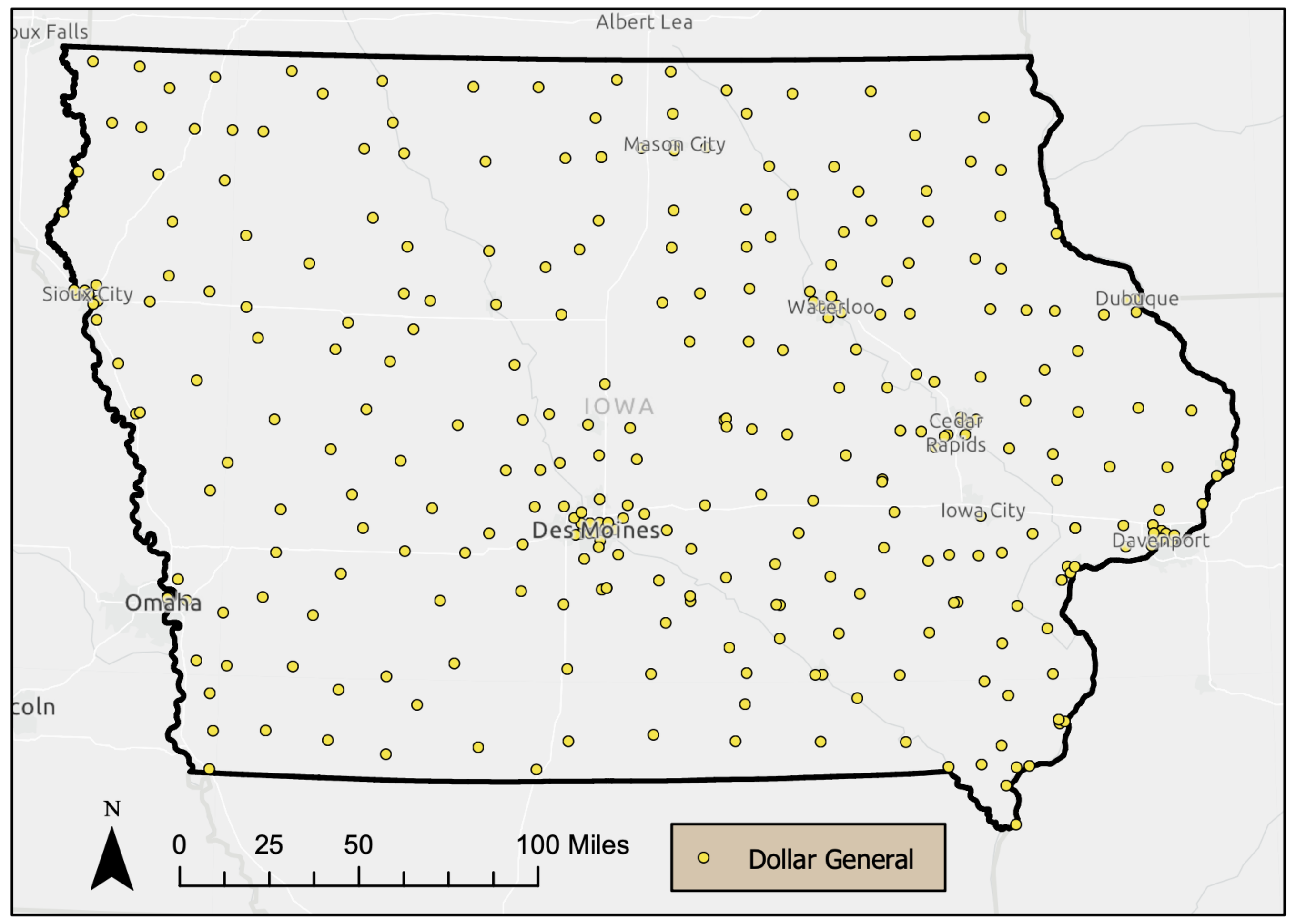

Figure 1: There were 315 DG stores in Iowa as of December 2023, accounting for 67.6% of chain dollar stores in the state [6]. Point pattern analysis (Ripley's K-function) reveals that the stores are statistically significantly significantly dispersed throughout the state, with 77.1% of Iowa’s land within a 15-minute drive of a DG store [7].

