

Which has more influence on the Spaniard's citizens dieting: the media's information and social networks, health professionals or close experiences of relatives and friends?

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Introduction

Spaniard's consumption habits have been subjected to a high mutations process since approximately the 80s, coinciding with the increased emergence of great media corporations, advertising agencies, the audio-visual industry, and at present, social networks. It has been a slow process but continuous throughout time, which has modified the Spaniard's habits (based on a Mediterranean diet and high consumption of pulses and vegetables) and impacted the whole population's health.

In one generation, the change of eating habits has caused significant public health problems, such as obesity, diabetes, high blood pressure, or attention deficit problems in children due to the overstimulation of added sugars. According to the latest data recorded by the study di@bet.es, this change in diet has led to an extreme increase in the number of people medicated for diabetes in Spain, according to the latest data recorded by the study di@bet.es (Pareja-Sierra et al., 2018). The incidence found was 11.5 cases / 1,000 person-years, which is very similar to that found in other local studies and indicates that around 386,000 people develop diabetes throughout the country each year. The importance of this study is that we have a nationwide image of diabetes epidemiology for the first time.

Once we know the impact that the change in eating habits of the Spanish has on health, we ask ourselves: Which influences the Spaniard's citizens dieting: the media's information and social networks, health professionals or intimate experiences of relatives and friends?

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To find out the answer to the central question of this study, we asked ourselves three research questions: a) What role do media and social networks play in the decision to decline one food or another? b) Which channels do citizens use to look for nutrition information?; and c) Which are the favourites sources of information to understand information related-food?

Material & Method

The ScienceFlows team launched a questionnaire to understand if citizens' diet choices were based on the information disseminated on digital media or social networks, political, moral or religious influences, or intimate experiences from relatives and friends.

The questionnaire was launched in October 2019 during the citizen public consultation held in València (Spain) within the H2020 European CONCISE project (Moreno et al., 2020). In the celebration of this event (citizen's public consultation) participated 100 Spain-resident people and gathered a tremendous sociodemographic diversity.

The diet survey was one of the activities included in the public consultation. Each citizen had to scan with their mobile phones a QR code that led them to the questionnaire. They were also asked to forward the survey to relatives and friends. The final number of responses was 324 (female=219; male=98; and non-binary= 7)

Data flow of the research process

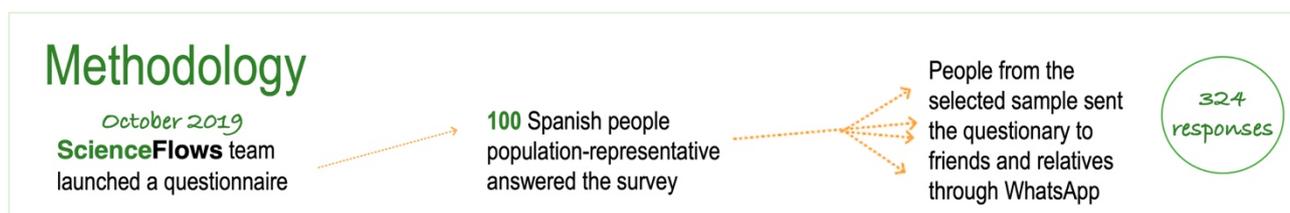


Fig. 1: Methodology of the study

The questionnaire had 45 variables for the study: gender, age, level of education, health status and importance of food. All of these variables were considered illustrative. The rest of the variables, related to the eating patterns followed by the individuals, their motivations and possible influences, were deemed active variables in the multiple correspondent analysis.

The survey included variables to know if citizens' choice of a diet was based on: a) the information disseminated on the digital media, social networks; b) political, moral, o religious influences; and c) personal experiences from relatives and friends.

Results

This exploratory data allowed us to summarise and visualise dataset compost of two or more categorical variables in scatter diagrams. We used them to identify groups of people with similar response profiles and study relationships between variables. In this point, the main findings of this study, as you can see in the following four diagrams, are:

First, the number of responses about the influence that close people have on choosing a diet indicates that there is agreement that friends can influence people's decisions related to diets and eating patterns more than relatives, especially among younger women. Together with the private experiences of family members, friends and acquaintances usually influence the decisions made about diet and intake of the other products, as in the case of complementary and alternative therapies, as has already been evidenced in studies previous (Cano-Orón *et al.*, 2019).

