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HOMO OECONOMICUS AT THE CAFÉ: A FIELD EXPERIMENT ON “SUSPENDED COFFEE”

Federica D’Isanto* and Salvatore Di Martino♦

Abstract

Individuals engage in daily behaviours that are often at issue with self-interest and rationality. This paper supports the thesis of inadequacy of the homo oeconomicus model, providing results of a field experiment conducted in the city of Naples (Italy) on the practice of “suspended coffee” (*caffè sospeso*). The suspended coffee tradition was initially launched in Naples and consists in people purchasing two coffees, one to drink on the spot and one to be left “suspended” for someone else to drink for free. A convenience sample of café clients completed a self-administered questionnaire. Their answers were examined in relation to the declared choice and consequent purchase of a suspended coffee. The analysis of the data focuses on the impact that socio-demographic characteristics and motivations, such as consumer choices and adherence to social norms, have on the choice of purchasing a suspended coffee. Within the framework of Structural Equation Modelling, results from a series of latent Path Analyses reveal that being aware of the existence of the suspended coffee tradition has a direct effect on its purchase whilst also mediating the effect of variables such as social norms, café, nationality, and age of the respondents. Our study confirms the human beings’ capacity to act pro-socially and altruistically. Limitations and future directions are also discussed.

Keywords

Prosocial behaviour; Social norms; Consumer behaviour; Altruism; Generosity

JEL Codes

A13, C38, C93, D64, D91

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1. Introduction

Every day, people engage in several prosocial activities such as restaurant tipping (Conlin, Lynn and O'Donoghue, 2003; Greenberg, 2014), blood donation (Mellström and Johannesson, 2008), and gift giving (Fehr and Gächter, 2000; Ruffle, 1999). This kind of activities cannot be easily explained through the traditional model of *homo oeconomicus* (Frey and Meier, 2004). Nevertheless, many still consider selfishness, greed and maximisation of profit as basic principles of modern economy. A main example is reported by Daniel Kahneman (2012), who, despite having largely demonstrated with Amos Tversky (1973) that cognitive and emotional factors are critical to economic choices, acknowledged that the neoclassic economy still persists in adopting the *homo oeconomicus* model as the main theoretical framework to interpret human economic behaviour (Kahneman, 2012).

However, the city of Naples in the South of Italy has recently rediscovered an old tradition called “suspended coffee” (*caffè sospeso*). Sometimes, people after consuming their own coffee decide to pay for an extra one (hence the name “suspended”) and let it be freely available for anyone who will come along asking for a free coffee.

This kind of behaviour is hard to interpret through the lenses of neoclassical economics. In fact, it stands in stark contrast with the ideal-typical neoclassic persona whose acts are supposed to be oriented towards the maximization of personal interests in spite of any prosocial inclination. Conversely, a suspended coffee decreases one's own purchasing power to increase the utility function of a total stranger. In that regard, who pays the suspended coffee for somebody else do not seem to act according to rules of rationality or profit maximization. In fact, they do not get a personal advantage from their action since they are not acquainted to the person who will enjoy the suspended coffee and, in some cases, they might never go back to that café or even that city again (e.g., tourists). Moreover, the suspended coffee is usually not required or expected as it is for tips, which makes it even a more altruistic and unselfish act, and, for this reason, less subjected to cultural influences or social pressure. Based on these premises, the practice of suspended coffee can be better explained thorough the lens of the economics of reciprocity (Fehr and Gächter, 2000). In particular, the act of buying a suspended coffee fits into the category of “unconditional reciprocity” because, as Bruni (2008: 47) eloquently points out, it requires the “existence of an intrinsic reward that the agent gains from the action itself, before and independently of the result of the act of reciprocity” .

This kind of gratuitous hence prosocial behaviours is a telling example of the human behaviour complexity and the difficulty to explain it by means of pure rational models.

In order to shed more light on the suspended coffee behaviour, we decided to conduct a field experiment with coffee consumers in two historical cafés in Naples. The main outcome variable analysed is the decision of whether to buy a suspended coffee, which we regard as an indicator (proxy) of prosocial/altruistic behaviour or unconditional reciprocity.

Section 2 will introduce the Neapolitan suspended coffee tradition and explain the reasons why such practice has drawn the interest of the scientific community. Section 3 will lay out the experimental design, including the instruments adopted, data collection, and variables analysed.

This section is followed by descriptive and inferential analyses across three models of increasing complexity, which were generated by means of latent path analyses within the context of Structural Equation Modelling. Last section will be dedicated to the discussion of the results, along with conclusions we can draw from them as well as limitations and recommendations for future studies.

2. The suspended coffee tradition

The suspended coffee is an old Neapolitan tradition which entails buying a coffee for a potential occasional customer—usually a disadvantaged person—as a little but significant act of solidarity. This comes with no surprise considering that the consumption of coffee and other beverages or foods is charged with cultural meanings, morality, and social class differences (Grauel, 2014; Grinshpun, 2014; Shaker Ardekani and Rath, 2017).

