

# **Assessing stakeholders' roles within social marketing strategies: prioritizing their influence and interest levels towards the adoption of sustainable food options in higher education**

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## **Abstract**

This paper reports on some preliminary findings derived from a European research project, including Portugal, Croatia and Turkey, aimed at implementing a social marketing strategy towards more sustainable food offers, in higher education institutions (HEIs). The main product of such strategy, akin to the social marketing framework, is the adoption of the Mediterranean diet in public canteens, given its clear association with healthier food intakes and recent positioning as a strategic element in achieving Sustainable Development Goals, specifically SDG2 (Zero Hunger), SDG3 (Good Health and Well-being), and SDG12 (Responsible Consumption and Production). The implementation of a social marketing strategy starts with the design of a stakeholders' priority matrix that enables the precise identification of key stakeholders, given that their levels of influence and sometimes their conflicting interests and concerns, are quite different. Based on a qualitative approach, this paper reports on findings retrieved from ten interviews with various stakeholders from the Portuguese context, namely, student federations, food service providers and HEIs social services. The research goals are: firstly, to ascertain pivotal stakeholders and explore their perceptions and opinions regarding stakeholders' influence in the incorporation of the Mediterranean diet in university canteens, and secondly to design a priority matrix to identify key stakeholders and their levels of dependence and influence. Results have allowed to reflect upon the different perceptions of the stakeholders interviewed, attributable to their different roles and concerns regarding the food offers in public HEIs canteens. Despite focusing on initial findings, this paper highlights the value of designing a stakeholder priority matrix in the strategic formulation of a social marketing strategy aimed at changing eating habits in higher education, towards healthier options as the Mediterranean diet.

**Key words:** Sustainable food options; Social Marketing; Priority matrix, Higher Education Institutions.

## **1. INTRODUCTION**

The Mediterranean diet is gaining prominence as a potentially healthier choice for promoting well-being and long-term sustainability. It is widely debated as a positive factor contributing to achieving Sustainable Development Goals (SDGs). MEDDIETMENUS4CAMPUS is a project in the sphere of Transnational Cooperation – Partnership for Research and Innovation in the Mediterranean Region (PRIMA), which involves three European Union countries (Croatia, Portugal, Turkey), being financed by the HORIZON 2020 Program and the Foundation for Science and Technology (FCT). This paper focus in the Portuguese preliminary results of this international project whose main goal is to use the Food Service sector as a mechanism for influencing eating behaviors and shaping stakeholders' and students' perceptions of food and canteen offers. It seeks to contribute to the social marketing literature by examining its potential to enhance students' adherence to Mediterranean diet within higher education institutions (HEIs) through menu interventions. While previous studies have employed the social marketing framework to explore

behavior change related to healthier eating habits, the adoption of social marketing strategies to promote adherence to the Mediterranean diet remains largely unexplored, especially in the context of HEIs. Previous research on eating habits has predominantly focus on a single stakeholder -consumers- and a limited set of outcome variables. While these studies offer valuable insights into the factors influencing adherence to food choices, there remains a gap in the literature regarding an integrated approach that considers multiple stakeholders (such as consumers, food providers, and decision-makers) across various variables. Additionally, most intervention initiatives primarily target the food offer environment without effectively engaging all relevant stakeholders.

Limited research has focused on food service offerings in higher education canteens. However, existing studies have characterized these meals as unbalanced, high in calories, fat, saturated fat, salt, sugars, meat, and processed meat. They provide insufficient quantities of vegetables, whole grains, fruit, nuts, pulses, and olive oil, deviating from the principles of the Mediterranean diet [1].

Some previous studies concluded that university students' adherence to the Mediterranean Diet falls short of the ideal level [2]. These students experience a transition to adulthood, during which their lifestyles are influenced by various factors affecting decision-making. These factors include distance from family, sudden changes in routines (especially related to schedules), changes in the surrounding environment, and increased independence and autonomy, particularly in dietary choices. Notably, during the first year of higher education, there is a tendency for students to gain weight, leading to a higher prevalence of overweight and obesity [3]. These weight-related issues are associated with an increased risk of chronic noncommunicable diseases [4].

To the best of our knowledge, research has not yet addressed this issue using an integrative approach involving multiple stakeholders (e.g., students, food providers, decision-makers) across a range of individual and contextual variables.