Objectives

Examine Dollar General’s impact on food access and community morale in six Iowa communities; determine if and how the chain’s impact varies across rural, suburban and urban communities in Iowa.

Methods

Research was conducted in six Iowa communities with a DG:

- 2 urban (Des Moines and Cedar Rapids);
- 2 suburban (Ankeny and Marion) and
- 2 rural* (R1: pop. 800, local grocery store closed in June 2024;
  R2: pop. 1,250, has an independent, local grocery store)

*** “R1” and “R2” are aliases used to protect the identity of research participants in rural communities.**

1. **On-the-street surveys:** measured economic, physical and cultural aspects of food access and food quality at DG.
   - 216 respondents (67 urban, 71 suburban, 78 rural)
2. **Focus groups:** public community meetings including a cognitive mapping exercise, survey completion and open discussion.
3. **Semi-structured interviews:** conversations with residents, city officials, developers, and grocery store owners.

Surveys analyzed in R; discussions/interviews analyzed in NVivo.

Results

Food access conditions were most limited in rural communities. 96.2% (n=75/78) of rural respondents purchased food at DG, more frequently than urban (74.6%, n=50/67) and suburban (47.9%, n=34/71) respondents.

Convenience was the top reason rural residents bought food at DG (94.7%, n=71/75). Rural communities lacked access to close and intermediate non-DG food stores (Figure 3); in contrast, DG was a close and convenient option.

