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SOCIO-DEMOGRAPHIC DETERMINANTS OF CONSUMABLES DELIVERIES IN MONTREAL METROPOLITAN AREA

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Socio-demographic determinants of Consumables Deliveries in Montreal Metropolitan Area[1]

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Abstract/Résumé

This research paper uses data from a survey of the population of Montreal metropolitan area in spring 2024 (N=2006). It examines the socio-demographic determinants of the use of package delivery services, the number of packages delivered and subscriptions to a delivery service. It presents results for all packages and for the delivery of prepared meals, groceries, clothing-leisure-electronics, newspapers and other goods. Analyses use logistic regressions and Poisson regressions. Results for determinants of subscription are obtained by logistic regressions. Our findings show that younger generation uses delivery services more frequently and for more deliveries, especially for prepared meals. Individuals with health-related mobility issues also receive more deliveries, mainly targeted on groceries. Larger households, however defined, use home deliveries more than single person households. These findings suggest that demographic changes are likely to increase delivery consumption in the future.

Ce cahier de recherche présente les données d'une enquête sur la livraison de colis, à domicile et sur le lieu d'emploi, auprès de la population de la région métropolitaine de Montréal réalisée au printemps 2024. Des modèles de régression logistique et de Poisson sont utilisés pour mieux comprendre les déterminants qui agissent sur la probabilité de recourir à la livraison et sur la quantité de biens livrés. Finalement, ce cahier s'intéresse à la probabilité de détenir un abonnement à la livraison. Les résultats sont présentés pour l'ensemble des colis livrés ainsi que pour cinq catégories de biens : (1) les repas préparés, (2) l'épicerie en ligne, (3) les vêtements, les produits culturels (ex. livres) et électroniques, (4) les journaux, et (5) un groupe autre. Les résultats montrent que les jeunes utilisent plus fréquemment les services de livraison, notamment pour les repas préparés. Les personnes ayant des problèmes de mobilité liés à leur santé reçoivent également davantage de livraisons, principalement pour l'épicerie. Les ménages plus nombreux, quelle que soit leur définition, ont davantage recours aux livraisons à domicile que les ménages d'une seule personne. Ces résultats suggèrent que l'évolution démographique devrait accroître le recours à la livraison au cours des prochaines années.

Keywords/Mots-clés: Commerce électronique, B2C livraisons à la maison, paquets, colis, régression logistique, régression Poisson, abonnements / E-commerce, B2C, home deliveries, package, package, logistics regression Poisson regression, subscription

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INTRODUCTION

Examining e-commerce driven deliveries is relevant since, according to a survey, 26% of residents of Canada and 42% of the United States made an online purchase at least once a week in 2023 (Léger Marketing, 2023). E-commerce is estimated to account for about 10 % to 15 % of the retail sector in high-income countries (Postnord, 2023; Statistique Canada, 2023). Some underlying trends suggest that the market share of e-commerce could continue to grow in years to come. COVID-19 forced many individuals to try online shopping experience in recent years (Unnikrishnan & Figliozzi, 2021) and to keep this habit (Markowska & al., 2023). Indeed, people aged 65 and over show the largest adoption growth (McGuckin & Fucci, 2018). The rapid growth of home deliveries raises concerns regarding its environmental, economic and social impacts on urban environments (Buldeo Rai & al., 2019, p. 2; Viu-Roig & Alvarez-Palau, 2020). Despite these concerns, primary data on home deliveries are scarce due to their private nature. Based on a systematic literature review on e-commerce and urban logistics, Buldeo Rai & Dablanc (2023) conclude that only 14 scientific publications out of 143 are based on real world statistical information. It seems difficult in this context to assess the real trend in online consumption and deliveries. Who is ordering online and receiving deliveries? For what type of good? To our knowledge, these questions have not been answered yet for any major Canadian city. Knowing more about determinants of e-commerce and deliveries may help design better policies to regulate urban logistic activities.

This paper identifies the main socio-demographic determinants of the use of package delivery services, the number of packages delivered and subscriptions to a delivery service by using data from a survey conducted in Montreal census metropolitan area (CMA) in 2024. After summarizing relevant papers on the determinants of online consumption and deliveries, we present data from our survey. We then report results from three sets of multivariate analysis. First, we use logistics regressions to explain the probability of using delivery. Second, we use Poisson regressions to explain the number of deliveries received. Finally, we examine, using logistics regressions anew, which determinants affect the probability of holding different types of delivery subscriptions.

LITERATURE REVIEW

There is a substantial body of scientific literature on e-commerce. The literature on business-to-consumer (B2C) deliveries is growing but remains limited due to the private nature of the data. An exploratory review of this literature is presented in Meloche & al. (2025). This review focuses specifically on econometric studies that have examined the determinants of delivery. We have identified only four, which are presented below and summarized in Table 1.

Among the papers listed, Spurlock & al. (2020) measure the impact of income and children on the use of delivery for different types of items (clothes, groceries, household items, prepared meals) during a typical week. Their sample consisted of 1,045 Bay Area California residents who responded to an online survey in the Spring of 2018. The authors tested their hypotheses using pairwise t-tests and multinomial logit choice models. They modeled household choice across four alternatives: 1: delivery; 2: vehicle trip; 3 non-vehicle trip: and 4: no purchase. Their analyses reveal that high-income households are significantly less likely to receive no delivery for the four types of items than other households. Households with children are more likely than households with no children to receive deliveries of household items. Both avoiding having to shop with children in tow and the bulkiness of certain products (e.g. diapers) may explain this difference. They conclude that high-income and households with children cared relatively more about time saving from deliveries.

Unnikrishnan & Fligliozzi (2021) compare the determinant of home deliveries before and during COVID-19 lockdown in the Portland-Vancouver-Hillsboro Metropolitan Area. The dataset contains 1,018 respondents who completed the online survey in the last week of May or the first week of June 2020. Authors use ordered choice models. Products are divided into seven categories. Results reveal that households that had more deliveries pre-COVID-19 had a higher likelihood of requesting more deliveries during the COVID-19 lockdown. This result is especially true for high-income households. The likelihood of a household using home deliveries also increases with the number of children, the possibility to work from home, the weekly screen time (computers and smartphones) of household members and having or not a subscription to a delivery service. Older customers and those concerned about costs are less likely to use home deliveries. As previously reported in the literature, education level is found to be the main predictor of household income.

Sousa & al. (2023) assess the relationship between neighborhood characteristics and the number of home deliveries in Belo Horizonte (Brazil) using binomial regression models. Results reveal a positive relationship with average income, number of retails shops and land area as well as a negative relationship with household size.

Finally, Segovia & al. (2021) conduct an online discrete choice experiment through the platform of Amazon's Mechanical Turk (MTurk) with 900 U.S. consumers. Authors assess grocery shopping preferences (i.e. in-store purchase, in-store pickup, curbside pickup and home delivery) under various scenarios of the COVID-19 pandemic and using mixed logit and quantile regression techniques. Results show that consumer preferences are affected more by psychographic characteristics than demographic characteristics. Participants who comply with COVID-19 directives exhibit higher willingness-to-pay for curbside pickup and home delivery.

Table 1: Summary of literature

Authors	Sample	Methods	Types of items delivered	Period	Variables
Spurlock & al. (2020)	Survey n = 1,045 Bay Area California Spring 2018	Pairwise t-tests and MNL	Grocery, Meal, Clothes	Recent typical week.	Income (+) Children (+)
Unnikrishnan & Fligliozzi (2020)	Survey n =1,018 PVHM Area May-June 2020	Ordered logit model	Grocery, Meal, Fashion, Household Electronics, Recreational, Medicines	Over 30 days.	Income (+) Elder (-) Screentime (+) Children (+) Workers in HH (+) At least 1 vehicle (+)
Souza & al. (2023)	Neighborhood n = 477 Belo Horizonte (Brazil) 2019 and 2021 Primary data from a national carrier	Binomial regression models	All deliveries, yearly		Income (+) Land area (+) Retail shops (+) HH size (-)
Segovia & al. (2021)	Discrete Choice experiment n = 900 MTurkMay 2020	Mixed logit model	Three delivery options for grocery	Over 30 days	psychographic characteristics

Source: Literature review carried out by the authors

SURVEY DATA

We first discuss the survey design, then data cleaning, and finally present some descriptive statistics of the data using both tables and figures.

Survey design

A survey was designed by the authors and administered by a polling firm, Leger Marketing, which maintains a panel of respondents constituted through a hybrid recruitment approach. The polling firm provides the weighting factors to generate representative samples of the population. Based on Canadian census data, the weighting factors include the region, gender, age, education and mother tongue of the respondents. The English and French versions of the 35-question survey was pre-tested on April 6 with 87 respondents. The English version of the questionnaire is appended to this paper. The French version can be found in Meloche & al. (2025). Data collection was carried out online from April 10 to 15, 2024 and generated a sample of 2,006 respondents residing in the Census Metropolitan Area (CMA) of Montreal (Quebec, Canada). The survey was divided into three parts. The first part gathered socio-demographic information (e.g. sex, gender, education level, household income, health issues related to the ability to travel). The second part asked respondents about the number of packages received during the seven days and the month preceding their answering day. In this research paper we present statistical results based solely on packages received under the name of the respondent within 7 days prior to the survey. Respondents were asked to specify the categories of goods they received and the place of receipt (at home and at their workplace if distinct from home). The questionnaire asked respondents about 10 categories of goods. These were grouped into 5 types:

- Meals (e.g., Uber Eats, Skip the Dishes, Door Dash, restaurants).
- Grocery (e.g., IGA, Maxi, farm baskets).
- Clothing, Electronics and Cultural (CEC) products (phones, tablets, various accessories, books, games, crafts, clothes, fashion accessories).
- Newspapers (e.g., Journal de Montréal, The Gazette).
- Others (health products, home products, gardening products, pet food).

Furniture and home services (e.g. plumber, electrician) were excluded from the analysis. The third part of the survey asked respondents about their preferences and habits regarding e-commerce deliveries (e.g. preference for fast deliveries, aversion to crowds).

Data cleaning

The distribution of the total number of packages is left-censored and positively skewed (Figure 1). Despite some relatively high values, it proved difficult to identify clear outliers. Most individuals who reported receiving a large volume of delivery had one of the following characteristics: (1) they received a greater variety of goods than the average respondent; (2) they received newspapers; or (3) they received prepared meals several times a week. Respondents receiving a very large number of packages are often young men, working from home, living in shared accommodation and enjoying a high income. Following an examination of the response profiles as well as a measurement of the strength of the observations that stood out from the interquartile range using modified Z-score and econometric tests, it was decided to exclude only six observations, each reporting more than 40 deliveries in the previous 7 days. The final sample thus has 2,000 observations. However, 12% of respondents did not reveal their household income question. This reduces the sample used for multivariate analysis to 1,753 observations.

