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BEHAVIOR OF CUSTOMERS AND TRADERS IN INFORMAL MARKETS. CASE STUDY IN SANTO DOMINGO, ECUADOR

COMPORTAMIENTO DE CLIENTES Y VENDEDORES EN MERCADOS INFORMALES. CASO DE ESTUDIO EN SANTO DOMINGO, ECUADOR

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Abstract

Informal markets, although they are not widely accepted, contribute to the generation of employment and facilitate access to multiple products. In addition to facilitating the financial flow within the territory. However, it is a fact that in this type of market many of the principles of commercialization are not fulfilled as in formal markets. This paper aims to deepen the peculiarities of the commercialization process of informal markets. It was carried out mainly through the observation of 86 selling points out of a total of 777 that operate in the market, characterizing variables such as the behavior of customers and traders, as well as the variation of supply and demand in selling points. Through the investigation it was possible to characterize variables related to the sales process and the behavior of customer and traders in an informal market in Santo Domingo city, Ecuador. It was observed that the volume of sale is related to the location of the establishment, the circulation of customers and access roads. In addition, a greater variety of products determines an increase in sales, although a significant increase in the variety can negatively affect its influence on sales volumes.

Keywords: customer behavior, traders' behavior, informal markets, sales process, purchase intention, selling points, market environment.

Resumen

Los mercados informales, aunque no son ampliamente aceptados, contribuyen a la generación de empleo y facilitan el acceso a múltiples productos. Además de facilitar el flujo financiero dentro del territorio. Sin embargo, es un hecho que en este tipo de mercado no se cumplen muchos de los principios de comercialización como en los mercados formales. Este trabajo tiene como objetivo profundizar en las peculiaridades del proceso de comercialización de los mercados informales. Se realizó principalmente a través de la observación de 86 puntos de venta de un total de 777 que operan en el mercado, caracterizando variables como el comportamiento de clientes y minoristas, así como la variación de oferta y demanda en puntos de venta. A través de la investigación fue posible caracterizar variables relacionadas con el proceso de venta y el comportamiento de clientes y minoristas en un mercado informal en la ciudad de Santo Domingo, Ecuador. Se observó que el volumen de venta está relacionado con la ubicación del establecimiento, la circulación de clientes y las vías de acceso. Además, una mayor variedad de productos determina un aumento en las ventas, aunque un aumento significativo en la variedad puede afectar negativamente su influencia en los volúmenes de ventas.

Palabras Clave: comportamiento del cliente, comportamiento de los vendedores, mercados informales, proceso de ventas, intención de compra, puntos de venta, entorno de mercado.

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I- Introduction

Although marketing research is varied and extensive, it should be recognized that these are generally oriented to markets that operate fundamentally in conditions of legal formality and with the fulfillment of basic budgets in relation to the theory of commercialization, whether from the point of view of the product, the customer, their purchasing roles, sales or merchandising actions, sales management, advertising or promotion, among other aspects of the research.

However, scattered throughout the globe abound markets where operating conditions are not entirely clear and legally established merchants or interlaced and (or) trained with others without training and without legal recognition. These markets could come to constitute spectacular jungles that do not necessarily obey the canons established by the theoretical postulates of Marketing.

Deciphering how commercial management operates in this type of market presupposes analysing how the distribution of the market influences, the typology of the customer and traders, their commercial results, among other variables, all of which constitutes the objective of the present investigation.

The studies on informal markets are varied according to the interests of analysis; Several authors (John & Ross, 2018; Shaw, 2018; Zhang & Zhao, 2018; Zhao & Zhang, 2018) link it to the trade of specific products such as: Wood, Medicines, Cigarettes, Housing, among others. Similarly, there is dispersion in the countries where the subject is analyzed, studies exist on the five continents (Kiggundu & Pal, 2018; Martinez & Rivera-Acevedo, 2018; Vogel & Musamba, 2018; Zelano, 2018; Zhang & Zhao, 2018; Boafo et al., 2022). Proof of the foregoing is the increase in the number of publications of the subjects in journals indexed in the Scopus database in the last two decades, as reflected in figure 1.

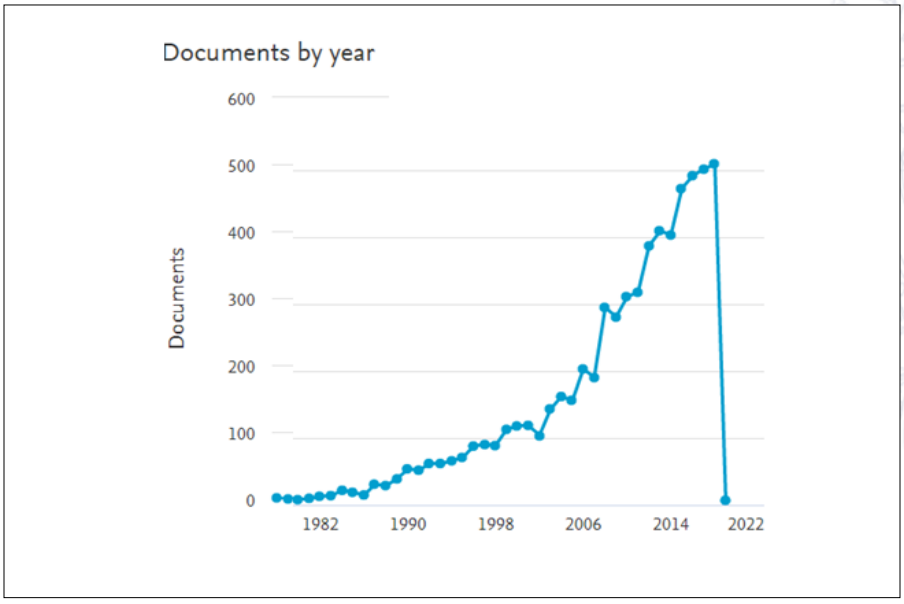

Figure 1. Number of publications in Scopus per year.
Note: own elaboration

Similarly, as seen in figure 2, the variety of sciences that address the study of this object of study is wide. Observing a predominance of research in the social sciences, within which the subject is approached from edges as distant as the migratory phenomena (Fouskas, 2018; Maroukis, 2018), gender equality (Sinha & Sengupta, 2017; Zainol & Al Mamun, 2018; Takaza & Chitereka, 2022), salary differences (Kahyalar et al., 2018) and informal labour markets (Williams & Bezeredi, 2018; Goyal, 2022; Horodnic et al., 2022).