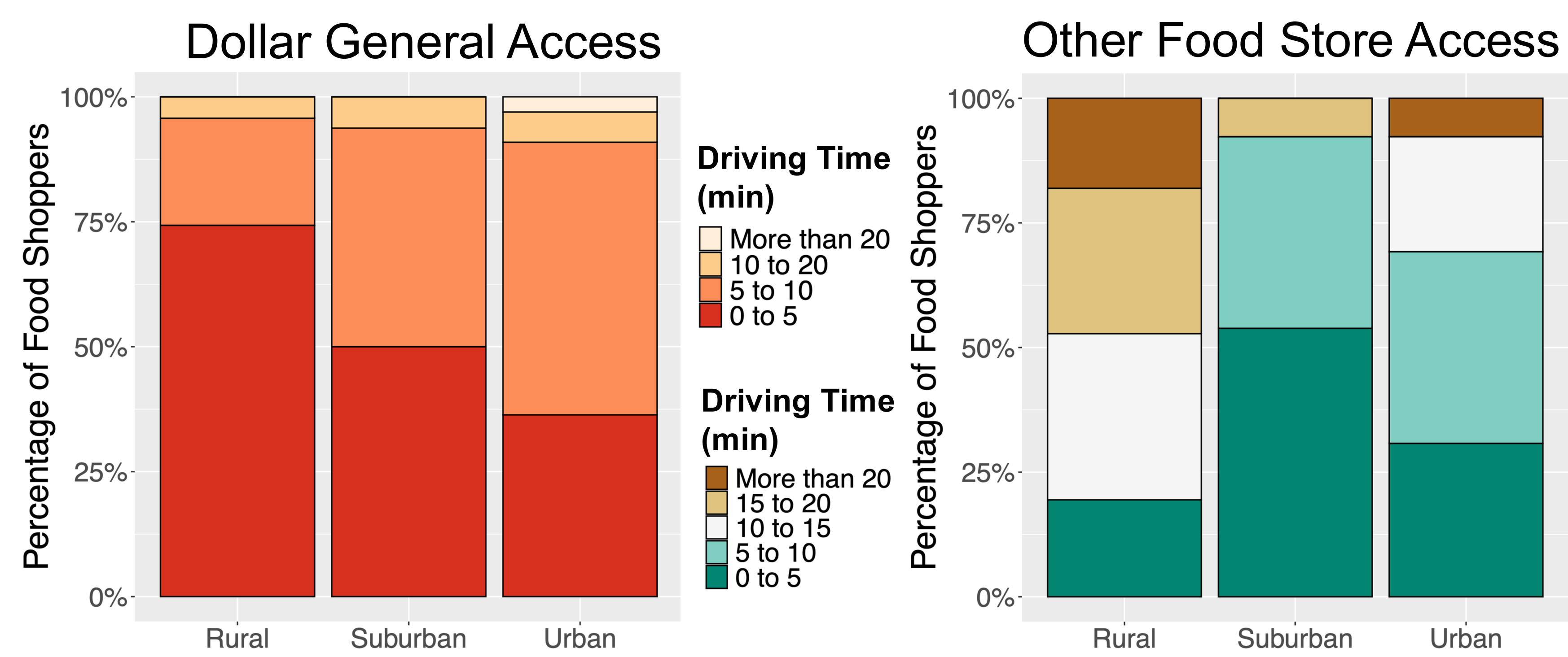

Figure 2: Drive time to reach DG (left) and another food store to purchase food that would have been bought at DG (right). Rural communities had the most respondents within a 5-minute drive of DG (74.3%, n=52/70). Rural residents had lower access to other food stores; only 19.4% (n=14/72) could reach a store in less than five minutes and no rural respondents could reach another food store in five to ten minutes.

Rural residents most frequently purchased shelf-stable (93.3%, n=70/75) and refrigerated/frozen food (72.0%, n=54/75). Fresh produce was purchased least frequently (17.3%, n=13/75) and was associated with grocery stores, not DG.

> **“Well, the vegetables and fruit ought to stay with the grocery store, they just don’t need it at Dollar General.” (Resident, R2)**

Across all communities, residents were least satisfied with the nutritional content of food sold at DG (Figure 3).

> **“As someone who’s trying to lose weight it’s pretty impossible to get vegetables or protein (at DG)... So it makes it a little harder to have a healthier lifestyle when you walk into somewhere that only has products that are processed.” (Resident, R1)**

