

# HOW ASSOCIATIONS INFLUENCE CONSUMER PREFERENCE

Identifying the selection process within a product category is vital for marketers. The image that a brand evokes among consumers is decisive for that process. When you know which characteristics of brands (and in which way) most influence the final choice of consumers, you can respond tactically. By improving the brand in these areas and / or giving these aspects a more central position in the communication strategy, you can continue to grow as a brand.

Despite the importance of understanding a brand's position in the minds of consumers, marketers and researchers struggle to properly identify it. On the one hand, we see that closed statements are used, which are often difficult for respondents to understand, and on the other hand, free associations that are surveyed are not easy to use quantitatively. In practical market research, one of these two measurement methods is regularly preferred over the other. As a result, the analyses that can be performed are mainly guided by how the data is collected. However, we can ask ourselves: is there really a method that should be clearly preferred? And: do the results of both methods not ultimately amount to more or less the same? Or does each method yield its own and unique pieces of the total puzzle?

The search for the best way to measure brand position has inspired DVJ Insights to conduct extensive research into this. We would like to answer the following questions:

- What is the best way to understand how consumers perceive a brand?
- How can we use free brand associations in predicting preference?
- How do free associations relate to the statements marketers normally use?

In terms of research context, we have chosen to examine the consumer choice process within the retail sector. On the one hand, we already know quite a lot from the academic literature about how consumers in this sector make their store choices. For example, much has been published about the relative influence of various factors on this process: such as [price level](#), [offers](#), [assortment \(size and composition\)](#), [location](#), [service](#) and [shopping atmosphere](#).

On the other hand, store choice is also a dynamic process, in which the priorities of consumers can change over time. This is especially true if external circumstances [require it](#). Within the current COVID 19 crisis, we know that this is certainly the case: previous research by DVJ Insights has already shown, for example, that the corona situation has led to [more online](#) (instead of offline) purchases, [less shopping](#) (but for larger quantities) and looking for ways [to cut spending](#). Such considerations regularly lead to other choices - for example, one in five Dutch people has now [switched to a different supermarket](#), because it is more in line with their now changed wishes and needs. It is therefore interesting to identify this changed shopping process again from different angles.

## APPROACH OF THE STUDY

Our large-scale consumer research took place in three retail categories: groceries, clothing, and electronics. Respondents were randomly assigned to one of these categories, and the following information was collected:

- The respondent has formed a consideration set of a maximum of 3 brands from a list of (offline and online) retailers, and indicated which of these brands is preferred.
- The respondent then shared his or her perception of that brand for each of the brands considered, in two ways:
  1. via free associations (which respondents have classified as positive, neutral or negative for the purpose of additional interpretation), and afterwards:
  2. via a set of closed statements (5-point Likert scales)

Table I shows the questioned statements (applied in each of the three categories), which are largely based on academic literature on store choice. In order to also overcome the consequences of the current crisis context, a statement has also been added about the extent to which a brand responds well to the current corona situation.

BRAND CHARACTERISTICS	STATEMENT
PRICE LEVEL	...offers value for my money
PROMOTION	...has appealing offers
QUALITY	...offers quality
PRODUCT RANGE	...has a unique product range ...has a wide range of private labels ...has a wide range of national brands
SERVICE	...offers customised service
LAYOUT	...is clear
EASE	...makes shopping easier
REPUTATION	...is symphatetic ...is a brand that I trust ...is a brand that I feel good about ...has a down to earth look on things
SOCIAL RESPONSIBILITY	...contributes to society ... is a brand that cares about sustainability
DEALING WITH COVID-19	...handles the current corona situation well

Table I: Recorded (closed) statements for measuring brand perception

#### **CLOSED STATEMENTS**

When statements are clearly formulated, this ensures that all respondents interpret and assess the properties to which these statements relate, in the same way. This allows answers from different respondents to be compared. In addition, scores on closed positions are also easy to track over time. For example, it is easy to check whether a recent campaign has been able to strengthen the link of a brand to specific properties.