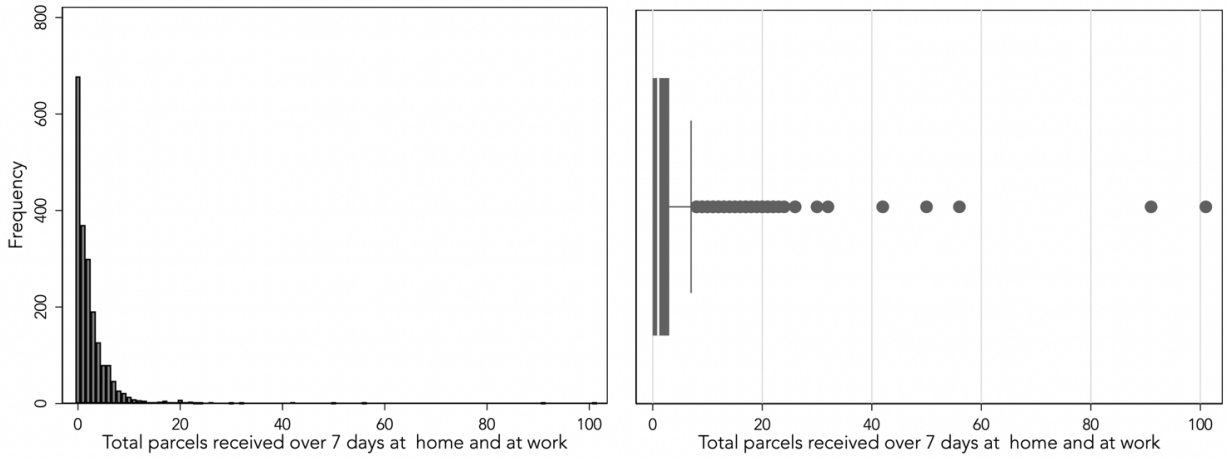

Figure 1: Total packages received over 7 days, histogram and boxplot, Montreal CMA, April 2024 (2006 respondents)
Source: Authors using Leger survey data

Descriptive statistics

Table 2 indicates that approximately two-thirds of respondents received at least one delivery in the seven-day period covered by the survey. On average, respondents had a total of 2.5 packages delivered with 89% of packages being delivered at home. Only 9% of respondents reported receiving a package at their workplace; this accounts for 11% of deliveries. The CEC category represents nearly a third of the products delivered. This is the largest category, followed by meals. The category "Others" includes many goods, including medicines and cosmetics, which represent 40% of deliveries in this category.

Table 2: Receipt of deliveries, seven-days period Montreal CMA, April 2024

Variable	Share of respondents with at least one delivery	Mean number of deliveries	Standard error
Total deliveries	67 %	2,52	0,097
Home total	65 %	2,29	0,085
Work total	9 %	0,23	0,030
Meals	26 %	0,50	0,032
Groceries	17 %	0,26	0,019
Clothing, electronics and cultural products (CEC)	38 %	0,75	0,041
Newspapers	8 %	0,26	0,029
Others	39 %	0,74	0,041

Source: calculations by authors using Leger survey data

Table 3 presents, for each of the independent variables used in the multivariate analyses found in this paper, the proportion of individuals who received deliveries, and the average number of packages received in the seven days preceding the survey as well as the standard deviation. The following observations emerge from these statistics.

Table 3: Socio economic characteristics of sample analyzed, frequency and number of deliveries, seven-days period, Montreal CMA, April 2024

	Variables	Observations	Proportion that has received at least one delivery	Mean total deliveries	Standard error
Sample	All respondents	2,000	67 %	2.52	0.097
	Respondents who reported household income	1,769	67 %	2.60	0.106
Gender	Male	927	65 %	2.82	0.169
	Female	1,063	67 %	2.24	0.102
Age of the respondent	18 to 24 years old	191	75 %	3.52	0.434
	25 to 34 years old	315	76 %	3.32	0.262
	35 to 44 years old	344	73 %	2.88	0.225
	45 to 54 years old	394	69 %	2.43	0.200
	55 to 64 years old	349	63 %	1.94	0.178
	65 to74 years old	230	46 %	1.45	0.266
	≥ 75 years old	177	58 %	1.98	0.249
Household income	< $20k	93	56 %	1.74	0.312
	$20k to $39k	184	53 %	1.94	0.265
	$40k to $59k	313	61 %	2.40	0.213
	$60k to $79k	264	75 %	3.22	0.352
	$80k to $99k	285	73 %	3.11	0.326
	≥ $100k	630	71 %	2.55	0.147
English proficiency	Low	749	59 %	2.03	0.125
	High	1,227	70 %	2.79	0.133
Health situation	No issues that affect the ability to travel around	1,702	66 %	2.44	0.102
	Minor issue	239	69 %	2.73	0.263
	Major issue	51	78 %	4.70	1.109
Household composition	Respondent lives alone	476	57 %	1.87	0.133
	Respondent lives with a roommate	99	76 %	4.09	0.658
	Respondent lives with a spouse	1,063	69 %	2.49	0.130
	Respondent lives with children under 13 years	315	74 %	3.22	0.262
	Respondent lives with children aged 13-17 y	210	66 %	2.20	0.225
	Respondent lives with children aged ≥ 18 y	329	74 %	2.89	0.248
Working situation	Respondent doesn't work	677	55 %	1.86	0.149
	Respondent works from home	406	71 %	2.90	0.240
	Respondent has an employer who allows personal deliveries to his workplace	357	80 %	3.60	0.281
	Respondent has an employer who doesn't allow personal deliveries to his workplace	464	72 %	2.50	0.167
Delivery subscription	Respondent has an Amazon subscription	979	77 %	3.12	0.154
	Respondent has a grocery subscription	100	90 %	5.69	0.649
	Respondent has a prepared meals subscription	130	93 %	4.90	0.465
	Respondent has other types of subscription	41	78 %	4.50	0.695
Shopping preferences	Buy more than necessary and return unneeded	219	79 %	4.17	0.425
	Usually select consolidated shipping	726	75 %	3.23	0.195
	Screen products: respondent prefers to touch, see, smell products before buying	1,348	62 %	2.30	0.117
	Respondent dislikes crowds	908	74 %	3.03	0.160
	Ecological footprint of products matter for the respondent	794	69 %	2.60	0.156
	Supporting local shop is important for the respondent	1,495	67 %	2.48	0.108
	Respondent usually select fast delivery	214	76 %	4.72	0.460

Source: calculations by authors using Leger survey data

- **Gender:** men and women use delivery services in similar proportions, but men receive a larger number of packages on average. Differences associated with gender are small relative to differences found for other variables.
- **Age:** the percentage of individuals receiving packages and the number of packages received generally drops with age. The 75-year-old group is an exception to the rule, particularly due to newspaper deliveries, as discussed later.
- **Household income**: the percentage of individuals receiving packages and the number of packages received is higher for households with an income above $60,000 than for poorer households.
- **English proficiency**: a better knowledge of English increases the proportion of individuals receiving packages, and the number received.
- **Health situation**: respondents with a health issue that significantly reduces their mobility (major issue) receive deliveries in greater proportion and number.
- **Household composition**: Individuals who live alone use delivery in smaller proportion and number. Conversely, individuals living with roommates and households with children under 13 years old show a higher proportion of usage and a higher volume of packages received.
- **Working situation**: working from home or for an employer who allows deliveries increases the proportion and number of deliveries.
- **Delivery subscription**: holding a delivery subscription (ex. Amazon Prime) increases strongly both the proportion and number of deliveries.

In addition to traditional socioeconomic variables, we were also interested in the impact of certain psychometric indicators related to **shopping preferences**.

- Bracketing is the practice of purchasing the same product in a variety of sizes and colors and returning unneeded products. In the UK, around 50% of individuals who purchased online are expected to return items by 2023 (Mintel, 2023). According to the results of our survey, 12% of individuals living in Greater Montreal buy more than they need and return products. These individuals unsurprisingly have a higher volume of packages received in the last 7 days.
- Individuals who prefer to screen the products they buy—that is, to see, smell, and touch them before making a purchase—use delivery less frequently and in smaller quantities. Conversely, individuals who dislike crowds use it more.
- In a context where the urban impacts of home delivery are raising concerns (GHG emissions, devitalization of local businesses), we wondered if certain personal values affect their use of delivery. Individuals who indicate that they care about the ecological footprint of the products they buy or for whom supporting local businesses is important do not display delivery usage behaviors that differ from the average consumer. It is possible that the products they value, for example farm baskets or local cosmetics products, are not available in local shops and can therefore only be acquired by delivery.
- Individuals who select the consolidation or fast delivery options use deliveries more and have a greater number of products delivered.

Figure 2 illustrates some of the findings reported in Table 3 with supplementary information regarding the place of delivery. Results indicate that deliveries at the workplace remain less frequent than home deliveries for all sociodemographic groups. The highest volumes of workplace delivery are observed in young individuals and those suffering from major health issues that affect their ability to travel around.

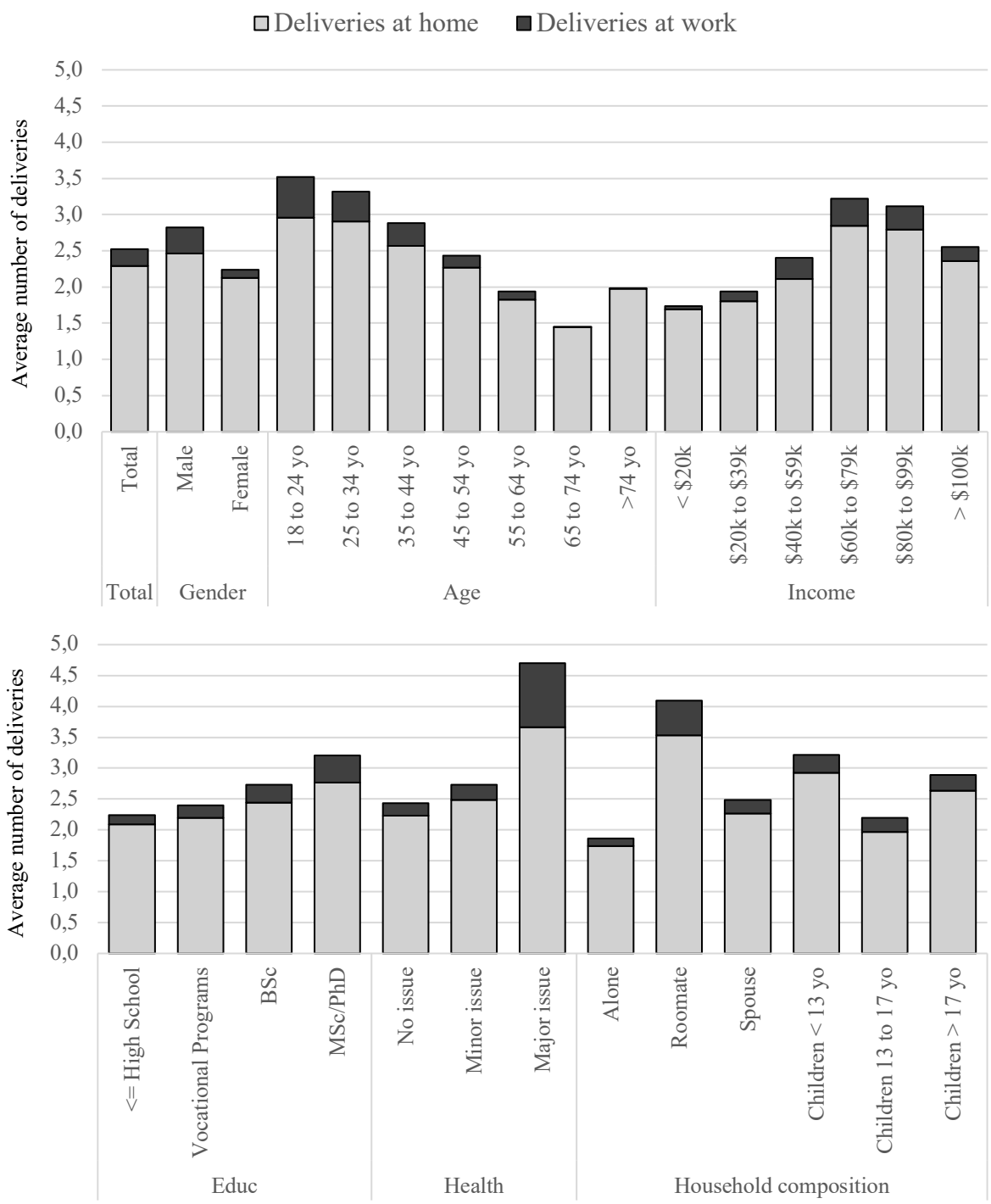

Figure 2: Deliveries by location, type of good and sociodemographic characteristics, Montreal CMA, April 2024
Source: calculations by authors using Leger survey data.