The scientific literature provides scant information on the history and meaning of suspended coffee. In order to find out more about this tradition, we collected, amongst other information, first-hand accounts from café staff and their clientele. From all the information we gathered, we found out that there are at least three different schools of thought about the origins and reasons behind this social practice.

According to the first one, this act is seen as a way to share joyful emotions. The Neapolitan writer Luciano De Crescenzo (2009: 11) describes the reasons behind the suspended coffee in these terms: “Sometimes it happened that when someone from Sanità quarter of Naples would feel particularly cheerful because things had come his way, he would pay for two coffees rather than one. The second coffee was left, hence suspended, as a friendly gesture for the next customer. Then, sometimes, a poor guy would show up and ask whether there was any suspended coffee left for him. It was a way like another to offer a coffee to the humankind”¹.

A similar school of thought considers the suspended coffee as a sympathetic and charitable gesture geared to those most in need. This tradition was born during World War II² and today—given the critical state of the Neapolitan and national economy—it has become a supportive act for disadvantaged people. Such habit is part of a wide range of cohesive and supportive acts that are distinctive of the Neapolitan society. One example out of many is the *acino di fuoco*, a practice that consists in carrying embers on a shovel across the Neapolitan courtyards by those who had already lit their early morning fire in favour of their neighbours, so they could save matches (Pazzaglia, 2004).

Lastly, according to the writer Riccardo Pazzaglia (2004), this tradition would have been born when groups of friends or acquaintances would meet at their local café just to end up quarrelling about who would pay the bill first. It would therefore happen that sometimes people would get confused about who actually had a coffee and who was supposed to pay for what, so they ended

¹ Authors’ translation.

² However, according to journalist Lorenza Castagneri (2013), its roots dates back to the early 19th century.

up paying for one or more coffees that had not been actually consumed. In that case, they did not ask for the money back, leaving the credit available for someone else to get a free coffee.

After a standstill period, the suspended coffee has recently been resumed, going beyond the city of Naples to spread across both nationwide and worldwide³. A main example is the “suspended coffees movement”, founded by the Irish John M. Sweeney, and joined by more than 1,400 cafés in 24 countries across the world⁴. In Naples, a widely felt sympathy for those who are going through the recent financial hardships has led in 2010 to the creation of the *Rete del Caffé Sospeso* (i.e., Suspended Coffee Network), which was joined by several well-known coffee shops around the city among which the Gran Caffé Gambrinus, one of the cafés that took part in our study. Since 2004, the charity *Ronde della carità* has even launched a national suspended coffee day (Nove da Firenze, 2004), whereas the *Rete del Caffé Sospeso* has launched a similar event, which symbolically coincides with the International Human Rights Day.

Whether guided by a desire to share, solidarity reasons or selflessness, buying a suspended coffee is a benevolent act towards one's kin and this is the reason why we consider it as a proxy of prosocial behaviour or unconditional reciprocity in the field experiment which will be detailed in the next paragraphs.

3. Experimental design

The study was carried out in the city of Naples on the 26th of June 2016 with the aim of exploring the socio-demographic characteristics, consumer choices, and adherence to social norms of the suspended coffee consumers. To this end, we carried out a cross-sectional experiment in two well-known Neapolitan cafés, namely the Gran Caffé Gambrinus, which is located in one of the central squares of Naples—a place well-known for its prestige and cultural heritage—and the Augustus café, which is a similarly well-regarded café located in the ancient historic centre area of Naples.

The data were collected through a relatively short paper and pencil self-administered questionnaire, which was available both in Italian and English to meet the language requirements of the high number of foreign tourists surveyed, particularly at the Gambrinus café.

Both types of questionnaires shared the same structure and content. However, some random questionnaires included the following introductory sentence, which we sourced from the New York Times (2014): “The suspended coffee is a Neapolitan tradition that boomed during World War II and has found a revival in recent years during hard economic times”. This short sentence was not intended to influence the subjects’ choice to buy a suspended coffee but only to remind the existence of such tradition to those who already knew about it and to test whether it would work as a nudge for those who were unaware of its existence. In fact, as the survey results

³ Although Buscemi (2015) highlighted how in the United States neoliberalism has exploited this old tradition for commercial reasons.

⁴ <http://suspendedcoffees.com> [Accessed: 2 April 2020].

confirmed, the “suspended coffee tradition nudge” did not exert statistically significant influence over the choice of buying a suspended coffee (D’Isanto and Di Martino, 2016).

The first part of the questionnaire collected the participants' socio-demographic data such as age, gender, nationality, employment status, whether being a tourist or not, and education level. The second part aimed at assessing the respondents’ level of trust in people as well as their adherence to socially prescribed norms of good behaviour.

In the final part, the participants were asked whether they knew about the suspended coffee tradition and to specify how many suspended coffees they wished to buy that day. It is also worth to remember that, being this a behavioural economics experiment, the researchers needed to check whether people’s stated intention to buy a suspended coffee was followed by the actual purchase of the product. To this end, after the respondents had left the café, the researchers asked the cashiers to provide them with a copy of the receipt.

Finally, respondents were asked if they had previously taken part to a similar experiment. 97.8% of the sample (2.2% did not answer the question) gave a negative answer, supporting our hypothesis that a similar study had never been conducted before.

4. Data collection and variables

Two trained undergraduate students supported by the first author of this paper approached a convenience sample of 230 people sitting at the tables of the Gambrinus café (59.2%) and the Augustus café (40.8%). After introducing themselves and explaining the study purpose, they invited people to fill out a questionnaire, which aimed at collecting demographic data, opinions about social norms and, as last question, whether the respondents intended to purchase a suspended coffee that day. The researchers made sure to collect all the questionnaires and receipts, prior consent from both the participants and the cafés staff.

A total of 230 people (113 men and 117 women) took part in the study. The average age of the sample is 43.48 years (SD = 15.17), of which 37.4% is composed of tourists and 61.7% of local residents. More than a fourth of the whole sample (29.1%) decided to buy a suspended coffee the day of the experiment, with an average bill of 5.98 EUR (SD = 7.49) per person. For a more detailed description of the participants’ socio-demographics characteristics, see Table 1.

Table 1 also shows that some categories of the variables Educational Level Attained (i.e., Primary School and Ph.D.) and Occupation (i.e., Unemployed and Student), present a too small number of cases to be employed in our analyses. Therefore, they were collapsed into a smaller number of categories.

Table 1 - Participants socio-demographics characteristics

Variable	N (Mean)	Standard Deviation (SD) Percentage (%)	N. of suspended coffees (%)
Age (AG)	(43.489)	(15.170)	
Missing *	1		
Bill (per person)	(5.981)	(7.492)	
Bill (per table)	(10.753)	(12.509)	
Gender (GN)			
Male	113	49.1	37 (55.2%)
Female	117	50.9	30 (44.8%)
Nationality (NT)			
Neapolitan	117	50.9	41 (61.2%)
Italian (IT)	65	28.3	41 (61.2%)
Foreign (FR)	48	20.9	9 (13.4%)
Civil Status (CS)			
Single	82	36.0	23 (34.3%)
Married (MA)	130	57.0	37 (55.2%)
Separated/Divorced (SD)	16	7.0	7 (10.4%)
Missing *	2		
Educational Level Attained (EL)			
Primary school	8	3.5	3 (4.8%)
Secondary school	88	38.3	24 (38.1%)
University degree	107	46.5	31 (49.2%)
Ph.D.	13	5.7	31 (49.2%)
Missing *	14		
Occupation (OC)			
Unemployed	10	4.3	5 (7.8%)
Retired and unpaid jobs	24	10.4	4 (6.3%)
Student	16	7.0	5 (7.8%)
Employee	43	18.7	16 (25%)
Professional	116	50.4	34 (53.1%)
Missing *	21		
Residence (RS)			
Tourist	142	62.3	16 (23.9%)
Local resident	86	37.7	51 (76.1%)
Missing *	2		
Total	230		

* Missing values were treated with pairwise deletion.

As we can see in Table 2, Primary School and Secondary school are now conflated into the category Primary & Secondary School, University degree and Ph.D. are now part of the category University and Ph.D. To label the new category encompassing unemployed, retired and unpaid jobs and student we referred to the Eurostat definition of economically inactive population, which comprises “all persons who were neither employed nor unemployed during the short reference period used to measure ‘current activity’” (Eurostat, 1999).

Table 2 - Collapsed categories for Education and Occupation

Variable	n	Percentage (%)
Educational level attained (EL)		
Primary & Secondary School	96	44.4
University and Ph.D.	120	55.6
Missing *	14	
Occupation (OC)		
Economic inactive population	50	23.9
Employee (EM)	43	20.6
Professional (PR)	116	55.5
Missing *	21	
Total	230	

* Missing values were treated with pairwise deletion.

In addition to the demographic variables, the researchers asked the respondents to answer four questions sourced from the European Value Study (2008)⁵. The first question was used to measure people’s level of trust towards others. The other three questions asked the respondents whether it is never, sometimes, or often justified to claim state benefits which they are not entitled to (GB), cheating on tax if they have the chance (TX), and avoiding fare on public transport (FT).

These variables were used to control for the effect of Social Norms (SN), following the procedure already adopted by Letki (2006). In fact, the desire to comply with social norms has been suggested as a possible explanatory variable of several prosocial behaviours (Azar, 2004; López-Pérez, 2008; Gächter, Nosenza and Sefton, 2013).

Data were manually entered in a Microsoft Excel spreadsheet and then transferred to Mplus v. 7.0 to be analysed. Overall, six main outcome variables were employed in this study, namely Suspended coffee (SC), Heard Before (HB), Café (CF), Fare Transportation (FT), Government Benefits (GB), and Taxes (TX). Table 3 shows their univariate proportions and counts.

⁵ Available at <https://dbk.gesis.org/dbksearch/sdesc2.asp?no=4800&db=e&doi=10.4232/1.12458> [Accessed: 2 April 2020].

One element immediately worthy of notice from Table 3 is that at least one third of the whole sample (30.9%), decided to buy a suspended coffee the day of the field experiment. This percentage is quite high, considering that, as mentioned above, the suspended coffee is a spontaneous and unselfish act, which is not required or expected and hence less affected by the cultural norms such as the ones influencing the tipping behaviour.

Table 3 - Univariate proportions and counts for main outcome variables

Variable	Absolute frequencies	Percentage (%)
Suspended Coffee (SP)		
Yes	67	30.9
No	150	69.1
Missing *	13	
Heard Before (HB)		
Yes	140	63.1
No	82	36.9
Missing *	8	
Café (CF)		
Gambrinus	136	59.1
Augustus	94	40.9
Fare Transportation (FT)		
Never	164	73.5
Sometimes	49	22.0
Often	10	4.5
Missing *	7	
Government Benefits (GB)		
Never	182	82.0
Sometimes	26	11.7
Often	14	6.3
Missing *	8	
Taxes (TX)		
Never	184	82.9
Sometimes	35	15.8
Often	3	1.4
Missing *	8	
Total	230	

* Missing values were treated with pairwise deletion.

5. Data analyses and results

Data were analysed in the context of Structural Equation Modelling, which is a statistical set of regression-based techniques designed to consider the complex relationships between both observed and latent variables (Hoyle, 1995; Kline, 2015). Within this framework, we relied on a recursive Latent Path Analysis to test the direct and mediated effects of several variables on our main outcome variable, namely suspended coffee. Given the presence of categorical variables, we ran a series of Probit regressions analyses with Weighted Least Square Parameter Estimates (WLSM) as implemented in Mplus 7.0 (Muthén and Asparouhov, 2002).

Since none of the cases exceeded 5% of missing values and Little's test showed them to be missing completely at random ($\chi^2 = .039$; Df = 1; $p = .844$), we treated missing data with the weighted least squares estimator (Asparouhov and Muthén, 2010). However, co-variables were still treated with listwise deletion, and this created a loss of data for some models we tested. Nonetheless, power analysis of the close-fit test based on the null and alternative value of RMSEA (MacCallum, Browne and Sugawara, 1996) shows that with 72 degrees of freedom and a .05 alpha level, the power of the final explanatory (Model3) – which is the one that included the highest number of variables – reaches .866 (see Table 4). Since a cut-off point for power analysis is usually understood as a minimum value of .80 (Cohen, 1992), we can be confident in the power of our sample to avoid making a type II error in rejecting the null hypothesis that the model did not fit well the data⁶.

Regarding the model indices of fit, we relied on the following guidelines proposed by Hu and Bentler (1999): Chi-Square test (χ^2) should be low and non-significant, a value for Root Mean Square Error of Approximation (RMSEA) below .6 with confidence intervals values close to 0 for the lower limit and less than .08 for the upper limit, and values higher than .95 for both TLI (Tucker-Lewis Index), and Bender's Comparative Fit Index (CFI).

To test the relationship between the variables used in our study, we adopted a stepwise method whereby a series of models with increasing complexity and number of variables were compared. As we can see in Table 4, the chi-square difference tests show that we can accept the alternative hypothesis that including the predictors of the suspended coffee showed in Model 2 significantly improves the model fit. By the same token, further paths included in Model 3 show that the latter fits the data significantly better than Model 2.

Table 4 - Suspended coffee path models

Model	χ^2 (WLSM)	χ^2 (Df)	χ^2 (p)	CFI	TLI	RMSEA (CI)	$\Delta\chi^2$	Δ df	Δp	n
Model1	39.426	35	.278	.956	.937	.026 (.000, .060)				189
Model2	52.783	57	.633	1.000	1.048	.000 (.000, .039)	32.326	4	<.001	191
Model3	71.634	72	.490	1.000	1.004	.000 (.000, .041)	26.898	3	<.001	191

⁶ This also advice caution in interpreting the findings of Model1, in that the results are underpowered.

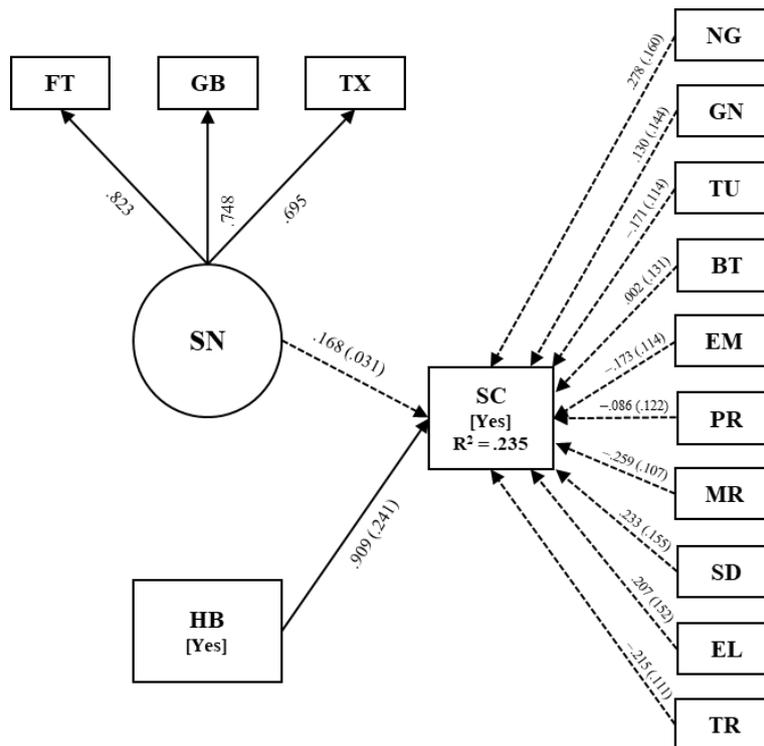
In Model1, we first started to measure the latent variable Social Norms through the manifest variables Fare Transportation (FT), Government Benefits (GB), and Taxes (TX). Results from Confirmatory Factor Analysis show that the three variables employed have all standardized parameter estimates (i.e., factor loadings) higher than .4, which is a generally understood threshold above which a manifest variable is considered to be a salient factor loading (Brown, 2006). In addition, inter-item reliability (R^2) shows that Social Norms explains a high level of variance of FR, GB, and TX (i.e. 57.4%, 61.4%, and 52.3% respectively). Lastly, Composite Reliability is higher than .7 and Average Variance Extracted higher than .5, indicating this latent variable has a high level of both internal reliability and convergent validity (Raykov, 1997; Fornell and Larcker, 1981) (see Table 5).

Table 5 - Factor loadings, reliability, and convergent validity measures for the variable Social Norms

Latent Variable	Manifest Variable	Factor Loading (λ^0)	Inter-Item Reliability (R^2)	Composite Reliability (CR)	Average Variance Extracted (AVE)
Social Norms (SN)	Fare Transport (FR)	.757	.574	.808	.584
	Government Benefits (GB)	.784	.614		
	Taxes (TX)	.723	.523		

In the next step, we regressed Suspended Coffee on Social Norms. In addition, we regressed it on Heard Before (HB) and the remaining control/demographic variables (i.e. gender, being a tourist, the total bill paid, occupation, civil status, educational level attained, and level of trust in others). As we demonstrated elsewhere (see D’Isanto and Di Martino, 2016) only Heard Before had a statistically significant effect on Suspended Coffee ($b = .909$; $p = .001$; 95% CI [.372, 1.447]) (see Fig. 1). However, in the next pages we will demonstrate that other variables predict Suspended Coffee and that Heard Before mediates their effect.

Figure 1 - Latent Path Analysis graph of Model1

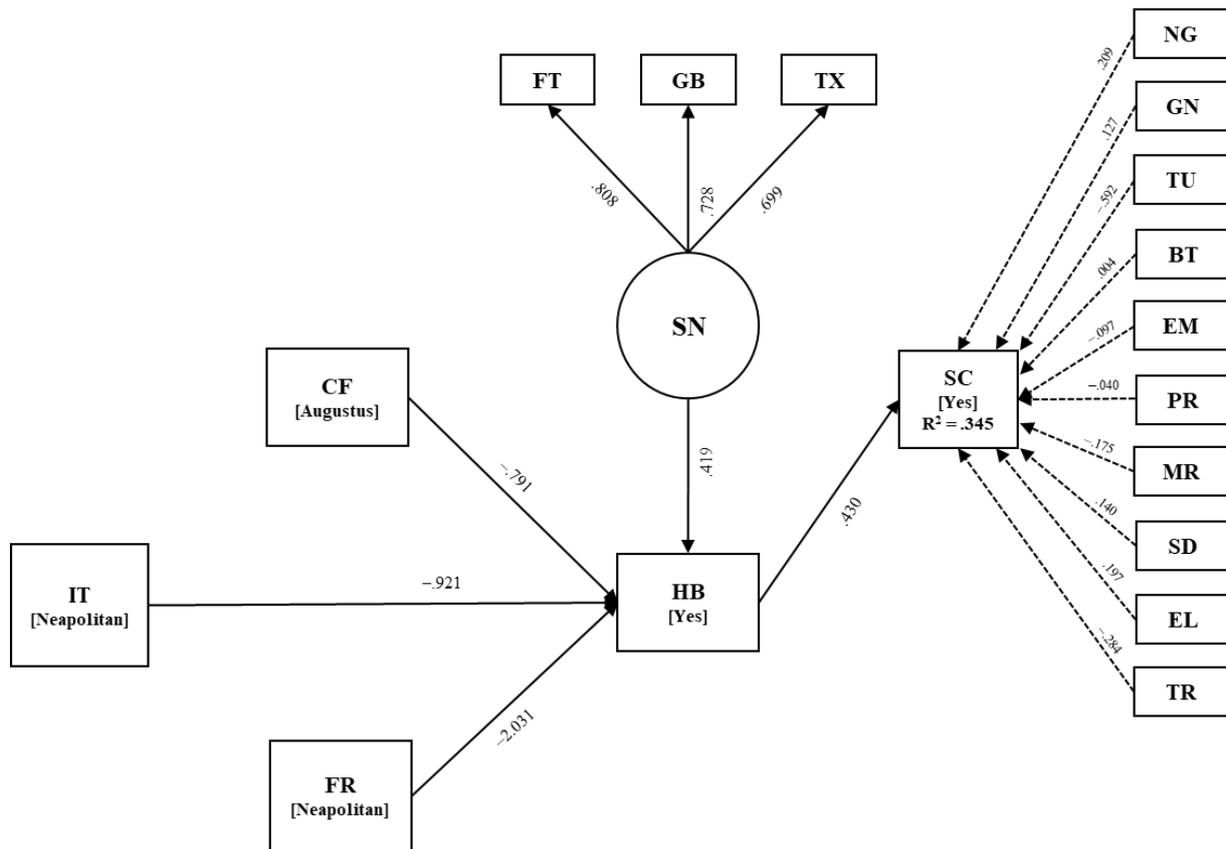


Note: Dotted lines indicate non-significant effect at the 5% alpha level. Reference categories in square brackets.

In Model2 we first removed the non-significant direct effect of Social Norms on Suspended Coffee, and then we regressed Heard Before on Social Norms, Nationality and Café (Fig. 2). The results show that Heard Before significantly mediates the effect of Social Norms ($b = .180$; $p = .019$; 95% CI [.030, .331]), going the Gambrinus café compared to the Augustus café ($b = -.340$; $p = .036$; 95% CI [-.658, -.022]), being Neapolitan compared to being Italian ($b = -.396$; $p = .036$; 95% CI [-.765, -.027]) and being foreigner ($b = -.874$; $p < .001$; 95% CI [-1.468, -0.279]).

We further hypothesised that other variables such as the kind of coffee shop people went to, age, and nationality of the consumer might exert a mutual influence on each other, whilst still being mediated by the effect of the variable Heard Before.

Figure 2 - Latent Path Analysis graph of Model2



Note: Dotted lines indicate non-significant effect at the 5% alpha level. Reference categories in square brackets.

Therefore, in Model3 we added a series of regression paths, which included coffee shop, nationality, and age (Fig. 3). This final model shows very good model fit parameters ($\chi^2 = 71.634$; Df = 72; $p = .490$; CFI = 1.000; TLI = 1.004; RMSEA = .000; 90% CI [.000, .041]).

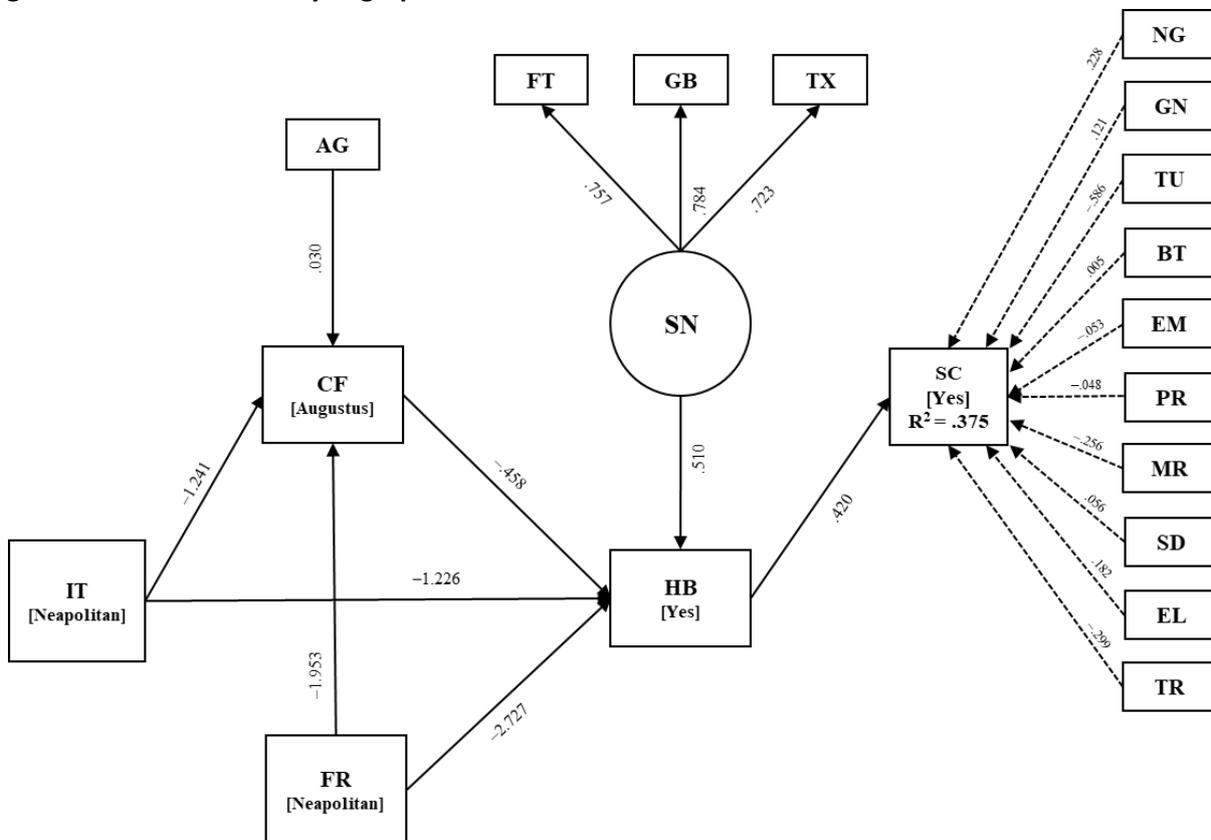
Similar to Model1, Model3 shows that the only variable directly predicting the choice of buying a suspended coffee is Heard Before ($b = .420$; $p < .001$; 95% CI [.187, .652]). In addition, this variable also mediates the effect of several other variables. For example, the path running from Age to Augustus Café, Heard Before and Suspended Coffee (Fig. 3) shows that each year increment in age increases the likelihood of going to the Augustus rather than the Gambrinus café ($b = .030$; $p < .010$; 95% CI [.007, .053]). This suggests that older people are more likely to frequent the August café. In turn, those who tend to go the Augustus café are less likely to know about the suspended coffee tradition ($b = -.458$; $p = .009$; 95% CI [-.802, -.114]). This is also confirmed by the negative total effect of Age on Suspended Coffee through Augustus Café and Heard Before ($b = -.006$; $p = .040$; 95% CI [-0.012, 0.000]). Conversely, even those who do not know about the suspended coffee are more likely to find out about it if they go to the Gambrinus café rather than the Augustus café.

In addition, Italian citizens are less likely than Neapolitans to know about the suspended coffee tradition ($b = -1.226$; $p = .002$; 95% CI $[-1.986, -0.466]$). However, they also tend to go less to the Augustus café ($b = -1.241$; $p < .001$; 95% CI $[-1.853, -0.629]$), preferring more the Gambrinus café, where they are more likely to find out about the suspended coffee, hence to buy one. The total significant effects of the paths Suspended Coffee on Heard Before on Italian ($b = -.515$; $p = .005$; 95% CI $[-0.874, -0.155]$) and the one of Suspended coffee on Heard Before on Augustus Café on Italian ($b = .239$; $p = .021$; 95% CI $[0.036, 0.441]$), supports this hypothesis (Fig. 3). However, the total sum of the two indirect effects combined is not significant at the 5% alpha level ($b = -0.276$; $p = .095$; 95% CI $[-.601, .048]$). Therefore, we advise caution before drawing any conclusion in relation to this effect of the variable Suspended coffee.

Foreign people (FR), also tend to know less about the suspended coffee tradition than Neapolitans ($b = -2.727$; $p < .001$; 95% CI $[-4.128, -1.327]$), and Wald test shows that they also know significantly less than Italians ($b = 6.579$; $Df = 1$; $p = .010$). In addition, foreigners tend to opt for the August café compared with Neapolitans ($b = -1.954$; $p = .014$; 95% CI $[-3.510, -0.398]$), yet not significantly less than Italians ($b = .967$; $Df = 1$; $p = .325$).

Similar to other variables used in this study, Social Norms has an indirect effect on Suspended Coffee through Heard Before ($b = .214$; $p = .008$; 95% CI $[0.057, 0.371]$), with a significant total effect ($b = .185$; $p = .046$; 95% CI $[.003, .366]$).

Figure 3 - Latent Path Analysis graph of Model3



Note: Dotted lines indicate non-significant effect at the 5% alpha level. Reference categories in square brackets.

6. Discussion

The results presented in the previous pages show that, as demonstrated elsewhere (D'Isanto and Di Martino, 2016), knowing about the suspended coffee tradition is the only variable that was found to directly predict the choice of buying a suspended coffee. However, in this study we presented further evidence that the following variables also exert an indirect effect on the choice of purchasing a suspended coffee: age, nationality, café, and social norms.

Age is a significant predictor of the kind of café people visited. Older people are, in fact, more likely to go the Augustus café, rather than the Gambrinus café. However, we also found that those who go to the Augustus café, included older people, are also less likely to purchase a suspended coffee. Regarding the variable Nationality, Neapolitan people are more likely than Italians and foreigners to know about the suspended coffee tradition and hence to buy one. In addition, Neapolitans and other people who tend to go to the Gambrinus café are more likely to find out about the suspended coffee, compared to those who go to the August café. This is confirmed by the fact that the latter does not usually encourage people to buy a suspended coffee, and it only adhered to our initiative on the day that the project was carried out. Conversely, the Gambrinus café is a well-known venue for suspended coffee consumers. Therefore, it is safe to assume that those who already know about the suspended coffee (usually Neapolitan people) and want to buy one are more likely to go to a place that offers this kind of service. In the same vein, those who have no previous knowledge of it are still more likely to find out about it if they go to a place that advertises its tradition and value.

Lastly, we have no easy answer of why knowing about the suspended coffee also mediates the effect of social norms. One possible explanation could be that law-abiding individuals are also caring people, who tend to know about the suspended coffee and wanting to help those in need. This hypothesis finds some ground in the ethics of justice and care literature, which posits that these two moral stances of human behaviour are intrinsically connected (Held, 2006; Di Martino et al., 2019). However, we cannot rule out that other variables related to social norms might play a significant role in predicting the choice of purchasing a suspended coffee.

7. Limitations and future recommendations

This is an exploratory study and as such it must be understood in the context of some limitations.

First and foremost, although our results showed some of the significant predictors of suspended coffee, we must acknowledge that only 37.5% of the variability in the outcome variable is explained by both the direct and indirect effects of the all variables employed in this study (see Figure 3). Other potential predictive variables are still likely to explain nearly two thirds of its remaining variance. Among these, we recommend for inclusion in future studies some which have been identified in previous studies on tipping, such as sense of generosity, gratitude, reciprocity, let-down aversion, and quality of the service (Conlin, Lynn and O'Donoghue, 2003;

Azar, 2004; Parrett, 2006; Greenberg, 2014). These variables could not be included in this study due to its explorative nature. Since respondents were approached while they were enjoying their beverage at the coffee shop, the researchers could not use a too long survey. Therefore, they had to select a limited number of possible explanatory variables.

Other limitations are linked with the cross-sectional nature of this experiment, which does not allow to rule out the chance that people might have felt inclined to purchase a suspended coffee only on the particular day we collected the data. In addition, the questionnaires we used were designed only in two languages and administered in two coffee shops. Future longitudinal investigations involving local, national, and international premises could shed more light on the behaviour of suspended coffee users. Moreover, we recommend employing a combination of qualitative and quantitative methods, making data collection instruments available in a wider array of languages, to explore the views and feelings of a broader range of providers, users and consumers of suspended coffee.

One last limitation pertains to the high number of suspended coffees purchased by the participants in this study. Although we found a non-significant effect of the nudge, the high percentage of suspended coffees purchased still raises the issue of whether being approached by a professional such as a university researcher might act as a stimulus to pleasing an authority figure. Future studies will need to avoid potential biases due to social desirability and social approval. For instance, we suggest that a future study compares a treatment group of participants who are asked to complete the survey before deciding to make the purchase with a control group of people who are approached only after they have paid their bill and left the cafés.

This and possible other limitations invite more investigation in the nature of the suspended coffee.

8. Conclusions

This work is an attempt to provide further confirmation to an already large branch of the literature that challenges the assumptions of the *homo oeconomicus*' paradigm. Indeed, as the case of the suspended coffee shows, human beings not always rationally calculate the costs/benefits ratio. In fact, they are often moved by instinct, habits, curiosity, social norms as well as empathy and compassion, which lead them to sympathise with people in need, even when they are strangers.

Moreover, the experimental data presented here are in line with a branch of the literature, which suggests that, contrary to the mainstream economic theory, people can engage in altruistic and pro-social behaviour. In fact, the people who took part in our field experiment proved to be more prosocial than expected. A prime example is that at least one third of our sample decided to buy a suspended coffee, despite their choice was not statistically determined by nudging to purchase the product and also controlled for variables such as gender, being a tourist, the total bill paid, occupation, civil status, educational level attained, and level of trust in others.

Our analyses also show a complex relationship between the variables that predict the suspended coffee behaviour. Although limited by its exploratory nature, this work opens the path to future studies in the suspended coffee and similar prosocial behaviours.

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