

## THE EFFECT OF DISTRIBUTION CHANNELS' STRATEGIES AND TYPES ON CONSUMERS' BUYING BEHAVIOR OF CONVENIENCE PRODUCTS

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***Abstract** As distribution is a key element in marketing strategies and its role can extend to be the core for creating competitive advantages for many products, especially for fast-moving consumer goods where product accessibility is a main determinant for consumers' buying behaviour. Accordingly, the purpose of this research is to investigate the impact of different distribution channel strategies and types on the consumer buying behaviour of convenience products such as protein bars.*

*A conclusive research design was used by describing attitudes towards various distribution strategies and types and also to test the effect of various distribution channels' strategies on consumers' buying behaviour. The researchers conducted self-administered questionnaires among a sample of 120 consumers using a non-probability judgmental sampling technique. The data were analyzed quantitatively using descriptive and inferential statistical*

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*techniques to test the research hypotheses. The research findings revealed that consumers' buying behaviour is affected by different distribution channel strategies and types specifically the intensive and selective distribution strategies in the research context that examines buying behaviour of a convenience product. The research results provide insightful implications for distribution managers of convenience products such as a protein on how to effectively distribute their products to create favourable buying behaviours towards their product by selecting the suitable distribution intensity and type.*

**Keywords:** *Consumer buying behaviour, Distribution strategies, Distribution channels*

**JEL Codes:** *M31, L81, L11*

## **Introduction**

Having an efficient distribution network has been one of the most crucial and critical factors in any manufacturing company or organization (Poulaki, & Katson 2020). Over the years, it has been noticed that if any business lacks an effective distribution channel, that would affect badly the profits leading to a business failure (Kulinskaet al., 2020). Having an adequate, accurate and a consistent distribution network gives the company a competitive advantage to thrive in its operating market (Rambocaset al., 2015). Distribution channel is the way a company manages and plans to deliver the products from the manufacturer to customers. There are four main types of distribution channels; direct distribution channel which is performed through delivering directly to the customer without any intermediaries, indirect distribution channel which is performed through dealing with retailers or any intermediary companies to have a high coverage of the market, physical distribution which means that the manufacturer sells the produced products in a physical store, and finally online distribution which reflects that the manufacturer is selling the products through the internet (Sharma et al., 2019).

Each company determines also which distribution strategy will be followed before operating in the market. There are three main distribution strategies; exclusive, intensive, and selective. Exclusive strategy involves selling the product in one or very few stores to reflect the product's exclusivity. Selective distribution involves selling a product at some stores in specific locations. Intensive distribution strategy involves selling a product in many stores as possible (Mondal et al., 2017). Meanwhile, it should be

highlighted that the adequate distribution strategy is chosen based on the product nature. Distribution channels types and strategies are very important for any company as they have a huge impact on the sales of the company's products. Moreover, they contribute in affecting consumers' buying behavior. For instance, customers prefer buying convenience products, which are goods consumers, buy frequently from a certain brand over another due to its affordability in the market. In other words, customers are willing to buy more from certain brands than others because they are reachable and easy to be found. However, they do not like to purchase from brands that are not affordable, as they find many difficulties to reach them (Pappas, 2016). Therefore, distribution channels became one of the most important factors that companies give a huge attention in order to gain and maintain customers from different areas.

This aim of this study is to investigate the impact of distribution channel strategies and types on the consumer buying behavior of convenience products as protein bars. A theoretical background will be presented first to explain the studied concepts from previous studies. Then, the research problem will be elaborated followed by research objectives and conceptual model. After that, the methodology part will be discussed followed by a detailed explanation of the research results and conclusion. Finally, the research will end up with some recommendations, research limitations and future research suggestions.

