



23rd Annual World Forum and Symposium

Atlanta Georgia / June 16 - 20, 2013

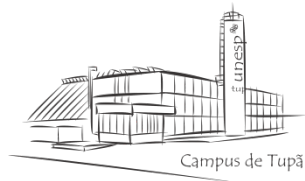
ANALYSIS OF CONSUMER BEHAVIOR OF FRESH FRUIT AND VEGETABLES (FFV) WHEN SELECTING THE PURCHASE PLACE: A COMPARATIVE STUDY IN TWO BRAZILIAN CITIES

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objectives

- **General:** analyze consumer behavior of FFV in two Brazilian cities of São Paulo State, Tupa and Jaboticabal, in relation to their desires and needs, and determine the factors that influence decision making when selecting of the purchase place.
- **Specifics:**
 - identify the demographic and socioeconomic profiles of the farmers' market, "varejão" and supermarket visitors in both cities;
 - classify the retail equipment according to the target audience and the mix of products offered;
 - identify the visitors' spending habits in different retail equipment; and
 - identify the factors that influence consumer decision making in determining the purchase place of the FFV.



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justification

Tupa

- 62,256 inhabitants
- 629.11 km² area
- west-northwest region of Sao Paulo State
- GDP = R\$ 10,457.00



Jaboticabal

- 69,624 inhabitants
- 706.50 km² area
- north-northeast region of Sao Paulo State
- GDP = R\$ 17,637.00

Since economic factors can influence the consumer purchasing behavior, **it is believed that the differences between these two cities with regard to economic activities and GDP per capita, may lead to a different purchasing behavior**



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method of research

- It were identified retail equipment, divided into days and different locations, in the case of farmers' markets, different sizes and city's regions, in the case of supermarkets and "varejão":
 - TUPA: 2 midsize farmers' markets, 9 supermarkets (4 midsize and 5 small), and 1 midsize "varejão", totaling 12 locations;
 - JABOTICABAL: 1 small farmers' market, 1 municipal market (small), 8 supermarkets (6 midsize and 2 small), and 5 "varejão" (1 midsize and 4 small), totaling 15 locations.
- Data collection - semi-structured questionnaires with closed multiple choice questions, aimed at 15-year-old people over, without distinction of gender or social class, living in both cities.
- The sampling technique adopted was non-probabilistic and was based on convenience, consisted of 340 people: 155 in Tupa and 185 Jaboticabal.



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farmers' market

municipal market



"varejão"

supermarket



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TABLE 1. Consumer's profile of retail equipment in Tupa and Jaboticabal

	Total		Tupa				Jaboticabal			
Base	155		110							
Educational Level										
Education Level										
No instruction	4	2.58	3.64	0.00	0.00	0	0.00	0.00	0.00	0.00
Some grade school	10	6.45	6.36	3.33	13.33	17	9.19	7.27	0.00	14.55
Grade school	23	14.84	19.09	3.33	6.67	26	14.05	15.45	10.00	10.91
Some high school	20	12.90	15.45							
High school	49	31.61	30.91							
Some college	23	14.84	11.82							
Familiar Income										
Age										
25-34 years	36	23.23	20.00							
35-44 years	44	28.39	23.64							
45-54 years	14	9.03	9.09							
55-64 years	26	16.77	20.91	3.33	14.29	28	15.14	17.27	20.00	10.91
Over 65 years	22	14.19	18.18	3.33	7.14	30	16.22	12.73	20.00	21.82
Marital Status										
Single	25	16.13	16.36							
Married	92	59.35	55.45							
Divorced	17	10.97	10.91							
Age										
Age										
3 - 5 M.W.	54	34.84	37.27							
5 - 7 M.W.	30	19.35	15.45							
More than 7 M.W.	19	12.26	9.09							
No Response	-	-	-	-	-	7	3.78	6.36	-	-

TUPA: 31.61% high school level

JABOTICABAL: 30.81% college degree

TUPA: Average familiar income between 1 and 5 M.W. (63.87%)

JABOTICABAL: Average familiar income above 7 M.W. (25.95%)

TUPA: More elderly people in supermarket (18.18%) and youngers in "varejão" (42.86%)

JABOTICABAL: 40% of interviewees in farmers' market are 55-year-old or older



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TABLE 2. Results of chi-square test of association between profile variables and consumption habits variables, Tupa and Jaboticabal (p -values).

