

*Frontiers: The Interdisciplinary Journal of Study Abroad*

© Laurel Lambert, Kritika Gupta, Somya Gupta, Zachary Nowak

The work is licensed under the [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

Volume 37, Issue 2, pp. 188-212

DOI: [10.36366/frontiers.v37i2.921](https://doi.org/10.36366/frontiers.v37i2.921)

[www.frontiersjournal.org](http://www.frontiersjournal.org)



# Experiences University Students Related When Studying Abroad and Acculturating into a New Foodscape

Laurel Lambert<sup>1</sup>, Kritika Gupta<sup>1</sup>, Somya Gupta<sup>1</sup>, Zachary Nowak<sup>2</sup>

## Abstract

The purpose of this study was to identify experiences gained from acculturating into the Italian food culture by American university students studying abroad in Italy. The Socio-Ecological Model (SEM) guided focus group discussions with students during the fall of 2022. A total of five groups with 29 students participated. The primary influence on acculturation experiences was intrapersonal as reported in beliefs and knowledge towards events happening in restaurants and grocery stores. Interpersonal interactions with course instructors, study abroad facilitators, and family were highly relied on in seeking food culture information. The need for information on reading food label ingredients and identifying allergens was reported and represents SEM Public Policy level. Universities and study abroad host institutions can provide pre-departure orientation and courses to ease and assist students in acculturating into new food cultures thereby enriching their experiences.

## Keywords

Dietary acculturation; food environment; foodscape; student acculturation; study abroad

---

<sup>1</sup> UNIVERSITY OF MISSISSIPPI, UNIVERSITY, MS, UNITED STATES OF AMERICA

<sup>2</sup> THE UMBRA INSTITUTE, PERUGIA, ITALY

**Corresponding author:** Laurel G. Lambert, [lambertl@olemiss.edu](mailto:lambertl@olemiss.edu)

Date of Acceptance: March 15<sup>th</sup>, 2025

## 1. Background

Study abroad programs, also known as "global learning," are described as valuable avenues for imparting to students the skills for capacity building, experiencing diversity, and preparing to be an active participant in global-level issues (Vatalaro et al., 2015). Research has shown that students who study abroad are afforded the opportunity to interact with people who hold varying worldviews while developing an appreciation of diverse cultures including their language and food (Ciliotta-Rubery, 2016; Hadis, 2005). While there are many benefits to studying abroad in a foreign environment, students are exposed to the challenges of living in unfamiliar surroundings with unfamiliar food environments. Many study abroad programs inform students of common problems that may arise in daily life abroad; however, they may fall short of providing students with all the tools needed to be adequately prepared for immersion into a new culture (Ciliotta-Rubery, 2016) and the process of acculturation.

Acculturation encompasses the cognitive changes and adaptations that individuals experience when they come into direct contact with individuals and aspects of another culture (Yu et al., 2019). Although there is a large amount of literature examining how education abroad can help students develop intercultural or global competencies (Bui et al., 2021; Savicki & Cooley, 2011; Schenker, 2019), that literature has not investigated how helping prepare students specifically for novel culinary or gastronomic experiences could be a part of developing students' skills for acculturating into the host country. Providing students with direction on their host country's food culture, matters of money, local facilities, and community characteristics has been shown to ease their introduction to a new culture (Douglas, 2020).

Food plays a large role when adapting to a new environment and dietary habits and is a factor that is frequently neglected when preparing students to study abroad. This multifaceted process, sometimes called dietary acculturation, involves exposure to not only the host's food culture but also to its community, financial, and cultural standards (Shi et al., 2021).

Food choice is impacted by the taste palette and is the result of constant exposure to specific food combinations as one grows up eating the food of their culture (Enriquez & Archila-Godinez, 2022). Cultural food environments are governed by sociocultural norms and beliefs, political influences including food

policies, as well as economic factors, and even physical architecture (Enriquez & Archila-Godinez, 2022). Study abroad programs are one opportunity in which to expose young adults to a new food environment, where social and cultural factors vary significantly across countries. Thus, study abroad programs not only expose students to educational practices and instructional philosophies outside of their own country, but programs also propel students into new foodscapes (Sogari et al., 2018). Universities' (U.S. and abroad) study abroad programs can ease students' acculturation to a new foodscape through pre- and throughout program arrangements (Bandyopadhyay & Bandyopadhyay, 2015). For short-term programs (2-6 weeks) the onus is on the faculty member or course instructor to assist students in acclimating to the new foreign foodscape. (Valenti & Faraci, 2024). For longer programs (semester-1 year), students can be encouraged to enroll in a food-related course. While there is a wide range of areas of study provided by the various study abroad programs, most have food-related course offerings. Providing students with intercultural awareness before departure can help students create positive expectations and anticipation for immersion in a different food culture (Bandyopadhyay & Bandyopadhyay, 2015).

### Socio-Ecological Model

Many researchers have turned to the Socio-Ecological Model (SEM) to explore the complex interplay of influences on the behavior and actions of individuals. First postulated and then further developed by Bronfenbrenner in the 1970's, the SEM framework is a multilevel conceptualization of factors that can impact individual behavior and incorporates intrapersonal, interpersonal, organizational, community, and public policy influencers (Robinson, 2008; Townsend & Foster, 2013). This five-level framework considers multiple levels of influence and relates how behavior is affected and impacted by various factors within those levels (Scarneo et al., 2019).

SEM proposes that individual behavioral changes are influenced not just by individual-level factors such as age and gender, but also by higher-level interactions with social, cultural, economic, and environmental settings in which they reside. SEM has been used to better understand various aspects of food behaviors such as developing effective nutrition education programs (Gregson et al., 2001), addressing childhood obesity (Ohri-Vachaspati et al., 2015), and increasing fruit and vegetable intake (Robinson, 2008; Townsend & Foster, 2013). Robinson (2008) applied the five-level SEM in the context of fruit and

