EXPLORING THE PRIMING EFFECT IN THE CONTEXT OF ORGANIC WINE: AN EXPERIMENTAL INVESTIGATION

Stephanie Schäfer, Koblenz University of Applied Sciences, sschaef2@hs-koblenz.de
Holger J. Schmidt, Koblenz University of Applied Sciences, hjschmidt@hs-koblenz.de
Klaus-Peter Wiedmann, Leibnitz University Hannover, wiedmann@m2.uni-hannover.de
Barry J. Babin, Louisiana Tech University, bbabin@latech.edu

Organic wine; priming; experiment; implicit system

Introduction

Sustainability has been a key issue in public perception for many years. In this context, consumers commonly express their willingness to consume organic products (Honkanen et al., 2006). Surprisingly, to this day, a large number of consumer behavior studies in the context of environmental or sustainable shopping behavior points to significant gaps between consumers' expressed and actual behavior towards the use of organic products (Carrington et al., 2014; Vermeir and Verbeke, 2006). How to nudge consumers to buy more such goods, is therefore an important area of interest. The purpose of this paper is to examine how marketers can unconsciously prompt consumers to buy more organic products, in this case organic wine, by means of the shopping atmosphere.

Literature review

The term atmospherics has been used to describe the conscious designing of a retail space with the intention to create effects in consumers that would increase their purchase probability (Kotler 1973). So far, a number of researchers have demonstrated that priming, defined as a non-conscious activation of knowledge structures (Bargh, 2006), impacts instore buying behavior. This has already been investigated in the context of wine: North et al. (1999), conducting a field experiment in a British supermarket, analyzed the priming effect of music on the sales of wine. They showed that more French wine was sold on days when French music was played, whereas German music led to an increase of bottles sold with German wine. A more recent study by North (2012) found that participants described the taste of wines differently, depending on what type of music was being played.
The aforementioned examples show that environmental stimuli, including an image, sound, word, smell or a certain combination of the aforementioned, may prime consumers and affect their actions. Nevertheless, to our best knowledge, research on the priming effect of the shopping atmosphere on consumers' preference of organic wine does not exist. Our study aims to close this important research gap.

Research methodology

Our research builds on an experimental design. A lab was set up in the rooms of a local coffee shop in the center of a German city. The atmosphere of the lab was manipulated to test its influence on consumers' evaluation of attributes that are important when buying wine at food retailers where they usually do not have the option to taste the wine. For experimental Group A, nature music was played, pictures of landscapes and flowers decorated the walls, and the colors green, brown, yellow dominated the test room (see Figure 1). For experimental Group B, jazz music was played, pictures of musicians were shown, and the dominant colors were

black and white. For the control group, no music was played, no pictures decorated the walls and no colors dominated the atmosphere.