Figure 3 indicates that approximately one-third of respondents did not receive any deliveries in the 7 days preceding the survey, 57% received at least one type of good at home, 1% at work only and 8% received packages both at home and at work. The proportions vary according to the type of good. A quarter or less of respondents had groceries or prepared meals delivered compared to about 40% for clothing, electronics and cultural products (abbreviated as CEC) products combined. Only 8% of the

population still receives newspapers. Online grocery shopping also shows a low adoption rate compared to other types of products with only 17% of the population. Conversely, CECs show the highest delivery rate with Others.

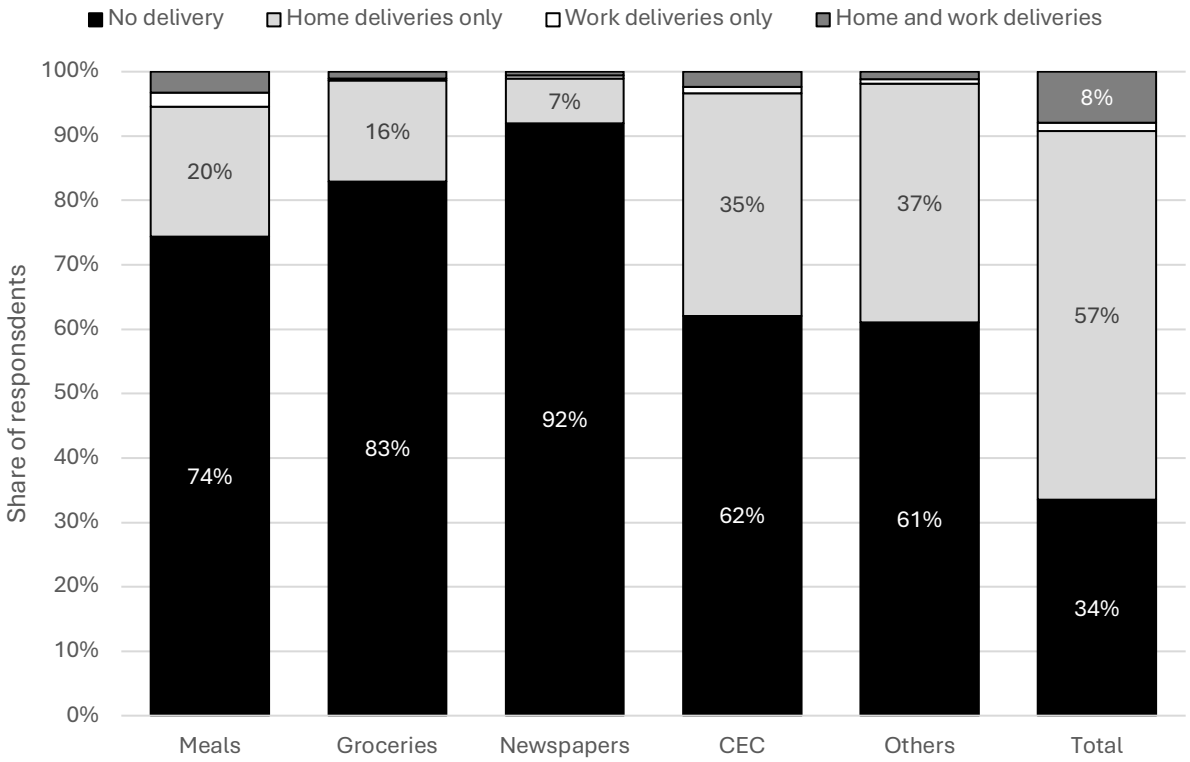

Figure 3 Share of respondents according to their receipt of specific delivered goods, Montreal CMA, April 2024
Source: calculations by authors using Leger survey data.

Figure 4 shows that a higher proportion of non-delivery is observed among the lowest income household (< $60,000), and individuals who are relatively older (> 55 years old), without children, with an education below university degree or without health issues. Most individuals have one or two types of goods delivered in a typical week. Younger households, especially those living with a roommate, those with health issues, as well as households with young children, show greater variety of goods delivered.

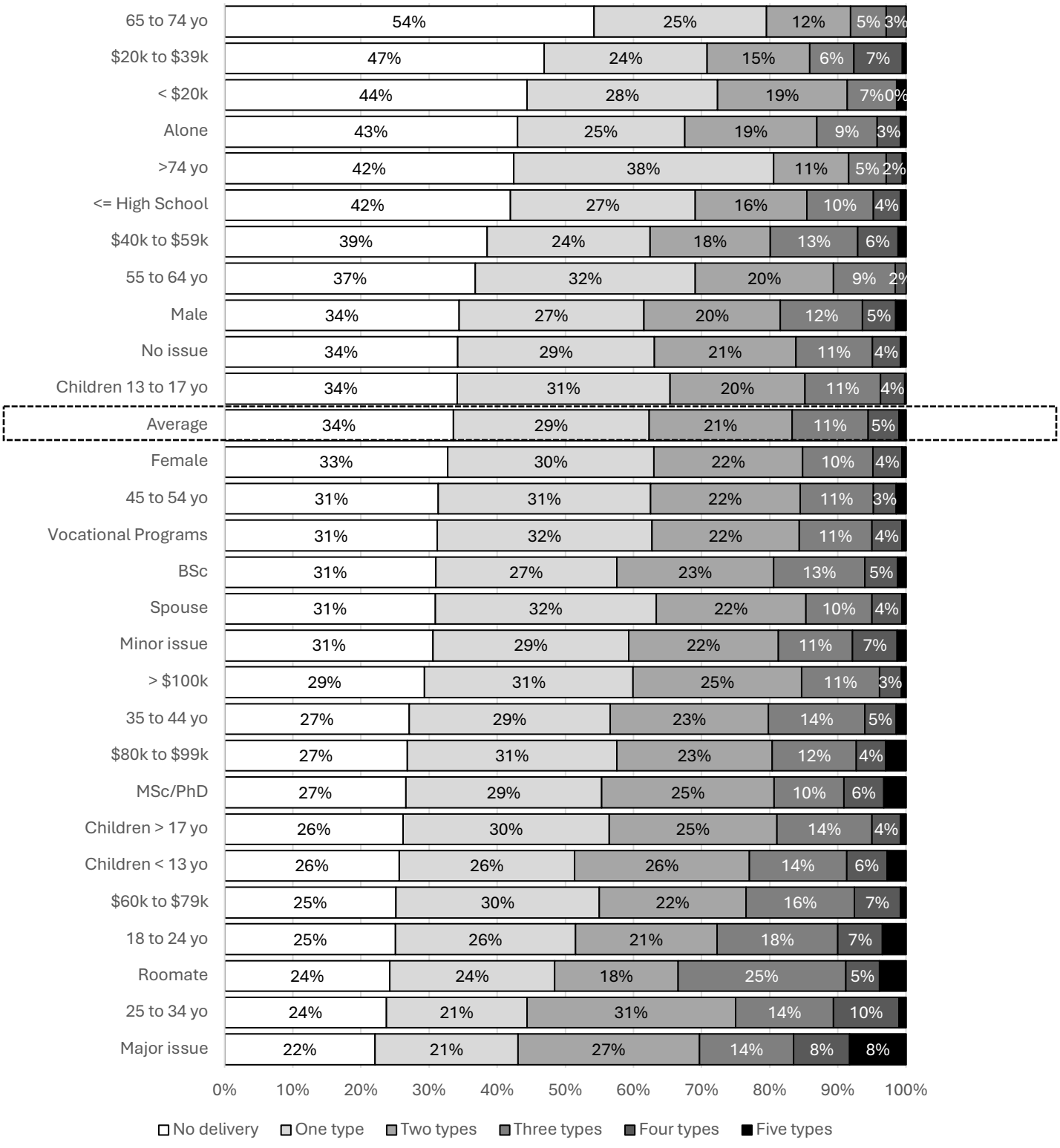

Figure 4: Share of respondents according to their use of delivery and characteristics, Montreal CMA, April 2024
Source: calculations by authors using Leger survey data.

Several authors have questioned whether home delivery complements or replaces in-store purchases (Farag & al., 2007; Jaller & Pahwa, 2020; Rotem-Mindali & Salomon, 2007; Weltevreden & Rietbergen, 2007). However, no study has yet addressed the question of whether workplace deliveries substitute or complement home deliveries. Furthermore, some studies indicate that delivery adoption rates differ depending on the type of goods. In this regard, groceries appear to be significantly behind (Huang & Oppewal, 2006; Mirhoseini & al., 2021). A positive delivery experience tends to reinforce online shopping and the use of delivery (Allen & al., 2018; The Economist, 2012). The cross-effect of a positive experience following the delivery of other types of goods is not yet discussed in the literature. Figure 5 shows that individuals who have a greater variety of goods delivered or who have goods delivered to multiple locations have a higher quantity of goods delivered on average. The analysis of the determinants of the quantity of goods delivered could be affected by the existence of different types of consumption profile and different levels of adoption of delivery.