One of the empirically verified strategies designed to promote behavior change within such an integrative framework is Social Marketing. Its contributions to the health and well-being of citizens are positively recognized by many entities within the health system. According to International Social Marketing (iSMA), European Social Marketing Association (ESMA) and Australian Association of Social Marketing (AASM) [5], social marketing framework seeks to develop and integrate marketing concepts with other approaches to influence behaviors that benefit individuals and communities for the greater social good. Social marketing recognizes that behavior change occurs at multiple levels (individual, community, organizational, and societal). It identifies opportunities for intervention across these levels to create meaningful impact [6].

The Stakeholder Engagement Model, initially introduced by Freeman [7], underscores the importance of correctly identifying and engaging key stakeholders in complex decision-making within institutional contexts. According to this model, achieving favorable outcomes hinges on a deep understanding of the interests and influence levels of third parties who may impact or be affected by the decision-making process. Stakeholder engagement serves as a vital reminder for social marketing practitioners and researchers to involve various actors beyond consumers, recognizing their impact on behavior. In their study, McHugh et al. [8] emphasize the need to systematically identify and manage stakeholders during intervention design, planning, and implementation. A diverse range of stakeholders is essential for achieving a collaborative social marketing system change agenda in addressing complex, common, or sustainable issues.

## 2. METHODOLOGY

Underpinned by a qualitative research design, some specific stakeholders were selected to participate in the development of the priority matrix, namely student associations, food service providers, HEI's social services and HEIs' decision makers, resulting in a total of ten interviews. The distribution of the interviews by type of stakeholder is presented in table 1.

Table 1: Interviews by type of stakeholder

Stakeholder	Number of interviews
Upper level: Director of “National Healthy Eating Program” and The Excellence Seal “Healthy Eating in Higher Education”	1
Portuguese Association of Nutrition Coordinator	1
HEI Decision makers on catering services providers	4
Students representatives	2
Private Catering service providers	2

Participants were asked to identify key stakeholders and their degrees of dependence and influence towards the implementation of healthier food choices in HEIs’ canteens. The criteria defined for characterizing the stakeholders were as follows:

-Dependence: This dimension evaluates the degree to which the project relies on the stakeholder for its success. It considers how much the project depends on the stakeholder's resources, support, or engagement to achieve its goals and objectives.

- Influence: This dimension measures the stakeholder's ability to affect the project's activities, decision-making processes, and reputation. Stakeholders with higher influence can significantly impact the project operations, reputation, and long-term success.

Such insights allowed to design a stakeholder priority matrix that will be used in future design of stakeholder engagement model for social marketing strategic planning.

### 3. RESULTS

In the context of stakeholder engagement methodology, it is crucial to initiate by identifying all relevant stakeholders critical to the project's success. Initially, this list was developed by the research team in Portugal. Subsequently, additional stakeholders emerged during interviews and were incorporated. The stakeholder list for this project in Portugal is provided in Table 2. The segmentation of stakeholders was determined retrospectively. High-level stakeholders encompass those responsible for European, national, and local policies. The project primarily targets Higher Education Institutions (HEIs), students, and canteens. Nutritionists constitute an autonomous segment due to their frequent references across various contexts. Additionally, other stakeholders, such as parents, media, vending machine operators, companies, student residences, and cafes, contribute to the project in diverse ways.

Table 2: List of stakeholders by segment



Segment of stakeholder	Stakeholder	Number by segments
UPPER LEVEL	European Union	4
	WHO	
	PNPAS/DGS (National Program for Healthy Eating Promotion/ General Directorate of Health)	
	DGE (General Direction of Education)	
HEI	HEIs - Nutritionists	8

	HEI – Social Services-administrator	
	HEI - Social Services - technicians	
	Academic Board Faculty/University	
	Faculty staff + researchers	
	Non-Faculty staff	
	University bodies with students' representatives ex Pedagogical Council	
	Specific HEI Programs for healthy eating at campus (e.g..PASS IPL)	
Students	Students Associations	6
	Students Federation	
	Students' Groups/Clubs	
	National Association of Nutrition Students	
	Students in Portuguese HEI – 1 <sup>st</sup> year	
	Other Students in Portuguese HEI	
Canteens	Catering Services Providers (Managers and nutritionists)	2
	canteen staff	
Nutritionists	Portuguese Association of Nutrition	2
	Portuguese Nutritionists Council	
Other stakeholders	Media	7
	Cafes and locals where students study and meet	
	University Students Residences	
	Vending machines companies	
	Secondary schools	
	Supermarkets	
	Parents	
Total	29 stakeholders	

A stakeholders characterization table was created (Table 3), considering the two chosen criteria: dependence and influence. The main contribution expected in engaging stakeholders was important in the discussion within team members and will be important in the social marketing plan.