The causes for which markets classified as informal are also varied, some because of the illegality of the products that are sold there (Klevakin, 2018; Titeca, 2018; Rojas & Briceño, 2019; Kanagaretnam et al., 2022), others because they constitute a way of evading certain types of taxes or simply because they are not formally registered as businesses or self-employed businessmen.

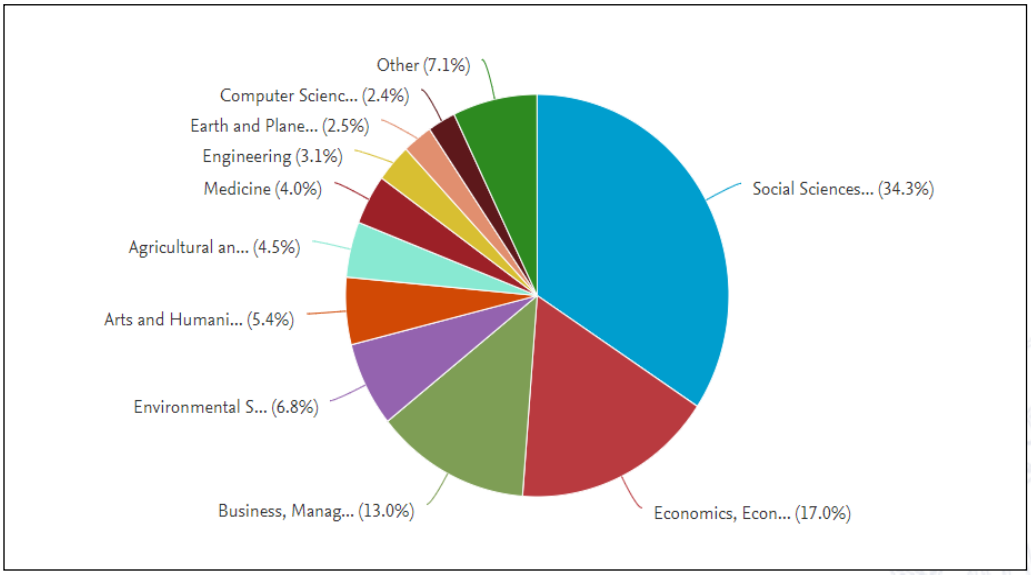

Figure 2. Number of publications in Scopus per year, by knowledge areas.
Note: own elaboration

Contrary to the above, despite the fact that over the last five years an average of more than 10,000 papers per year have been published in the Scopus database on the subject of marketing and the considerable interest in the analysis of informal markets, they are scarce analyses of marketing issues in informal markets. For example, in a search conducted of 2,000 papers per year, in the period from 2014 to 2018, topics related to marketing and informal markets only three papers were identified, only one of them (Sihvonen & Turunen, 2016) specifically addressed the issue of study and was oriented to the analysis of how to value fashion brands in second-hand online markets (Bigné Alcañiz, 2020).

Despite the lack of research on this type of market, marketing research has identified several authors that address it, among which are: Rajagopal (2010), Neuwirth (2011), Ha (2014), Mortenbock and Mooshammer (2016), Venter de Villiers et al. (2018).

Informal markets are usually also known as flea markets. These are usually buildings or open spaces where merchants sell various products or services in open stalls, and exchanges are described as informal due to the lack of regulations and cash-heavy transactions (Yang et al., 2022; Karrar & Rudaz, 2022). Other distinguishing elements are its markedly retail activities of independent local companies, operated by their owners (Ha, 2014). Although they are usually associated with cheap prices, some research suggests that at present they no longer always fulfill this characteristic (Neuwirth, 2011), allowing other authors to highlight the lucrative potential of this activity and conceive it as the economy of the future (Talamini et al., 2022).

In this type of market, its own characteristics are recognised, such as: Broad social contribution and feeling of flexibility (Ha, 2014), are incorporated or manifest as part of the local culture, contributing to its enrichment, dissemination and conservation (Mortenbock & Mooshammer, 2016), many of its visitors come to him in the hope of finding cheap prices (Petresu & Bhatli, 2013; Leung et al., 2022).

Recently Venter de Villiers et al. (2018) carried out a study on seven hypotheses to be validated in this type of market where they analyse variables that in most cases will also be analysed in this research, which include:

- Loyalty to the brand: According to Ishak and Ghani (2013), this is associated mainly with the positive perception of the customer towards a brand.

- Purchase intention: It is the possibility that the consumer buys the product or service, and the more intense the purchase intention, the greater the probability that the consumer will achieve the act of buying the product or service (Moslehpour et al., 2015). Among the elements that stimulate this intention is the influence of the store's atmosphere, creating an exciting commercial space and generating a positive attitude among consumers (Hussain & Ali, 2015). According to the authors, it is likely that a customer will walk through the store for longer if the experience in the

store is pleasant, increasing the possibility of making a purchase of a product. Among the variables that determine the purchase intention are: temperature, lighting, music, aroma and security (Hussain & Ali, 2015).

- Market location: Refers to the location of the store in relation to its competitors, the convenience of customers, as well as the adequacy of the location in relation to other forms of companies (Lamb et al., 2012). The importance of location for business success is recognised by multiple researchers (Pope et al., 2012; Koc & Burhan, 2015).

- Assortment of products: In this aspect there is no consensus in the literature on what should be the optimal behavior of this (Gao & Simonson, 2016). Some authors defend the idea that the greater the better to stimulate the purchase of more customers (Lamb et al., 2012; Gao & Simonson, 2016), while others argue that the specialisation in the assortment can be the source of better results (Liyun, 2011; Spassova & Isen, 2013).

- Influence of the salesperson: The sales staff must be oriented to achieve an attraction to the customer, either by their charisma, business offer or other gadgets that they can use. For example, Stillerman and Sundt (2007) says that traders play music or joke and increase the potential for purchase. Keng et al. (2016) indicated that the more positive the experience, the more likely a consumer will consider making a purchase.

These types of markets, in general, follow a process of unplanned and disorganized growth, originating from a tendency of the population to concentrate in a specific commercial area as a strategy to respond to a commercially identified demand. The concentration of businesses in certain areas allows small businessmen to share and take advantage of the advertising expenses that some companies make, since by locating in the same area they increase the probability of being visited.