## **Literature Review**

According to Wong and Lesmono, (2019) distribution channel is a way of communication between the manufacturer and the consumer in a direct or indirect way, and it is one of the most important parts that the manufacturer focuses on planning for it, even before launching the product, in the product development stage. Modak et al., (2021) explained that distribution channels that depend on manufacturer, distributors and retailers, play an important role in increasing the firm's profits and revenues since they all have a certain time frame to follow, starting from the manufacturer who is responsible of providing the required amount of products to be available at the right time, so that the distributor can start to deliver and provide the products for the retailers who place the products in their stores to be available for the consumers. According to Sarmah et al. (2015) retailers are considered as the place where the customers could find the manufacturer products, and also some retailers contain different brands for the same product category and sells the products of two competitors such as: Pepsi and Coca-Cola, both will be found in same markets.

Distribution channels are one of the factors in the marketing mix (4 Ps). It is referred to marketing mix as the product, place, price, and promotion. Distribution channels are considered as the place where the product is suited in a convenient place to be found easily by the customers. In other words, it is the way that a company provides its products to the customer in the market and it can be physically with the traditional ways and also can be online, which is a new way provided by the change in consumer buying behavior and became a very important way in selling products (Zhu, 2020).

Also, distribution channel is a way of communication that helps the company in building a long-term relationship with customers by providing them with constant supply of their desired products in the retail stores. The success of this distribution channel is counted by measuring the quantity sold from products, as it is an indicator of the ability of the customers to reach to the brand easily by the aid of these channels. In addition, the good relationship between the brand and the customers requires a good relationship between the manufacturer and distributor or retailer as that will be reflected in the availability of the products on their shelves (Seitz, 2015). Moreover, Farra et al.(2019) stated that distribution channels are not only participating in creating a long-term relationship with customers, but they can also contribute in building good brand image for the manufacture's companies.

Distribution channels have several benefits. First, place utility as they help in moving the goods from one place to another. Second, time utility as they provide the customers with the needed products in the suitable and convenient time. Third, convenience value as they provide the customers the goods with convenient shape, unit, size, style and package to match with their needs and preferences. Fourth, possession value as it gives the consumers the opportunity of owning or obtaining the goods. Therefore, it could be said that such channels help provide the product to consumers when, where, and in the amounts, they prefer (Mondal et al., 2017).

### **Types of Distribution Channels and Strategies**

According to Kocaogluet al. (2020) there are different types of distribution strategies such as: direct and indirect shipment, when products are taken from supplier to users or when it is delivered from producer to retailer, this is called direct strategy, while indirect strategy is when a manufacturer brings an external business or entity that is responsible for delivering products to consumer.

Direct distribution is considered as one of the most used product distribution techniques. The direct distributions were defined as when a corporation sells and transports its products directly to clients (Abdullah et al., 2021). That excludes the need to deal with a middleman, as the manufacturer communicates directly with customers during the buying process (Rambocas et al., 2015). Direct routes include selling, retail stores, accepting orders from e-commerce websites, as well as other direct methods. Also, Andrejić&Kilibarda (2015) stated that direct distribution channels are considered as the simplest and easiest way of distribution and they have many different ways such as the order from the catalogue by email, also there is the internet online shopping which became the most common way for shopping now. Direct channels are frequently used by manufacturers who offer perishable or expensive commodities to a densely settled target market such as bakers, jewelers, and other professionals fall under this category.

Meanwhile, the indirect distribution channels have been defined as the company's distribution functions are performed through intermediaries. This type of distribution channel has several benefits such as being considerably easier to maintain a good position in the market than a direct distribution channel if there is a good relationship with intermediaries. Also, it can provide more support and distribution knowledge that a company may lack. On the other hand, indirect distribution has some disadvantages such as it can add new levels of cost and complexity to the consumer's bill. Also, there may be problems in the shipping because of the slow delivery. In addition, they may take control away from the producer leading to conflicts (Kulinska, &Smaga, 2020).