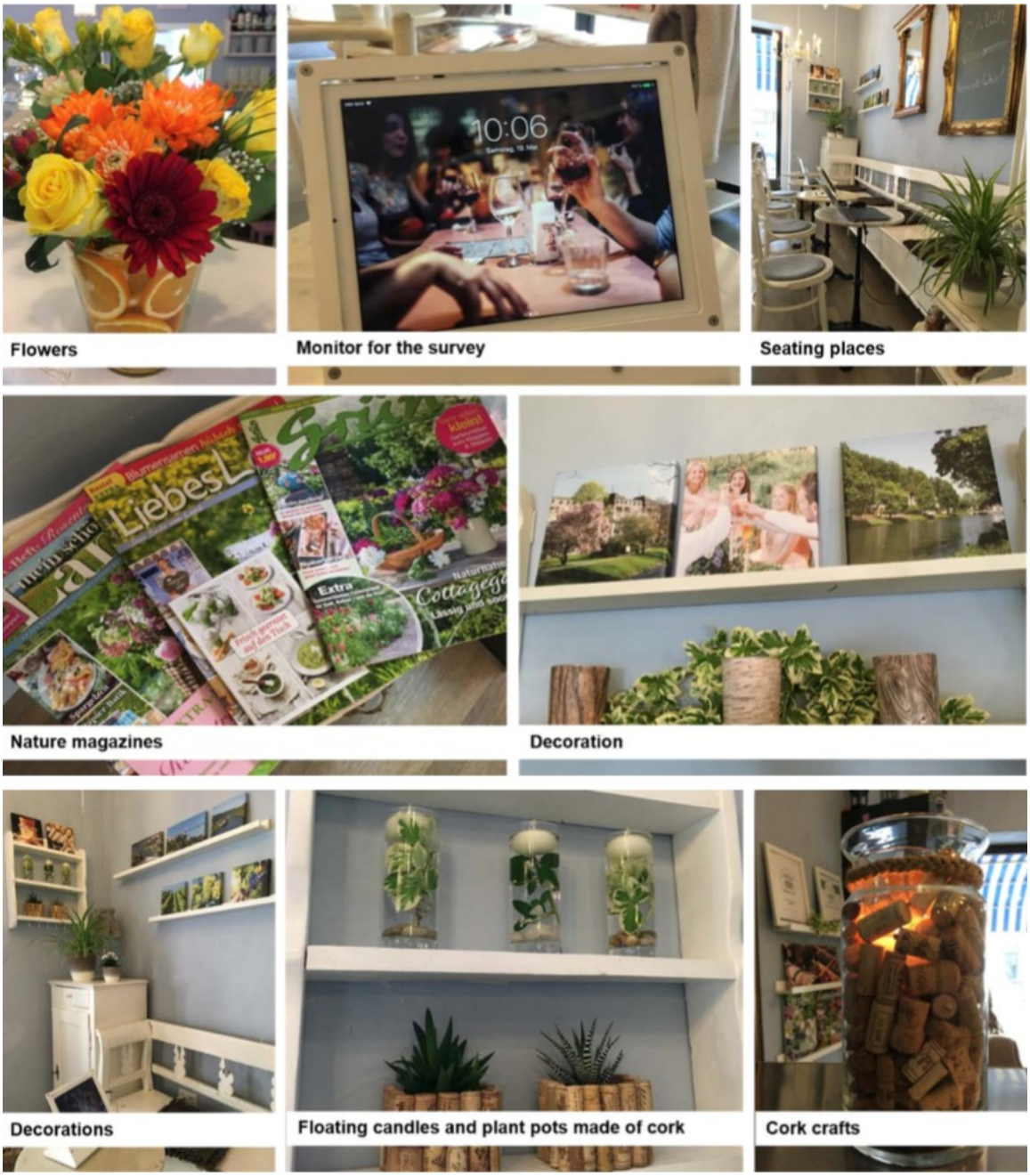


Figure 1: Test room for experimental group A

The respondents were recruited through convenience sampling outside the location, asked to enter the lab, take a seat and answer an online survey that used best-worst-scaling (Flynn and Marley, 2014) as an empirical method. The characteristics of survey respondents are shown in Table 1.

		Nature		Jazz		Control	
Classification variables	**Modalities**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Gender	Female	24	60.0%	22	55.0%	18	45.0%
	Male	15	37.5%	18	45.0%	22	55.0%
	Not specified	1	2.5%	0	0.0%	0	0.0%
Age	18 - 29 years old	21	52.5%	14	35.0%	17	42.5%
	30 - 39 years old	5	12.5%	10	25.0%	14	35.0%
	40+ years old	14	35.0%	16	40.0%	9	22.5%
Involvement	Low	30	75.0%	33	82.5%	33	82.5%
	High	10	25.0%	7	17.5%	7	17.5%
Organic	Yes	21	52.5%	19	47.5%	27	67.5%
	No	11	27.5%	14	35.0%	5	12.5%
	Undecided	8	20.0%	7	17.5%	8	20.0%