Over time, these informal markets tend to be part of a historical and "identity" behavior of the cities, generating a feeling of rights acquired by small merchants. However, this form of growth sometimes, on the one hand, interferes with the development plans of cities and their land use strategies. On the other hand, the way in which they were constituted does not always ensure merchants receive the best benefit, much less an equitable benefit. However, these merchants show a high resistance to change, if they are offered a change of place that could benefit them.

In Santo Domingo, Ecuador, there is one of these markets that, although it is not the most peculiar or striking of the markets under analysis, has a considerable extension and operates with a significant number of traders, generating a considerable monetary flow and of customers that they can constitute another investigative approach to these peculiar markets. The objective of this research was to characterize the functioning of this informal market in order to understand the performance dynamics that it shows and the incidence of some variables in this behavior. Having this information could be useful both for small businesses to evaluate their location and for the government to design proposals for reorganization of the city, which, through an assertive communication process, allows finding a mediating solution for the interests of small businesses and the territorial planning of the city.

II- Methodology

The set of steps required to develop the investigation is described below.

Description of the place of investigation

The main popular market in Santo Domingo city, Ecuador, it is a place of informal traders located along the entire street with a linear extension of approximately 600 meters, it has several access points. In addition to the entrances of both ends of the street it has at least five streets that intercept it in its route and serve as complementary exits or entrances. Traders supply their services seven days a week and every day of the year, operating mainly in daytime, which starts around 09h00 and concludes about 18h00. They mainly sell hardware, clothing and footwear, fabrics and, to a lesser extent, foodstuffs and other products. The market has three aisles and more than 700 selling points. Not including the establishments located on both sides of the street, although these coexist in the market, they present a higher level of formality (legal recognition) and another variety of complementary supply. It should be noted that in the market, official brands are usually not offered but replicas of these, what compels customers not to consider the brands of the products as quality criteria.

Two types of customers are mainly at the market: those who buy wholesale in their intermediary role and those who seek to directly satisfy their needs. In both types of customers, can also be found individuals who come to the market with a clear idea of what they are going to buy and others who come looking to identify purchase opportunities.

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Determination of the size of the population

For the definition of the number of traders a tour of the entire market was made and through direct observation it was possible to establish the number of traders, although it should be noted that according to their own informal nature the number of traders, selling points and typology of assortment can vary from one day to the next, that is why we work with average values according to the observations made, which are considered representative of the level of complexity of the object under analysis. Table 1 summarizes some of the characterization data. Based on the equation (1), the sample size was determined for the sales points and number of traders considering both equivalent amounts.

$$N = \frac{k^2 * p * q * N}{e^2(N-1) + k^2 p * q} \quad (1)$$

Where:

N = Size of the equivalent population
p = q = 0.5
e = 0.01 (researcher error)
K = 1.96 for a confidence level of 95%.

Based on table 1, a sample size of 86 traders and selling points was established.

Table 1.

Characterization of traders

Assortments offered	Number of selling points (A)	Number of traders (B)	Average traders per assortment (B/A)
Hardware store	33	42	1.3
Clothing	670	810	1.2
Footwear	56	88	1.6
Fabrics	13	18	1.4
Baggage	5	8	1.6
Total	777	966	7.1

Note: own elaboration

The study was carried out during one week of the month of July of the year 2019, a week was chosen where there were no atypical variables, such as holidays, that could influence the results of the study. To establish the number of customers that visit the market, seven observation cycles were carried out during all the days of the week and during the different hours of work of the market in its different areas. The areas and schedules were selected randomly, trying to make sure that all areas and schedules were represented. All of which was captured in graphics of letters that served as registration methods. In general terms, it was possible to establish that the number of customers was high (approximately three customers per square meter during busy times and one customer per square meter during low hours), which would be equivalent to considering the number of customers throughout the year. The whole market in general ranges between 1 000 and 4 500 customers.

The time of travel by the market moving in one direction can be up to 25 minutes for a person walking at an average speed, which would mean that the total number of potential customers in one day could reach between 38 880 and 138 240 customers. Although, it should be noted that the market is on a street for people who are not necessarily customers this figure can be reduced by half, assuming that one in two people who move through the market do so with the purchase intent. Table 2 summarizes the average behavior of the number of customers by schedules and days of the week.

Table 2.

Behavior of the average number of customers

Schedule	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
9h00 to 12h00	4320	4320	4320	4320	4320	8640	8640	38880
12h00 to 14h00	8640	8640	8640	8640	8640	8640	8640	60480
14h00 to 18h00	4320	4320	4320	4320	4320	8640	8640	38880
Total	17280	17280	17280	17280	17280	25920	25920	138240

Note: own elaboration

As it is observed, the hours of greater affluence are the weekends and the hour of the half day, in the first hours the customers do not go to the market for being doing other tasks and in the last hours of the afternoon it begins to diminish the affluence for reasons of security.

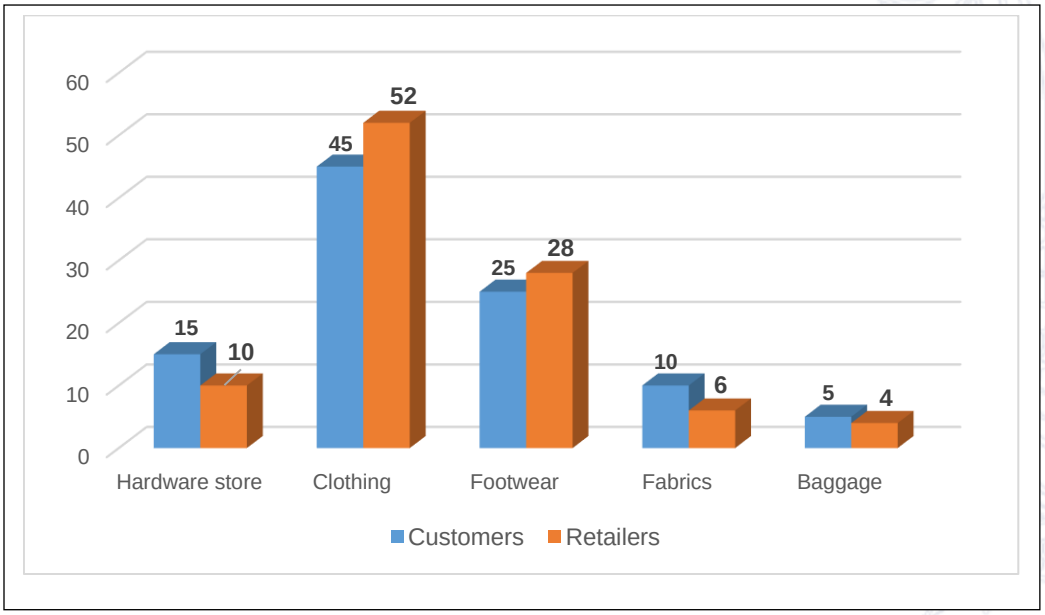

Figure 3. Percentage of customers and traders by type of products marketed.
Note: own elaboration

The study focused on customers and traders associated with clothing and footwear products, since they constituted the majority of customers and traders. Figure 3 reflects the percentage of customers and traders by type of marketed products. As noted, there is a proportionality in the rate of change between the number of customers and traders, with a predominance of both categories in the marketing of clothing and footwear.