However, the downside of using closed statements is that they fully dictated how each consumer visualises different brands. It is established in advance that this image consists of a fixed set of aspects, while consumers might not even think about (part of) these aspects themselves, within their choice process. Instead, other properties may predominate - but we cannot gather information on this as long as there is no closed statement associated with it.

#### **FREE ASSOCIATIONS**

By asking respondents the (open) question to write down everything that comes to mind when they think of a brand, it is precisely those characteristics that are most strongly attributed to the brand by the consumer. For instance, the research does not define in advance how they should think about the brand.

After collecting all the data, the free associations are categorised and coded as belonging to one of ±40 themes. Table 2 gives an overview of the most frequently mentioned themes and the extent to which they have been mentioned within each of the three retail categories. This shows that some themes are not considered to be (equally) relevant within all categories. It is also striking that, within the free associations, themes are mentioned, as expected, that were not covered by the closed positions. These are topics such as delivery, location, other customers in the store, and the origin of the brand. It should also be noted that, despite the current COVID 19 crisis, in the end only a very small proportion of the associations relate to the measures that shops have taken to deal with the corona situation.

ASSOCIATION THEME	% WITHIN GROCERIES	% WITHIN CLOTHING	% WITHIN ELECTRONICS
ASSORTMENT WIDTH	10%	12%	13%
AFFORDABILITY	14%	15%	7%
HELPFUL STAFF	6%	3%	12%
STORE APPEARANCE	6%	3%	3%
DELIVERY	0%	6%	5%
OFFERS	6%	2%	4%
PRODUCT QUALITY	3%	5%	3%
LOCATION	6%	1%	2%
RELIABILITY	1%	1%	6%
CUSTOMERS IN THE STORE	2%	2%	0%
TIDINESS	3%	1%	0%
REGION / COUNTRY OF ORIGIN	1%	1%	1%
ADVERTISING CAMPAIGNS	1%	1%	1%
CORONA RELATED MEASURES	1%	0%	0%

Table 2: Category-specific frequencies of frequently mentioned association themes

We then analyse which shopping properties do or do not play a crucial role in consumer's choice of store. We examine the role in which perceptions regarding these properties are measured (closed statements versus free associations). We follow a step-by-step approach for this.

### **WHAT DO CLOSED STATEMENTS TEACH US ABOUT CONSUMER CHOICES?**

Our initial focus is on the brand properties as measured via the closed statements. By estimating a multinomial logit model, we explain the ultimate consumer preference for a store. We do this based on how they assess the stores considered on each of the statements. Table 3 shows for each of the three retail categories the statements that significantly (90% confidence level) influence the consumer's ultimate store preference.

	GROCERIES (N=262)	CLOTHING (N=138)	ELECTRONICS (N=154)
PREDICTIVE VALUE (HIT RATE)	69%	58%	62%
STATEMENT	Standardised coefficient (if significant under 90%)		
...OFFERS VALUE FOR MY MONEY	,435		
...HAS APPEALING OFFERS	,462	,384	
...HAS A UNIQUE PRODUCT RANGE			,455
...MAKES SHOPPING EASIER	,398	,541	,422
...IS A BRAND THAT I FEEL GOOD ABOUT		,351	
...HAS A DOWN TO EARTH LOOK ON THINGS	-,382	-,625	
...CONTRIBUTES TO SOCIETY	-,295		
... IS A BRAND THAT CARES ABOUT SUSTAINABILITY	,304		
...HANDLES THE CURRENT CORONA SITUATION WELL	,875		

Table 3: Results of multinomial logit model: closed statements -> store preference

The results show that the store selection process can differ significantly from category to category. Only shopping convenience appears to be a significant driver of choice in each of the three categories. Where the composition of the assortment, and therefore the specific products that are offered, plays an important role in electronics, store preference in clothing and (especially) groceries is determined more by what one ultimately has to pay for these products.

