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WORK PLACE INFLUENCE ON PURCHASE BEHAVIOR OF PET FOOD PRODUCTS IN THE PANDEMIC PERIOD

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ABSTRACT. The pet food industry faced changes recently determining important market growth. During the COVID-19 pandemic the pets' popularity increased as many people wanted to adopt or buy a pet during this period. Also, in respect with the workplace, the COVID-19 pandemic divided the pets' owners in those who worked from home or hybrid and those who worked from the workplace. The main goals of the research are to analyze the factors that pet owners consider when they are purchasing pet food products, and the budget allocated for pet food products according to how pets' owners worked in this period. Based on descriptive research, the study revealed that those who worked from home/ hybrid during the pandemic period put more emphasis on product quality and brand awareness and less on price. Those who have worked at workplace more emphasis on price and less on the quality of pet food.

Keywords: pet food, work, purchasing behavior, COVID-19 pandemic, Romania

JEL classification: M31, L67, D91

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Introduction

Pets occupy an increasingly important place in people's lives in most countries. With the increasing presence of pets in human lives, the industry responsible for pet food and pet care has also developed. The global pet food market is expected to grow to $75.29 billion in 2021 and the trend of growth is also expected to remain in 2022. So the pet food industry is an important pillar in more and more economies around the world (Alexander et al, 2020).

The pet food industry has seen several changes recently which have led to increasing market growth. The main factors that determined the positive evolution of the pet food market are: the rising incomes of the population, the growing popularity of pets, especially among the younger generation, and more generally the urbanization of the population (Alexander et al., 2020). Another important factor that has contributed in recent years to the pet food market growth is the tendency of people to humanize pets more and more (FEDIAF, 2022). The humanization of pet animals continues to be increasing, in particular because the popularity of animals is increasing among the Millennials and Z Generations, but also because more and more pet owners spend more time at home.

During the COVID-19 pandemic period the popularity of pets was increased, and many people wanted to adopt or buy a pet during this period. In this period of pandemic people have experienced many changes and restrictions that have made them change their behavior (Stanciu S. et al., 2020). With these changes, new consumers of pet food products have emerged on the market and thus behavior and certain trends from the market have changed (Ho et al., 2021).

Given the expansion of the pet food market in recent years, there is a growing concern to analyze consumer pet food preferences, but the current literature is still quite weak in this regard. The COVID-19 pandemic divided the consumers in two segments: those who have worked from home or hybrid and those who have worked from the workplace (Russell J., et al. 2021). These aspects and the continuing trend toward the growth of the pet food market during the pandemic make analysis of the pet food market more exciting and provide a challenge for research in the field.

The central aim of the research is to analyze the buying behavior of pet owners throughout the pandemic period. The main objectives of the present study are: O1. Analysis of the factors that pet owners consider when they are purchasing pet food products, based on how they worked during the pandemic (work from home/ hybrid or from at the workplace). O2. Analysis of the budget allocated by pet owners for pet food products according to how they worked (worked from home/ hybrid or from at the workplace). For this purpose, the authors developed the following research questions: RQ1. For those who worked from home or in a hybrid system during the pandemic period, compared to those who worked from the workplace, the price factor of pet food products had of different importance? RQ2. Had the quality factor of pet food products of different importance to those who worked from home or in hybrid systems than those who worked from the workplace in the pandemic period? RQ3. For those who worked from home or hybrid the brand awareness of pet food products had of different importance than those who worked from the workplace in the pandemic period? RQ4. Was the delivery time of pet food products of different importance to those who worked from home or hybrid than those who worked from the workplace in the pandemic period? RQ5. Were promotion campaigns on pet food products from the pandemic period of different impact for those who worked from home or hybrid than those who worked from the workplace? RQ6. Did those who worked from home or on a hybrid system during the pandemic period allocate a different budget for pet food products than those who worked from the workplace?

Review of Literature

In 2010 the pet food industry was worth $59.3 billion (Hoobs and Shanoyan, 2018). The latest figures showing the size of the global pet food market are officially registered in 2020 when the pet food industry was worth $72.07 billion in revenues (Research and Markets, 2021). In 2021, the global pet food market is expected to grow to $75.29 billion, an increase of more than 4% (Research and Markets, 2021).