The social environment plays a crucial role in diet habits

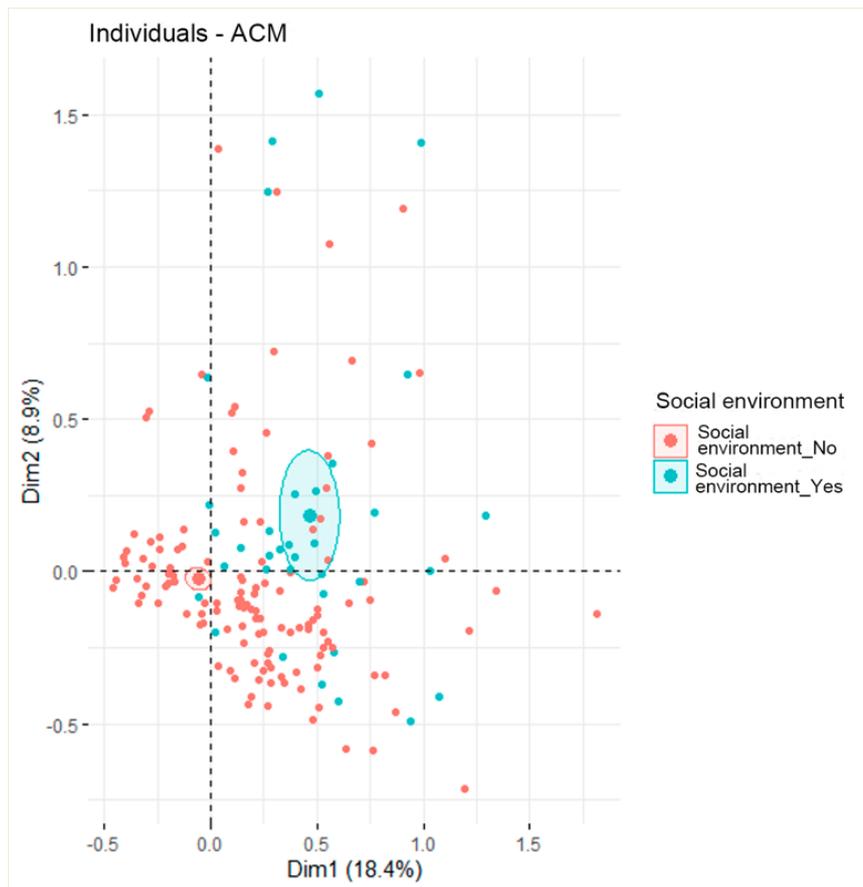


Fig. 2: Diagram shows the influence of friends and relatives on people choosing a diet.

Second, the role of physicians is also minimal, as you can see in the following diagram. In general, they only follow the recommendations of dietitians and nutritionists when there are health problems, such as people with diabetes or celiac disease.

The role of physicians play in diet advice

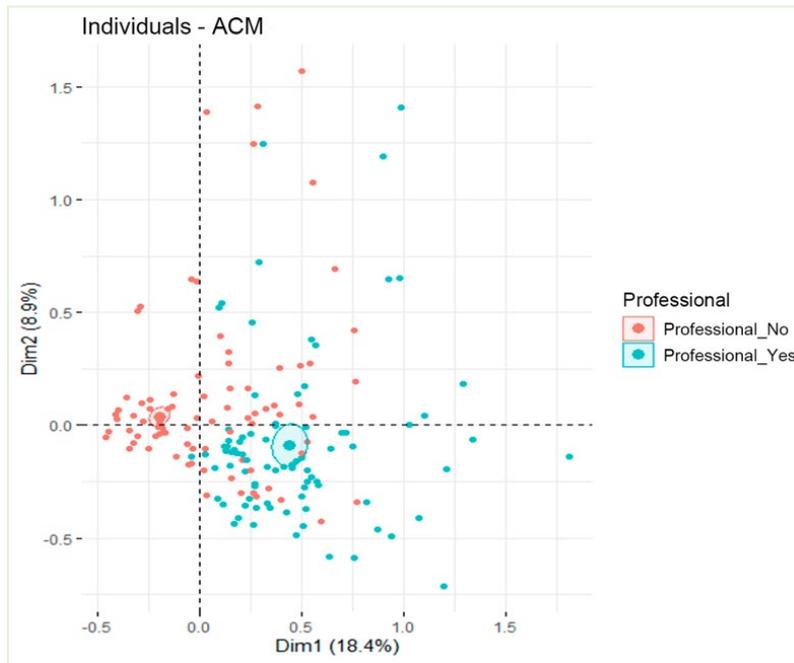


Fig. 3: The diagram shows the weight of the diet advice out of professional recommendations.

Third, conventional or digital media were perceived as having a limited influence on the diet that people choose. Sometimes the role played by the media is informative, but it cannot influence decision-making on issues related to the private sphere of people. That is why the respondents differentiated between the channels and the people who could influence by recommending a diet (celebrities and influencers, among others).

The role of media play in making decisions on the diet

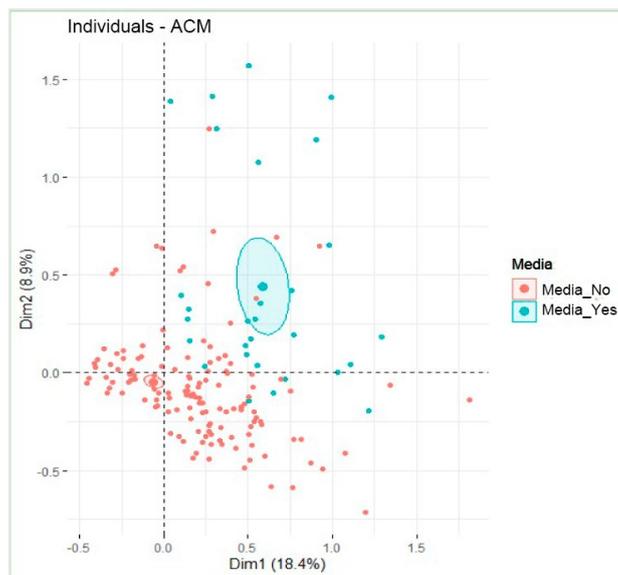


Fig. 4: The diagram shows the limited influence of the diet by conventional or digital media.