There are also differences between the categories in the percentage of choices that can be correctly predicted based on the closed statements (the 'hit rate'). This is somewhat higher in the shopping category: something that is partly due to the higher number of statements that are significantly linked to preference. A striking feature of these statements is the extent to which a store handles the current corona situation well. While this does not play a significant role in store choice within clothing and electronics, the results indicate that for groceries this is currently the primary driver of store preference - even more important than the overall price level and the quality of the offers.

#### NEW INSIGHTS THROUGH FREE ASSOCIATIONS

The second step shifts the focus from closed statements to free associations, and serves to examine whether we can draw comparable conclusions about the consumer choice process

if we follow this measurement method for perceptions. In this model, the explanatory variables are formed by "dummies", which indicate for each of the association themes formed whether or not a respondent has mentioned them. We consider positive and negative associations separately from each other.

Table 4 shows that the average predictive strength of the models with free associations (64%) has not changed much from that of the closed statements (63%). However, we do find different patterns when it comes to drivers within the consumer choice process. First of all, within each category, there appears to be previously unidentified brand characteristics that play a significant role in determining store preference. These are, for example, an attractive retail location in the case of groceries, and a positively valued region of origin in the case of clothing. Sometimes this even concerns properties that were already covered with a closed statement (for example assortment width for groceries, service for electronics), but which apparently can only really be seen as a driver when the consumer also **spontaneously** and **effortlessly** connects them to a store.

	GROCERIES (N=262)	CLOTHING (N=138)	ELECTRONICS (N=154)
<b>PREDICTIVE VALUE (HIT RATE)</b>	<b>65%</b>	<b>61%</b>	<b>66%</b>
ASSOCIATION THEME	Standardised coefficient (if significant under 90%)		
<b>POSITIVE ASSOCIATIONS</b>			
ASSORTMENT WIDTH	,543		,961
AFFORDABILITY	,398		
HELPFUL STAFF			,493
OFFERS	,464	,429	
PRODUCT QUALITY	,484		,331
LOCATION	,471		
RELIABILITY	,294		,409
REGION / COUNTRY OF ORIGIN		,394	
ADVERTISING CAMPAIGNS	,214		
CORONA RELATED MEASURES	,361		
MEAT	,591		
PRESENCE OF BRANDS	,202		
CHILDREN'S CLOTHING		,509	
AVAILABILITY OF SIZES		,472	
STYLE		,420	
<b>NEGATIVE ASSOCIATIONS</b>			
ASSORTMENT WIDTH	-,434		
AFFORDABILITY			-,698

Table 4: Results of multinomial logit model: free associations -> store preference

In addition, we see that some of the drivers identified via the closed statements also emerge via free associations. This is the case, for example, for offers for groceries and clothing, and assortment width for electronics. Compared to the model based on closed statements, these aspects no longer necessarily have the same (relative) interest in determining consumer preference. The clearest example is reflected in the shopping category, to be precise in how stores deal with the current corona situation. We saw earlier that this theme was limited in the free associations evoked by the various supermarket chains. As soon as we no longer force consumers to think about this beforehand, we see that the relative influence on the selection process is decreasing sharply, and is certainly no longer the strongest driver.

#### **A COMBINATION OF MEASUREMENT METHODS: WORTHWHILE?**

The two previous analyses showed that the insights gained about consumers' store choices can differ significantly depending on how perceptions of stores are measured. The question which then automatically arises is: are these ultimately two sides of the same coin, or do the insights from both measurement methods complement each other? To find out, a third model has been estimated, in which shopping preferences are explained by both the scores on the closed statements and the free associations.