vegetable consumption and included the *intrapersonal level 1* individual characteristic behaviors such as knowledge, attitudes, beliefs, and personality traits. The various influences on students in their food consumption behavior at the intrapersonal level may also include convenience, cost, pleasure, weight control, nutrition knowledge, and taste (Pearcey & Zhan, 2018). Other factors identified as influencing students' dietary beliefs and behaviors at the *intrapersonal level 1* are access to food, religious values, time constraints, campus environment, and healthcare access (Alakaam & Willyard, 2020). *Interpersonal level 2* factors include the groups that are generally most influential on behaviors such as family, friends, peers, and those who play a supporting role (Robinson, 2008). Peer pressure from friends was found to influence college students' food choices which could be viewed as a positive or negative impact (Sogari et al., 2018). More recently, social media has been suggested to play a role in interpersonal influences (Beech, 2015; Choudhary et al., 2019). *Organizational level 3* includes formal guidelines such as rules and regulations and informal guidelines such as the culture of the surrounding environment which may influence individual behavior such as the physical environment (i.e. grocery stores) and has a significant impact on how we make food decisions and diet in general (Sogari et al., 2018). *Community level 4* incorporates social networks, norms, or standards used in the public, among groups, and/or communities. (Robinson, 2008). The outermost SEM level is *public policies level 5* which refers to laws and regulations that impact actions and influence behaviors. At various stages of oversight of the foodscape, there are policies for food safety, food security, food quality, food ethics, food sustainability, food waste, labeling transparency, and consumer protection. (Lizzi & Righettini, 2018; Zace et al., 2022).

Providing students with strategies to maneuver and flourish in a new culture can have a significant impact on their experiences and how they perceive the outcomes. The purpose of this research was to gain insights into how best to prepare students for their cultural experiences abroad. We used a qualitative exploration of complex socio-cultural dynamics and individual students' perceptions and attitudes throughout an international educational experience as it relates to the Italian food culture and environment. Our exploration is guided by a modified SEM which is modeled after the work of Gregson et al. (2001), Robinson (2008), Scarneo et al. (2019), and Townsend and Foster (2013). In this study, we define the term "foodscape," used by

MacKendrick (2014) as “the places and spaces where you acquire food, prepare food, talk about food, or generally gather some sort of meaning from food.”

Thus, our study aimed to (i) investigate the extent to which U.S. study abroad students embraced, accepted, or faced challenges with different aspects of Italian food culture; and (ii) identify the intrapersonal, interpersonal, foodscape community, food organization, and political food policy factors that inform students' experiences in navigating and adapting to the Italian foodscape.

## 2. Methods

### 2.1. Focus Group Discussion Guide

We developed questions to reflect each SEM level modified for this study. The number of questions included for each level are as follows: Intrapersonal (one question), Interpersonal (two questions), Organization (one question), Foodscape Community (three questions), and Public Policy (one question). In addition, there were two summary questions about students' experience in their study abroad program as it relates to the food culture. We reviewed the questions with three faculty members (two whose first language is Italian and one who is fluent in Italian as a second language) who taught at the first of two participating institutes in Italy. Some revisions were made, and all agreed the questions would elicit information appropriate to investigate the students' food acculturation as influenced by the five SEM levels (see SEM figure).

We then piloted the questions with three students enrolled in the first institute who were asked to verbally respond to each of our questions as they were asked. After some question modifications, a pilot focus group was conducted with three different students. One of three U.S. researchers moderated the focus group onsite while the two other researchers listened and recorded the focus group discussions through Zoom. We wrote the students' responses to the *intrapersonal* question on a whiteboard to assist the students with what information had already been provided. The entire session lasted 38 minutes. When the focus group discussion was completed, we reviewed the responses. There were concerns about the lack of depth to responses for the *intrapersonal* question which may have been too broad. We decided to divide the question into three questions, covering areas of food culture in the context of restaurants, grocery stores, and eating at home. The rest of the questions elicited in-depth discussion among the students and were not altered.

## 2.2. Recruitment of Participants

Before data collection, the study protocol was approved by The University of Mississippi's Internal Review Board for Human Subjects and by the directors at the two participating institutions. Faculty and staff at each institute agreed to assist in recruitment through notification via classroom announcements and flyers placed in student areas. Only students who were raised in the U.S. could participate. No assigned class credit was provided to those who participated; however, students who did participate were given an Amazon gift card. A pilot and two focus groups ( $n = 3$ ,  $n = 6$ , and  $n = 5$  students respectively) discussions were conducted at the first institute in a classroom setting and two focus groups ( $n = 7$  and  $n = 8$  students respectively) were conducted at the second institute in a conference room for a total of 29 students.

## 2.3. Focus Group Discussions

Prior to beginning the discussions, students were requested to complete a survey in which demographic data was gathered (Table 1).

**TABLE (1)**

PARTICIPANT DEMOGRAPHICS ( $N = 29$ )

Demographic	Category	<i>n</i>
Gender	Male	4
	Female	25
Classification	Freshman	0
	Sophomore	0
	Junior	17
	Senior	12
Ethnicity	White	24
	Black	3
	Asian	1
	Hispanic	0
	Other	1

Additional information such as experience with the Italian culture was captured by how many days prior to their study abroad program they had traveled in Italy, how many days they were in Italy during their study abroad program, and through students reporting their assessment of the level of

fluency (novice, intermediate, or advanced) in speaking Italian. Next, the researcher who moderated the discussions introduced themselves and students were presented with information on the study, their role, the benefits and/or risks, confidentiality, and their right to withdraw.

The same researcher moderated the pilot and four focus group discussions on-site in Italy. The two other researchers listened to discussions via Zoom and wrote notes. The researcher conducting the focus group discussions was trained in qualitative research with over 20 years of experience. Another researcher was trained and experienced in moderating focus groups for over five years. Focus groups lasted approximately 60 minutes. At the end of each session, we discussed results and/or any issues and new information. At the end of the fifth focus group session, we agreed that saturation had been achieved.

## 2.4. Data Analysis

All recordings were uploaded to a remote server and transcribed by a professional transcribing company. We then compared the transcripts to the recordings to ensure accuracy and thoroughness. We used the software, Dedoose version 9.0.17, for coding. The levels of SEM were deemed “Parent Codes” with identified themes deemed “Child Codes.” We reviewed one of the five transcripts together to begin identifying themes that would be child codes. Then each of us coded at least 1 of the 4 transcripts remaining. Upon completion of coding, we discussed issues, asked questions, and cleared any confusion in coding statements. Child codes were revised, and we again reviewed their transcripts’ codes to see if changes were needed. We reconvened and reviewed all five transcripts together and discussed any discrepancies. All discrepancies were resolved, and a 100% consensus was reached.