Yeung&Mok (2013) referred to the direct and indirect distribution channels using different terms as they stated that that there are two types of distribution strategies which are official authorized distribution channels and unofficial parallel imports distribution channels, the official authorized distribution channels are distributors by the manufacturer or the company itself or a retail store that took an approve to use the brand name and being authorized from the company to trade their products and sell it to the customers, while the unofficial parallel imports distribution channels referred toas the stores that bring the products by buying them from different areas and start selling it with different prices from the authorized stores. Additionally, there are two types of distribution channels which are: centralized and decentralized. The former, centralized distribution channels, means directly selling the manufacturers' products to the customer by using the expected-revenue function in estimating the price or in pricing, generally. However,

there is a risk in using this distribution channel as the manufacturers will be responsible for all unsold item, incurring unwanted expenses, or rather, losses. Whereas decentralized distribution channels imply that the retail stores are rather responsible for the sales and delivery of the products on the manufacturers' behalf (Jerathet al., 2017).

Pulidoet al. (2015) stated that there are also online and physical distribution channels. The physical distribution channel entails that the companies should focus on the time that it takes to deliver the product by studying the amount of goods that can be carried in one wagon or vehicle and by measuring the journey's duration from the starting point – when the order is received by the firm– to the ending point which is when the customer receives their order. On the other hand, the online distribution channel can be carried out by using the relevant applications or via the internet which facilitates the ordering process. The authors also state that establishing proper logistics system is extremely essential to ensure the efficiency of whichever distribution channel any firm selects.

Moreover, the physical distribution channels are known for the high availability of products in the retailers which makes it vital for firms to try and cover most of the regions that they sell in. Given that most countries have a developing infrastructure by constantly building new roads and highways, it has become significantly easier to cover the regions that the firms need to reach. Therefore, firms should rather focus on the prices to compete with other distribution channels and other retailers that sell same product. They should also focus on the quantity to be distributed, and the availability of the products and the number of retail stores they intend on covering (Sharmaet al., 2019). However, the easiest and the most common distribution channel system is the online one as the consumer can easily find and quickly buy any product that they desire on the internet. This reflects the internet's power in the market which is a big shift as it facilitates the buying process for consumers (Schegget al. ,2013).

Phygital marketing is a new concept that is used nowadays in the shops in order to enhance the customers' experience (Moravcikova&Kliestikova, 2017). Phigital marketing is a term that combines both physical environment and digital experience. Phygital refers to both the online and offline environments by taking the best aspects from each space to create a much more complete and satisfying customer experience (Johnson& Barlow, 2021). The phygital phenomenon is considered as a different and unique marketing tactics that are used recently as it provides a multichannel focus where the

consumer's purchasing process is fluid and familiar (Moravcikova&Kliestikova, 2017).

Phygital combines the best components from the physical experience, and digital experience. It takes from the physical retail experience the advantage of interaction with people and the product. However, it takes the advantage of immediacy, immersion, and speed from the digital experience (Johnson& Barlow, 2021;Moravcikova &Kliestikova, 2017). For example, phygital experience depends on interactive touch screens in which customers can scan the code of the product on a digital screen and get precise information (e.g., product features, color, size, availability, and so on) as well as compare the product to other possibilities (Banik& Gao, 2023). In addition, phygital experience requires contactless payment systems as the customer can pay online in the shop without waiting for paying in a cashier (Johnson& Barlow, 2021). Moreover, phygital marketing provides the customers with augmented reality experience through a smart digital mirror which gives the customers the opportunity to make a trail of these phygital retail products in order to test their fitness in various environments (e.g., party, traveling, weather, etc.) (Banik& Gao, 2023). Moravcikova and Kliestikova (2017) stated that 50 percent of customers are interested to pass through phygital experience. They added that this approach is the best way to satisfy a demanding, hyper-connected, and picky consumers as it meets their needs through multiple platforms.

latest examples of this trend include Amazon's cashier-less convenience stores called "Amazon Go" and "Nike Live" stores, which make the shopping experience completely different. The customers go to the store and they choose what they need from the products, and they scan a code with their smartphone. Then, they leave the shop directly without passing through the traditional checkout line as they will get an electronic receipt detailing the amount Amazon will charge to their account (Ziaie et al., 2021).