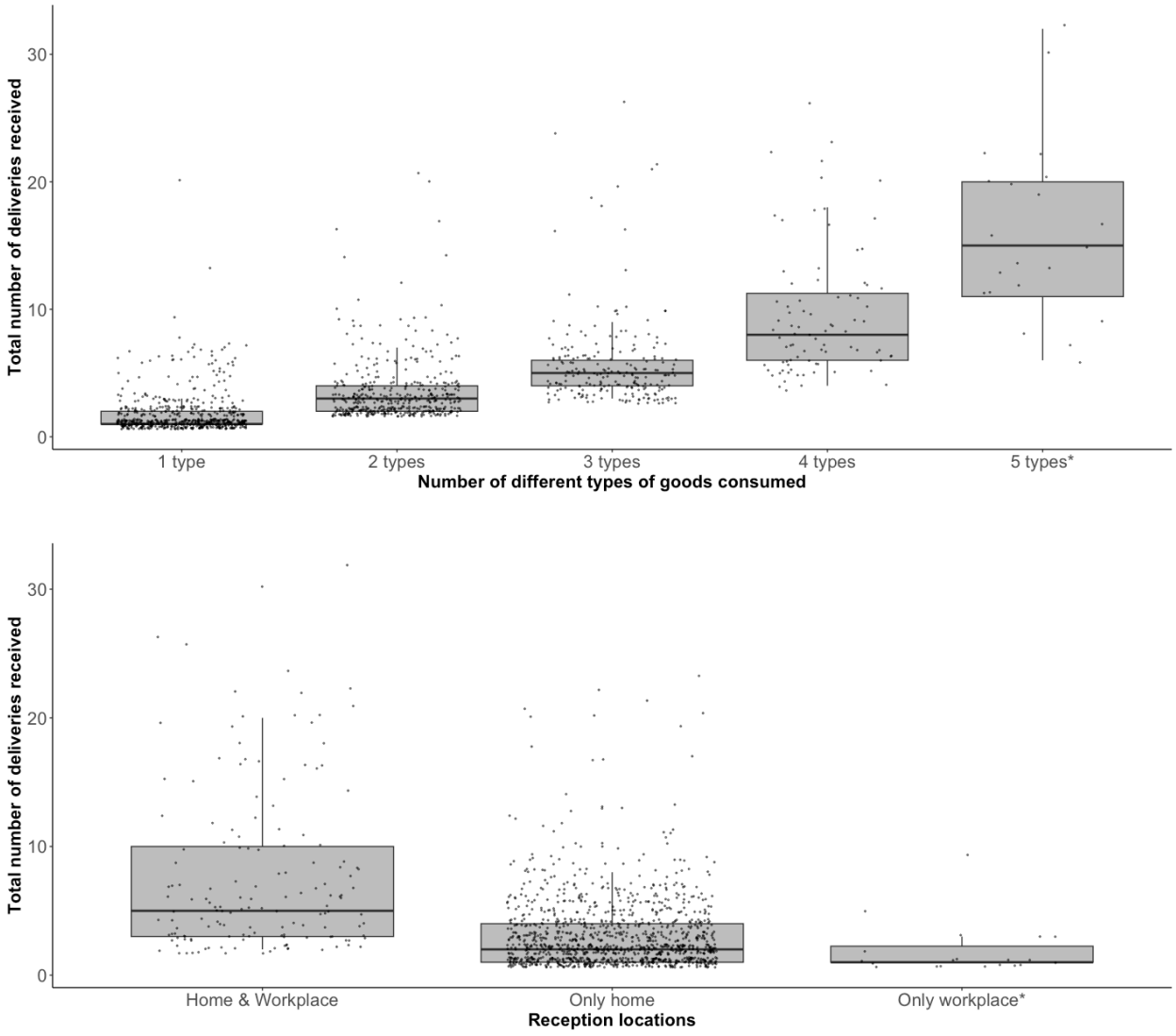

Figure 5: Boxplot according to location and number of types of good consumed, Montreal CMA, April 2024
Source: Léger survey data. Note (*) Less than 30 observations for the category "Only workplace" and "5 types".

International comparisons

International comparisons regarding the number of parcels delivered should be interpreted with caution. Buldeo Rai & al. (2019, 2023) point out that not-only the method of collection of the data, but also the definition of a delivery, a package or a parcel tends to vary from one study to another. Based on a systematic review of literature data, the authors indicate that estimates of packages received per capita tend to be lower in Europe than in Asia and the United States. An upward trend is also observed in the most recent estimates. The table 4 below presents some of the results listed in the literature concerning the average packages received per capita. First, the result of our survey, transformed into a daily per capita measure is 0.14. This estimation is similar to the number obtained for the USA of 0.12 for 2022 (U.S DoT, 2023). It should be noted that our survey, particularly in the choice of goods studied, was heavily inspired by American practices. Given the proximity and similarity of the two economies, the similarity of the results increases confidence in the estimates produced.

Table 4: Number of packages estimated to be delivered per day, five studies

Study	Method	Country or Region	Package per capita per day
Buldeo Rai & Dablanc (2023)	Systematic literature review	Europe	0.20
Buldeo Rai & al. (2019)	Case study	Bruxelles	0.04
National Household travel Survey 2022 (U.S. DoT, 2023)	Survey	United States	0.12
Allen & al. (2018)	Primary data	United Kingdom	0.05
Meloche & al. (2025)	Survey	Greater Montreal Area	0.14

In table 5 below, deliveries are broken down according to the type of goods purchased. The data from the survey conducted in Greater Montreal indicates 19% of prepared meals, 10% groceries and 71% others (Meloche & al., 2025); US results for similar categories are 18%, 10% and 72%. These similarities once again increase confidence in the representativeness of our sample.

Table 5: Distribution of delivered goods by type, three studies

	Allen & al. (2018) United Kingdom	National Household travel Survey (2022) United States	Meloche & al. (2025) Greater Montreal Area
Non-food	**62 %**	**70 %**	**71 %**
Clothing and electronics	-	27 %	30% (includes cultural products)
Health	-	15 %	12%
Newspapers	-	-	10 %
Others	-	28 %	18 %
Food	**30%**	**28%**	**29%**
Grocery	17 %	10 %	10%
Prepared meal	13 %	18 %	19%
Furniture and appliances	**8%**	**-**	**-**
Services	**-**	**2 %**	**-**

MULTIVARIATE ANALYSES

Although scientific literature provides some indications on the socioeconomic determinants of e-commerce and delivery, there is no well-established econometric model explaining the probability of using delivery, the quantity of deliveries received, let alone what explains holding or not a delivery subscription. This section thus attempts to contribute to existing knowledge by answering these two questions. The results are presented in three parts. The first part focuses on the probability of having at least one package delivered using logistics models. The number of deliveries being a count variable, the second part focuses on the determinants of the quantity of parcels received over 7 days using a Poisson regression model. The third part focuses on the impact of socioeconomic determinants on the probability of holding a delivery subscription and also uses a logistic model.

Logistic regressions: use of delivery services

Table 6 presents the odds ratios for all types of goods and locations combined (L1), for home delivery only (L2) and work delivery only (L3). Given the important share of home deliveries in the total deliveries, the first two sets of results are similar. Examining first socioeconomic determinants, individuals with a relatively higher level of education have a greater probability of receiving a delivery, particularly at home. On the other hand, income has no impact, perhaps because the level of education is strongly associated with the level of income. Age and gender have relatively little impact on the probability of receiving at least one delivery. However, individuals aged 45 to 64 are less likely to have goods delivered to their workplace. Employer permission to receive packages has a very significant impact on the probability of receiving a package at work.

Turning to preferences and habits regarding e-commerce deliveries, respondents who prefer to touch, see or smell products before purchasing them have a lower probability of using delivery services. All things being equal, individuals who are not working are less likely to use delivery services. Individuals who usually pay for express delivery are more likely to have their packages delivered to their workplace. This result could reflect that they are individuals with a more severe time constraint or a higher degree of impatience.

Two factors appear to have a major impact on the probability of using delivery services: the presence of health issues that affect the ability to travel and subscribing to at least one delivery service. Subscriptions, however, do not emerge as a significant determinant for deliveries at work.

Given the importance of a subscription in the results, table 6 also presents regression results separately for respondents who do not have a subscription (L4) and those who have at least one (L5). Among individuals without subscription, a greater likelihood of using deliveries, all types of goods and locations combined, is observed among women, individuals aged 18 to 24, with a high level of education, living with a partner and presenting health issues. The probability of using delivery is also higher for individuals who believe that it is important to support local businesses. Although seemingly contradictory, it is possible that these individuals do not usually buy online, but when they do it, it is to obtain local products that are difficult to access physically in their neighborhood (e.g. farmers' basket). Among individuals who have at least one subscription, aversion to crowds emerges as an important factor in explaining the likelihood of using delivery in the last 7 days. Receiving packages at home increases the probability of also receiving them at one's workplace and vice versa. This could indicate the presence of an adoption process. Individuals who buy goods online and use delivery services extend this habit to different locations and increasing categories of goods when their experience is positive.

Table 6: Logistic regression results according to location and subscription status, Montreal CMA, April 2024

	(L1) Total		(L2) Home		(L3) Work		(L4) Total, without subscription		(L5) Total, with at least one subscription	
	obs = 1,753 df = 1,752 F (36, 1717) = 4.78 Prob > F = 0.0000		obs = 1,753 df = 1,752 F (37, 1716) = 4.64 Prob > F = 0.0000		obs = 1,753 df = 1,752 F (36, 1717) = 5.24 Prob > F = 0.0000		obs = 801 df = 800 F (32,769) = 3.01 Prob > F = 0.00		obs = 952 df = 951 F (32,920) = 1.47 Prob > F=0.05	
	Odds ratio	t	Odds ratio	t	Odds ratio	t	Odds ratio	t	Odds ratio	t
Male	Reference group									
Female	1.277	-1.83	1.229	-1.54	0.788	-1.00	1.655**	-2.75	1.024	-0.12
18-24	1.370	-1.02	1.440	-1.21	0.880	-0.35	2.798*	-2.33	0.741	-0.74
25-34	Reference group									
35-44	0.940	-0.26	0.932	-0.3	0.723	-1.01	1.197	-0.5	0.785	-0.81
45-54	1.090	-0.36	1.057	-0.23	0.456*	-2.22	1.465	-1.11	0.879	-0.39
55-64	0.897	-0.42	1.037	-0.14	0.234***	-3.34	1.307	-0.77	0.631	-1.20
65-74	0.601	-1.62	0.688	-1.2	0.078	-3.12	1.029	-0.07	0.330*	-2.36
>75	0.994	-0.02	1.126	-0.33	0.043	-3.09	2.034	-1.66	0.450	-1.51
High school or less	Reference group									
Vocational Programs	1.310	-1.53	1.170	-0.91	1.423	-1.10	1.446	-1.50	1.147	-0.55
BSc	1.450*	-2.13	1.438*	-2.10	1.342	-0.90	1.710*	-2.22	1.277	-0.94
MSc/PhD	1.638*	-2.24	1.692*	-2.39	1.374	-0.88	2.187**	-2.60	1.282	-0.76
Low English Proficiency	Reference group									
High English Proficiency	1.192	-1.29	1.135	-0.94	1.217	-0.80	1.289	-1.38	1.224	-1.00
Lives alone	Reference group									
Lives with a roommate	1.798	-1.83	1.948*	-2.10	0.808	-0.49	2.237	-1.86	1.587	-0.99
Lives with a spouse	1.593**	-2.87	1.477*	-2.41	1.449	-1.45	1.591*	-2.19	1.541	-1.94
Lives with children < 13	1.011	-0.05	1.204	-0.89	0.738	-1.07	1.391	-1.02	0.820	-0.78
Lives with children 13-17	0.718	-1.57	0.785	-1.17	0.909	-0.30	0.664	-1.19	0.726	-1.21
Lives with children > 18	1.576*	-2.10	1.494	-1.89	1.997*	-2.32	1.812	-1.96	1.372	-1.10
Less than 20k	Reference group									
$20k to $39k	0.962	-0.11	0.870	-0.40	1.635	-0.54	0.770	-0.58	1.038	-0.06
$40k to $59k	0.988	-0.03	0.966	-0.10	4.113	-1.71	0.675	-0.94	1.120	-0.19
$60k to $79k	1.712	-1.49	1.494	-1.14	3.742	-1.55	1.726	-1.27	1.487	-0.66
$80k to $99k	1.651	-1.35	1.582	-1.26	4.191	-1.74	1.676	-1.19	1.308	-0.43
> $100k	1.036	-0.10	1.054	-0.15	2.272	-0.97	0.876	-0.31	1.005	-0.01
No health issue (Ref)	Reference group									
Health issue, minor	1.579*	-2.27	1.483	-1.95	2.385*	-2.54	1.839*	-2.26	1.537	-1.36
Health issue, major	2.905*	-2.42	3.050*	-2.57	1.910	-1.23	4.163*	-2.42	2.826	-1.70
Employer doesn't allow	Reference group									
Do not work	0.617*	-2.27	0.696	-1.71	0.092***	-4.43	0.443**	-2.98	0.876	-0.40
Work from home	0.890	-0.60	0.957	-0.22	0.541	-1.96	0.932	-0.26	0.880	-0.47
Workplace allows personnal delivery	1.478	-1.86	1.066	-0.31	5.193***	-6.19	1.887*	-2.08	1.357	-1.13
Screening before buying	0.634**	-3.00	0.607***	-3.37	1.117	-0.47	0.593*	-2.46	0.648*	-2.11
Aversion for crowds	1.398*	-2.49	1.443**	-2.75	0.911	-0.40	1.374	-1.70	1.493*	-2.06
Ecological footprint matter	1.108	-0.75	1.095	-0.67	0.881	-0.55	0.922	-0.42	1.466	-1.85
Supporting local shops	1.223	-1.30	1.248	-1.45	1.376	-1.24	1.807**	-2.65	0.88	-0.56
Buy more than necessary	1.617	-1.86	1.751*	-2.27	1.446	-1.30	1.779	-1.62	1.372	-0.92
Pay for fast delivery	0.876	-0.54	0.705	-1.46	3.163***	-4.02	1.074	-0.18	0.857	-0.54
Prepared Meal subscription	2.042***	-5.14	2.131***	-5.53	0.751	-1.22				
Grocery subscription	3.056*	-2.07	3.288*	-2.22	2.021*	-2.14				
Amazon subscription	3.920*	-2.50	3.702*	-2.56	1.376	-0.91				
Other delivery subscription	2.810*	-2.42	2.735*	-2.38	0.148	-1.43				
Received packages at work			2.372**	-2.77						
Received packages at home					2.308**	-2.66				