This pet food industry is segmented by specialists according to some important criteria: animal type, product type, ingredient type, sales channel and by geography (Mordor Intelligence, 2021). The first market segmentation criterion gives us an overview of the pet food market by dividing the market into dog, cat, and small pet food. The largest segment is dog food, which is estimated to represent about 60% of the whole pet food market. The next important segment is cat food, which accounts for about 35% of the total market (Hoobs and Shanoyan, 2018). In terms of product types the pet food market is divided into: dry food, wet food, veterinary diets, treats and snacks and organic products (Mordor Intelligence, 2021). The dry food category is the most sold product (over 90% from the total market) for both main segments (dog and cat food), as it provides both comfort, lower prices and better storage capacities than wet food; all are the factors consumers seem to value most (Hoobs and Shanoyan, 2018).

In terms of geographic market segmentation, the largest market is North America, which accounted of around 38% of the total pet food market in 2020. It is followed by Western Europe, which was about 22% of the total market in 2020 (Research and Markets, 2021). At European level, the leader is Germany, followed by the UK, France, Italy, Spain and then the rest of Europe representing much lower percentages (Hoobs and Shanoyan, 2018; Mordor Intelligence, 2021).

The trend of humanizing pets, especially dogs and cats (owners giving their pets human characteristics, such as looking at the pets as part of their family or even as children) has led to an increase in certain types of products in recent years. (Kumcu & Woolverton, 2015). Complex relationships typically exist between owners and their pets, especially in terms of feeding behavior, with the owner's affection or love for their pet most pronounced by providing food (White et al., 2016; Morgan et al., 2020). For example: In 2020 alone, organic pet food reached $22.8 billion in sales (FEDIAF, 2022). Another aspect that shows that people are trying to humanize pets more and more is the growing demand for certain diets such as BARF diet (new attributes in this field) and other food supplements

(Handl & Ecvcn, 2014). Also another trend that has grown in recent years, especially as regards dog feeding, are the sort of grain-free or gluten-free food (Banton, Baynham, Pezzali, Von Massow, & Shoveller, 2021). In the human food industry, there has been a trend for all sorts of such foods from which are increasingly inspired and the pet food (Boya, Michael, Dotson, 2015).

This trend of humanizing animals is primarily the fact that more young people hold a pet animal and they have a different view in terms of care for pets. Studies in recent years have shown that the Millennials generation currently holds about 32% of all pets (https://petkeen.com/pet-food-statistics-trends; FEDIAF, 2022).

Also, people's easier access to information, but also their increasing interest in feeding their pets with quality food, is another factor of the pet food market growth. Nowadays, pet food buyers have access to numerous sources of information about their pet's nutrition. Information can be obtained from veterinarians, the Internet, animal trainers, pet store employees, pet nutrition books, pet company websites, or other owners of pets, even if this information does not always come from reliable sources (Vinassa et al., 2020). Another survey conducted on a sample of 93% women out of a total of 2181 respondents concluded that the most used source of information on choosing pet food is veterinarians (40%), followed by the Internet (24%). (Schleicher et al. 2019).

Pets today play a particularly important role, both in terms of people's mental well-being and in terms of the economy (Rombach & Dean, 2021). Many people need pets to relieve their anxiety or loneliness, but there are some people who depend on pets. (e.g. utility dogs). From the economic point of view, pet animals generate income primarily for farmers or traders selling pet animals, but in particular the expenses and income generated by food and other pet products, which represent significant sums in the economy. In the USA, for example, the average annual budget people allocate strictly for pet food is between $254 and $287 (Chen, Hung, 2012; Rombach and Dean, 2021).

When deciding on the types of feed for their pet animals, but also when deciding on quality or other aspects, it has generally been found that women are more concerned about these details (Hoobs and Shanoyan, 2018; Rombach and Dean, 2021).