### **Types of Distribution Strategies:**

The companies choose the distribution strategy which will use mainly based on the product type (convenience product, shopping product, specialty product, or unsought product). Each type has the convenient distribution strategy that also fits with the consumers of this product (Agostini et al., 2021). Distribution strategies could be intensive distribution, selective distribution, and exclusive distribution. According to Mondal, et al. (2017), exclusive distribution is a distribution strategy where buyers are only able to purchase

goods from the brand's own retail store or website. Using this strategy reflects high credibility among consumers as they assume that the products must be special if they are exclusively sold through the brand's retail store or website.

In contrast, it is reckoned that the intensive distribution is one of the most favorable strategies to follow if a company intends on penetrating a new market as it leads them to easily flood the market with their new product to gain as much exposure as they can whilst simultaneously working with their marketing channels to raise awareness about the product and its procurement locations (Zhang and Wang, 2018). This strategy is more suitable for the convenience product markets, as the customers need this type of products in a continuous and frequent basis (Agostini et al.,2021).Ultimately, the selective distribution is a distribution strategy where companies sell their products in specific retail stores or websites rather than sell it in every store possible (Ramanathan and Parrott, 2017). Selective distribution is a combination of both intensive and exclusive distribution which allows the business to have their products displayed in several places while being selective about the display centers (Gazelyand McLaren, 2015). Agostini et al. (2021) stated that selective distribution strategy is more appropriate for shopping or luxury products.

### **Consumer Buying Behavior**

According to Ramya and Ali (2016), consumer buying behavior is the selection or the purchase of products based on various factors. The studied factors are the intrinsic and extrinsic factors. The intrinsic factors are inner motivations factors that based on the consumer personally, while the extrinsic factors that depends on the marketer (Bagga, & Bhatt, 2013).Furthermore, social factors, emotional factors, environmental factors, cultural factors, epistemic and conditional factors have been studied to influence the consumer buying behavior. Additionally, factors such as: the frequency of buying and the quantity purchased have also been found to influence the consumer buying behavior (Mihaela, 2015). Extrinsic factors groups cultural factors like social class, social factors like family feedback and references as well as economic factors, whereas the intrinsic factors group determinants like age, income, personality and lifestyle, and psychological factors.

Seitz (2015) stated that understanding consumer buying behavior can effectively build a lasting relationship between the company and the customer. One of the reasons why companies try to study consumers' buying behavior is to influence their purchasing decision. There are also multiple determinants



that can affect a consumer's buying behavior, such as: the information that they can obtain on the product, product quality, product price, and product features. Other psychological determinants similarly include reference group, social class, and product reviews. Melkonyan et al., (2020) claims that consumer buying behavior starts when the customer sets their needs, seeks the alternatives to the product that would meet their needs, evaluates those alternatives, buys the product after eliminating the unsuitable alternatives ultimately reaching the final part which is the post-purchase decision.

### **Hypotheses development**

Madhavan&Kaliyaperumal (2015) found that distribution strategies impact the consumer's buying behavior. Riyadi and Arif (2023) stated that distribution strategy becomes one of the essential parts of determining consumer buying behavior. They found in their study that with changes in distribution strategies that lead to changes in purchasing decisions by customers. Langga et al. (2021) concluded in their study that there is a significant relationship between intensive distribution and buying behavior of the customers, as they found that an increase or improvement in intensive distribution will result in increase in purchase intention, and also lead to repurchase intention. Agostini et al. (2021) approved that the selective or exclusive strategies have an effect on consumers' purchase behavior, but it could not be said that these strategies lead to increase or decrease the purchase intention of the customers as that is related to the type of the product and the brand name. Therefore, the first research hypothesis is;

#### **H1: There is a relationship between distribution strategies and consumer buying behavior**

Bagga& Bhatt (2013) agreed that there is a relationship between distribution channels and consumer buying behavior. They mentioned that the distribution channels even online or physically have a big effect on consumer buying behavior. They stated that consumer buying behavior differs according to the channel. Therefore, each company should study first its consumers' behavioral attitude before applying its distribution channels' system in order to emphasize that the used channel is suitable with the company's customers. Pappas (2016) stated that choosing the right distribution channel will not only lead to consumer's purchase intention, but also will lead to customer satisfaction. He emphasized that customers buying behavior may be affected negatively if the company depends on a channel that the potential customers

are not familiar with or do not like. Therefore, the second research hypothesis is;

**H2: There is a relationship between distribution channels and consumer buying behavior**

**The Research problem**

Distribution is a crucial aspect in marketing strategies that focuses on designing and implementing both distribution channels types and strategies to enable any business to make their products available for consumers. Companies use different types of distribution channels and strategies depending on their products and target consumers. However, there is a lack of studies that has been conducted in Egypt to understand how the consumers' behavior changes according to the distribution strategy or channel. Most of the researches was conducted in Asian countries such as Bagga& Bhatt (2013), and Langga et al.(2021) or in European countries such as Langga et al.(2021).Accordingly, this research investigates how different types and strategies affect consumers' buying behavior to come up with conclusions on how to effectively design the distribution channel for protein bars as a case of convenience products to best serve the Egyptian consumers.

**Research importance**

Theoretically, this research will contribute to the previous literature by filling the knowledge gap through investigating the effect of distribution channels strategies and types on consumer buying behavior in the Egyptian context. Empirically, this research will provide retail managers with insights about distributing their products using the suitable distribution channel strategy and type which fits their consumers, and that is extremely crucial as they will not spend their money on the distribution channel that is not matchable with the target and potential customers.

**The research objectives**

**O1:** To measure the relationship between the type of distribution strategy and consumer buying behavior.

**O2:** To measure the relationship between the type of distribution channels and consumer buying behavior.

## **The research hypotheses**

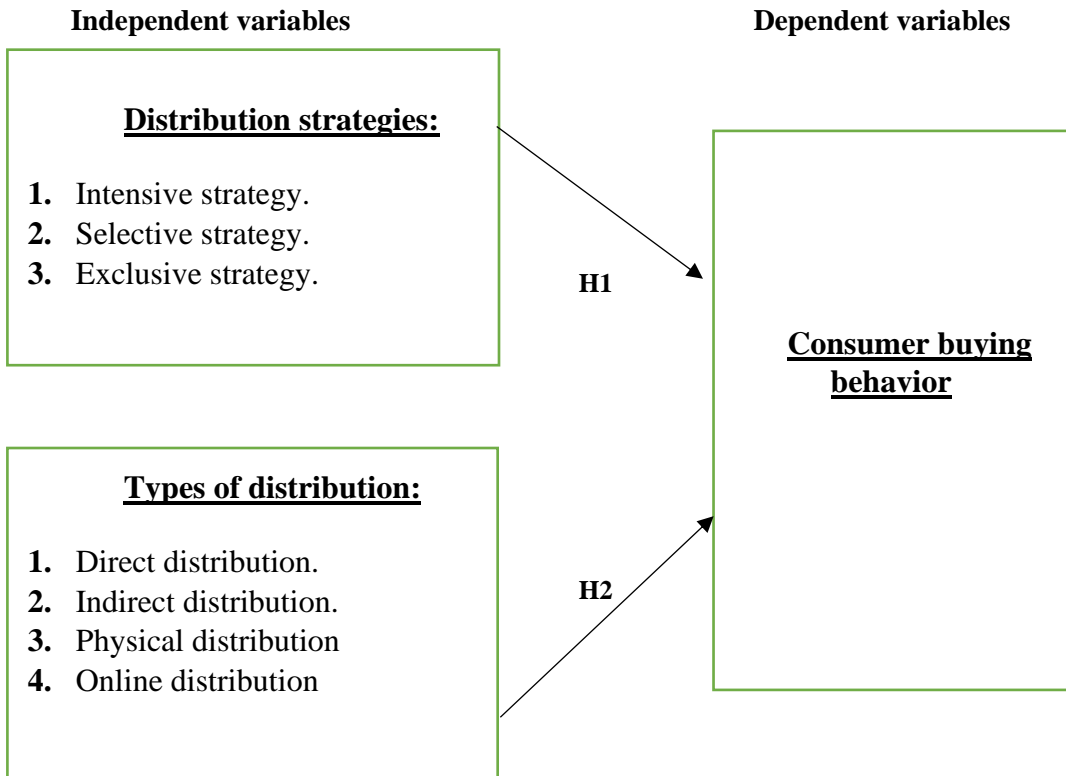
**H1:** There is a relationship between the type of distribution strategy and consumer buying behavior.

**H2:** There is a relationship between the type of distribution channels and consumer buying behavior.

## **Research model**

After reviewing the literature and developing the research hypotheses, the following conceptual framework was suggested for the study to investigate what are the distribution channel strategies (intensive- selective-exclusive) and types(direct-indirect-physical-online) which have an effect on the buying behavior of the protein bars consumers in Egypt.

The research applied a conclusive research design that describes consumers buying behavior of protein bars and their attitude towards different distribution strategies and channel types, moreover the research tests the causal relation between each type and strategy and consumer buying behavior depending on quantitative research as a category of primary research methods used to collect data that depends on numerical and statistical values using questionnaires. Both secondary and primary data were used in the research. Starting with the secondary data by using academic articles to gain knowledge about the research variables and write the literature review.



## Research Methodology

**Population and sampling process :** The research population consists of consumers of protein bars and a small sample size is decided arbitrarily based on the researchers' convenience, available time, and resources, accordingly a sample of 120 self-administered questionnaires were conducted using non-probability Judgmental sampling technique as the researchers do not have population frame and Judgment sampling increases the relevance of the sample to the population of interest, as only individuals that fit particular criteria are included in the sample who are buyers of nutritional bars who are also interested in healthy snacks with nutritional benefits.

**The research variables and measurements :** The research independent variables which are three types of distribution strategies

(intensive – selective – exclusive), the four types of distribution channels (direct - indirect – online – physical) are all measured using reliable statements from previous studies with slight adaptation to fit the research context. The dependent variable buying behavior was measure by nominal scale questions designed by the researches to measure buying behavior of product category under study.

**Questionnaire design:** The questionnaire includes section for each research variable in addition to demographic questions depending on using likert and nominal scale. A pilot study is conducted with a small scale to ensure that the questionnaire questions are clear and easy to be answered and to make sure that it is in a simple sequence and if any other questions needs modifications. The pilot testing was conducted among a sample of 20 respondents testing both English and Arabic version of the questionnaire.

**Data collection:** Data was collected using self-administered questionnaire the researchers conduct questionnaires through personal interviews with consumers of protein bars who were located in different gyms and sport and fitness centers.

**Method of data analysis :**The data was analyzed using a statistical package for social sciences (SPSS) using tests, the frequency, the mean for descriptive analysis, reliability statistics were used to ensure the reliability of the measurements in addition to and using spearman’s rho, chi-square tests, and cross tabulation to test relationships among studied variables.

## **Results**

Table one shows that majority of the respondents are between 20-30 years old with the highest percentage of 78.3% and age group comes 30-40 years old 12.5% then less than 20 which was 8.3% and the minority was for 40-above which something that we expected since it only represented 0.8%. In addition the majority of respondents work in private sector companies and students while the remaining was almost evenly split between public sector, business owners and others.

Finally the educational factor, the majority was bachelor degree holders which represented around 80.8% out of the 120 applicants and coming right after it was high school students which represented 13.3% and the rest was kind of evenly split between post graduates which had a 4.2% and others for 1.7%.

**Table 1: Sample characteristics**

<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Total</b>
<b>Gender:</b>			
Male	100	83.3 %	120
Female	20	16.7 %	
<b>Age:</b>			
Less than 20	10	8.3 %	120
20-30	94	78.3 %	
30-40	15	12.5 %	
40-above	1	0.8 %	
<b>Occupation:</b>			
public sector	5	4.2 %	120
private sector	66	55 %	
Business owner	6	5 %	
Student	42	35 %	
Other	1	0.8 %	

A reliability test was conducted for each group of statements measuring each variable and according to the Cronbach's Alpha figure; all the measurements used in the method of data collection are reliable as the general rule of thumb is that a Cronbach's alpha of 0.70 and above is good, 0.80 and above is better, and 0.9 and above is best. The lowest figure was for the statements measuring physical distribution with 0.68 and the researchers moved forward in the analysis as it is approaching the accepted level.

**Table 2: Reliability of the measurements used**

Construct	Cronbach's Alpha
Intensive distribution strategy	0.938
Selective distribution strategy	0.838
Exclusive distribution strategy	0.847
Direct distribution	0.834
Indirect distribution	0.852
Physical distribution	0.682
Online distribution	0.804

**Testing the first hypothesis**

**Table 3: The relationship between type of distribution strategy and consumer buying behavior.**

	Intensive distribution strategy	Selective distribution strategy	Exclusive distribution strategy
Frequency of purchase	Sig= 0.113	Sig= 0.088	Sig= 0.00 Correlation coefficient = -.405**
Amount of money spent	Sig= 0.525	Sig= 0.030 Correlation coefficient = .198*	Sig= 0.495
Quantity purchased	Sig= 0.179	Sig=0.039 Correlation coefficient = -.442**	Sig=0.001 Correlation coefficient = .177*

The chi-square test was used to test the relationship between the different distribution strategies and the different dimensions of consumer buying behavior which are (frequency of purchase, quantity purchased), while spearman's rho test was used to test the relationship between the different distribution strategies and the amount of money spent to buy a protein bar as a dimension of consumer buying behavior.

By using the chi-square test in testing the effect of intensive distribution strategy on the frequency of buying and the quantity purchased from protein bars, and spearman's rho test in testing the different strategies of distribution and the amount of money spent, it is shown that all of them are higher than 0.05 which means that there is no relationship between them.

In the selective distribution strategy, chi-square's test on the chosen dimensions, shows that there is no relationship between selective distribution strategy and the frequency of purchasing protein bars, but there is a relationship between selective distribution strategy and the quantity purchased. Also, spearman's rho's test showed a positive relation between amount of money spent per purchase and selective strategy and a negative relation with quantity purchased which reflect that the consumers do not buy in bulks if the product are available in more than one place.

In the exclusive distribution strategy by using the two types of tests, each one with its dimensions, the results say that the exclusive distribution strategy has an effect on the frequency of buying, and quantity of being. But it has no effect and there is no relationship between this strategy and the amount of spent for buying a protein bars. Also, spearman's rho's test showed a negative relation between frequency of purchase and exclusive strategy and positive relation with quantity purchased which reflect that consumers buy more quantity if the product is sold in one place.

After knowing the significance between the variable, cross tabulation is used and it shows that, in the relationship between the selective distribution strategy and the amount of money spent, it is found that the majority of those who chose selective strategy spend 35-50 and 50 or above, and in the relationship between the selective distribution strategy and the quantity purchased, it is shown that the majority goes to small quantity or bulk quantity. In the exclusive distribution strategy, the cross tabulation shows that the majority of those who chose exclusive stores buy protein bars monthly, or weekly and they chose to buy small quantity or bulk quantity to store for later use instead



of one unit which is logic they buy a bulk quantity to store it for later use. So, they will take a long frequency like a month to buy another bulk quantity.

**Testing the second hypothesis:**

	Direct distribution	Indirect distribution	Physical distribution	Online distribution
<b>Frequency of purchase</b>	Sig= 0.143	Sig= 0.261	Sig= 0.004 Correlation coefficient = = 0.15	Sig= 0.003 Correlation coefficient = 0.04
<b>Amount of money spent</b>	Sig= 0.202	Sig= 0.185	Sig= 0.921	Sig= 0.857
<b>Quantity purchased</b>	Sig= 0.329	Sig= 0.214	Sig= 401	Sig= 0.006 Correlation coefficient = 0.33

**Table 4: The relation between the type of distribution channels and consumer buying behavior**

By using two types of tests, spearman’s rho for the amount of money spent and chi- square for the frequency of buying and the quantity purchased from protein bars, it is found that the direct distribution and indirect distribution

don’t have effect on any of the different dimensions of consumer buying behavior and there is no relationship between them.