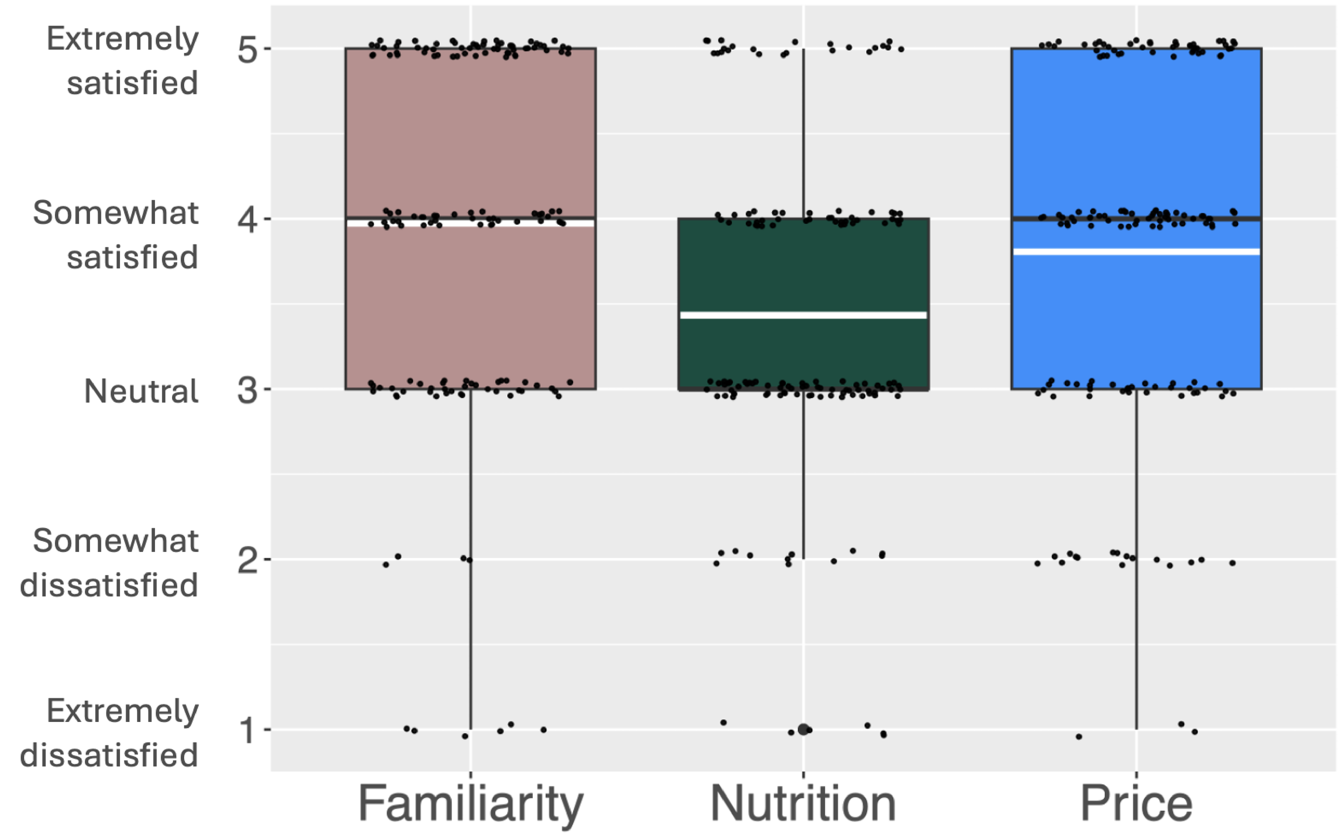

Figure 3: Average satisfaction ratings of familiarity (n=147), nutrition (n=143) and price (n=150) of food purchased at DG. On average, nutrition was ranked lower than both familiarity and price. A one-way ANOVA test showed significant effect on nutrition satisfaction metrics when compared to price and familiarity ($F(2,437) = 10.29$, $p = 4.29E-05 < 0.01$, $\eta^2 = 0.04$).

Results

Rural residents were most glad to have DG in their communities (Figure 4) despite initial oppositions to the chain opening.

> **“It kinda pushed out the local grocery store, but it is convenient being the only store now.” (Resident, R1)**
>
> **“It’s a blessing they (DG) are here.” (Resident, R1)**