Table 1: Characteristics of survey respondents

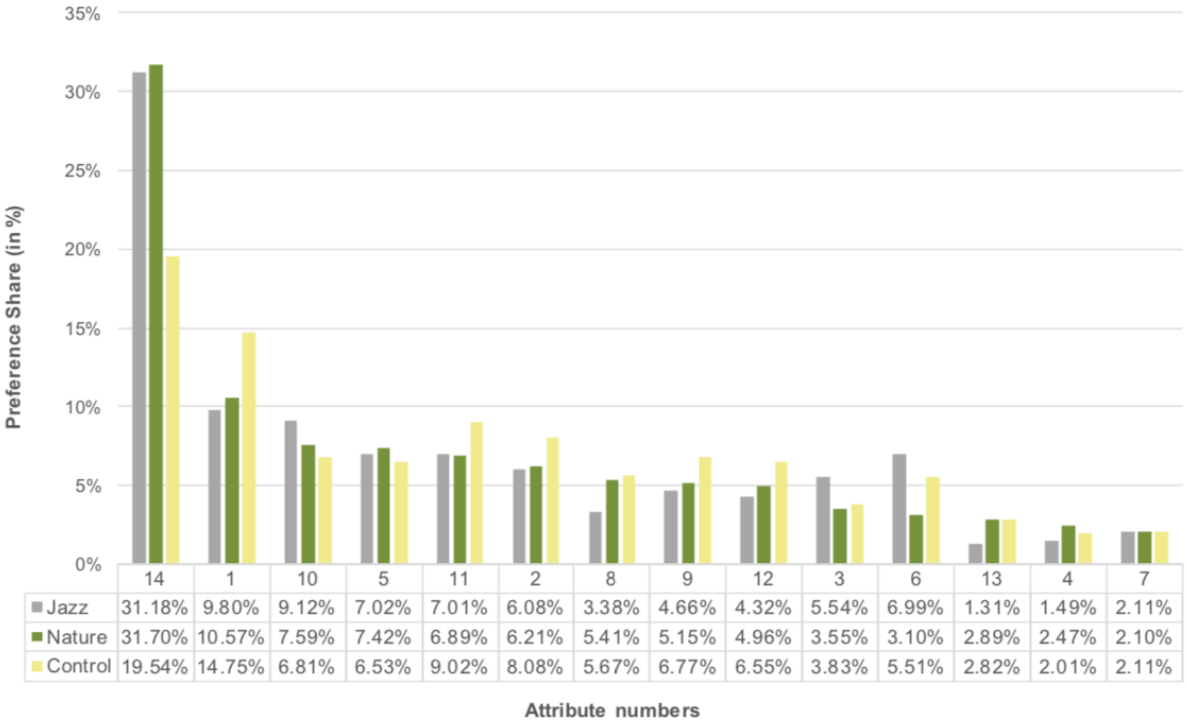
The introductory section of the questionnaire described the following situation: *"Imagine you are standing in front of a shelf with wine bottles and you want to buy a bottle of wine for a relaxing evening with friends. Which of the following attributes is most important for your decision, and which is least important?"* Four attributes were shown at a time, and attributes were altered several times until statistical relevance was achieved (see Table 2 for an exemplary design plan). The attributes used included the origin of the wine, the knowledge about it, a possible prior recommendation, the style (dry, semi-dry, sweet), the grape variety, the brand name, the attractiveness of the label, and that information that the wine was organically produced, among others.

No.	**Attributes**	**Choice set**													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Grape variety								x				x	x	x
2	Origin of the wine					x						x	x	x	
3	Information on the shelf			x				x		x		x			
4	Alcohol level						x		x			x		x	
5	Matching food				x				x		x			x	
6	Information on back label	x			x	x	x								
7	Award | Medal	x	x	x	x										
8	Attractive front label		x	x				x				x			
9	Brand name | Winery	x	x			x					x				
10	Someone recommended it	x	x										x		x
11	Tasted the wine previously			x			x			x					x
12	Organically produced							x	x	x	x				
13	Vintage					x	x	x		x					
14	Style (dry, semi-dry, sweet)				x						x		x		x

Table 2: Exemplary design plan

Findings, conclusions and recommendations

We expected that Group A rated the importance of the attribute "organically produced" significantly higher than groups B (the jazz group) and C (the control group). However, the overall results of the experiment did not support this hypothesis. Control group C rated the attribute in focus the highest (see Table 3).



	14	1	10	5	11	2	8	9	12	3	6	13	4	7
Jazz	31.18%	9.80%	9.12%	7.02%	7.01%	6.08%	3.38%	4.66%	4.32%	5.54%	6.99%	1.31%	1.49%	2.11%
Nature	31.70%	10.57%	7.59%	7.42%	6.89%	6.21%	5.41%	5.15%	4.96%	3.55%	3.10%	2.89%	2.47%	2.10%
Control	19.54%	14.75%	6.81%	6.53%	9.02%	8.08%	5.67%	6.77%	6.55%	3.83%	5.51%	2.82%	2.01%	2.11%

Table 3: Group comparison of influencers on choice *(14: Style; 1: Grape variety; 11: Tasted the wine previously; 2: Origin of wine; 10: Someone recommended it; 9: Brand name / Winery; 12: Organically produced; 5: Matching food; 8: Attractive front label; 6: Information on back label; 3: Information on the shelf; 13: Vintage; 7: Award / Medal; 4: Alcohol level)*

A possible explanation for this could be the following: filling out a questionnaire is an effortful task that requires respondents' full attention, and this could limit the effect size of priming. Answering questions engages cognitive system 2, which is an effortful, slow, and deliberately controlled response system (Thaler and Sunstein, 2009). It requires energy and cannot work without attention but, once engaged, it has the ability to filter the impulses of system 1. The priming manipulation, however, aims to influence cognitive system 1, which in turn evokes behavioral change. System 1 requires little energy or attention and makes judgments based on experiences and generalizations, making it prone to biases and systematic errors. Using it does not feel like thinking (Thaler and Sunstein, 2009). Therefore, instead of using a questionnaire, a more "real" shopping experience (similar to a test market) should be simulated in further research.

Literature

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