In Romania a study carried out by the Romanian Association of Pet Food Producers (ARPAC) in 2020, that is in the pandemic period, shows the behavior of the owners of pets in the urban environment. The results indicated that the main motive for buying a pet is emotional. 66% of pet owners have a dog, the majority, medium and small and 58% own a cat. From the investigated urban owners, 17% of dog owners and 16% of cat owners got the pet during the state of emergency. Regarding food, 43% of dog owners and 57% of cat owners declared that they feed their pet exclusively on pre-packaged food, purchased from stores. The main sources of acquisition are supermarkets/ hypermarkets, chains of pet stores or nearby pet stores (ARPAC, 2020).

The literature clearly shows us a trend toward the global pet food market growth even in the pandemic period. During this period, several factors have contributed significantly to maintaining this growing trend of the pet food market, to the development of business on the online side mainly due to the imposition of restrictions by the authorities (Sayyida, et al., 2021). Once certain traffic restrictions were imposed in the pandemic period, industry companies have increasingly focused on the online environment and have developed some home delivery services (Sheth, et al. 2020) (Kwak and Cha, 2021).

Another important factor that has contributed to the pet food market growth in the pandemic period was the increase in the number of pet adoption especially among those who spent more time at home (Morgan et al., 2020). The increase in adoption or purchase of pet animals also resulted from the fact that many people worked from home or in hybrid schemes during the pandemic period. According to a study carried out in Romania by E&Y in 2020, during the emergency period around 60% of respondents worked from home or hybrid. (Ernst & Young, 2020). Once time with this major change in work, several people had more time off, which made some of them want a pet (Maryati T., 2020).

Also, the same study by E&Y shows that respondents increased spending on food by around 21% (where the pet food products are included) (Ernst&Young, 2020).

One of the main factors that led to changes in individuals' purchasing behavior in pandemic period is home work or hybrid work (Applebaum, Tomlinson, Matijczak, McDonald, & Zsembik, 2020). Working at home has brought several changes to the lives, habits and working patterns of many employees, and many studies showed us that the market was divided into two segments of consumers: those who have worked from home / hybrid and those who have worked from the workplace, in this period. (Ștefan, 2021).

Another important aspect which has led to the trend of increasing demand for pet products, especially among those who have worked from home, was their income (Reema S. et al., 2021). Studies have showed that the segment of those who have worked from home or hybrid in the pandemic period, they have had higher incomes compared to those who have worked from the workplace during this period (Ștefan, 2021).

Materials and methods

The main purpose of the research is to analyze the buying behavior of pet owners throughout the pandemic. In this respect, we conducted an online interview. A self-administrated questionnaire, composed of 23 questions was implemented on Facebook groups related to pets.

The questionnaire was shared online in 51 different Facebook groups of Romanian pet owners: 25 mixed groups (groups with dog and cat owners), 20 groups of dogs (groups that predominantly had members who were dog owners) and 6 groups of cats (groups that predominantly had members who were cat owners). The questionnaire was anonymous and was kept active between 20.11.2021 and 3.12.2021. 1,525 people answered, owners of dogs, cats and other pets, 99.28% of respondents live in Romania and 0.72% live outside Romania.

In this paper, descriptive research was used analyzing the pet owners buying behavior in Romania, especially those who own dogs and cats. The data analyzed in the questionnaire include demographic characteristics of the respondents and variables related to the consumer's intention and purchasing behavior during the pandemic. Demographics described their age, gender, education, marital status, monthly income, type of work during COVID-19 and where they live.

The answers to the questions were presented as relative frequencies and IBM SPSS software version 25 (IBM Corp., Armonk, NY, USA) was used for the statistical analysis.

Results and discussions

Regarding the demographic characteristics of the sample, more than half of the respondents are between 18 and 36 years old (51.15%). In terms of gender, the sample is dominated by women (91.67%). More than 75% of respondents have university education and more. Half of the respondents have an income of less than 4000 lei (around 800 EURO/month), and over 60% of them do not have children. The majority live in cities with less than 200,000 inhabitants, all of them are Romanian, but they live in different cities in the country and abroad (Table 1).