The role of celebrities and influencers play in making decisions

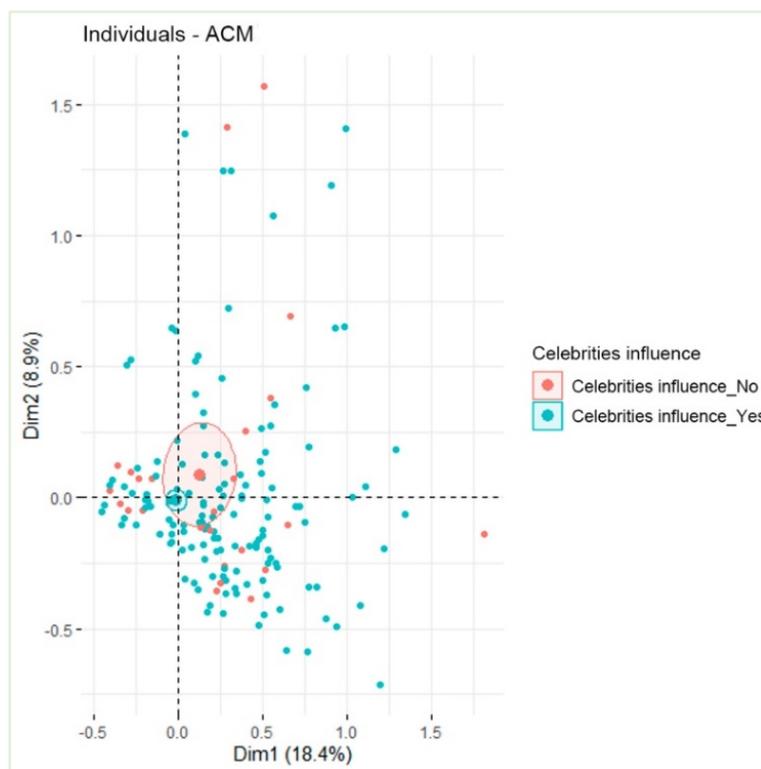


Fig. 5: The diagram shows how responders perceived the relevance of celebrities setting trends with diet.

Finally, as you can see, in the Figure 5, the perception of 90% of participants was that celebrities play an essential role in the choice of diets by citizens.

Conclusions

This study is in the same framework as the international studies about researching sources and channels to information in people's diets (Byrne, Kearney & MacEville, 2017; Póinhos *et al.*, 2017; Qutteina, *et al.*, 2019; Sabbagh *et al.*, 2020). For instance, Póinhos *et al.* (2017) launched a survey with 9381 participants in nine EU countries (Germany, Greece, Ireland, Poland, Portugal, Spain, Netherlands, UK, and Norway) to assess several questions concerning European citizens attitudes related to diet information. The points to be analysed were based on the followings research questions: a) the intention of European citizens to adopt personalised nutrition; b) about the trust in service regulators and information sources; and c) also on preferences for service providers and information channels. They found out that Spain was the only country where the preferred communication channel was automated internet service. On the other hand, regarding the overall trust in information provision, data indicated that Spain showed the highest mean confidence, followed by Portugal, Ireland, Germany, Netherlands, UK, Poland, Norway and Greece.

The main finding of our study was the high number of responses about people's influence on choosing a diet. Data show that there is an agreement that friends could influence people's diets and eating patterns more than relatives, especially among younger women. The role of physicians is also

minimal. The media was perceived as having a limited influence on the diet that people chose; and that the media had a negligible impact on the diet people decided.

Finally, the perception of 90 per cent of interviewed was that celebrities play an essential role in the choice of diet by citizens. They indicated (90.37%) that the influence was because of the person and not the channel they emit their messages. In other words, those surveyed believed that celebrities greatly influenced people's decisions through social networks profile or television, as had been stated by Byrne et al. in 2017. They concluded that social influencers' role in changing individual behaviour around food choices and diet grew each day.

Qutteina (2019) analysed the prominent social media food messages that should be tested for their persuasiveness, providing insights for future research that aims to assess the effects of social media food marketing on adolescents. The authors concluded about the high impact of social networks in young people, including diet trends. In our study, people were of legal age, so we do not have data about teenagers and underages; participants had a 47 years old median. Furthermore, educational level was not a relevant variable in any sociodemographic group. Maybe, should be necessary a complementary study to identify differences between personal o channel influences.

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