	FRUITS			VEGETABLES			GREENS			ASP
TUPA: Association between the habit of consuming fruits and familiar income.										
Gender										0.7808
Education										0.1632
Age										0.0161*
Marital status										0.6983
Familiar income	0.0277*	0.2865	0.0448*	0.1772	0.4706	0.8130	0.4682	0.8871	0.7775	0.0100*
JABOTICABAL										
Gender										0.11
Education										0.43
Age	0.0004	0.0000	0.0003**	0.0000	0.0000	0.0003**	0.5530	0.7305	0.0003**	0.7495
Marital status										0.00
Familiar income										0.88
TUPA: Frequency of fruits consumption showed a significant association to marital status and familiar income.										
JABOTICABAL: Frequency of fruits consumption is associated to familiar income.										

TUPA: Average spending amount per purchase is significantly associated to age and familiar income.



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Advantages of retail, according
consumers' point of view, Tupa.

Quality of products

Reliability in origin

Food with less pesticide

Possibility of tasting

Supermarkets:
Reliability in origin

Farmers' market and "Varejão":
Greater variety of products

Advantages of retail, according
consumers' point of view, Jaboticabal.

Freshness of food

Quality of products

Reliability in origin

Supermarkets and "Varejão":
Reliability in origin

Farmers' market:
Best price

Municipal Market:
Food with less pesticide



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TABLE 5. Results of chi-square test of association between profile variables and attributes variables of retail equipment (perception of the purchase place, by the interviewees), Tupa and Jaboticabal (*p*-values).

PROFILE VARIABLES	ASPECTS CONSIDERED									
	HC	VP	FF	PA	QP	RO	LP	HF	BP	PT
TUPA										
Gender	0.0279*	0.4281	0.8071	0.7184	0.5209	0.6343	0.6083	0.6272	0.2358	0.5661
Educational level										0.1322
Age										0.2098
Marital status										0.5760
Familiar income										0.0356*
JABOTICABAL										
Gender	0.7547	0.4802	0.1612	0.2881	0.6825	0.7558	0.6266	0.9425	0.3371	0.4767
Educational level	0.1946	0.5271	0.4474	0.3378	0.4930	0.2925	0.5602	0.6454	0.3249	0.8376
Age	0.0100*	0.7016	0.1746	0.1059	0.3033	0.1075	0.3346	0.3330	0.1055	0.1599
Marital status										0.3431
Familiar income										0.7584

TUPA: Concerns about Hygiene/Cleaning of products was associated to Gender.

JABOTICABAL: Concerns about Hygiene/Cleaning of products was associated to Age.

**TUPA: Concerns about price was associated to Age.
Possibility of tasting fruit was associated to Familiar income.**

LABEL:

*: Significant at 5%
**: Significant at 1%

HC: Hygiene/cleaning of products
VP: Variety of products
FF: Freshness of food
PA: Product appearance

QP: Quality of products
RO: Reliability in origin
LP: Food with less pesticide
HF: Healthier food

BP: Best price
PT: Possibility of tasting



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Characterization of retail equipment in Tupa

Farmers' markets show presence of consumers with higher income and higher spends per purchase, when compared to profiles in supermarkets and "varejão".

Characterization of retail equipment in Jaboticabal

Supermarkets show retired consumers, with higher income and higher spends per purchase, when compared with others retail equipment.



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conclusions

- In general, consumer habits observed are similar in both cities surveyed, suggesting that the difference in income levels does not affect the behavior and FFV intake.

TUPA: female, with high school, aged between 35 and 44, married and with a familiar income between 3 and 5 minimum wage.

JABOTICABAL: female, with college, between 35 and 44 years, married and with a familiar income above 7 minimum wages.

TUPA: Spend on average between R\$10.00 and R\$20.00 per purchase.

JABOTICABAL: Most interviewees spend over R\$40.00 per purchase.



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conclusions

- The mix of products offered at retail equipment in both cities was a little different.

TUPA: traditional products in larger quantities and products with little or no processing.

JABOTICABAL: minimally processed products and exotic fruits (with higher frequency), showing greater available income of the population.



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THANK YOU

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