Level of significance: * p<0.05, ** p<0.01, *** p<0.001 Variables with no Ref group =1 if the characteristic is present 0 otherwise
Source: calculations by authors using Leger survey data

Table 7: Logistic regression results, five types of goods, Montreal CMA, April 2024

	(L6) Prepared meal		(L7) Grocery		(L8) CEC		(L9) Newspapers		(L10) Other Goods	
	obs = 1,753 df = 1,752 F (39. 1714) = 8.61 Prob > F = 0.0000		obs = 1,753 df = 1,752 F (39.1714) = 6.06 Prob > F = 0.0000		obs = 1,753 df = 1,752 F (38.1715) = 5.15 Prob > F = 0.0000		obs = 1,753 df = 1,752 F (38.1715) = 4.12 Prob > F = 0.0000		obs = 1,753 df = 1,752 F (38.1715) = 6.19 Prob > F = 0.0000	
	Odds ratio	t	Odds ratio	t	Odds ratio		Odds ratio	t	Odds ratio	t
Male	Reference group									
Female	0.939	-0.40	0.961	-0.22	1.213	-1.5	0.483**	-3.15	1.219	-1.54
18-24	0.758	-0.91	1.405	-1.02	1.510	-1.68	1.454	-0.80	0.967	-0.12
25-34										
35-44	0.793	-1.04	1.526	-1.58	0.754	-1.34	0.660	-1.00	0.732	-1.45
45-54	0.380***	-4.06	1.527	-1.52	1.063	-0.28	0.760	-0.62	1.208	-0.87
55-64	0.421**	-3.16	0.841	-0.52	0.873	-0.60	1.471	-0.97	1.167	-0.66
65-74	0.158***	-4.37	0.888	-0.27	0.652	-1.47	1.154	-0.27	1.116	-0.37
>75	0.243***	-3.38	0.391*	-2.09	0.839	-0.57	3.874**	-2.83	0.994	-0.02
High School	Reference group									
Vocational Programs	0.916	-0.40	1.043	-0.18	1.239	-1.25	0.790	-0.77	1.017	-0.10
BSc	1.369	-1.47	1.118	-0.49	1.446*	-2.14	0.843	-0.55	0.866	-0.84
MSc/PhD	0.930	-0.28	1.784*	-2.10	1.661*	-2.38	1.324	-0.79	0.756	-1.18
Low English Proficiency	Reference group									
High English Proficiency	1.219	-1.22	1.773**	-3.07	0.91	-0.70	0.778	-1.04	1.117	-0.83
Lives alone										
Lives with a roommate	1.640	-1.36	0.738	-0.79	1.466	-1.42	1.275	-0.58	1.320	-0.96
Lives with a spouse	1.091	-0.51	1.011	-0.06	1.139	-0.9	1.002	-0.01	1.211	-1.3
Lives with children < 13	0.791	-1.16	1.098	-0.39	1.578*	-2.45	1.184	-0.45	0.995	-0.03
Lives with children 13-17	0.552*	-2.33	2.028**	-2.63	0.839	-0.84	0.405	-1.50	0.837	-0.88
Lives with children > 18	1.725*	-2.47	0.843	-0.64	1.340	-1.61	1.139	-0.39	0.946	-0.29
Less than 20k	Reference group									
$20k to $39k	1.269	-0.54	1.844	-1.12	1.284	-0.73	1.644	-0.82	0.669	-1.04
$40k to $59k	1.953	-1.67	1.424	-0.70	1.592	-1.46	1.078	-0.12	0.724	-0.91
$60k to $79k	2.389*	-2.17	0.825	-0.36	1.506	-1.27	1.339	-0.49	1.492	-1.11
$80k to $99k	1.982	-1.66	0.961	-0.08	1.497	-1.22	2.643	-1.65	1.060	-0.16
> $100k	1.223	-0.51	0.856	-0.31	1.626	-1.54	1.182	-0.28	0.936	-0.19
No health issue Ref	Reference group									
Health issue, minor	1.064	-0.26	1.634	-1.87	0.985	-0.07	1.238	-0.67	1.245	-1.07
Health issue, major	1.143	-0.26	3.195*	-2.35	0.685	-0.97	1.243	-0.47	3.461**	-3.16
Employer doesn't allow	Reference group									
Do not work	0.531*	-2.43	1.867*	-2.12	0.906	-0.52	1.687	-1.39	0.613*	-2.32
Work from home	0.958	-0.22	2.008**	-2.81	1.107	-0.57	1.216	-0.58	0.629**	-2.58
Employer allows	1.249	-1.04	1.908*	-2.53	1.070	-0.38	1.258	-0.65	0.950	-0.28
Screening before buying	0.628**	-2.80	0.531***	-3.30	0.677**	-2.87	2.444***	-3.47	1.035	-0.24
Aversion for crowds	1.240	-1.39	1.180	-0.94	1.100	-0.76	0.717	-1.41	1.460**	-2.95
Ecological footprint matter	0.870	-0.82	1.753**	-3.01	0.891	-0.84	1.464	-1.63	0.959	-0.30
Support local shops matter	1.180	-0.90	1.095	-0.42	1.203	-1.28	0.759	-1.00	0.922	-0.53
Buy more than necessary	1.210	-0.76	1.680	-1.92	1.399	-1.59	2.354**	-2.64	0.789	-1.08
Usual. pay for fast delivery	2.230***	-3.39	1.168	-0.59	0.812	-0.99	0.666	-1.05	0.919	-0.41
Prepared Meal subscription	5.536***	-5.72								
Grocery subscription			6.261***	-5.67						
Amazon subscription	1.355	-1.81	0.807	-1.16	1.303*	-1.99	1.072	-0.29	1.823***	-4.43
Other delivery subscription	1.052	-0.08	0.786	-0.30	1.273	-0.59	8.650***	-4.65	1.124	-0.29
Meal delivery user			2.414***	-4.74	1.546**	-2.87	2.198**	-2.97	1.536**	-2.77
Grocery delivery user	2.647***	-5.13			1.282	-1.39	2.190**	-2.94	3.064***	-6.29
Newspaper delivery user	2.486**	-3.26	1.780*	-2.03	1.613*	-1.99			1.015	-0.06
CEC delivery user	1.522**	-2.65	1.304	-1.40			1.541	-1.82	2.683***	-7.65
Other goods delivery user	1.507**	-2.59	2.858***	-5.63	2.672***	-7.60	1.043	-0.16		

Level of significance: * p<0.05, ** p<0.01, *** p<0.001

Source: calculations by authors using Leger survey data

Table 7 presents the results for each set of goods separately, but for combined locations (home and work) (L6 to L10). In all cases holding or not a subscription as well as cross usage of delivery services matters

For prepared meals, one finds that older individuals are less likely to use this kind of delivery. For groceries and other goods (including health products), a major impediment to mobility is an important driver of use. For CEC goods, university education increases the receipt of such goods. For newspapers being a male and age 75 and over are key determinants of having one delivered.

Poisson regressions: number of deliveries

Tables 8 and 9 present the incidence rate ratios of Poisson regressions for the same combinations of variables as tables 6 and 7. The results obtained in tables 8 and 9 are similar in several respects to those found in the previous tables. Thus, in table 8, respondents with major mobility issues receive more packages as do those who hold a delivery subscription. Various combinations of living arrangements also increase the number of packages received as well as an employer who allows deliveries. Preferences also have a similar impact in tables 6 and 8: individuals who like to see or touch products both use delivery services less (table 6) and receive a smaller number of deliveries (table 8). One important difference with logistics regression results is that education is not a significant variable in table 8.

Turning to table 9 we again observe some impact of mobility issues and strong impacts of holding various delivery subscriptions on the number of specific deliveries. Socio demographic characteristics also matter; respondents aged 45 and over use prepared meal deliveries less (table 7) and receive a smaller number of these deliveries (table 9). One also notes that the number of newspapers received strongly increases amongst individuals aged 75 and over. Families with children have 30% to 40% more prepared meals and CEC goods delivered. Preferences also play a role. For example, respondents who care about their ecological footprint both use more intensely grocery delivery services (table 7) and receive more grocery deliveries (which can be farmers' basket) (table 9). Again, the level of education has no impact in this table. Respondents for whom the ecological footprint of products is important tend to have fewer newspapers delivered. Individuals aged 45 and over have significantly fewer prepared meals and groceries delivered, but more newspapers.

Table 8: Poisson regression, number of deliveries received, total by delivery location and subscription status, Montreal CMA, April 2024