	<b>GROCERIES (N=262)</b>	<b>CLOTHING (N=138)</b>	<b>ELECTRONICS (N=154)</b>
PREDICTIVE VALUE (HIT RATE)	71%	78%	74%
STATEMENTS / ASSOCIATION THEME	Standardised coefficient (if significant under 90%)		
<b>CLOSED STATEMENTS</b>			
OFFERS VALUE FOR MY MONEY			-,530
HAS APPEALING OFFERS	,410	,656	
OFFERS QUALITY		,579	
HAS A UNIQUE ASSORTMENT			,717
HAS A WIDE RANGE OF PRIVATE LABELS		,566	,447
MAKES SHOPPING EASIER			,534
IS A BRAND THAT I TRUST			,713
IS A BRAND THAT I FEEL GOOD ABOUT		,797	
HAS A DOWN TO EARTH LOOK ON THINGS	-,549	-,833	
IS A BRAND THAT CARES ABOUT SUSTAINABILITY	,450		
HANDLES THE CURRENT CORONA SITUATION WELL	,638		
<b>POSITIVE ASSOCIATIONS</b>			
ASSORTMENT WIDTH	,366	,529	,850
HELPFUL STAFF			,621
STORE APPEARANCE		,514	
OFFERS	,287	,429	
PRODUCT QUALITY	,433		
LOCATION	,463	-,720	
RELIABILITY			,513
CUSTOMERS IN THE STORE		,390	
CORONA RELATED MEASURES	,400		
MEAT	,676		
CHILDREN'S CLOTHING		,482	
AVAILABILITY OF SIZES		,779	
<b>NEGATIVE ASSOCIATIONS</b>			
AFFORDABILITY			-1,027

Table 5: Results of multinomial logit model: closed statements + free associations → shopping preference

Table 5 shows that measuring store perceptions via closed statements and free associations adds value in explaining store preference. Across the categories, the predictive strength is on average nearly 10 percentage points higher than the best-performing model that only includes closed statements or only free associations. A significant improvement was achieved, especially from clothing stores, from 61% to 78%.

When we look at the significant coefficients within this combined model, we first see that several store features are still designated as drivers just through the closed statements. These are, for example, a focus on sustainability within groceries and shopping convenience within electronics. This demonstrates the added value of closed statements. They reveal factors that do influence consumers' choice of stores, but that come to surface to a lesser extent when a consumer is asked to state his or her first thoughts about a brand.

Other drivers only come to light through free associations. Some of this was simply not (yet) covered by closed statements, such as shop location within groceries and the availability of specific sizes within clothing. In addition, another part, which includes assortment composition for groceries and service for electronics, is only a driver if it is also spontaneously (instead of only aided) linked to a brand. This implies that while a retail chain can increase preference by improving on such properties, it should not be forgotten that they also must be heavily supported in their advertising campaigns. It is essential for these aspects that as many consumers as possible immediately associate the brand with these aspects.

Finally, the analysis results show that some brand properties, both in closed and open form, have a significant effect on store preference. Examples are dealing with the corona situation (groceries), offers (groceries and clothing) and reliability (electronics). For such properties it can be determined that these drivers are preferred anyway, but also that when a store succeeds in linking these aspects so strongly to its brand that consumers spontaneously recall them, it can settle the choice of consumers even more to its own advantage.

## **A MORE COMPLETE PICTURE OF CONSUMER CHOICES**

In our large-scale study, we compared two methods to identify consumer perceptions of brands and their ultimate influence on (preferred) decisions. These two methods are closed statements and free associations. We conducted this research within three retail categories: (groceries, clothing and electronics), because of changes in priorities and regulations as a result of the corona crisis, there is a need for this sector to understand how consumers are making their decisions today.

First of all, our results show that both measurement methods score more or less the same in terms of predictive power. In doing so, they solve a comparable part of the total 'puzzle' around brand choice. However, that does not automatically mean that the same insights are obtained through both methods. While several preferred drivers can be identified both through closed statements and free associations, others appear significant in only one of the two measurement methods.

Some brand characteristics do play a role in consumer decisions, but are less present in the overall image that a consumer has of a brand. Such properties can be identified by asking them through closed statements. Other relevant brand attributes are just outside the well-defined framework within which marketers think about their brands now, or only play a role if they are one of the first aspects that come to mind when consumers think of the brand. To gain insight into these properties, the use of free associations is necessary.

Our study therefore shows that both measurement methods complement each other well. When used together, the overall predictive strength relative to consumer behaviour is significantly increased. DVJ Insights therefore advises marketers to not blindly focus on one of these methods, but to use them together, to get the most complete picture of the decision-making behaviour of (potential) customers.