## 3. Results and Discussion

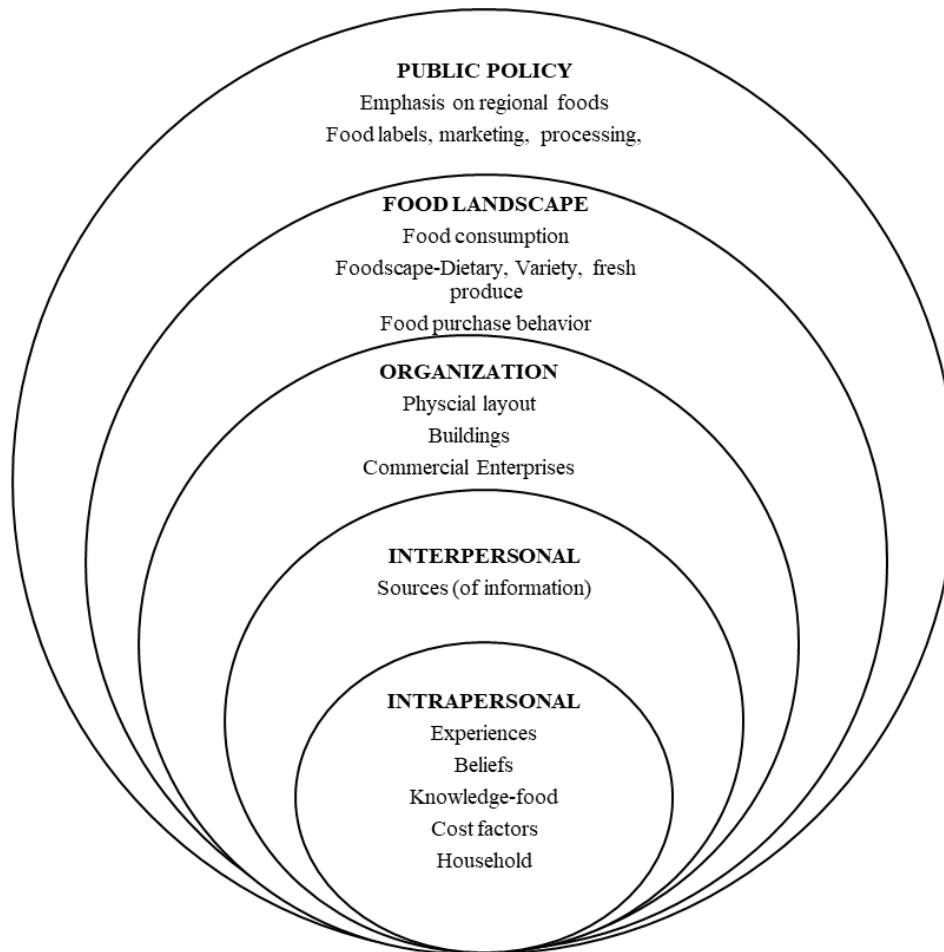
### 3.1. Participant Characteristics

A total of 29 students participated in focus group discussions held in the fall semester of 2022 in two Italian cities. Demographic characteristics of students are provided in Table 1. Students were from 16 different U.S. states, 11 had visited Italy prior, and two students considered their speaking skills as intermediate with 27 reporting novice levels.

Results of focus group discussions are divided by SEM levels intrapersonal, interpersonal, organization, foodscape community, and public policy as shown in the SEM Figure.

**FIGURE (1)**

SOCIOECONOMIC MODEL (SEM) USED IN THIS STUDY



### 3.2. Intrapersonal Level 1

*Experiences* ( $n = 69$ ) were the most dominant theme at the Intrapersonal level. It seems that students' interactions with Italian food culture revealed deeper socio-cultural dynamics that shaped their study abroad experiences. They noted that Italians have a profound appreciation for high-quality, local, and fresh foods, which is a stark contrast to the convenience-oriented food culture in the U.S. This appreciation for food as a cultural identity and social activity underscores the importance of food in Italian life. Students shared their experiences, both positive and negative, and, at times, incidents they felt were

embarrassing while dining in restaurants. They also reflected on how such experiences were significantly different from ones in the U.S. The students reported these observations with statements such as the one quoted below:

I'd say going to a restaurant in Italy is a lot more of an experience than in the U.S. You can really take the time to enjoy your meal. You don't feel rushed. Your server isn't constantly coming up to you to get that table turned over like they do in the U.S. You actually get to sit there and enjoy your meal. I found that I've spent a lot more time eating out at restaurants. (FG 4)

Students quickly learned that dining in Italy involves different social norms and rituals compared to the U.S. For instance, Italians are more mindful in eating and view restaurant meals as extended social occasions which was also concluded by Almerico (2014). Added to this nuance was the overwhelming experience of ordering from the menu due to the numerous menu categories and fear of ridicule when asking questions or requesting modifications. Such anxiety reflects a broader discomfort with unfamiliar cultural practices, which can hinder students' exploration and appreciation of the new food culture (Frey & Tropp, 2006). Such was the case as reflected in the two statements below:

If you have fish in your meal and you want extra Parmesan, they'll look at you in disgust. (FG 3)

... if you don't finish there's nothing for you. Like either finish it there or it's really hard to ask for (to go box) if you try to go to a couple restaurants but, they also will get a little bit offended too if you don't, if you don't finish. I had somebody yell at me at one of the restaurants one of my waiters was like, oh you don't order the drink because you're too fit. You're too fit to order the drink? And now I feel like I have to order the drink, so they'll be very blunt with you, versus in the United States where it's just kind of, please the customer, there's a lot more emphasis on sucking up to the customer there. (FG 3)

Students provided additional food culture experience stating that in America, it is normal to "grab" food and eat on your way to class. They observed that in Italy, people tend not to drink or eat food outside of the cafe. Students felt the Italian people were looking at and talking about them if they took their food with them. This was one cultural norm that the students struggled with but tried to adopt for fear of being mocked. This phenomenon has been reported previously that efforts by individuals to adopt the habits of other cultures can

be from fear of being negatively stereotyped as an American (Frey & Tropp, 2006).

The complexity of maneuvering through the cultural differences in dining out can be reduced prior to students traveling abroad. Having pre-study abroad orientation can address these issues. To reduce the potential anxiety of dining out, students can view suggested videos (YouTube) and be provided reading material on the cultural nuances of dining in an Italian restaurant. Students could be provided with an Italian menu and have them role-play being a patron who is ordering a meal in an Italian restaurant. Inform students of the purpose and order of each meal course and the subtleties of the less attentive wait staff, and what Italians may consider appropriate and not appropriate food combinations.