	(P1) Total		(P2) Home		(P3) Work		(P4) Total, without subscription		(P5) Total, p with at least one subscription	
	obs = 1,753 df = 1,752 F (36. 1717) =11.93 Prob > F = 0.0000		obs = 1,753 df = 1,752 F (37. 1716) =10.7 Prob > F = 0.0000		obs = 1,753 df =1,752 F (37. 1716) =15.01 Prob > F = 0.0000		obs = 801 df = 800 F (32. 769) =4.20 Prob > F = 0.00		obs = 952 df = 951 F (32. 920) = 5.82 Prob > F=0.05	
	IRR	t	IRR	t	IRR	t	IRR	t	IRR	t
Male	Reference group									
Female	0.909	-1.24	0.994	-0.07	0.545**	-2.92	1.092	-0.73	0.841	-1.92
18-24	1.126	-0.85	0.972	-0.21	1.314	-1.10	2.046**	-2.74	0.899	-0.75
25-34	Reference group									
35-44	0.903	-0.90	0.914	-0.86	0.908	-0.34	1.194	-0.84	0.872	-1.05
45-54	0.946	-0.45	1.025	-0.2	0.518*	-2.22	1.164	-0.68	0.901	-0.71
55-64	0.85	-1.27	0.859	-1.21	0.666	-0.95	1.447	-1.69	0.725*	-1.98
65-74	0.679	-1.61	0.697	-1.51	0.120**	-2.92	1.279	-0.81	0.593	-1.48
>75	0.952	-0.26	0.993	-0.04	0.133*	-1.96	1.882*	-2.16	0.838	-0.81
High school	Reference group									
Vocational Programs	0.945	-0.46	0.940	-0.53	1.174	-0.58	1.023	-0.13	0.881	-0.93
BSc	1.101	-0.89	1.034	-0.33	1.659	-1.88	1.216	-1.09	1.022	-0.17
MSc/PhD	1.141	-1.10	0.987	-0.11	1.090	-0.27	0.994	-0.03	1.159	-1.04
Low Eng Proficiency	Reference group									
High Eng Proficiency	1.132	-1.56	1.136	-1.64	0.880	-0.55	1.106	-0.77	1.226*	-2.16
Lives alone	Reference group									
Roommate	1.244	-1.72	1.180	-1.24	0.705	-1.26	1.196	-0.74	1.374*	-2.35
Spouse	1.12	-1.31	1.046	-0.52	1.569*	-2.03	1.02	-0.14	1.137	-1.25
Childen < 13	1.173	-1.51	1.168	-1.59	0.656	-1.81	1.451*	-1.99	1.099	-0.81
Children 13-17	0.809	-1.91	0.787*	-2.31	1.109	-0.41	0.873	-0.63	0.766*	-2.05
Children > 18	1.247*	-2.09	1.192	-1.77	2.039**	-2.81	1.677***	-3.46	1.094	-0.8
Less than 20k	Reference group									
$20k to $39k	1.096	-0.39	1.058	-0.25	3.386	-1.34	0.667	-1.33	1.568	-1.64
$40k to $59k	1.224	-0.94	1.112	-0.49	5.385	-1.95	0.73	-1.12	1.570	-1.74
$60k to $79k	1.482	-1.79	1.346	-1.38	3.319	-1.36	1.183	-0.58	1.660*	-1.97
$80k to $99k	1.434	-1.57	1.407	-1.45	4.256	-1.70	1.326	-1.07	1.541	-1.51
> $100k	1.148	-0.65	1.186	-0.80	2.624	-1.09	0.96	-0.14	1.312	-1.08
No health issue Ref	Reference group									
Health issue, minor	1.134	-1.09	1.079	-0.69	1.330	-1.07	1.553**	-2.67	1.034	-0.24
Health issue, major	1.566**	-2.87	0.979	-0.12	10.170***	-7.22	1.428	-1.32	1.961***	-4.41
Doesn't allow (Ref)	Reference group									
Do not work	0.971	-0.24	1.116	-0.88	0.083***	-3.88	0.645*	-2.43	1.108	-0.72
Work from home	1.082	-0.85	1.136	-1.39	0.354***	-3.41	1.093	-0.52	1.077	-0.70
Employer allow	1.324**	-2.79	1.116	-1.25	2.668***	-4.55	1.530*	-2.41	1.321**	-2.61
Screen products	0.885	-1.45	0.869	-1.78	0.875	-0.67	0.628***	-3.61	0.985	-0.15
Aversion for crowds	1.220*	-2.47	1.267**	-3.13	0.852	-0.78	1.095	-0.83	1.257*	-2.34
Ecological footprint	0.916	-1.16	0.915	-1.19	0.878	-0.66	1.010	-0.07	0.928	-0.8
Local shop	0.969	-0.33	0.96	-0.43	1.221	-0.85	1.125	-0.77	0.956	-0.42
Buy more	1.405**	-3.21	1.263*	-2.15	1.439	-1.79	1.346	-1.61	1.301*	-2.22
Fast delivery	1.335**	-2.59	1.185	-1.51	1.866**	-3.14	1.832**	-2.64	1.359**	-2.65
Meal subscription	1.322**	-3.04	1.407***	-3.92	0.551**	-2.94				
Grocery subscription	1.627***	-3.76	1.417**	-2.94	2.112**	-2.98				
Amazon subscription	1.387**	-2.92	1.445***	-3.64	1.105	-0.39				
Other subscription	2.188***	-5.12	2.493***	-6.29	0.066*	-2.21				
Work deliveries			1.098***	-6.17						
Home deliveries					1.182***	-8.88				
Constant	1.217	-0.72	1.155	-0.54	0.036***	-3.45	1.025	-0.08	1.661	-1.56

Level of significance: * p<0.05, ** p<0.01, *** p<0.001
Source: calculations by authors using Leger survey data

Table 9: Poisson regression, number of deliveries received for five types of goods, Montreal CMA, April 2024

(P6)	(P7)	(P8)	(P9)	(P10)

	Prepared meal		Grocery		CEC		Newspapers		Other Goods	
	obs = 1,753 F (39. 1714) =15.46 Prob > F = 0.0000		obs = 1,753 F (39.1714) = 16.12 Prob > F = 0.0000		obs = 1,753 F (38.1715) = 11 Prob > F = 0.0000		obs = 1,753 F (38.1715) = 9.26 Prob > F = 0.0000		obs = 1,753 F (38.1715) = 18.88 Prob > F = 0.0000	
	IRR	t	IRR	t	IRR		IRR	t	IRR	t
Male										
Female	0.887	-1.10	0.931	-0.52	0.993	-0.06	0.870	-0.59	1.117	-1.08
18-24	1.168	-0.84	0.757	-0.85	0.981	-0.11	1.233	-0.43	1.103	-0.64
25-34										
35-44	0.997	-0.02	1.175	-0.77	0.921	-0.54	0.810	-0.45	0.930	-0.46
45-54	0.633*	-2.48	1.471	-1.84	0.861	-0.96	1.462	-0.74	1.268	-1.72
55-64	0.557*	-2.27	0.599	-1.89	0.967	-0.15	2.756*	-2.11	0.955	-0.28
65-74	0.223***	-3.55	0.647	-1.21	0.509*	-2.45	1.667	-0.87	1.345	-0.76
>75	0.321**	-2.91	0.427*	-2.26	0.803	-0.83	6.680***	-3.74	0.731	-1.40
High school										
Vocational Programs	0.809	-1.28	0.900	-0.54	1.207	-1.26	0.676	-1.24	1.045	-0.23
BSc	0.901	-0.69	1.129	-0.60	1.218	-1.43	0.874	-0.43	1.047	-0.32
MSc/PhD	0.769	-1.49	1.087	-0.35	1.061	-0.37	1.536	-1.22	0.977	-0.15
Low English Proficiency										
High English Proficiency	1.016	-0.11	1.766***	-3.82	1.074	-0.73	0.824	-0.75	1.067	-0.67
Lives alone										
Lives with a roommate	1.116	-0.49	0.800	-0.77	1.249	-1.23	1.093	-0.20	1.216	-1.22
Lives with a spouse	1.014	-0.11	1.208	-1.16	0.872	-1.02	1.047	-0.18	1.138	-1.27
Lives with childen < 13	0.950	-0.37	0.929	-0.42	1.326*	-2.29	0.774	-0.72	1.035	-0.25
Lives with children 13-17	0.788	-1.23	1.372	-1.63	0.819	-1.33	0.350	-1.78	0.778	-1.76
Lives with children > 18	1.399*	-2.20	0.866	-0.71	1.440*	-2.43	0.964	-0.13	0.923	-0.56
Less than 20k										
$20k to $39k	0.862	-0.37	1.604	-1.19	1.019	-0.07	2.200	-1.22	0.892	-0.46
$40k to $59k	1.050	-0.13	1.264	-0.62	1.226	-0.78	1.443	-0.57	1.025	-0.11
$60k to $79k	0.995	-0.01	0.971	-0.08	1.359	-1.13	1.818	-0.93	1.396	-1.54
$80k to $99k	0.989	-0.03	0.941	-0.16	1.504	-1.15	3.021	-1.83	1.631	-1.73
> $100k	0.714	-0.95	0.826	-0.48	1.497	-1.49	2.241	-1.29	1.363	-1.39
No health issue										
Health issues, minor	1.502*	-2.57	0.952	-0.22	0.902	-0.71	1.073	-0.23	1.104	-0.68
Health issue, major	0.660	-1.23	1.581	-1.45	0.791	-1.08	1.37	-0.78	2.022***	-3.89
Employer doesn't allow										
Do not work	0.597*	-2.28	1.365	-1.38	1.094	-0.41	1.26	-0.62	0.820	-1.30
Work from home	0.998	-0.01	1.304	-1.40	1.154	-1.09	0.865	-0.38	0.818	-1.79
Employer allows	1.127	-0.79	1.596*	-2.41	1.251	-1.78	1.418	-0.89	0.963	-0.31
Screen products	0.719**	-2.86	0.573***	-3.59	0.870	-1.25	1.786*	-2.45	0.986	-0.11
Aversion for crowds	1.162	-1.30	1.104	-0.66	1.083	-0.66	1.011	-0.05	1.451***	-3.43
Ecological footprint matter	0.926	-0.70	1.530**	-2.72	0.836	-1.46	0.635*	-2.09	0.934	-0.69
Support local shops	1.054	-0.44	1.005	-0.03	1.040	-0.37	1.132	-0.50	0.849	-0.97
Buy more	0.998	-0.02	1.756**	-2.84	1.320	-1.95	1.304	-0.94	0.951	-0.35
Usual. pay for fast delivery	1.383*	-2.24	0.981	-0.09	1.009	-0.06	0.843	-0.51	1.087	-0.58
Meal subscription	2.246***	-6.18								
Grocery subscription			2.263***	-4.19						
Amazon subscription	0.963	-0.28	0.926	-0.54	1.347*	-2.47	1.323	-1.13	1.553**	-3.23
Other subscription	0.873	-0.43	0.874	-0.30	1.105	-0.39	6.991***	-6.93	0.946	-0.16
Meal			1.236***	-6.28	1.157***	-4.36	1.076	-1.07	1.165***	-3.31
Grocery	1.207***	-3.78								
Newspaper	1.049	-1.18	1.105*	-2.03	1.028	-0.69			1.076*	-2.52
CEC	1.098***	-4.01	1.078*	-2.02			1.034	-0.63	1.117***	-3.85
Other goods	1.091**	-3.29	1.065	-1.80	1.128***	-5.19	1.074*	-2.55		

Level of significance: * p<0.05, ** p<0.01, *** p<0.001
Source: calculations by authors using Leger survey data

Determinants of holding a delivery subscription (logistics regressions)

The analysis of the determinants on the probability of using personal deliveries and of the number of packages received shows that holding one or more delivery subscription increases both outcomes. It

can be assumed that individuals (or households) who regularly use delivery services have an economic interest in acquiring delivery subscriptions. Then, holding a subscription reduces the marginal cost of using delivery services and may have a subsequent effect on the frequency of deliveries. Yet the determinants of holding or not a subscription to an e-commerce linked delivery service do not appear to have been examined in the literature.

Table 10 shows the impact of the selected variables on the probability of holding a delivery subscription. It can first be observed that age significantly reduces the probability of holding a subscription overall, in particular for prepared meals. Conversely, families with or without children have a greater probability of holding one. Individuals with major health issues have a greater probability of having subscriptions for groceries and meals. English proficiency is also a significant factor that probably reflects the ease of shopping online. Individuals who prefer to smell, touch or see products before buying have a lower probability of having a subscription. Individuals who have an aversion to crowds or who are willing to pay for fast delivery have a greater probability of purchasing a subscription.

Finally, it can be observed that the quantity of packages purchased emerges as a determining factor in the probability of having a subscription. Although the impact is weaker than for other determinants, the presence of a reciprocal relationship cannot be rejected. Several two-step models were tested as part of this research project. Although it is clear that a reciprocal relationship exists, neither theory, literature, nor data allowed us to adequately model this relationship. This question would be worth exploring in future research.