The physical distribution has a relationship with the frequency of buying protein bars and was proved with the chi-square test, but it doesn’t have an effect on the amount of money spent or the quantity purchased.

The test of chi-square agreed that there is a relationship between the online distribution and frequency of purchase and quantity of protein bars purchased, while spearman rho's test proved that online distribution has no effect on the amount of money spent to buy a protein bar.

The results of this test can be summarized in that the amount of money spent to buy a protein bar is not affected by any of the different types of distribution channels. Same as the two types direct and indirect has no effect on any of the dimensions of the consumer buying behavior.

But the physical and online distribution having an effect on some of these dimensions.

By using cross tabulation in the relationship between the physical distribution and the frequency, it shows that the majority of those who buy protein bars from physical stores usually buy it weekly, monthly and rarely come in the second and third stage. The majority of the online users buy monthly or weekly. Also, spearman's rho's test showed a positive relation between physical and online strategies and frequency of purchase.

### **Conclusion and discussion of results**

From testing the first hypothesis, the research proved that there is a positive relation between the type of distribution strategy and consumer buying behavior it was shown that there is a relationship between the amount of money spent and selective distribution strategy in addition also to chi square test agreeing that there is a relationship between selective distribution and the quantity purchased as well. While for the exclusive distribution using both spearman's rho's test and chi-square's test both agreeing on the relationship that is discovered between exclusive distribution and the frequency of purchase and the quantity being purchased. The results of this research have proved that the results are aligned with Zhang & Wang (2018) and Ramanathan & Parrott (2017) that there is a relationship between the type of distribution strategy and the consumer buying behavior described by the relationship between selective distribution and the amount of money spent and also the quantity purchased, moreover the results are different than previous studies in terms of the effect of both intensive and exclusive distribution on consumers' buying behavior which could be due to the different research context as previous studies were not investigating the buying behavior of convenience products of Egyptian consumers.

From testing the second hypothesis, the research proved that there is a relationship between the type of distribution channel and the consumer buying behavior. The results proved that the physical and online distribution channels have an effect on the consumer buying behavior and have a significant effect on the quantity purchased, frequency of purchase and the amount of money spent. The research results are aligned with Muñoz, &Gazmuri (2015) and Faria (2019) on the other hand the results proved inconsistency with previous research in terms of the effect of direct and indirect distribution channels on consumers buying behavior.

### **Recommendations:**

From the results of this research, the following recommendations are directed to distribution or channel managers of protein bars in the Egyptian market:

- It is advised to focus more on the intensive and selective strategy, as protein bars are convenient product so it is not preferable for customers to be buy it from exclusive store.
- Focus more on direct and physical distribution than indirect and online distribution as consumers hold more positive attitudes towards these strategies.
- Continuously update the online distribution channel to be more attractive, by making special prices, as those who chose online distribution, they buy a bulk quantity. So, the marketers can provide them the ability to buy this bulk quantity with special offers and prices which will also attract some customers to buy online.
- As many respondents agreed that they usually buy protein bars physically to ask a nutritionist before buying. So, it can be offered online with a lot of information about each product under the product, also a chat icon beside it for a chat service with a nutritionist from the company to answer customer's question.

### **The Research Limitations and areas for future research:**

The research has a geographical limitation, as the questionnaires were conducted only in Cairo. Moreover, the majority of respondents were males which were a total of 100 respondents while the female respondents were 20. Finally, the majority of respondents were frequent gym visitors which were leading to accurate results yet not diverse enough since the research is built on a convenience product.

Future researchers can consider exploring a new area of application instead of protein bars by investigating a different category of convenience products such as energy drinks. Future researchers can measure the effect of distribution channels on the consumer brand loyalty. Future researchers can collect data from different geographical

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