Of the total number of respondents, 79.4% have dogs. A percentage of 26.7 of them are pet owners as of 2020 and almost 10% of them have their pet starting with the lockdown. In respect with how the respondents have their pet, 40% of them are adopted and 31.34% were adopted during the pandemic.

Table 1. Demographic characteristics of the sample

Category	Items	%
age	under 18	0. 33%
	18-36	51.15%
	37-55	44.00%
	58-75	4.52%
studies	Elementary	1.18%
	Highschool	16.72%
	Post-high school	6.23%
	University	43.80%
	Master	23.74%
	Post-university	8.33%
income	<2.000 lei	11.21%
	2000-4000	39.48%
	4000-6000	25.84%
	6000-8000	10.82%
	8000-10000	5.31%
	>10000	7.34%
relations	Single	20.98%
	In a relationship, without children	43.34%
	In a relationship, with children	35.67%
work	Remote work	30.56%
	From work	37.05%
	Hybrid	20.33%
	Not working	12.07%

Category	Items	%
residence	Principle city (> 200,000 residents)	11.74%
	Secondary city (<200,000)	87.54%
	Other country than Romania	0.72%
	Female	91.67%
gender	Male	8.33%

Source: Analysis performed by authors

The research analyzed in the first stage the factors that influence the most in the purchase decision of the two segments, those who worked from home/ hybrid and those who worked from workplace during the pandemic. The factors considered for this analysis were: price, quality, brand awareness, delivery terms and promotions.

Price

The "price" factor was considered an important, often decisive factor in the purchasing decision for many consumers of pet food products. As for the two segments, those who worked during the pandemic period at home/ hybrid and those who worked from the workplace, as shown in Figure 1, there is no significant association.

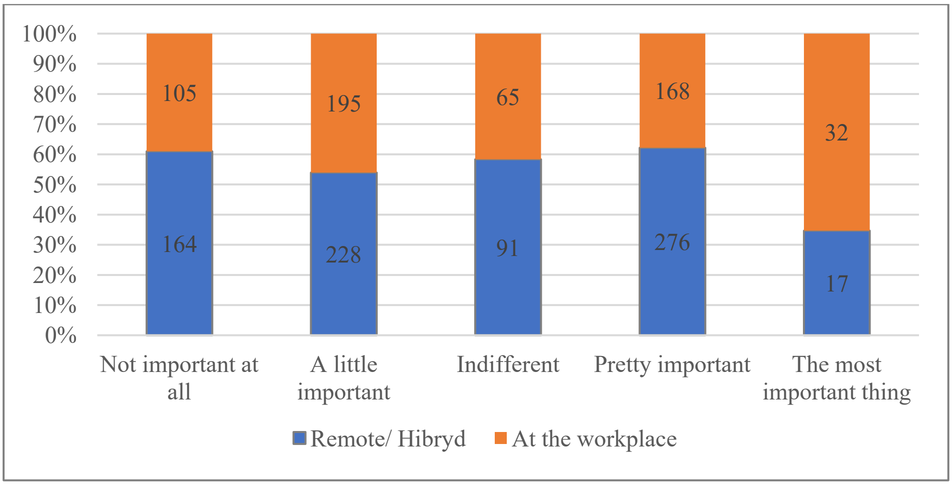

Figure 1. The importance of the price factor depending on the method of working the sample

Source: Analysis performed by authors

However, those who worked in the remote system (from home) or those who worked in the hybrid system during the pandemic period were less influenced by this factor in their process of purchasing pet products. We can make this statement because, as can be seen on the graph in the extremities, a larger number of those who worked from home or hybrid considered the price factor important (164 said it was not important at all and 228 said it was of little importance; compared to 105 and 195 respondents in the segment of those who worked from home, respectively). Also, only 17 respondents in the remote/hybrid segment considered the price factor as the most important in the purchasing decision-making process (compared to 32 respondents in the group of those who worked from home and who considered this factor to be the most important). One explanation for this is that the income of those who worked from home or hybrid is usually higher than the income of those who work only from work, as other studies show (Al, 2021). Studies have shown that most of the time the segment represented by those who worked from home or hybrid during the pandemic had higher incomes compared to those who worked from work during this period (Ștefan, 2021).