Table 10: Logistic regression results on subscription ownership, all and three specific types, Montreal CMA, April 2024

	(L11) No subscription		(L12) Amazon Subscription		(L13) Grocery subscription		(L14) Prepared meal subscription	
	obs = 1,753 df = 1,752 F (33. 1720) = 5.53 Prob > F = 0.0000		obs = 1,753 df = 1,752 F (33. 1720) = 5.69 Prob > F = 0.0000		obs = 1,753 df = 1,752 F (33. 1720) = 3.72 Prob > F = 0.0000		obs = 1,753 df = 1,752 F (33. 1720) = 3.65 Prob > F = 0.0000	
	Odds ratio	t	Odds ratio	t	Odds ratio	t	Odds ratio	t
Male	Reference group							
Female	0.829	-1.50	1.241	-1.74	1.055	-0.18	1.115	-0.47
18-24	1.150	-0.48	1.049	-0.17	0.666	-0.82	0.581	-1.31
25-34	Reference group							
35-44	1.201	-0.85	1.011	-0.05	1.159	-0.41	0.764	-0.88
45-54	1.873**	-2.80	0.662	-1.89	0.846	-0.36	0.480*	-1.99
55-64	1.780*	-2.54	0.669	-1.80	0.463	-1.22	0.260**	-2.95
65-74	2.225**	-2.76	0.576	-1.93	0.605	-0.67	0.060*	-2.45
>75	2.150*	-2.53	0.511*	-2.17	1.235	-0.23	0.054**	-2.79
High School	Reference group							
Vocational Programs	0.888	-0.70	0.970	-0.18	0.662	-1.06	1.704	-1.45
BSc	1.285	-1.45	0.672*	-2.32	0.599	-1.22	1.457	-1.00
MSc/PhD	1.034	-0.16	0.694	-1.72	1.042	-0.09	1.362	-0.67
Low English Proficiency	Reference group							
High English Proficiency	0.672**	-3.09	1.451**	-2.90	1.893	-1.93	2.148**	-2.58
Lives alone								
Lives with a roommate	0.856	-0.55	1.013	-0.04	4.067**	-3.16	0.482	-1.39
Lives with a spouse	0.647**	-3.04	1.358*	-2.16	1.667	-1.63	0.899	-0.34
Lives with childen < 13	0.726	-1.66	1.526*	-2.21	0.738	-0.7	1.451	-1.1
Lives with children 13-17	0.607*	-2.33	1.410	-1.63	0.677	-0.74	0.766	-0.7
Lives with children > 18	0.625*	-2.52	1.668**	-2.84	0.866	-0.35	1.219	-0.45
Less than 20k	Reference group							
$20k to $39k	0.758	-0.87	1.019	-0.06	2.866	-1.47	0.458	-1.10
$40k to $59k	0.627	-1.56	1.321	-0.93	1.441	-0.53	0.739	-0.53
$60k to $79k	0.722	-1.03	1.369	-0.99	1.07	-0.09	0.644	-0.75
$80k to $99k	0.852	-0.51	1.244	-0.70	0.69	-0.49	0.400	-1.44
> $100k	0.590	-1.72	1.775	-1.89	0.888	-0.17	0.576	-0.89
No health issue	Reference group							
Health issues, minor	0.870	-0.77	1.011	-0.06	1.892	-1.66	1.375	-0.72
Health issue, major	0.532*	-2.00	0.986	-0.04	6.597***	-3.42	4.331**	-2.58
Employer doesn' allow	Reference group							
Do not work	1.258	-1.20	0.802	-1.15	0.357	-1.84	0.927	-0.18
Work from home	1.006	-0.03	1.067	-0.36	0.731	-0.75	1.061	-0.18
Employer allow personnal delivery	0.975	-0.13	1.067	-0.35	1.834	-1.63	1.534	-1.33
Screen product: prefer to smell, touch or see products before buying	1.917***	-4.72	0.541***	-4.54	0.646	-1.64	0.682	-1.63
Aversion for crowds	0.690**	-2.93	1.524***	-3.37	1.914*	-2.19	1.379	-1.30
Ecological footprint matter	1.114	-0.82	0.887	-0.91	1.29	-0.82	1.189	-0.65
Supporting local shops matter	0.757	-1.90	1.319	-1.87	1.78	-1.63	1.038	-0.14
Buy more than necessary	0.999	0.00	1.072	-0.30	0.658	-0.85	0.311*	-2.26
Usually pay for fast delivery	0.432***	-3.73	2.137***	-3.56	1.697	-1.51	1.991	-1.88
Number of packages delivered in 7 days	0.892***	-4.08	1.069**	-3.02	1.111***	-3.80	1.093***	-3.49
Constant	1.848	-1.68	0.505	-1.88	0.0134***	-4.99	0.0536***	-4.50

Level of significance: * p<0.05, ** p<0.01, *** p<0.001

Source: calculations by authors using Leger survey data

CONCLUSIONS

This paper reports, using 2024 survey data for the Montreal CMA, both descriptive statistics and multivariate analysis of the probability of using delivery services, the number of packages delivered and the probability of subscription to a delivery service.

Our results are in line with the existing literature about household composition. The presence of children for instance is a determinant of online consumption in other studies like Spurlock & al. (2020) and Unnikrishnan & Fligliozzi (2021). Larger households (people living with a spouse, roommate or children) in the Montreal metropolitan area have a higher probability of receiving deliveries and subscribing to a delivery service than individuals that live alone. They also receive more packages.

Contrary to the results found by most studies in our literature review, household income does not play a significant role in e-commerce usage in Montreal metropolitan area. Education has also only a minor effect. This result is partly attributable to the fact that our regression models control for income-related variables (e.g., household composition, health issues, employment status) as well as for certain psychometric variables.

Health issues affecting mobility have not been studied extensively in the papers listed in our review of literature. Our results show, however, that having health-related mobility issues significantly increases the use of delivery services, particularly for groceries.

Regarding psychometric variables, there are both aficionados of online shopping/delivery services (order more, use priority deliveries) and refractory individuals that still enjoy examining products before purchasing them. For Spurlock & al. (2020), the value of time is one of the main drivers of online consumption. Higher income households and families with children use more deliveries because they value their time more. This is coherent with some of our results regarding preferences. Individuals that usually pay for faster delivery have a higher probability of subscribing to a delivery service and receiving more deliveries.

As Unnikrishnan & Fligliozzi (2021) found in Portland metropolitan area, we find that subscribing to a delivery service in Montreal is correlated with a higher probability to shop online and receive deliveries. We cannot conclude however that subscription is a significant determinant of online consumption. It may rather be its consequence. Heavy users of deliveries may receive more deliveries because they have a subscription, but they also have a higher probably to pay for subscription if they expect to become heavy users of e-commerce. Our results show this interaction between the two variables. This question of reciprocity would merit being studied in the context of future work.

One important finding is that the younger generation (less than 45) show a greater likelihood of using delivery and also of using it in greater quantities than older individuals, particularly for prepared meals. This suggests that generational and life cycle trends are at play. The fact that individuals under 45 are more frequently using deliveries for prepared meals may be associated with a generational trend toward online consumption. Having children and suffering from mobility problems are also associated with one's life cycle. Combining these two results, we would argue that a new generation with a higher tendency to shop online and use deliveries will eventually age into life cycle events like having family or will become elders with mobility limitations. Since these events will increase their use of e-commerce as their generation already order more online, all this points toward an increase in market share of e-commerce and in the absolute number of deliveries in the future.

Some cultural and psychological considerations may nonetheless slow down e-commerce growth. As our results show, speaking English in Montreal is a significant determinant of having a subscription to

a delivery service. This is probably because many delivery service companies are branch of large American companies. Their brands are well established in the English-speaking world, but they don't necessarily create the same sense of belonging among the French speaking population (which represents most of the population in Montreal CMA). Segovia & al. (2021) had already shown that psychological factors also affect the probability of using e-commerce and deliveries. In our study, we find that individuals that have aversion to crowds will have higher online consumption. On the other hand, individuals that like to touch and smell their goods before they buy will prefer to go to the store. As long as this preference exists, there will always be stores.

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APPENDIX

A.1 English language questionnaire

We are academics interested in how people use the delivery of various goods in the greater Montréal area. Human memory being what it is, we know that some questions will be easier to answer accurately than others. Thank you for doing your best. You will notice that we are talking about consumer products. We want to exclude anything directly related to your work, such as legal documents, industrial or commercial machinery and so on.

[SEX1] What was your sex at birth?

Row:
[r1] Male
[r2] Female
[SEX2] What is your gender?
Gender refers to your current gender, which may be different from sex assigned at birth and may be different from what is indicated on legal documents.
Row:
[r1] Man
[r2] Woman
[r96] Another gender
[age] How old are you?
Row:
[r0] Under 18
[r1] Between 18 and 24
[r2] Between 25 and 34
[r3] Between 35 and 44
[r4] Between 45 and 54
[r5] Between 55 and 64
[r6] Between 65 and 74
[r7] 75 or older
[r9] I prefer not to answer

[SCOL] What is the last year of education that you have completed?
Row:
[r1] Elementary (7 years or less)
[r2] High school, general or vocational (8 to 12 years)
[r3] College (pre-university, technical training, certificate, accreditation or advanced diploma (13-15 years))
[r4] University certificates and diplomas
[r5] University Bachelor (including classical studies)
[r6] University Master's degree
[r7] University Doctorate (PhD)
[r9] I prefer not to answer

[ENFA] Are there any children under 18 years old living in your household?
Row:
[r1] Yes
[r2] No
[r9] I prefer not to answer

[LANGU1] What is the language you first learned at home in your childhood and that you still understand?
Row:
[r1] French
[r2] English
[r3] A language other than French or English
[r99] I prefer not to answer

[Q6] What is your level of knowledge of French and English?
Column:

[c1] Excellent
[c2] Very good
[c3] Good
[c4] Poor
[c5] Nil
Row:
[r1] French
[r2] English

[Q7] In what type of housing do you live?
Row:
[r1] Single-family dwelling
[r2] Du/Tri/Quadruplex
[r3] Buildings with more than 4 units
[r4] I prefer to not answer

[Q8] Does your household have access to at least one of the following vehicles (can be more than one)?
Column:
[c1] Yes
[c2] No
[c99] I prefer to not answer
Row:
[r1] Gas/diesel vehicle
[r2] Electric vehicle
[r3] Car-sharing
[r4] Electric or standard bicycle

[Q9] Does your general health limit you from getting around?
Row:
[r1] No
[r2] Yes, somewhat
[r3] Yes, significantly
[r4] I prefer to not answer

[Q10] What is the composition of your household? You...
Select all that apply.
Row:
[r1] Live alone
[r2] Live with a roommate
[r3] Live with a spouse
[r4] Live with one or more child aged 12 or under
[r5] Live with one or more teenagers (aged13-17)
[r6] Live with one or more adult child (aged 18+)
[r99] I prefer not to answer

[Q11] What is your place of work in March 2024?
Row:
[r1] I don't work
[r2] I always or mainly work from home

[r3] I work at least two days a week at the premises of my employer who allows the delivery of packages for personal use
[r4] I work at least two days a week at the premises of my employer who does not allow the delivery of packages for personal use
[r99] I prefer to not answer

[Q12] Let's start with packages shipped under your name: In the last 7 days, please indicate, for each type of delivery listed below, how many times a package containing a consumer product (yours or that of another household member) was delivered to your home or workplace (if different from your home): *Leave blank if zero.*
Column:
[c1] Home
[c2] Workplace
Row:
[r1] Prepared meals (UBER EATS, Skip the Dishes, Door Dash, restaurants, etc.)
[r2] Food (groceries, farm baskets, etc.)
[r3] Health products (medication, cosmetics, other health products)
[r4] Cultural products (books, games, crafts, etc.)
[r5] Electronic products (phone, tablet, various accessories, etc.)
[r6] Home products (kitchenware, decorations, bathroom accessories, etc.)
[r7] Clothing and fashion accessories
[r8] Gardening products (flowers, seeds, plants, fertilizers, etc.)
[r9] Pet food
[r10] Furniture and home appliances
[r11] Parts used for repair, such as auto parts, etc.
[r12] Newspapers (Journal de Montréal, The Gazette, etc.)
[r96] Other (please specify)

[Q13] Let's now turn to packages shipped under someone else's name. In the last 7 days and to the best of your knowledge, for each type of delivery indicated below, please indicate how many times a package containing a consumer product addressed to someone other than you, whether or not they live with you (family member (parents, brother/sister,...), boyfriend/girlfriend, friend, co-worker or neighbour), was delivered to your home.
Leave blank if zero.
Column:
[c1] Member of your household, other than you
[c2] Family member, boyfriend/girlfriend, friend, co-worker, neighbour
Row:
[r1] Prepared meals (UBER EATS, Skip the Dishes, Door Dash, restaurants, etc.)
[r2] Food (groceries, farm baskets, etc.)
[r3] Health products (medication, cosmetics, other health products)
[r4] Cultural products (books, games, crafts, etc.)
[r5] Electronic products (phone, tablet, various accessories, etc.)
[r6] Home products (kitchenware, decorations, bathroom accessories, etc.)
[r7] Clothing and fashion accessories
[r8] Gardening products (flowers, seeds, plants, fertilizers, etc.)
[r9] Pet food
[r10] Furniture and home appliances
[r11] Parts used for repair, such as auto parts, etc.
[r12] Newspapers (Journal de Montréal, The Gazette, etc.)