To observe the behavior of customers, the sample size was determined using the table proposed by Bigné Alcañiz et al. (2010), assuming a population greater than 100 000 and a sampling error of 5 % which is equivalent to 398 customers. In all cases, they were customers who made purchases, so those who did not meet this condition were discarded from the study.

Definition of the variables to observe

Three types of observation object are established and for each of them specific variables to be analyzed, as summarized in table 3.

Table 3.

Definition of the variables to be observed

Observation object	Variables to observe
Selling Points	Location Relationship variety of sales volume Relationship variety inventory rotation Market environment
Customers	Type of customer (searcher or explorer, wholesaler or trader) Number of selling points you visit before you decide to purchase Order in which the selling points are visited until the moment the purchase is made Order of valuation of the attributes to decide the purchase (Model, Size, Color, Quality, Price) Attitude for negotiation (tendency to negotiate, not negotiating)
Traders	Attitude to sell (passive or active) Flexibility to negotiate (grant or wait) Sales level (high, medium or low)

Note: own elaboration

Design of methods for the collection of information

The fundamental way to collect the information used was the observation of both customers and traders, with this objective guides and observation records were designed that contemplated the possible manifestations of each of the variables identified. In addition, questions to be developed were established through direct interviews with customers who made purchases as a way to resolve doubts regarding the classification of the observed variables. The observation guides were designed to follow up customers in their journey through the market and contact with the different traders until the moment they decide to make their sale or to record the behavior of customers and traders during the sale process. An analysis of the apparent validity and content of the observation and interview guide was carried out, through the consultation of 12 experts, all with master's or PhD degrees, with more than 10 years of experience in research and teaching. university in topics related to administration, commerce, city marketing or physical planning, among other topics.

Processing of information

For the processing of the information, different levels of analysis of the descriptive statistics were established, where the relative frequency and the accumulated frequency and the use of histograms to describe behaviors were used as the main statistician.

In addition, bivariate statistics were used to evaluate the relationship between variables through the construction of crossed tables and the performance of hypothesis tests, specifically the Chi-Square test ($\chi 2$) to establish the possible statistically significant relationship between the variables to be analyzed. Statistically, this test is formulated as follows in equation (2):

$$\chi^2 = \frac{\sum_i^j (O_{ij} - E_{ij})^2}{E_{ij}} \qquad (2)$$

Where

O_{ij}: observed frequencies
E_{ij}: expected frequencies

The hypothesis of independence (H0) is rejected at the level of significance of 0.05 with degrees of freedom df = (r-1)*(k-1). Where r is the number of rows and k is the number of columns. To the extent that $\chi 2$ calculated is greater, the relationship

between the variables analyzed will be stronger. The structure used in the construction of the crossed table can be observed in the results session.

To evaluate the possible relationship of independence between the location of the establishments and the variables of sales volume and sale price, a non-parametric hypothesis of χ^2 test was performed, the results of which are summarized in table 4.

Table 4.

Results of the non-parametric test

	Relationship between the location of the selling point and:	
	Sales volume	Sales price
Value	47.422	35.810
Significance	0.000	0.000
Phi Coefficient	0.689	0.598
Cramer's V	0.487	0.493
Contingency coefficient	0.567	0.513

Note: own elaboration

As it is observed, according to the significance of the χ^2 test, the variables "Sales volume" and "Sales price" are not independent of the variable "location of the selling point" and, in correspondence with the coefficients of Phi, Cramer's V and Contingency, the relationship between the variables is considered significantly strong.

III- Results

Selling points

Location: The study of the location was developed by classifying the selling points according to their location in three categories: initial, middle and final and from this classification two variables were analysed in these: prices and sales volume. For the sales volume, the units sold were averaged per day, for seven days in 29 selling points located in each of the identified categories. It was set up an average value of sales volume, and in correspondence with this was considered a high sales volume if it was higher by 25% to the average volume and low if it is lower in equal magnitude to this average volume. The sales volume data was taken only considering the customers that were traveling in one direction.

To analyse the prices, three price levels were established in order to determine the average sale price of the selling points in the sample for the same types of products, which was set up by identifying the price of the products throughout the entire market and calculating the average price. Based on this information, a high price was considered if it was 25% higher than the average price and low if it is less than the average price.

The analysis of the location of the establishment allowed the construction of table 5, according to which the volume of sales decreases to the extent that the selling point is located further into the market. Similarly, prices are lower towards the interior and the center of the market and tend to rise towards either extreme. Which is understandable given that customers can enter by either direction.

Table 5.

Influence of the location of the selling point in the sale.

Type of location	Sales volume			Sales price		
	Low	Medium	High	Low	Medium	High
Initial	4.1%	29.7%	66.2%	12.3%	12.3	75.4%
Half	28.9%	43.7%	27.4%	67.5%	23.9	8.6%
Final	78.9%	17.3%	3.8%	9.8%	22.1	68.1%

Note: own elaboration

Variety of the offer: For this analysis the variety of average assortments by sales points was considered, which was measured by ranges as shown in table 6, likewise, the daily sales volume was measured in physical units.

Table 6.

Behavior of variety of products and average of sales volume in selling points.

Product variety range (Different product types)	Number of selling points	Average of units sold per day	Average of inventory turnover (days)
1-5	11	100	17
5-10	15	140	22
10-15	26	150	30
15-20	21	130	45
20 or more	13	90	60 or more

Note: own elaboration

It should be noted that in establishments with a product typology of less than 15, there is a direct relationship between the variety of products and the units sold per day. However, from more than 15 different types of products, the units sold show an inverse relationship with the variety. This can be seen in a better way in figure 4.