Quality

Another factor whose importance was analyzed in the decision-making process of buying was the factor - “quality”. The importance of this factor for the two segments was shown in Figure 2.

As can be noticed, this is a decisive factor for the segment of those who worked from home or hybrid during the pandemic period. Instead, those who worked from work took less account of this factor when they had to make choices about purchasing products for their pets. There is a significant association between the job (at home or hybrid and the workplace) and the list of ingredients, that determine the quality of the products (important/unimportant). The statistical analysis found that this factor (product quality) is 14.9 times more important for those who worked from home/hybrid than those who worked from work during the pandemic period.

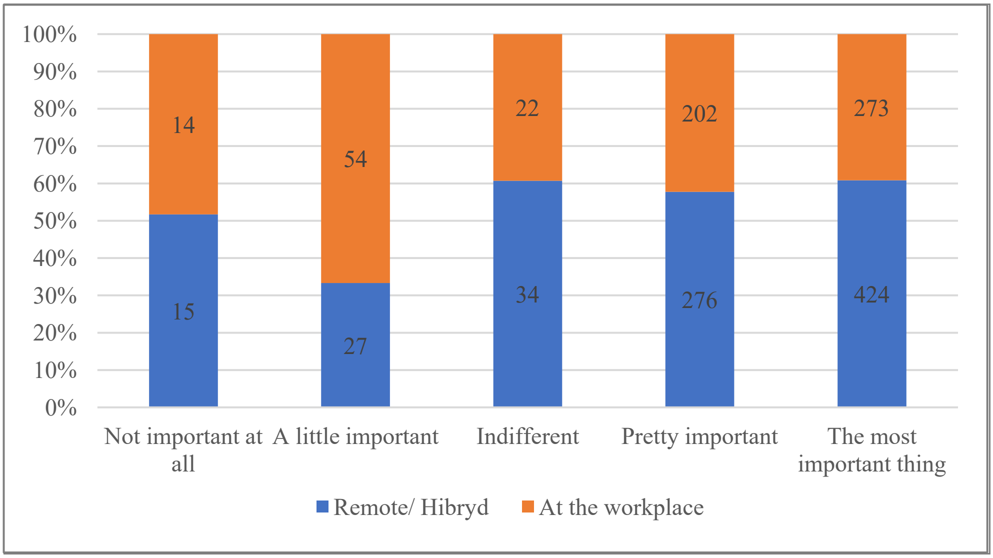

Figure 2. The importance of the quality factor depending on the way the sample is working

Source: Analysis performed by authors

Brand awareness

"Brand awareness" is an increasingly important factor for many consumers in the pet food market in recent years (Alexander et al, 2020).

The study revealed a greater interest in this factor for the segment of those who worked from home or in a hybrid system during the pandemic period and less decisive for those who worked from work.

Regarding brand awareness, there is a significant association between work (at home or hybrid and at work) and brand awareness (important/ unimportant). For those who worked from home/hybrid, the "brand awareness" factor is 6.32 times more important than others in the segment of those who worked from work during the pandemic period.

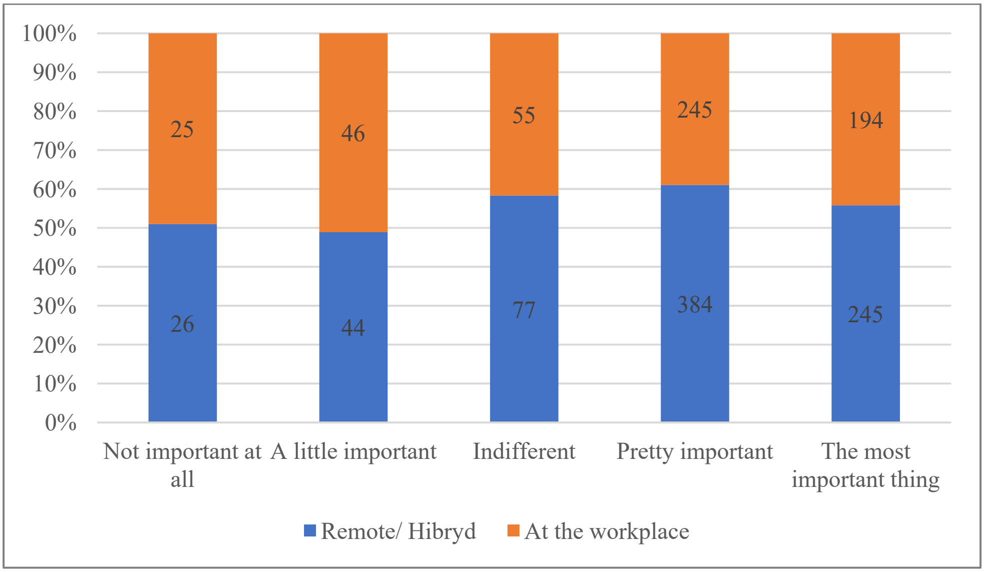

Figure 3. The importance of the brand's notoriety factor depending on the way the sample works

Source: Analysis performed by authors

Delivery conditions

Another important factor that became almost indispensable during the pandemic period, was the home "delivery service" of pet products. Regarding the two segments and their preference for accessing this service from the analyzed sample data, it resulted that there is no significant association between the job (remote/ hybrid and workplace) and the "delivery conditions" (important/ unimportant). However, we can see from figure 4 that for the segment represented by those who worked from the workplace, this factor was considered a slightly more important element in their purchasing decision (100 respondents of those who worked from the workplace said it was the most important aspect, compared to 92 respondents in the other segment).

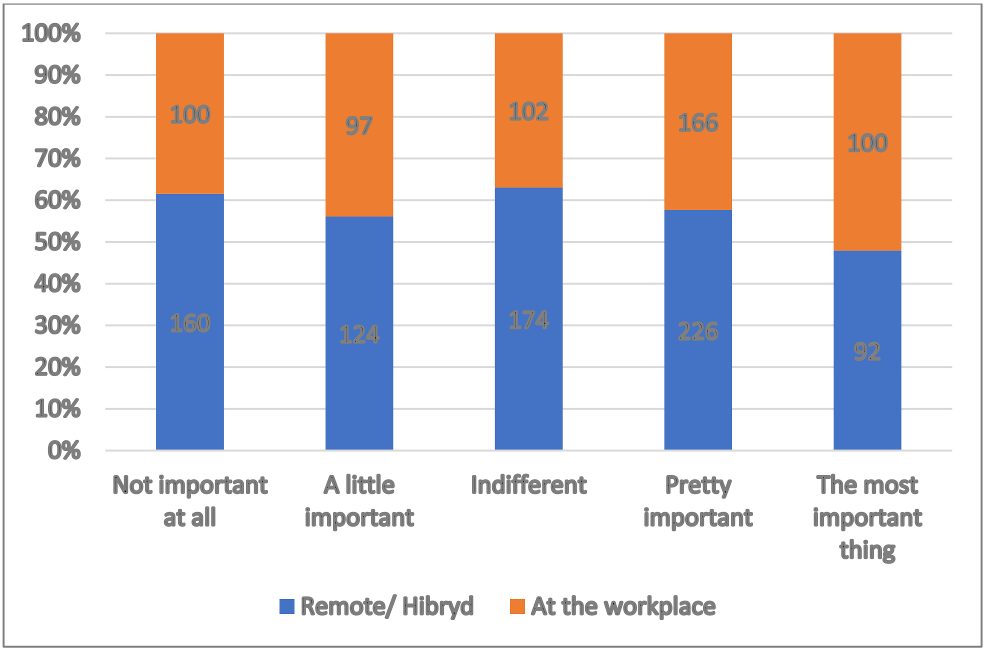

Figure 4. The importance of the delivery conditions factor depending on the method of working the sample

Source: Analysis performed by authors

Promotions

The last analyzed aspect was the “promotions” factor. This element was particularly preferred by the segment of those who worked from home/hybrid during the pandemic period and considered less important by those who worked from work during this period. These preferences in relation to this factor were shown in Figure 5.

Therefore, there is a significant association between the job (remote/ hybrid and workplace) and the promotions offered by the provider (important/ unimportant). For those who worked from home/ hybrid, the factor “promotion” is 1.2 times more important than the others in the group who worked from work during this period.

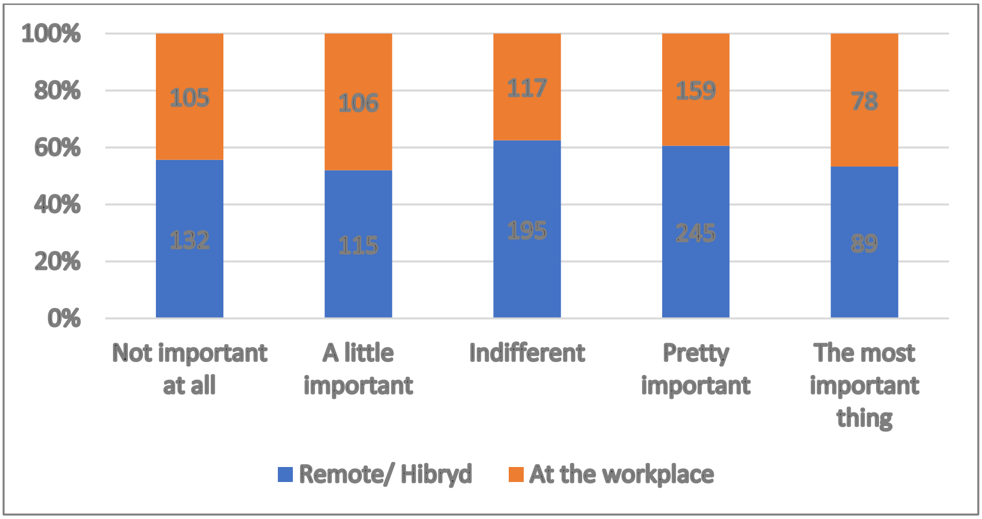

Figure 5. The importance of the promotion factor depending on how the sample works

Source: Analysis performed by authors

Budget

In the second phase of the research, we analyzed whether there is a link between the budget allocated by respondents to the purchase of pet products and modality of how they worked during the pandemic period. And for this analysis we divided the respondents into the same two segments, those who worked from home/ hybrid and those who worked from work during the COVID-19 pandemic.

We found from the statistical analysis that the responses were not statistically significant. However, we analyzed each threshold of the budget, depending on the modality of how the respondents worked (Figure 6).

Regarding the budget allocated by the two consumer segments, those who worked from home/ hybrid during the pandemic, allocated a little higher budget for pet food products. While those who worked at workplace during this period allocated a little smaller budget for pet food during the pandemic.

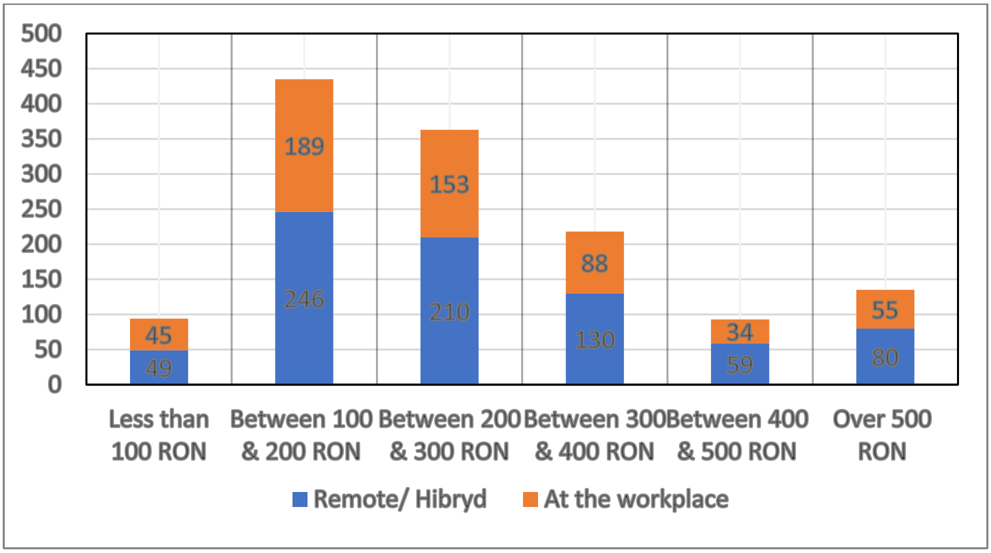

Figure 6. Budget allocated vs. how the respondents worked
Source: Analysis performed by authors

As a first element to be noted, the budget thresholds between 100 - 200 lei (around 20 - 40 Euro) and between 200 - 300 lei (around 40 - 60 Euro) recorded the biggest differences between the two segments. So, we can say that the average budget allocated by those who worked from home or hybrid during the pandemic, was between 100 and 300 lei, while the segment represented by those who worked from the workplace, they have allocated a lower budget of these thresholds. Another difference is also in the allocated of the budget range between 300 and 400 lei per month (around 60 - 80 Euro), where again there is a major difference in favor of the segment of those who worked from home or hybrid. The smallest difference between the two segments is at the range allocated budget of less than RON 100 per month, where the two segments are almost equal. Of course, we also noticed that the largest budget allocated by respondents, is also allocated by the same segment of those who worked from home or hybrid during the COVID-19 period. 80 of the respondents who worked from home/hybrid said they allocated a maximum budget (over 500 lei, around 100 Euro) for pet food during the pandemic period. While only 55 of the respondents who worked from workplace during the pandemic period said they had allocated the maximum budget for pet food.

Conclusions

The pet food market has an upward trend for many years now, reaching important figures in many countries in recent years. Although the annual percentage increase in developed countries is no longer high, because the market is already at a high level, in developing countries the pet food market is growing from one year to another, with high percentage increases in many cases. Thus, this market is of growing interest not only for existing players but also for new producers or retailers, and not least for consumers, because more and more individuals are planning to have a pet in the future.

With the pandemic period, there have been countless changes in the markets in general. the pet food market has also undergone several changes. Consumer behavior has changed a lot during the pandemic period and some aspects of these behavior changes have also remained modified after the elimination of restrictions caused by the COVID-19 pandemic. Some of these changes were due to government restrictions, but others were due to product crises, which led to massive impulse shopping. All these changes have led to the formation of new segments of consumers who have behaved differently. The research identified two new consumer segments, depending on how they worked during the pandemic period (those who worked from home/hybrid and those who worked from work). These new consumer segments behaved differently during the pandemic period.

As a first conclusion from the data analysis, it can be said that those who worked from home/ hybrid during the pandemic period put more emphasis on product quality and brand awareness and less on price. As a second conclusion, this is also reinforced by the fact that those who worked remote/ hybrid, spend larger budgets on the purchase of pet food. Those who have worked at work place more emphasis on price and less on the quality of pet food. This is also supported by the fact that, following the analysis of the data in the questionnaire, those who worked from the workplace stated that they allocate a smaller budget for pet products.

After analyzing the data obtained through the questionnaire, it was found that for those who worked from home / hybrid, factors such as quality, brand awareness and promotions were considered relatively decisive factors in the purchasing decision. For the other consumer segment, however, those who worked from work during the pandemic period, factors such as “price” and “delivery conditions”, were slightly more important (even if not significantly more important) aspects of purchasing decision-making, to the detriment of factors such as “product quality”, “brand awareness” and “promotions”.

The current research revealed several changes in pet food buying behavior, as well as some differences between the two consumer segments. Once-formed segments have a real chance of staying that way, as many employers have not given up and do not want to give up the idea of giving employees the chance to work in a hybrid system or even exclusively from home.

The paper reviews the Romanian pet food market during the pandemic period. The study is relevant for retailers and pet food producers, veterinarians, but also for other people interested in the development of the pet food market during the COVID-19 pandemic.

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