*Beliefs* ( $n = 60$ ) were the second most dominant theme discussed. Beliefs are the inherent biases formed by participants' unique life experiences in the U.S. or anywhere prior to their study abroad program that influenced their food culture experiences in Italy. While reflecting on their beliefs, participants were asked to compare their beliefs about food in the U.S. with their experiences and observations in Italy stating:

There's just a lot of rules here of what you can and cannot eat past a certain time, where in America you can eat whatever you want at any time. (FG 3)

I feel like in America we do not value what we eat enough or possess the knowledge to know actually where our food is coming from or what's in our food. It's just that much more of everything else going on around us is the focus- fuel our bodies. I will just eat food to have energy and to keep going throughout my day rather than caring about what it's going to do to my body or how it's going to promote health and growth. (FG 1)

But anyway in America, I feel like everywhere you turn, there's a chain and there's fast food. Everywhere here it's very much privately owned restaurants and everyone... I don't know, I feel like if you were to eat out every meal, you would probably be healthy versus in America, it probably would not work out that way. (FG 1)

Reinforcement of positive beliefs and the need to correct any incorrect assumptions about the host country can be made at multiple levels of interaction. Administrative leadership in study abroad programs can be purposeful in designing activities to facilitate the interactions between

American students and their host country's students or community members. In a learning environment, students may be more open to acknowledging and rethinking preconceived beliefs. Interactions may challenge their previous values, attitudes, and ways of thinking about another culture and lead to a more positive experience while abroad (Sobkowiak, 2019).

*Knowledge-food* ( $n = 29$ ) was used to identify gain in knowledge about the Italian foodscape, and observations about differences in food products, ingredients, and types of foods served. The students compared their original beliefs surrounding Italian foods and described in statements like the two quoted below an increase in their knowledge through their curriculum, classroom instructors, experiences, and observations:

My sister and then some of my parents' friends, they told me always order the house wine. It's always good, it's always pretty cheap. (FG 3)

One thing that is really contested against that I didn't know about is Parmesan cheese, like, I assumed all Parmesan cheese was the same which was a big, big mistake apparently. And like Peperino Romano has its own like special label or whatever. (FG 4)

Students observed the strong allegiance Italians have to foods produced in their region and throughout Italy. They learned that in Italian culture, food represents who you are, and where you come from, and is part of your identity. Ciliotta-Rubery (2016) stated that food is intimately linked to one's culture in how it is classified, consumed, and prepared. By introducing and discussing the parameters of food and its identity, students will acquire an invaluable toolset for a better understanding of the richness and complexity of a place through the gateway of its food. Students who enrolled in a class on Italian food culture, or other food courses seemed to have a better understanding of food culture and were more accepting and appreciative of the differences. One student shared their experience as follows:

Me and my roommates have done a lot of cooking and I think a couple of us took classes, especially the first few weeks we were here. I grilled cheese apricot jam on the green apple. That was so good. Then we made a tomato soup together, so we've been doing a lot of different recipes, really fun. (FG 4)

Another student recounted learning that there is traditionally no salt in Tuscan bread because at one time salt was heavily taxed. Having that knowledge allowed her to appreciate Tuscan bread even though she rarely ate it. While

students learned and appreciated this aspect they also clung to and made efforts to continue their habits as shown in their search for familiar fast food and ethnic restaurants, their usual snacks and beverages, and, as mentioned, a Starbucks® store to order a large cup of coffee to go.

Since all focus group participants were students, it was not surprising that *cost factors* ( $n = 20$ ) with food purchases and consumption were discussed in all focus groups. Some students noted that eating out could be expensive while living on a student budget. Students eventually realized that they could order food from only one meal course but were very surprised (and disappointed) that they had to pay for water stating, “The only thing about a student on a budget, it can go pricey, so I usually do one just pasta” (FG 1). Another student shared their perspective with the following statement:

The thing that's tough for me is Italy's having a recession so everything's way less expensive. It's like so cheap and I feel like I'm actually kind of nervous for it because when I get back home, I'm going to want to have the quality that I have, and that we have at home is more expensive than here. (FG 2)

Many students agreed that fresh produce, including fruits and vegetables, seemed relatively inexpensive in Italy in comparison to home and commented on the higher costs for the same products in the U.S. stating,

All of the fruits and vegetables are really affordable as well. It does not cost much compared to America, where you have to go to a farmer's market and pay two to three dollars more for an item there. (FG 1)

*Household* ( $n = 19$ ) describes some of the significant differences in the nonavailability of household equipment that posed a challenge for the students. Discussions included limited to no availability of familiar cleaning agents, and no equipment such as automated coffee makers, electric ranges, microwaves, dishwashers, big-sized refrigerators, and garbage disposals which are commonly found in U.S. households. As one student described,

... the whole cooking at home things I think, it's not as common to make coffee at home in Italy because when I lived alone this summer (in the U.S.) my apartment came fully furnished by the company I worked for, with like necessities, and one of the necessities we got was like a coffee maker obviously. But like here, I feel like it's very rare I see coffee pots or coffee makers in people's houses as a necessity. And if you do see one

it's very old-fashioned and like crass almost. It's not like a high-quality coffee machine. (FG 4)

Concerns regarding how to use cooking equipment in the absence of familiar cooking equipment such as a microwave, coffee maker, and dishwasher proved challenging in students' food preparation efforts. In purchasing foods to prepare at their Italian residence, students were challenged with the lack of cold and dry food storage. As reported, smaller kitchens and food storage availability is a common challenge faced by students studying abroad (O'Sullivan & Amirabdollahian, 2016). This challenge can be addressed by informing students that most Italians purchase fresh foods daily for the day's meals, hence the smaller food storage spaces are adequate. Another issue with the small food storage areas was the number of students placed in apartments (sometimes five in one apartment), and the need to be cognizant of how to share and manage the small storage areas among all roommates.

In addition to a lack of familiar equipment and storage, many students lacked cooking skills, highlighting the gap between their accustomed dining habits at U.S. universities, which often included meal plans and campus dining options, compared with the self-sufficiency required in Italy. Students who fared better, enrolled in cooking classes and were excited that they could make pasta and other traditional Italian meals. As students' knowledge of a culture's food preparation method, symbols, and taboos increases, so does their chance of improving their overall study abroad experience (Ciliotta-Rubery, 2016). Most study abroad programs have food-related courses available to students, no matter what their field of study. Encouraging students to enroll in at least one food-related course may help assuage some of these challenges. Lastly, most apartments do not have garbage disposals for food waste so there is a learning curve for the different divisions for recycling waste in Italy, as is represented in this quote:

And then another thing I was thinking is that like with food waste, it's very different. Like it took me a long time to get used to like where the food, where the different trash goes. You don't just put everything down the garbage disposal, like it goes in a compost bag. (FG 4)

### 3.3. Interpersonal Level 2

*Sources* ( $n = 59$ ) of information included, but was not limited to, Italian classroom instructors, study abroad alumni, study abroad program facilitators, social media like TikTok, YouTube, blogs, and friends and family who may have

visited Italy in the past. Students actively connected their experiences and observations with information shared with them by various sources such as the following four:

(1) the classroom

I think something I didn't expect is history ties a lot with food culture out here. Like we asked our Italian teacher why there's not salt in the Tuscan bread a lot of times and he was saying way back when the Romans taxed salt very heavily. (FG 4)

... during the school we're making sauce for four people, and she sort of gave us the correct amount. It was so nice. she's like, "This much," "You need this much garlic and this much.... (FG 5)

(2) Italian friends and roommates

For me when I was [inaudible 00:31:39] connect with actual students from Italy here, so I've befriended a couple of Italians and they'll show me, "Oh, this is a good place to go out to eat," and they'll order for us and show me all these different things. (FG 1)

(3) local citizens in the community

I really make an effort to speak Italian, but most people here speak English, so once they learn that I'm trying, they are typically very, very sweet and want to help me. I always ask for recommendations. (FG 4)

Well the guy doesn't speak English so it's a good way to practice Italian and order something in Italian. But he recognizes us and he ... I almost always get the same thing, and so he knows what I'm getting and he's like, Okay, whatever. (FG 1)

(4) family

My nonna, she's from Naples and so she taught me about or, at least, I know more about the southern, like what you're like Naples and southern food. (FG 4)

While students did refer to family, friends, and even local citizens in providing advice, their primary source for guidance and information came from program instructors and facilitators, highlighting the important roles these individuals play in students' understanding of the new culture. This awareness can alert future development of course content materials easing the cultural acculturation for students.

### 3.4. Organization Level 3

*Organization* ( $n = 20$ ) refers to the discussions around structures, the physical layout of towns, trains, stores, size of businesses, locations, and types of business (less fast-food places). Discussions under this theme referred to the comparisons in the physical structures of the food environment in Italy with that of the U.S. Students discussed the smaller size of local Italian grocery stores with that of commonly used supermarkets in the U.S. Students felt somewhat intimidated when entering grocery stores. Because the stores are much smaller there with fewer selections and variations of most items, compared to the U.S., and many of the shelf items were not familiar in terms of packaging or labels.

The sheer size of all the grocery stores that I've been in here, they're definitely smaller and they're very crowded because people typically just go for the day and get their dinner, so they're always crowded and more on the small size. (FG 2)

Like, there's no alternatives really, and even when there are alternatives they're often a single brand and they're very small. Like, you want almond milk, there's one brand at the grocery store that we have and it's very very tiny. (FG 4)

However, it did not take long for students to acclimate to the Italian stores due to the frequency of daily shopping. One process commonly reported as “being intimidating” was the requirement to weigh one’s produce and place a price sticker on the produce bag. One student mentioned avoiding purchasing fruit at first. Students agreed that the produce is fresher, costs less, and is also very accessible through farmers’ markets and individual produce stands. Despite these obstacles, students adapted quickly, appreciating the freshness and lower cost of produce stating:

Here you have to measure out how much your fruit weighs. I was nervous. I didn't want to hold people up in line while I'm trying to figure out how to weigh my fruit, so I didn't get fruit for a while, and then I realized it was an easy thing to do. (FG 1)

This adaptation underscores the resilience and flexibility required in acculturating to a new food environment. As an overall note, students reported irritation with grocery stores and local shops closing for several hours in the afternoon. However, they also reflected positively on how Italians seem to have a work-life balance but that closing stores in the afternoon would never happen in the U.S.

### 3.5. Foodscape Community Level 4

*Food consumption* ( $n = 62$ ) was a dominant theme. The foodscape community had a significant impact on students' food consumption, grocery shopping, dietary needs, and habits. The formal nature of dining in Italy, with expectations for reservations and appropriate attire (even for casual dining), contrasted sharply with students' experiences in the U.S.

Italians if you watch them eat, eat so slowly, like dinner takes so long but I think but they're like actually enjoying what they're eating. So, I'm like hmm, maybe I should try this. (FG 4)

Their menus are much more spread out in terms of courses. It's not just appetizers and then main meal and maybe a dessert. You're going to go and maybe get an appetizer, a first course, second course. At least that's how the menus are laid out. (FG 1)

Students perceived that one needed to dress more formally when going out in the evening and that attire such as gym or workout-type clothing was frowned upon at any time. Students were surprised that customers stayed as long as two or three hours to eat their meal and how staying that long would not or could not happen in the U.S. as was stated by one student:

America at restaurants, in a way, not in an annoying way, they're going to get you your check and get you out the door. But if it's here, you could sit forever at your table and they're never going to be like, you need to leave. Here's your check. (FG5)

The customer service in restaurants was confusing. While in the U.S., customers receive constant attention, in Italy the waiter only comes to your table to take your order and deliver your food. Students also needed to adjust to requesting the bill, not being allowed to split the bill among others at the table, and that tipping was optional but rare.

I don't like asking for extra things and I don't like asking for substitutes for things especially when I'm in a different country because I don't want to seem like that American person, so I try to do the thing that an Italian will do. (FG2)

Paying for water was also new to the students. One student admitted she did not have anything to drink with her meal because she did not like wine and would not pay for water. A few students said they were tired of Italian foods and believed the Italians needed more variety and other ethnic food-type

restaurants. They also missed having a place to buy an “American” breakfast with items such as eggs, bacon, and toast. These experiences highlight the necessity for comprehensive pre-departure orientations that cover dining etiquette and expectations in the host country.