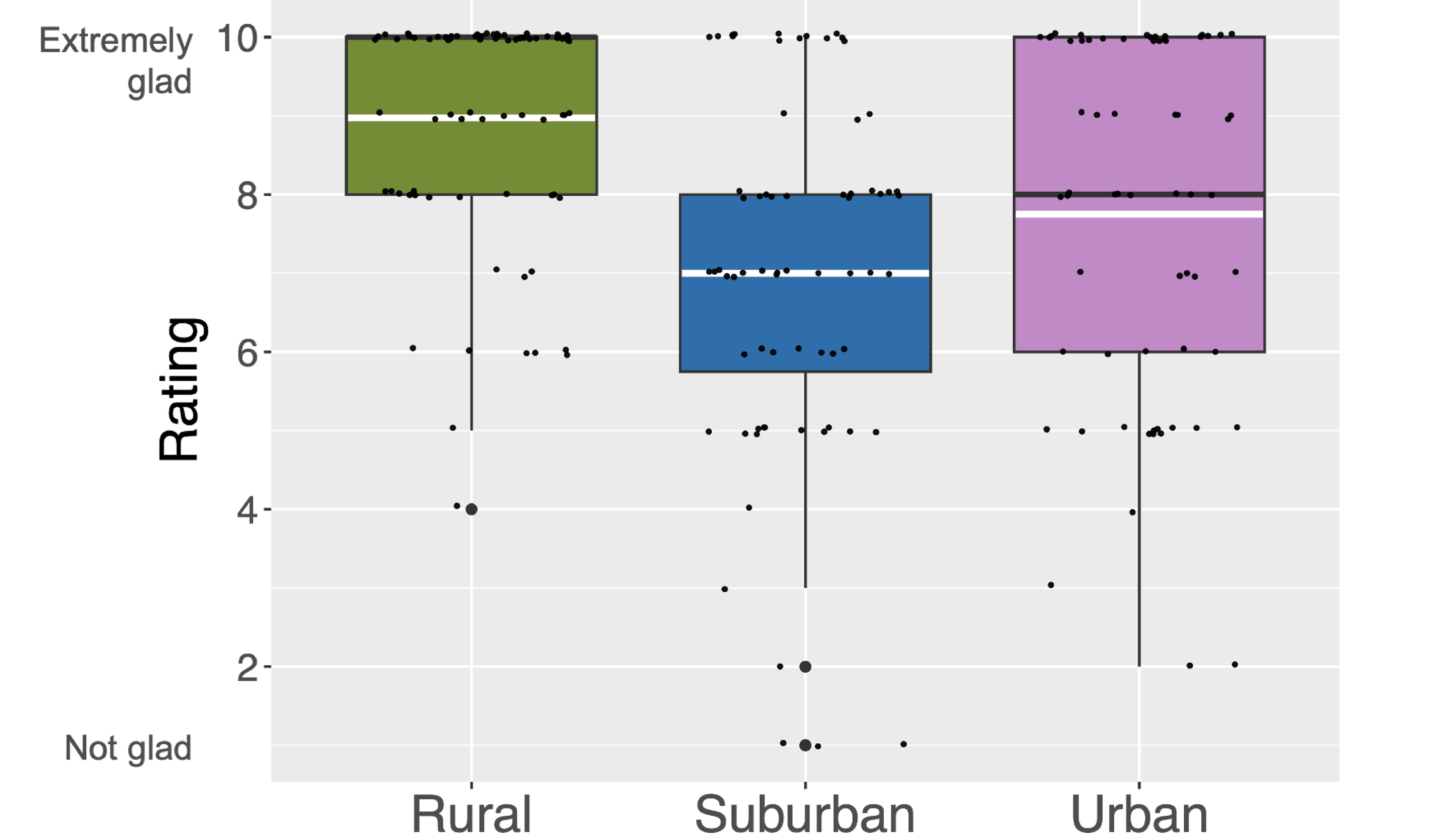

Figure 4: Gladness ratings for rural (mean = 8.97, n = 78), suburban (mean = 7.00, n = 68) and urban (mean=7.75, n=64) respondents (inter-quartile range 25-75%). A one-way ANOVA test revealed a statistically significant difference between rural ratings and suburban/urban ratings ($F(2,207) = 17.83$, $p = 7.16E-08 < 0.01$, $\eta^2 = 0.15$).

Discussion

Closure of rural grocery stores [9], higher poverty rates [10] and the rise of dollar stores [11] contribute to limited food access in rural areas. Dollar stores like DG are often the only food retail option, but studies have found that dollar stores offer fewer fresh items [12], instead selling primarily canned or frozen fruits and vegetables [13]. Despite this, dollar stores are positively received by communities [14], with rural residents favoring dollar stores the most [15].

These findings emphasize the importance of supporting grocery stores to ensure access to fresh and nutritious food in rural areas. Zoning regulations can be employed by municipalities to restrict dollar store growth, reducing competition for grocery stores [17]. However, positive perceptions of dollar stores suggest that they can be partners in rural food access. Dollar stores have the capacity to offer fresh produce (i.e. DG Market) [12]; conditional use ordinances can require dollar stores to sell fresh and healthy foods [16].

Conclusion

By contrasting findings from urban, suburban and rural Iowa communities, it is shown that DG is a key industry trend in rural food retail environments.

- Food was most frequently purchased at DG in rural communities.
- Few to no other food stores in rural communities coupled with far distances to other food stores made DG a convenient option.
- Rural community members were most glad to have DG.

Supporting rural grocery stores while regulating dollar stores can help ensure reliable access to nutritious food in rural and small-town communities.

Sources: [1] MarketLine Company, 2024; [2] Long et al., 2019; [3] Atwal & Bryson, 2023; [4] Bisaha, 2024; [5] Flora et al., 2016; [6] Lopez et al., 2024; [7] Wharton Research Data Services Historic Businesses, 2023; [8] Hornbuckle, 2023 (ArcGIS StoryMaps); [9] Stevens et al., 2021; [10] Haynes-Maslow et al., 2020; [11] Feng et al., 2023; [12] Reimold et al., 2024; [13] Caspi et al., 2016; [14] John et al., 2023; [15] Wolfrath et al., 2018; [16] Accordino & Conte, 2024; [17] McCarthy et al., 2022.