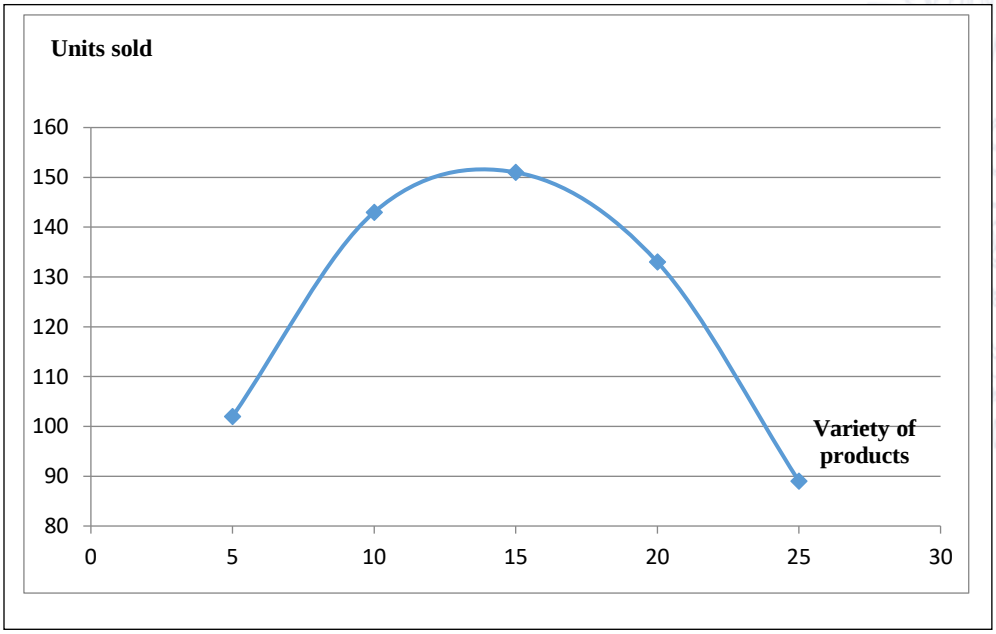

Figure 4. Relationship between the variety of products and the units sold.
Note: own elaboration

Level of inventory turnover: To evaluate this parameter, it was decided to measure it according to the quantity that mediated between one supply and another of the establishment. Although in all cases it was not fulfilled that the stocks of each of the types of products were sold out and that the quantities to be supplied were constant, but it was assumed that there already existed at the point of sale a low existence that motivated the new sale. The measurements made are shown in table 4. As shown in figure 5, as the variety of products increases, the inventory turnover speed decreases as the products stay longer in the establishment.

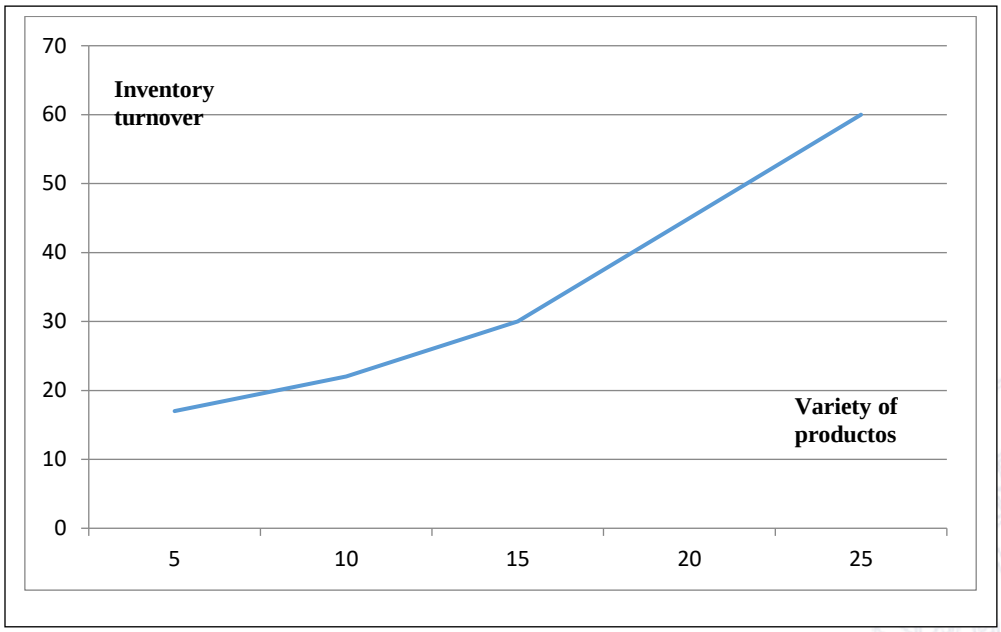

Figure 5. Relationship between the variety of products and the inventory turnover.
Note: own elaboration

This can be due to several factors such as: the lower the variety, the greater the sale and the higher the turnover speed, the storage capacity and the financial capacity are limited by the existence of products with low turnover speed.

Market environment: Market operating conditions are generally homogeneous throughout their length, in terms of physical conditions; what can vary with respect to the environment is related to the number of people present in it, where in certain hours a greater overcrowding is generated as a result of the concentration of customers in the afternoon hours, mostly as it tends to darken. It increases the insecurity of the market and that of the customers, all of which leads to an impact on the purchase decision. For the analysis of this variable, measurements were made of the number of customers that arrived at the establishments by timetables and the percentage of them that materialised the purchase, as shown in table 7. According to this, it can be affirmed that there is a direct relationship between the market environment and the purchase intention, that is, the more favourable the environment is, the greater the probability of achieving a sale.

Table 7.

Influence of the market environment

Schedule	Percentage of customers per schedule	Density of customers in the market	Security	Percentage of customers that make the purchase
9h00 to 12h00	14.13	Low	High	55.12
12h00 to 14h00	43.75	High	High	61.76
14h00 to 18h00	28.13	Medium	Medium-low	38.9

Note: own elaboration

With the purpose of verifying the possible relationship between the variable "realization of sales" and the incidence that have on this the variables "density of customers in the market" and the "security", the hypothesis test was applied again parametric of χ^2 test whose results are summarized in Table 8.

Table 8.