Consistently, the topic of snacks and their availability were discussed. There were very few snack options in the grocery stores and snacks were only available in family-type packages and not as single sale items. The overall lack of accessibility to convenience foods such as chips, cookies, and sweets was missed and reflects college students' food habits and what are commonly consumed foods (Sogari et al., 2018). One area that students found strange was the very limited number of frozen food offerings, specifically mentioning pizzas. College students in the U.S. have identified foods that are convenient as a top reason to purchase that food (Pearcey & Zhan, 2018). With the lack of convenience food options, students found themselves preparing more meals in Italy than they may have at home.

*Foodscape-dietary* ( $n = 12$ ) theme encompassed discussions around food allergies, intolerances, preferences, special diets, and any food restrictions. Broadly, students discussed their disappointment to find that food labels did not usually mention if the food product may lead to allergic reactions for the consumer. Many food products in grocery stores and restaurants did not have a non-allergic alternative. As one participant (FG 5) said, “I know a lot of my friends have allergies to stuff and whenever we go in restaurants, they look at us like we're insane. Like no something or cheese and they're like, What?”

Students discussed the lack of food availability for people with dietary restrictions and compared it with the foodscape of the U.S. which provides a host of alternative food items. Some students preferred to cook at home because they could not be assured of knowing what ingredients were in the food. One participant said, “I also have like dietary, so I'm like pescatarian and I like cooking at home better here than going out” (FG 4). The limited number of food items to meet students' specific dietary needs or wants was an issue. Lack of dietary options included gluten-free, sugar-free, reduced-calorie, and sugar-free carbonated beverages. Students reported searching for, but not finding, types of food marketed as “healthy” such as low-fat, high-fiber, or organic. Weight control and altered dietary needs have been shown to play a role in students' decisions to purchase food (Sogari et al., 2018). Not having these options was disconcerting for some students. Finding alternative foods to compensate for an

allergy was of special concern. Several students mentioned issues with nut allergies and the frequency of hazelnuts being included in food items.

*Foodscape-variety* ( $n = 41$ ) covered discussions about the lack of variety in available food, but beyond the dietary restrictions. For example, variety in terms of number of brands available for a specific food product, lack of convenience food, and lack of food that they are used to in the U.S. Students also discussed the lesser number of frozen and other convenience foods that are readily available in the U.S. and compared these observations with the perception of better quality.

Here's just less frozen meals and microwave meals here in stores. You kind of have to learn to cook because there's not really another option. In the United States, the amount of frozen pizzas, just frozen pizzas, the amount of brands. You could eat a different one every single day for a long time. (FG 3)

American food, we have so many options of different cultures of food whereas I think a lot of people here have probably never had, I don't know, like Mexican food, they've never had Vietnamese food, they've never had something like that, whereas in America it's way more common. And for that, it sucks because even though their food's so good, there's a plethora of ... It took me a month and a half to find red pepper flakes in the grocery store, and hot sauce, so there are definitely things that they're missing out on in exchange for having a lot of really good Italian food. (FG 5)

*Foodscape-fresh produce* ( $n = 20$ ) discusses the availability of fresh produce, fruits, and vegetables in Italy. Students compared food availability and food accessibility-related experiences with those in the U.S. As stated by one student, "Just the overall accessibility of fruits and vegetables here seems way more superior than America. There doesn't seem to be any food deserts or areas where you're going to get nutrient deprived food" (FG 1).

*Food purchase behavior* ( $n = 18$ ) included the process and intricacies of purchasing food at local grocery stores, cafes, and shops. Some of the subtle food purchasing differences students discussed were purchasing convenience food in the U.S. versus purchasing fresh food in Italy. Students also cited the same reason for not buying food in bulk in Italy as it can go bad easily.

I mean I think maybe I have not stumbled across it yet and that's why, they're (foods) included in a smaller area (shelf area) but like usually there's a lot more bulk options in the US, like buying in bulk is a really big thing. (FG4)

When I'm at home or at college when I go to a grocery store, it's like I go, I get a ton of stuff and then I don't go for two or three weeks. But here, I just get a small amount of things every other day. It's like a very different way of shopping for me here. (FG5)

### 3.6. Public Policy Level 5

*Public policy Level* ( $n = 35$ ) included students recognizing the emphasis on regional food identity and stricter food regulations in Italy, which they perceived as contributing to healthier food options. Students learned that in Italy, there is a *great emphasis on regional foods* ( $n = 10$ ), which they understood contributes to a lack of variety in brands and availability of produce only when in season. Students also became aware of the importance placed on a food's identity in where it was grown, produced, and processed in Italy. Most European countries, including Italy, use the regulations and guidelines set forth by the European Commission as their main source of reference for food labeling, food safety, and food sustainability (European Commission, 2022).

I'm picking fresh produce here, too, in the United States when I go to the grocery store, it seems like every single thing is perfect in the produce section, and here there will be things that have a mark on it or it's ripe, like you can take that home and eat it now rather than having to wait a couple days for it to ripen up like I do in the US. And I like that a lot better because it makes me think, "Okay, this wasn't sorted through to find the best looking one. Okay, it all tastes good. You can eat any of it. (FG 5)

Next, students observed a significant difference in *food labels and marketing* ( $n = 9$ ). These discussions often compared the differences in food regulations in the U.S. and the European Union. Consistently, students brought up their concerns about the lack of package labeling regarding the lack of dietary-specific options like gluten-free or sugar-free listed on the food products' packaging, further complicating their adjustment. This emphasizes the need for better preparation of students and developed strategies to manage dietary restrictions abroad.

Unbeknownst to students, Italy does have regulations for providing food information to consumers and is required to list 14 major substances. Unfortunately, students did not know the English translation for the different ingredients, so labels were of no use. Due to the possibility of a severe allergic reaction, study abroad programs need to seriously consider including allergens

and reading food labels in their pre-departure orientations, if they have not already. Increasing students' ability to read food labels and identify potential allergens may provide them with more self-assurance on the type of foods they are buying and their safety (Lizzi & Righettini, 2018).

... on my food, like prepackaged food, there's not a huge list of ingredients. It's a lot shorter and I haven't seen red dye 40 at all or anything like that or a lot of preservatives, I've noticed, haven't been in foods that they typically would be in the US. I've been a lot better about my food choices. (FG 5)

Students also described their observations regarding *food processing* ( $n = 16$ ). Students mentioned how food regulations were much stricter in Italy regarding what chemicals can be used in producing foods and included in ingredients. They felt that the foods were healthier because of these restrictions stating, "You can't use chemicals. In my one class, we learned that you cannot use any pesticides on the grapes" (FG 2).

## 4. Implications for Study Abroad Programs

The findings of this study underscore the central role of food culture in shaping students' study abroad experiences. Students' interactions with food and local attitudes towards food can significantly influence their overall impressions and satisfaction with their study abroad program. Therefore, these aspects should be foregrounded in program preparation, pre-departure, and on-site orientations, rather than being considered a mere sidebar. For program preparation and orientation efforts, this means:

1. **Pre-Departure Training:** Provide comprehensive pre-departure training that includes information on the host country's food culture, dining etiquette, and practical skills such as basic cooking techniques and reading food labels.
2. **On-Site Orientation:** Collaborate with host institutions to offer detailed on-site orientations covering local dining practices, grocery shopping norms, use of household equipment, and tips for managing dietary restrictions.
3. **Cultural Education Integration:** Integrate cultural education into the curriculum, such as courses on local food culture and cooking classes, to enhance students' appreciation and understanding of their host country's culinary practices.

4. Use of Local Resources: Encourage students to actively engage with local residents and utilize local resources, such as shop clerks and instructors, for cultural information and support.

By foregrounding these elements, universities can significantly enrich students' study abroad experiences, helping them to navigate and appreciate the complex socio-cultural dynamics of their host country.

## **5. Limitations**

This study had a small sample size of four focus groups and one pilot group with 29 participants. Even though the study met the principle of homogeneity of the qualitative thematic coding process, the results of the study cannot be generalized to a larger population. The study is also influenced by the primary researcher who has conducted several study abroad programs in Italy and may have contributed to researcher bias and subjectivity in the analysis. However, the other research team members, who had not visited Italy, were involved throughout the data collection, analysis, and manuscript writing to limit any researcher bias. This study is context specific and may be appropriate to only U.S. study abroad programs in Italy.

## **6. Conclusion**

Studying abroad is an opportunity for students to obtain global experiences and immersion into another culture. Providing them with a better understanding of the food culture of their selected foreign country could bring a richer experience to their time studying abroad. Universities can assist in this effort by providing pre-departure education or orientation, presentations by individuals well versed in Italian food culture, and guidance on accessing websites and social media that may be helpful. Universities could collaborate with host institutions on developing an orientation specific to Italian food culture which could include:

- Cultural norms for ordering from a menu and interacting with staff in a food establishment,
- Selection, availability, and purchasing process of food items and cleaning products in grocery stores,
- Intricacies of food habits outside of eating establishments; and
- Public policies regarding product production and identification, and regulations regarding food safety and labeling.

## Acknowledgments

The researchers would like to acknowledge the following for their contributions:

- 1) The Umbra Institute, in Perugia (Italy), especially Dr. Clelia Viecelli Giannotti and dottor Manuel Barbato for their assistance with this research, as well as students in the Institute's program in Food, Sustainability, & Environment for their participation in the focus groups.
- 2) SAI Study Abroad program in Florence (Italy) for their assistance with this research as well as students studying at the Florence University of the Arts for their participation in the focus groups.
- 3) Funding in part through the University of Mississippi, Office of Global Engagement, International Collaboration Grant.

## Ethical Approval

This study was approved by the University of Mississippi, Office of Research and Sponsored Programs (Protocol #23x-058).

## Declaration of Competing Interest

The authors have no competing interests to declare.

## References

- Alakaam, A., & Willyard, A. (2020). Eating habits and dietary acculturation effects among international college students in the United States. *AIMS Public Health*, 7(2), 228–240. Academic Search Premier. <https://doi.org/10.3934/publichealth.2020020>
- Almerico, G. M. (2014). Food and identity: Food studies, cultural, and personal identity. *Journal of International Business and Cultural Studies*, 8(1).
- Bandyopadhyay, S., & Bandyopadhyay, K. (2015). Factors influencing student participation in college study abroad programs. *Journal of International Education Research*, 11(2), 87-94. <https://files.eric.ed.gov/fulltext/EJ1060059.pdf>
- Beech, S. E. (2015). International student mobility: The role of social networks. *Social & Cultural Geography*, 16(3), 332–350. <https://doi.org/10.1080/14649365.2014.983961>
- Bui, H. T. N., Selvarajah, C., Vinen, D. G., & Meyer, D. (2021). Acculturation: Role of student–university alignment for international student psychological adjustment. *Journal of*

- Studies in International Education*, 25(5), 546–564.  
<https://doi.org/10.1177/1028315320964286>
- Choudhary, S., Nayak, R., Kumari, S., & Choudhury, H. (2019). Analysing acculturation to sustainable food consumption behaviour in the social media through the lens of information diffusion. *Technological Forecasting and Social Change*, 145, 481–492.  
<https://doi.org/10.1016/j.techfore.2018.10.009>
- Ciliotta-Rubery, A. (2016). Food identity and its impact upon the study abroad experience. *Journal of International Students*, 6(4), 1062–1068. <https://doi.org/10.32674/jis.v6i4.336>
- Douglas, S. R. (2020). Counterfactual understandings: What Japanese undergraduate students wish they had known before a short-term study abroad experience. *TESL-EJ*, 23(4).
- Enriquez, J. P., & Archila-Godinez, J. C. (2022). Social and cultural influences on food choices: A review. *Critical Reviews in Food Science and Nutrition*, 62(13), 3698–3704.  
<https://doi.org/10.1080/10408398.2020.1870434>
- European Commission. (2022). *Food Safety*. [https://food.ec.europa.eu/index\\_en](https://food.ec.europa.eu/index_en)
- Frey, F. E., & Tropp, L. R. (2006). Being seen as individuals versus as group members: Extending research on meta perception to intergroup contexts. *Personality and Social Psychology Review*, 10(3), 265–280. [https://doi.org/10.1207/s15327957pspr1003\\_5](https://doi.org/10.1207/s15327957pspr1003_5)
- Gregson, J., Foerster, S.B., Orr, R., Jones, L., Benedict, J., Clarke, B., Hersey, J., Lewis, J., & Zotz, K. (2001). System, environmental, and policy changes: Using the social-ecological model as a framework for evaluating nutrition education and social marketing programs with low-income audiences. *Journal of Nutrition Education*, 33, S4–15.  
[https://doi.org/10.1016/S1499-4046\(06\)60065-1](https://doi.org/10.1016/S1499-4046(06)60065-1)
- Hadis, B. F. (2005). Why Are They Better Students When They Come Back? Determinants of Academic Focusing Gains in the Study Abroad Experience. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 11(1), 57–30.  
<https://doi.org/10.36366/frontiers.v11i1.151>
- Lizzi, R., & Righettini, M. Stella. (2018). Food policy in Italy. *Reference Module in Food Science*, 1–9. <https://doi.org/10.1016/B978-0-08-100596-5.21468-6>
- Mackendrick, N. (2014, December 22). Foodscape. *Contexts: Sociology for the public*.  
<https://contexts.org/articles/foodscape/#:~:text=A%20foodscape%20centers%20around%20a,and%20several%20fast%20food%20restaurants>
- O’Sullivan, N., & Amirabdollahian, F. (2016). Loyal tongue, liberal mind: International students’ experiences on dietary acculturation in England. *Journal of International Students*, 6(1), 107–127. <https://doi.org/10.32674/jis.v6i1.484>
- Ohri-Vachaspati, P., DeLia, D., DeWeese, R. S., Crespo, N. C., Todd, M., & Yedidia, M. J. (2015). The relative contribution of layers of the Social Ecological Model to childhood obesity. *Public Health Nutrition*, 18(11), 2055–2066. Cambridge Core.  
<https://doi.org/10.1017/S1368980014002365>
- Pearcey, S. M., & Zhan, G. Q. (2018). A comparative study of American and Chinese college students’ motives for food choice. *Appetite*, 123, 325–333.  
<https://doi.org/10.1016/j.appet.2018.01.011>
- Robinson, T. (2008). Applying the Socio-Ecological Model to improving fruit and vegetable intake among low-income African Americans. *Journal of Community Health*, 33(6), 395–406. <https://doi.org/10.1007/s10900-008-9109-5>

- Savicki, V., & Cooley, E. (2011). American identity in study abroad students: Contrasts, changes, correlates. *Journal of College Student Development*, 52(3), 339–349. <https://doi.org/10.1353/csd.2011.0035>
- Scarneo, S. E., Kerr, Z. Y., Kroshus, E., Register-Mihalik, J. K., Hosokawa, Y., Stearns, R. L., DiStefano, L. J., & Casa, D. J. (2019). The socioecological framework: A multifaceted approach to preventing sport-related deaths in high school sports. *Journal of Athletic Training*, 54(4), 356–360. <https://doi.org/10.4085/1062-6050-173-18>
- Schenker, T. (2019). Fostering global competence through short-term study abroad. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 31(2), 139–157. <https://doi.org/10.36366/frontiers.v31i2.459>
- Shi, Y., Lukomskyj, N., & Allman-Farinelli, M. (2021). Food access, dietary acculturation, and food insecurity among international tertiary education students: A scoping review. *Nutrition*, 85. <https://doi.org/10.1016/j.nut.2020.111100>
- Sobkowiak, P. (2019). The impact of studying abroad on students' intercultural competence: An interview study. *Studies in Second Language Learning and Teaching*, 9(4), 681–710. <https://doi.org/10.14746/ssl.t.2019.9.4.6>
- Sogari, G., Velez-Argumedo, C., Gómez, M. I., & Mora, C. (2018). College Students and Eating Habits: A Study Using an Ecological Model for Healthy Behavior. *Nutrients*, 10(12), 1823. <https://doi.org/10.3390/nu10121823>
- Townsend, N., & Foster, C. (2013). Developing and applying a socio-ecological model to the promotion of healthy eating in the school. *Public Health Nutrition*, 16(6), 1101–1108. <https://doi.org/10.1017/S1368980011002655>
- Valenti, G. D. & Facaci, P. (2024). Acculturation and adjustment among international college students: The moderating role of perceived second language proficiency. *Journal of American College Health*, 1-9. <https://doi.org/10.1080/07448481.2024.2361310>
- Vatalaro, A., Szente, J., & Levin, J. (2015). Transformative learning of pre-service teachers during study abroad. *The Journal of Scholarship of Teaching and Learning*, 15(2), 42–55. <https://doi.org/10.14434/josotl.v15i2.12911>
- Yu, B., Bodycott, P., & Mak, A. S. (2019). Language and interpersonal resource predictors of psychological and sociocultural adaptation: International students in Hong Kong. *Journal of Studies in International Education*, 23(5), 572–588. <https://doi.org/10.1177/1028315318825336>
- Zace, D., Di Pilla, A., Silano, M., Carini, E., Frisicale, E. M., Vandevijvere, S., Sassi, F., & Specchia, M. L. (2022). Implementation level of best practice policies by Italian Government for healthier food environments: Healthy Food Environment Policy Index (Food-EPI). *Annali Dell'Istituto Superiore Di Sanita*, 58(1), 55–66.

## Author Biography

**Dr. Laurel Lambert**, a Professor at the University of Mississippi, is a dietary acculturation expert with a teaching background in culinary sciences. A registered dietitian nutritionist and food systems management specialist, she centers her research on child nutrition programs and policies. Dr. Lambert has

also been notably teaching study abroad courses in Italy since 2013 and collaborates with Italian researchers for gastronomic studies, providing her unique insights into Italian food culture.

**Dr. Kritika Gupta** is a Senior Program Analyst at Ripple Effect and an Adjunct Instructor in nutrition at the University of Mississippi. Dr. Gupta has a background in nutrition research, program evaluation, and qualitative data analysis. With notable achievements, including being a TEDx speaker, she has served the Society for Nutrition Education and Behavior as a member of the Advisory Committee for Public Policy and a representative to the Board of Directors.

**Somya Gupta** is a Ph.D. student and research assistant of Nutrition and Hospitality Management at the University of Mississippi. Her research interest includes school & sustainable gardening, policy making, community and child nutrition. She serves as Chair Elect for Student Division of Society for Nutrition Education and Behavior. She has worked as clinical nutritionist at Fortis Hospital. Before that, she received her Bachelor's and Master's degree from Panjab University in Foods and Nutrition.

**Zachary Nowak** is the director of The Umbra Institute and a lecturer for the Harvard University Extension School. He is a historical geographer with an interest in how place and taste go together (or do not). He has written about the history of pizzerias in Naples, Chianti in California, unsalted bread in Perugia, polenta in Italy, terroir nowhere, and truffles all over the world.