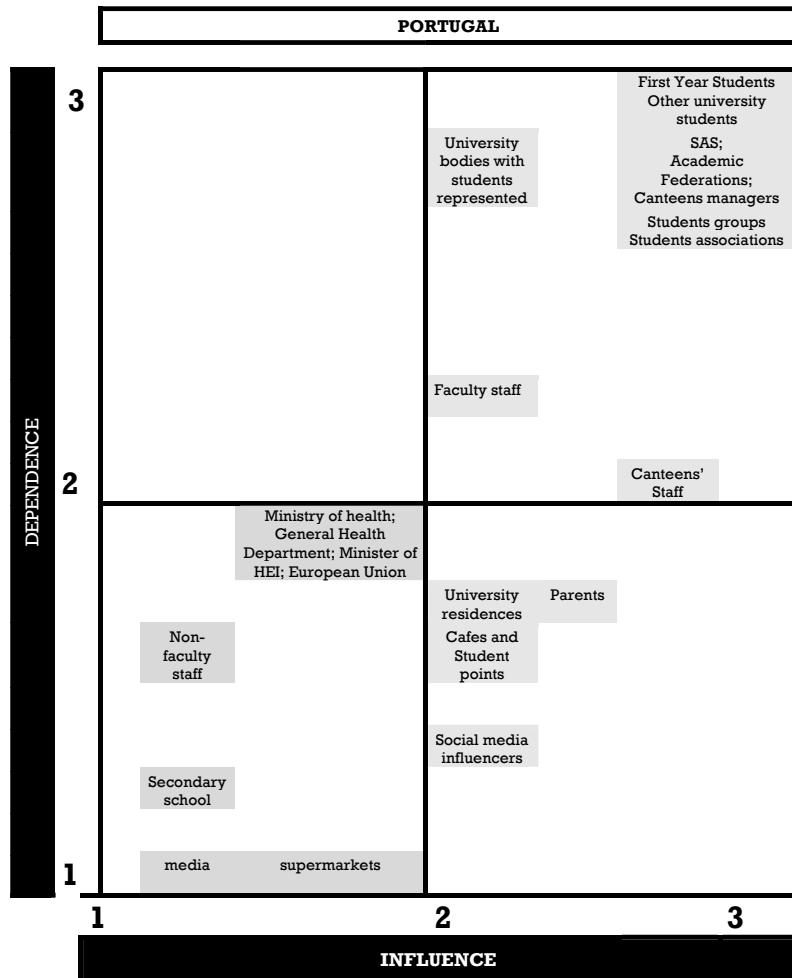
Table 3: Stakeholders characterization table

Stakeholder	Dependence			Influence			Main contribution expected in engaging with this stakeholder
	1 Low	2 Medium	3 High	1 Low	2 Medium	3 High	
...	....	....					

After filling out table 3, it was possible to construct the prioritization stakeholder matrix (Figure 1). This exercise allowed us to identify four different levels of prioritization. The most critical stakeholders are those located in the upper right corner of the matrix. In Portugal it was defined as main stakeholders: first years university students; other university students; SAS (social service in campus responsible for food offer), academic federation of students; canteen managers, other students groups and associations; in another level: university committees or governing bodies with student representation and finally faculty staff and

canteen staff. Therefore, it is necessary to establish closer forms of engagement throughout the various phases of the social marketing plan to ensure the achievement of the set objectives.

Figure 1: Prioritization stakeholder matrix



#### 4. CONCLUSIONS

This paper provides empirical insights into the ways higher education institutions can contribute to achieving Sustainable Development Goals (SDGs), by examining the adoption of the Mediterranean diet in university canteens. A social marketing strategy aimed at changing eating habits of HEIs' students, needs to consider an effective stakeholder engagement methodology. Through qualitative interviews with ten stakeholders, the research identifies key players and their perceptions regarding the incorporation of the Mediterranean diet on campus. The stakeholder priority matrix designed may guide HEIs to identify influential stakeholders that ensures a collaborative approach to implementing food behavior changes. HEI and particularly their departments that decide about food offer on campus should consider social marketing plans to change students' food behavior. In Portugal, the social services of public higher education institutions (HIEs) are responsible for developing the specifications that define the food offerings on campus. Therefore, it is essential to consider these stakeholders, as well as cafeteria managers and staff. Faculty members emerge

as key stakeholders, given that some professors, through their pedagogical relationships with students, can be true influencers of healthier and more sustainable eating habits. This understanding can inform future strategies and policies in HEIs.

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