Results of the non-parametric test

	Relationship between "Realization of sales" and:	
	Density of customers in the market	Security
Value	43.658	41.583
Significance	0.002	0.005
Phi	0.473	0.478
Cramer's V	0.394	0.401
Contingency coefficient	0.512	0.563

Note: own elaboration

Depending on the significance of the χ^2 test, the variables "Density of customers in the market" and "Security" are not independent of the variable "Realization of sales" and in the same way, according to the values of the coefficients of Phi, Cramer's V and Contingency, the relationship between the variables is significant.

Customers

Types of customers in the market: The classification of the type of customers was developed through observation, analysing whether there was a relationship between the purchase volume of customers by products and the behavior of these with respect to the purchase, that is, if they bought something from chance they found or if they stopped at the selling point once they observed the product or asked about the existence of it. This observation allowed the construction of figure 6, which summarizes the type of customers observed.

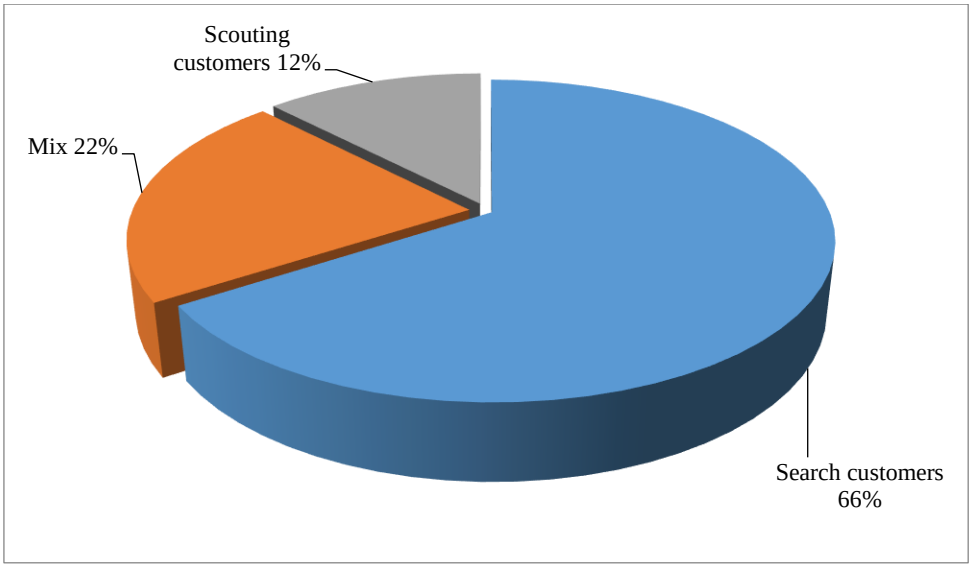

Figure 6. Classification of the type of customers in the market.
Note: own elaboration

It is evident that the search customers significantly outnumber the scouting customers, from which it is deduced that the majority of the people come to the market motivated by a concrete need that can be potentially satisfied by a product offered on it; On the other hand, people who do not have a marked purchase intention but who may be attracted by something existing on it, and others who attend to satisfy a specific demand, but in their search for the satisfactory product, are attracted by other existing products that were not directly in their purchase intention.

Number of selling points that a customer visits before deciding the purchase: For the analysis of this variable, the scale shown in table 9 was established. According to this, the observations made allowed to identify that the highest percentage of customers decided to make their shopping generally in the positions that were at the entrance of the market or failing to make a tour to the end of the market and then returned to the place that was more attractive to make purchases.

Table 9.

Influence of the location of the establishment in the purchase

Location	Position of the selling point from the entrance to the place of purchase, considering only the points of existence of the product					Selective return
	1	2	3	4-10	10-Final	
Percentage of customers	28.7	19.5	22.6	5.3	4.8	19.1

Note: own elaboration

Order of valuation of the attributes to decide the purchase: To establish the order in which the customers value the decision attributes of the purchase, a checklist was used, where the order was recorded according to behavior of each customer. Subsequently, the average of the registered values was determined and ordered according to the value of this statistician. The results are shown in figure 7.

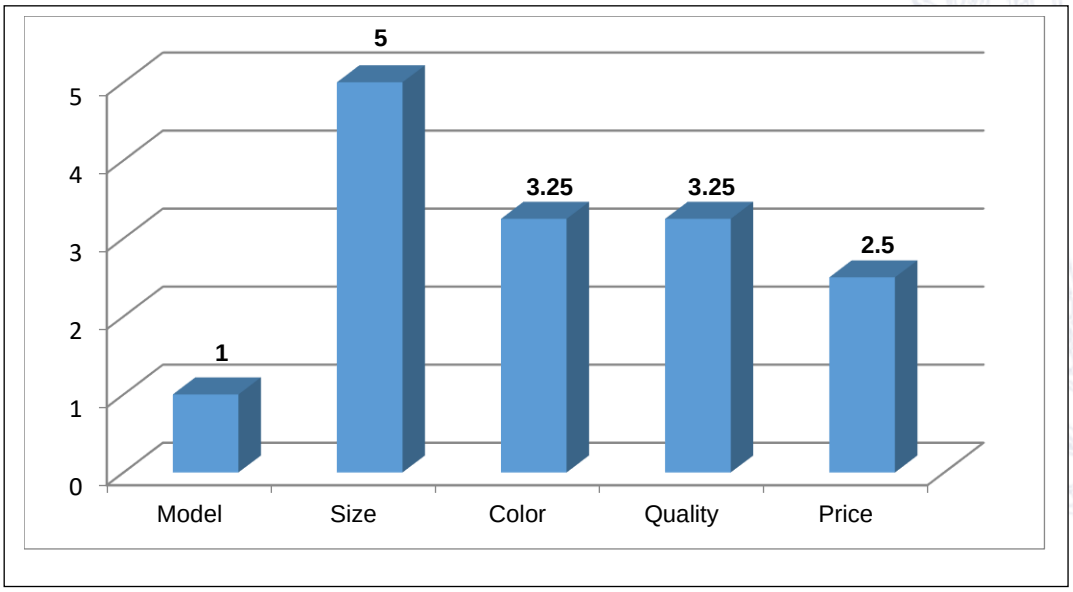

Figure 7. Attribute valuation order to decide the purchase.
Note: own elaboration

In accordance with the foregoing, it is categorical that of the attributes considered the first one that was established as the purchasing decision criterion was the product model, as well as the last attribute evaluated to decide was the size. Second, the price was valued, which is understandable if one considers the nature of the market where customers who come to it are not of high purchasing power and the price itself is one of the main motivators in the selection of the market. However, it was not possible to establish an order of preference between color and quality, since some customers first evaluated the quality and others instead the color, the selection of the color with respect to the quality is not strange either, since it is assumed that in this type market is not precisely the quality that distinguishes the products. In this sense, it is prudent to emphasize that in this market the products are not distinguished by trademarks since they are mostly copies and, consequently, they are not a valid reference criterion.

Attitude for negotiation: Four possible behaviors of the customer were established for the study of this category: active and persistent dribbler, medium dribbler, low dribbler (only makes an attempt to achieve an advantage) and no dribbler (assumes or rejects the offer without negotiating) through observation, it was possible to classify customers according to this category whose results are shown in figure 8.

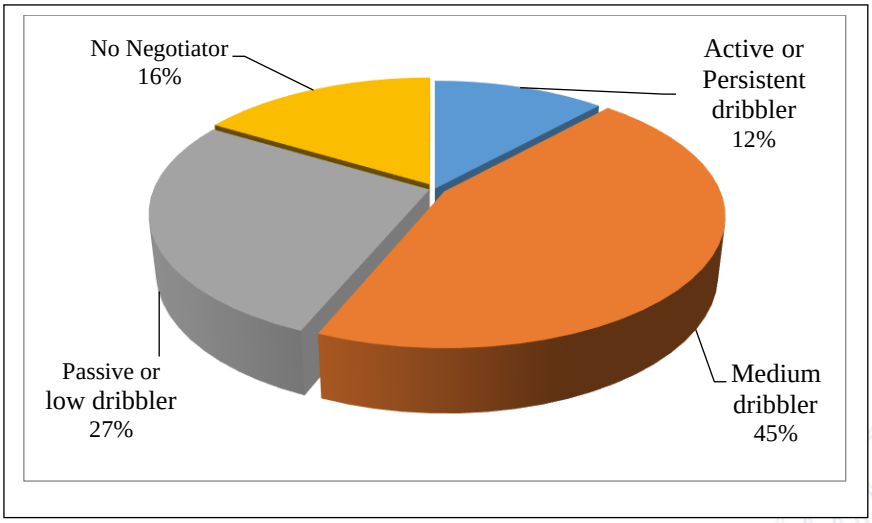

Figure 8. Classification of customers according to their negotiating attitude.
Note: own elaboration

Customers generally (84%) tend to show a negotiating attitude, although 16% of customers were found that are not given to negotiate, before an offer they simply take it or leave it. In the same way, it was revealed that only 12% developed negotiation actions persistently. This customer's negotiating attitude is related to the nature of the market, which, being of an informal nature, presents greater flexibility for its prices and, in general, traders as a sales strategy establish an initial sales price higher than the price expected by them and much higher than the cost, assuming that with this strategy they will have a higher level of negotiation with the customers.

Traders

Attitude of sale: To evaluate this behavior, the passive categories (seated salesman waiting for the customer to arrive and ask) or active (located outside the selling point exhorting to make the purchase or delivering samples) were defined. The summary of observations made is shown in figure 9, according to which the number of passive traders is slightly higher than active traders.

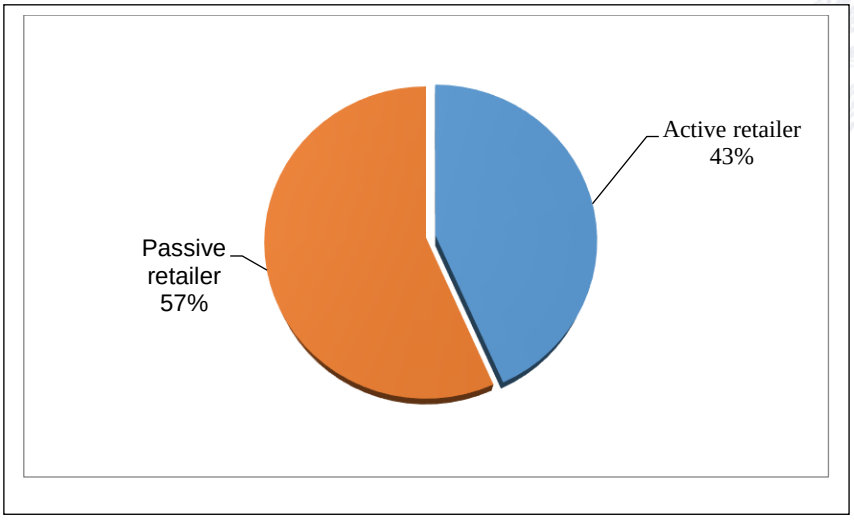

Figure 9. Selling attitude of traders in the market.
Note: own elaboration

Flexibility to negotiate: Regarding this variable, three categories were identified: trader who gives (offers price reduction even before the customer offers it), trader who waits (makes price reduction only if the customer requests it) and does not negotiator (does not make price modifications). Based on the observations made, it was possible to obtain the information shown in figure 10.

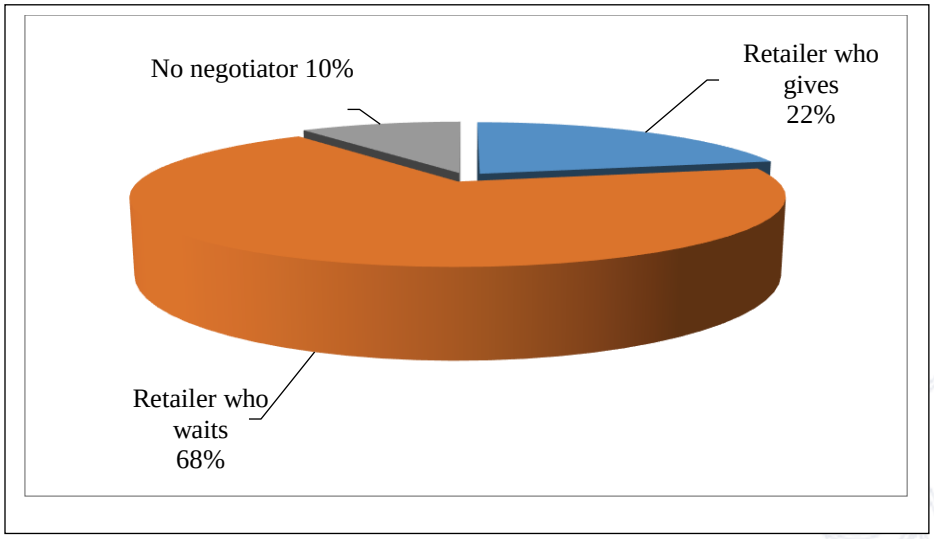

Figure 10. Trader flexibility to negotiate.
Note: own elaboration

Sales volume of the trader: To evaluate this variable the sales volume of the selected traders was recorded, this record was made in physical units and not in monetary units to avoid the bias introduced by the money. Sales levels were classified into three categories, considering high those that exceed 25% of the sales average, and under those that do not reach 25% of the average sales. The results of the sales volume of the trader were analysed by means of crossed tables, answering it with its relation with the trader's attitude and its flexibility. The results are shown in table 10.

Table 10.

Relationship between sales volume, attitude and flexibility of trader.

Sales volume	Trader's attitude		Trader flexibility		
	Active	Passive	Granting Trader	Waiting Trader	No negotiator
High	62.4	28.5	69.9	42.8	11.2
Medium	27.3	41.3	24.4	38.1	46.7
Low	10.3	30.2	5.7	19.1	42.1

Note: own elaboration

It is found that those traders who have an active attitude and greater flexibility, as expected, achieve better sales levels than passive traders or that do not show a negotiating trend. To evaluate the possible relationship of independence between the sales volume and the variables "Trader´s attitude" and "Trader flexibility", a non-parametric hypothesis of χ^2 test was carried out whose results are summarized in table 11.

Table 11.

Results of the non-parametric test.

	Relationship between sales volume and:	
	Trader's attitude	Trader flexibility
Value	37.382	39.792
Significance	0.004	0.043
Phi	0.514	0.558
Cramer's V	0.446	0.503
Contingency coefficient	0.536	0.511

Note: own elaboration

Corresponding to the significance of the χ^2 test, the variables "Trader´s attitude" and "Trader flexibility" are not independent of the variable "Sale volume", and in correspondence with the coefficients of Phi, Cramer's V and Contingency, the relationship between the variables is significant.

IV- Discussion

In correspondence with the different analyses developed, it could be established that the sales volume of the selling points in informal markets is related to variables such as “location”, depending on the flow of customers and access routes, being more likely to make a sale in the most accessible places. In addition, it was observed that the most accessible selling points achieve better sales volumes and to counteract this effect, traders with a less privileged location can resort to strategies of decreasing the price of their supply. These results corroborate those presented by Lamb et al. (2012), Pope et al. (2012), Koc and Burhan (2015).

It was also revealed that although a greater variety of products can lead to an increase in sales levels, a significant increase in the variety can negatively affect its influence on sales volumes; this, in the opinion of the investigators, can respond to the interpretation (real or not) by the customer of a low specialisation of the offer on the part of the trader, a dispersion of the attention or knowledge of the customer on the offer of the selling point or a decrease of the trader's effort to sell his wide range of products.

The results found in this sense come to serve as mediators between the contradictory or opposing approaches of Lamb et al. (2012), Gao and Simonson (2016), Venter de Villiers et al. (2018), who defend the assortment variety for the increase in sales and those of Liyun (2011), Spassova and Isen (2013), that advocate a smaller variety of assortment to favour the purchase decision. In this sense, and as another consequence of the above, in selling points with greater variety in their type of products in the offer, there is a lower speed in the rotation of inventories, which can produce other negative effects such as: the products, decrease in liquidity, decrease in storage capacity, among other consequences.

With regard to the market environment, it became clear that a clean and safe environment is more likely to guarantee that the sale is made than in an environment where these conditions are in danger. These results correspond to those found by Hussain and Ali (2015), Moslehpour et al. (2015).

On the other hand, the characterization of customers made it possible to identify that in this type of sales point, those who visit it with a defined objective of purchase intention can predominate over those who seek to explore different offers that are attractive to them; as well as that they show a tendency to carry out and accept haggling actions in quantity or price of the products. In the same way, it can be observed that in the hours with the highest concentration of customers in the market, the probability of making the sale decreases, which can be due to multiple reasons: the increase in workload affects the bargaining power of the trader, the existence of a greater number of customers generates greater insecurity and a market environment that is not conducive to sales, which corresponds to the search results by Hussain and Ali (2015), Moslehpour et al. (2015).

On the other hand, it was found that those traders who assume a more active attitude towards the sale in order to attract more customers and show flexibility in the negotiation process with customers achieve better results in sales volume. These results coincide with those found by Stillerman and Sundt (2007), Keng et al. (2016), Venter de Villiers et al. (2018).

V- Conclusions

In correspondence with the different analyzes developed, on the one hand, it was possible to verify the fulfillment of results reported by previous investigations regarding the incidence of the location of the business and the safety and hygiene environment that exists in the establishments at the points of sale; while on the other, results were found that to a certain extent explain the apparent contradiction reported in the literature regarding the incidence of the variety of assortments at the points of sale. Similarly, correspondence was found with previous research regarding the presence of sales skills such as: flexibility in negotiations and an active attitude towards customers favor the process of materializing sales.

It must be recognized that the research carried out is not conclusive and rather has an exploratory nature, given that the variables analysed are not sufficiently comprehensive nor are they fully delimited so as to be able to reach generalizing conclusions. The results obtained are conditioned by the cultural peculiarities of the population under study, the design of the flow of market circulation, government regulations regarding trade, among other aspects. However, the replications of similar research in different contexts in the future could support or contradict the existence of similarities with the results of this research.

In any case, the results of this research could constitute practical contributions from the point of view of administrative sciences for the managers of the territory if they decided to support the development of this type of trade and likewise the study provides useful information for small businessmen who wish to operate in markets with similar conditions to those valued in this research.

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Contribución de los autores

RPC: administración del proyecto, planificación y supervisión de la investigación, conceptualización y diseño de la investigación, planteamiento de la metodología y resultados, revisión del manuscrito.
GGV: software, curación de las bases de datos, análisis formal e interpretación de los datos, planteamiento de resultados, revisión del documento.
ASR: escritura del manuscrito original, planteamiento de la discusión y conclusiones, redacción, revisión y edición del documento final, análisis bibliográfico.
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