[r96] Other (please specify)

[Q14] For the entire month of March 2024, again for packages shipped under your name, please indicate for each type of delivery below, how many times a package containing a consumer product (yours or that of another household member) was delivered to your home or workplace (if different from your home):
Leave blank if zero.
Column:
[c1] Home
[c2] Workplace
Row:
[r1] Prepared meals (UBER EATS, Skip the Dishes, Door Dash, restaurants, etc.)
[r2] Food (groceries, farm baskets, etc.)
[r3] Health products (medication, cosmetics, other health products)
[r4] Cultural products (books, games, crafts, etc.)
[r5] Electronic products (phone, tablet, various accessories, etc.)
[r6] Home products (kitchenware, decorations, bathroom accessories, etc.)
[r7] Clothing and fashion accessories
[r8] Gardening products (flowers, seeds, plants, fertilizers, etc.)
[r9] Pet food
[r10] Furniture and home appliances
[r11] Parts used for repair, such as auto parts, etc.
[r12] Newspapers (Journal de Montréal, The Gazette, etc.)
[r96] Other (please specify)

[Q15] Let's get back to packages shipped under someone else's name. For the entire month of March 2024 and to the best of your knowledge, for each of the types of delivery indicated below, please indicate how many times a package containing a consumer product addressed to someone other than you, whether or not they live with you (family member (parents, brother/sister...) boyfriend/girlfriend, friend, co-worker or neighbour), was delivered to your home.
Leave blank if zero.
Column:
[c1] Member of your household, other than you
[c2] Family member, boyfriend/girlfriend, friend, co-worker, neighbour
Row:
[r1] Prepared meals (UBER EATS, Skip the Dishes, Door Dash, restaurants, etc.)
[r2] Food (groceries, farm baskets, etc.)
[r3] Health products (medication, cosmetics, other health products)
[r4] Cultural products (books, games, crafts, etc.)
[r5] Electronic products (phone, tablet, various accessories, etc.)
[r6] Home products (kitchenware, decorations, bathroom accessories, etc.)
[r7] Clothing and fashion accessories
[r8] Gardening products (flowers, seeds, plants, fertilizers, etc.)
[r9] Pet food
[r10] Furniture and home appliances
[r11] Parts used for repair, such as auto parts, etc.
[r12] Newspapers (Journal de Montréal, The Gazette, etc.)
[r96] Other (please specify)

[Q16] In March 2024 how many packages containing consumer products addressed to you were delivered to your home or workplace by the following companies:
Row:
[r1] Amazon
[r2] Retailer (e.g., IGA, Ikea) offering delivery service
[r3] Canada Post
[r4] UPS, DHL, FedEx, Purolator and other companies
[r5] UBER Eats, Door Dash or other meal delivery companies.

[Q17] In March 2024, when a package containing consumer products was delivered to your home or workplace, it was (tick all the modes used at least once):
Row:
[r1] Hand-delivered to you
[r2] Handed to an employee such as a receptionist, concierge, etc.
[r3] Left outside, in front of your door
[r4] Left in your mailbox
[r5] Left in the lobby
[r6] Left in a designated place (room in the condo/apartment lobby)
[r7] Left in a locker
[r8] Left with a neighbour
[r9] Left at a drop-off point
[r10] Other, please specify:

[Q18] In March 2024, how many packages containing consumer product purchases for you or a household member did you have to pick up at a drop-off point?
Row:
[r1] At a post office
[r2] Warehouse or point of sale of a delivery company (Purolator, UPS, etc.)
[r3] At a local store (convenience store, pharmacy, etc.)
[r4] Other drop-off points (CanPar, Penguin PickUp, etc.)
[r97] No package received

[Q19] In March 2024 how many times did you go to a store to pick up packages containing consumer products that you or a household member purchased online?

[Q20] Between January and March 2024, how many service calls were made to your home for installation, maintenance or repair of equipment (furnace, refrigerator, computer, etc.)?

[Q21] With the exception of the holiday season, is the month of March 2024 representative of your online shopping habits for consumer products with home or workplace delivery over the course of a year?
Row:
[r1] I received fewer deliveries than usual: how many?
[r2] I received more deliveries than usual: how many?
[r3] I received as many deliveries as usual.

[Q22] For the most recent holiday season (December 2023), did you purchase consumer products online (for yourself and as gifts) delivered to your home or workplace?
Row:
[r1] More than a typical month: if so, how many more packages?

[r2] Fewer than a typical month: if so, how many fewer packages?
[r3] No difference from a typical month

[Q23] Since January 1, 2024, how many packages sent to your home containing consumer products have been stolen?

[Q24] Since January 1, 2024, how satisfied have you been with the package delivery services you use?
Row:
[r1] Very satisfied and no perceived problems
[r2] Satisfied but a few problems, such as slight delivery delays
[r3] Somewhat dissatisfied, frequent delivery delays and packages in poor condition
[r4] Very dissatisfied (Please explain why:)
[r97] Service not used

[Q25] Thinking about 2023 as a whole, please indicate for a typical month and to the best of your recollection, the total number of packages (meals, health food, cultural product, electronics, etc.) containing consumer products for you or a family member that arrived at your home.
Row:
[r1] None
[r2] 1-2
[r3] 3-5
[r4] 6-10
[r5] 10-15
[r6] 15-19
[r7] 20+

[Q26] If you compare 2023 with 2022, would you say that in 2023:
Row:
[r1] Your online purchases increased more than your in-store purchases
[r2] Your online purchases increased as much as your in-store purchases
[r3] Your online purchases increased less than your in-store purchases
[r4] Your online purchases decreased, but less than your in-store purchases
[r5] Your online purchases decreased as much as your in-store purchases
[r6] Your online purchases decreased more than your in-store purchases
[r7] Your purchases have not changed

[Q27] What impact has the COVID-19 pandemic had on your consumption habits?
Row:
[r1] I buy more online than I did before the pandemic, and this is a habit I intend to maintain in the future.
[r2] I bought more online during the pandemic, but I've gone back to my pre-pandemic habits
[r3] The pandemic had no influence on my buying habits
[r4] I buy less online than before the pandemic

[Q28] In March 2024, do you have a subscription under your own name or a household member's name that offers free delivery?
Row:
[r1] No subscription
[r2] Amazon Prime
[r3] Food/grocery delivery subscription
[r4] Meal delivery subscription (Uber One or similar)

[r5] Another subscription (Please specify:)

[Q29] To help us assess the availability of stores near your home, please indicate the first three characters (letter-number-letter) of your postal code.

[Q30] Purchases can be made in person or online. How many fewer in-person shopping trips do you make per week because you use delivery services for:
Row:
[r1] Prepared meals (UBER EATS, Skip the Dishes, Door Dash, restaurants, etc.)
[r2] Food products (groceries, farm baskets, etc.)
[r3] Health products (medication, cosmetics, other health products)
[r4] All other products (cultural products, electronics, home products, pet products, etc.)

[Q31] If home delivery were not possible, what would be your preferred mode of transportation to buy the following products:
Column:
[c1] Car
[c2] Public transit
[c3] Bicycle / On foot
Row:
[r1] Prepared meals (Uber Eats Door Dash...)
[r2] Food/groceries
[r3] Health products (medication...)
[r4] All other products

[Q32] In your opinion, if you couldn't have everything you usually order online delivered, how many fewer orders/purchases would you make in a typical week? For example, instead of ordering a meal, you would prepare it yourself, so one less on-line purchase:
Row:
[r1] Prepared meals (UBER EATS, Skip the Dishes, Door Dash, restaurants, etc.)
[r2] Food products (groceries, farm baskets, etc.)
[r3] Health products (medication, cosmetics, other health products)
[r4] All other products (cultural products, electronics, home products, pet products, etc.)

[Q33] When you buy online, do you…?
Column:
[c1] Always
[c2] Often
[c3] rarely
[c4] Never
Row:
[r1] Go look at the products at the store before buying them online
[r2] Return purchased products
[r3] Buy more than you need and return merchandise that is not suitable for you
[r4] Pay for expedited delivery
[r5] Select the "consolidated shipping" option
[r6] Pay for green shipping when available

[Q34] Please indicate whether you agree or disagree with the following proposals:
Column:

[c1] Strongly agree
[c2] Somewhat agree
[c3] Neither agree nor disagree
[c4] Somewhat disagree
[c5] Strongly disagree
Row:
[r1] Supporting local merchants is important to me
[r2] I prefer to see/touch/smell products before buying them
[r3] I don't like crowds and avoid traditional stores for this reason.
[r4] The number of packages delivered to my building causes inconvenience (e.g., noise, garbage)
[r9] The delivery of packages in my building creates security issues
[r5] The number of packages delivered on my street causes inconvenience (e.g., noise, pollution)
[r6] The number of packages delivered in the city causes inconvenience (e.g., sharing the street)
[r7] The ecological footprint of the products I buy is important to me (e.g., organic, fair trade)
[r8] I would reduce my deliveries of small items (e.g., prepared meals, clothing) if I were charged a $2 eco-fee per delivery

[Q35] Please think of a typical month. Excluding what you save, what you pay for housing (rent, mortgage, heating...) or to reimburse your debts, you spend the rest. Your online purchases represent what percentage (%) of your purchases? Here is a numerical example of what we are looking for. Let's assume that you have (after your housing expenses, debt repayment and savings) $1,000 a month left over for all your purchases. If, for example, you normally spend $70 a month online on yourself and your household, then you select the answer 6%-10%; if it's $140, the answer is 11%-25%.
Choose what is appropriate for you.
Row:
[r1] Less than 1% of my purchases
[r2] Between 1% and 5% of my purchases
[r3] Between 6% and 10% of my purchases
[r4] Between 11% and 25% of my purchases
[r5] Between 26% and 50% of my purchases
[r6] More than 50% of my purchases

[Q36] What is your household income for 2024?
Row:
[r1] $19,999 or less
[r2] Between $20,000 and $39,999
[r3] Between $40,000 and $59,999
[r4] Between $60,000 and $79,999
[r5] Between $80,000 and $99,999
[r6] $100,000 or more
[r99] I prefer not to answer

[QCOMMENT] If you have any comments, please enter them here: