

HOW POWER IS PESTER POWER? A MIX-METHOD STUDY

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Moving from a critical reflection on mix-method studies, the paper presents the Italian validation of the Nag Factor Questionnaire developed by Ogba and Johnson (2010); this is the first Italian empirical study on nag factor. Pester power or nag factor is the children ability, by nagging, to push their parents to purchase the products they desire. Nag factor has been studied for its severe consequences on children obesity, since a lot of times kids nag for junk food and within a socio-educative perspective for its influence on materialism. This pilot study is triangulated: it implies a survey, realized with the Pester Power Scale, along with diaries written for a week by 10 mothers. Results show that pester power is definitely power: it fully mediates the relationship between marketing forces directed to kids and consumer behaviour expressed by parents. Moreover, mothers seem not always aware of the nagging ability of their kids and several times they chose bad solutions to cope with infant tantrum, like submissiveness. We propose some practical implications in terms of marketing for kids with a focus on packaging policies.

Keywords: Pester power; Nag factor; Mix-method; Marketing communication; Consumer behavior.

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This paper, beyond the controversy between quantitative and qualitative methods, aims at proposing to the reader the reasons for the feasibility of an alternative methodological way: triangulation (Fielding & Fielding, 1986). When we talk about triangulation we refer to the intersection of points of view, whether these are represented by different researchers and social scientists, or rather distinct data collection and analysis techniques. Proposing the triangulation of techniques and methods of analysis means, in a certain



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sense, to propose a third way, often not appreciated. If, in fact, it is easy to understand that the integration between the two contenders is not only little traveled but even not legitimized, inconceivable from the point of view of methodological ideology. All with the serious consequence that attempting a triangulation often runs the risk of translating into a strange position for which one is not recognized either by the group of researchers who define themselves as quantitative or by that made up of researchers who define themselves as qualitative and this is because the two positions have become extremely radicalized. To fully understand not only the legitimacy of the triangular position but its full practicability, it may be useful to refer to the limits that quantitative methods and qualitative methods have shown over time. We could, in fact, support the hypothesis according to which triangular methods have gained space above and beyond the quarrel of quantitative methods versus qualitative methods precisely because of the limits that the two known and major paradigms have revealed over time (Cortini, 2014). We will try to show the power of mix-method by a very simple way: presenting a mix-method study on pester power.

PESTER POWER: AN INTRODUCTION

It is well established that children do not choose what to eat or what to buy, since their parents generally choose for them (Fisher & Birch, 1999). Nevertheless, international literature is stressing their power of influencing. It seems, in other words, that children, who will become future consumers, namely a direct market, represent an important source of indirect market able to shape, in some ways, attitudes and consumer behaviours of their parents by nagging them (Lawlor & Prothero, 2011; Nicholls & Cullen, 2004).

The term *pester power* underlines that there is a power played by a part on the other, even if, as already stressed (Tucker, 2005), within a very complex framework, made up by complex interactions influenced by conformity to group norms, attention seeking, and self-image.

In particular, a primary objective of much of the research has been to investigate how advertising and packaging push children to nag parents to purchase desired products (e.g., toys or junk food) in Western countries (Giordano, 2016; Gollety & Guichard, 2011; Ogba & Johnson, 2010).

Research results are still ambiguous in terms of nagging efficacy; according to some authors, in fact, even if on one hand children nag, on the other the majority of parents (80% almost) seem to resist (Ogba & Johnson, 2010; Spungin, 2004). Our paper has as a target the Italian context and aims at verifying the efficacy of nagging, with a special focus on kids with working mothers and on ethical concerns referring to nagging and junk food.

PACKAGING

International literature, besides the above mentioned worry about children obesity, has stressed a lot the role played by packaging. Packages refer to the material box that protects a product, typically food.

Marketing people seem to know that a very young child can make consumer choices (Horgan, 2005; Turner et al., 2006) and try to take advantage of such a possibility, starting from the shape and colour of packaging. In particular, it seems that a lot of packages contain specialized fonts and graphics to signal fun food to children and, in addition, most display a cartoon image on the front of the package (Elliott, 2012).



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Gelperowic and Beharrell (1994), in an interesting study realized by focus groups, find that kids are attracted by "nice looking" packages and conclude that mothers choose for these packages in the hope that their kids will eat. In addition, it seems that mothers succumb also to avoid tantrum.

Fun Food

Appeals to fun in packages, in a direct or indirect way (think, on one hand on the presence of fun characters and, on the other one, to possibility to have fun with packages, like, e.g., when there are cartoons to be coloured inside the pack or when products offer a fun activity to be done with packages, like it happens with Babybell cheeses) are nowadays a marketing must.

The appeal to fun is also realized by using strange names and by inviting kids and teens to surf online in searching for specific activities, like social networking or games.

Roberts (2005) coined a neologism: "eatertainment," to identify the marketing techniques targeted on kids, like different premium offers, free gifts such as free toys, stickers, and so on.

Concerning the mass medium, on one hand, even if marketers seem to be still focused on TV (Livingstone & Helsper, 2004), on the other one new media are emerging as important point of reference, as well as packaging, which remains important since most food selection occur within supermarket where packages become definitely more tangible than a TV advertisement (Den Hoed & Elliott, 2013).

RESEARCH DESIGN

Within the above mentioned theoretical framework, we have designed a triangulated research, comprising two different studies, one in the shape of survey, based on the Italian validation of the Pester Power Questionnaire developed by Ogba and Johnson (2010), and the other one in the shape of diaries filled by 10 mothers, on a daily basis, for a week on the experience of grocery shopping with their kids, writing on all the requests kids do before and during shopping, along with their feelings and emotions related to that.

The choice for a mix-method design, or triangulation, resides in the belief that quantitative and qualitative data can combine and enlighten one another (Cortini, 2014; Cortini & Tria, 2014).

The diary study, in details, aims at analysing experiences of mothers and letting them reflect on the nagging their kids perform in order to try to cope with it. It has been interesting in such a way, to find that mothers seem to suffer from nagging without a real awareness, so that diary can become a way to realize and figure out the pester power. We could anticipate our results stressing that diaries may represent a training for parents who are obliged to write on their kids' requests and their own replies.

In the following paragraphs we will present, first of all, the survey's results (Study 1) and we will conclude by discussing diaries' results (Study 2).

STUDY 1

After having done a brief analysis of the literature and relative instruments developed all around the world to investigate pester power, we have chosen to focalize on the paper by Ogba and Johnson



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(2010), since it presents an empirical tool to measure pester power that contains a specific scale on packaging. The questionnaire is made by 12 items, distinguished into three dimensions: packaging attractiveness, nagging, and submissiveness. We have proceeded by translating all the items, following the so-called backtranslation (Brislin, 1970). After a psychometric analysis of the Italian version of the Pester Power Questionnare realized on a very large sample (Cortini, 2021), we have decided to reduce the dimension of pack to three items and to enlarge both the dimensions of nagging and submissiveness, in order to include items concerning not only food and to understand the different nuances of mothers' submissiveness. Concerning this latter dimension, in particular, we added an item concerning the possibility to succumb only when the requested product is on sale and the possibility to succumb only in order to avoid conflicts (actually this item was present in the very first version of the Ogba and Johnson questionnaire).

Procedure and Measures

We contacted several primary schools in Abruzzo and Puglia regions. After having done two pilot studies, we defined the last version of the questionnaire, which is under scrutiny for the present paper, and a sample of 560 pupils resident in Abruzzo were analysed. In particular, we asked mothers to fill-in our questionnaire at home, taking all the time they needed. In details, the questionnaire, after having been accepted by the School Council, was diffused by the help of teachers and recollected after 2/3 weeks.

To the original questionnaire developed by Ogba and Johnson (2010) we added a dimension related to the submissiveness of kids in front of TV advertisements. In other words, it was supposed that kids nag their parents because, in turn, they are nagged by advertising. The final version of the questionnaire, along with a very rich sociodemographic part (concerning, e.g., working condition of mothers, number of TV hours watched per day, possibility to count on a pocket money or not, etc.), comprised the following subscales: pack, advertising power, nag, and submissiveness (Table 1).

TABLE 1 Main study variables

	Items	Alpha
1. Pack	3	.69
2. Advertising power	5	.75
3. Nag	8	.89
4. Submissiveness	4	.72

Results

Descriptive Statistics and Correlations

Means, standard deviations, and correlations among study variables are reported in Table 2. As can be seen, all study variables were significantly and positively interrelated.

After having verified the distributive qualities of our subscales, we proceeded with the analysis.



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TABLE 2
Means (*M*), standard deviations (*SD*) and correlations among study variables

	M(SD)	1	2	3	4
1. Pack	2.78 (0.86)	-			
2. Advertising power	2.22 (0.70)	.52***	-		
3. Nag	2.13 (0.73)	.49***	.44***	-	
4. Submissiveness	2.35 (0.98)	.19***	.25***	.30***	-

Note. *** p < .001.

Structural Equation Model

We tested a full structural equation model (SEM) in Mplus 7 (Muthén & Muthén, 1998-2012). The tested model is reported in Figure 1 and included both a measurement model (i.e., depicting the links between the latent variables and their observed indicators) and a structural model (i.e., depicting the links among the latent variables themselves).

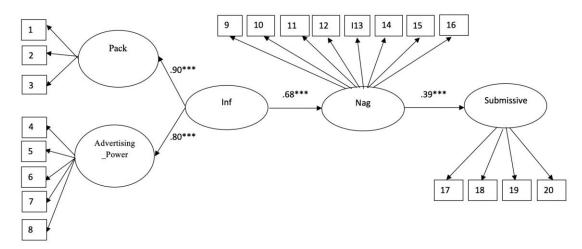


FIGURE 1
Structural Equation Model Tested.

Note. Inf = influence. Errors of Items 9 and 12 were positively correlated (.35, p < .001).

***p < .001.

Specifically, the measurement model consisted of four first-order latent factors (i.e., pack, advertising_power, nag, submissiveness.) and one second-order latent variable (influence). The first-order latent factor *pack* was defined by three observed indicators, the factor *advertising_power* by five observed indicators, the factor *nag* by eight observed indicators, and the factor *submissiveness* by four observed indicators. In addition, the first-order latent factors pack and advertising_power loaded on the second-order latent factor *influence*, stressing a unity of marketing tools played on kids. The structural model included the regression paths from influence to nag, and from nag to submissiveness.

We tested the model using the maximum likelihood (ML) estimation. In order to establish whether the model was good fitting we relied on various indices: the (a) χ^2/df ratio that should be lower than 3; (b)

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the comparative fit index (CFI), that should be higher than .90; and (c) the root mean square error of approximation (RMSEA), that should be lower than .08 (Kline, 2011).

Results indicated that the model fitted the data very well — $\chi^2 = 416.397$, df = 165; $\chi^2/df = 2.524$; CFI = .906; RMSEA [90% CI] = .065 [.058, .073]. The standardized factor loadings are reported in Table 3. They ranged from .44 to .83 and they were all statistical significant at p < .001. The structural paths are reported in Figure 1. As can be seen, influence was strongly related ($\beta = .68$, p < .001) to nag, and nag was strongly linked to submissiveness ($\beta = .39$, p < .001). This model explained large portion of variance on submissiveness (i.e., 15%) and especially on nag (i.e., 47%). This stresses the power of influence on submissiveness by the mediating role played by nagging, which seems to be definitely powerful.

TABLE 3
Standardized factor loadings

	Pack	Ad_p	Nag	Subm
Item 1	.77			
Item 2	.66			
Item 3	.57			
Item 4		.76		
Item 5		.66		
Item 6		.63		
Item 7		.61		
Item 8		.44		
Item 11			.83	
Item 9			.78	
Item 10			.74	
Item 13			.69	
Item 12			.69	
Item 16			.66	
Item 14			.63	
Item 15			.63	
Item 17				.67
Item 18				.66
Item 19				.61
Item 20				.58

Note. All factor loadings are significants at p < .001. Ad_p = advertising_power; Subm = submissiveness. The Italian version of the questionnaire is available upon request.

Standing the power that nagging displays, we wanted to analyse in details who nags the most and also who succumbs the most. Our hypothesis was that kids receiving a pocket money should nag the less, being more aware about the value of money but we did not find significative differences in terms of nagging between kids with and without pocket money. In addition, we analysed the role played by being an active worker versus being an housewife in the dimension of submissiveness without differences.



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STUDY 2: DIARIES

We added a diary study, realized with a very small subsample (n = 10) of the mothers who filled in the survey questionnaire. Every mother received a diary that has to be filled every evening, consisting of a series of open questions related to the daily activities and to what did happen during the eventually grocery shopping, so that it was up to the mothers to decide how much time to dedicate to the diary itself, without obliging them to write a lot, as suggested by Reis and Gable (2000). The choice for diaries resides in their ability to reduce the so-called retrospective bias (Ohly et al., 2010; Reis & Gable, 2000), which is known to threaten the validity of more general survey measures.

Text Preparation

As a preliminary step we have collapsed the transcripts of all diaries into one single "txt" format file, one after the other one. Before analysing the text in T-Lab we prepared the text, with a disambiguation work, where homophones words are distinct, and a lemmatization work, where different words are made to go back to a single lemmatic root, thus allowing an analysis of conceptual content (Cortini & Tria, 2014; Verrocchio et al., 2012). An example of disambiguation work is given by the state form, that can mean both "nation" and the past participle of the verb to be in Italian; disambiguating means to retrace in the text all the possible homophonic words and re-tag them.

With regard to the reverse process, the lemmatization, which brings different linguistic forms to a common root, we take, as an example, the combination of the lemmas request and requesting under the umbrella lemma requesting; the logic of this operation responds to the need of computing the concept of requesting in any of the linguistic forms with which it is expressed, and therefore to combine, by continuing with this example, all the ways, the times and the people of the verb to request (preliminary operation that the software performs automatically before starting the analyzes), as well as all the other words used to recall the concept of request. The analysis technique we are performing, as its own label suggests, content analysis, intends to analyze the conceptual content that is concealed behind apparently distinct linguistic forms.

Associations Analysis: Results

After text preparation, we proceeded with the first automatic analysis of occurrences and cooccurrences, that in technical jargon is defined *associations analysis*, realized only on words with frequency threshold of 4 times.

The first word in terms of occurences is "today"; this is quite understandable since a lot of sentences in the diaries started with "today... I went to the grocery shopping ... but today . . ." Of course, even important in quantitative terms the word "today" is not definitely important for the meanings of our study, so that we proceeded to analyse the co-occurrence with the second used word that is to say "request" (Table 4).

From the co-occurences analysis emerges that parents tend to please their kids who become happy and, in turn, this has an impact on their happiness. Of course, such a happiness based on materialism, which reduces the relationship between parents and sons to a dialogue request-answer, raises us a lot of questions in educative terms.

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From the analysis of the mere co-occurrences and from the analysis of the transcripts it emerges that nagging, if added to the dimension of requesting, is able to capture the majority of the discursive world of the sample mothers. When discussing about shopping they stress how much the pester power of their kids is powerful. What deserves to be further investigated is the feeling of happiness and calm mothers experience after having subcumbed, in a circular way that we have already stressed.

TABLE 4
Main association with the word "request

LEMMA	COEFF	C.E.(A)	C.E.(AB)	χ^2
To buy	.773	35	30	17,425
Today	.756	47	34	7,188
I	.659	39	27	2,263
Daughter	.618	22	19	8,419
Supermarket	.51	29	18	0,009
Grocery shopping	.444	17	12	0,795
She	.433	15	11	1,142
To explain	.433	15	11	1,142
To see	.396	12	9	1,126
To please	.394	15	10	0,221
To look for	.394	15	10	0,221
Serene	.386	10	8	1,698
To help	.374	6	6	4,121
Нарру	.368	11	8	0,703
Home	.352	12	8	0,168
Submissiveness	.341	5	5	3,381
Son	.325	22	10	3,455
Commercial	.311	6	5	1,329
To desire	.305	4	4	2,664
To nag	.305	4	4	2,664
Request	.276	11	6	0,261
To cry	.27	8	5	0,004
Price	.264	3	3	1,968
Tantrum	.254	9	5	0,15
Candy	.254	9	5	0,15
Toy	.249	6	4	0,076
Chips	.249	6	4	0,076
To protest	.249	6	4	0,076
Package	.229	4	3	0,33
Product	.229	4	3	0,33

Note. COEFF = coefficient; C.E. (A) = occurences: C.E. (AB) = co-occurences.

FUTURE RESEARCH AGENDA AND CONCLUSIONS

According to our main results, nag factor has an impact on family consumer behavior; nagging is something that impacts on the possibility to succumb by parents and, in turn, on their feeling of wellbeing.



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In particular, it seems that kids are deeply influenced by TV advertisements and packaging and, in turn, try to influence.

What seems to us mandatory to be understood is the role of pestering in positive attitudes and behaviors, like for example green consumption and lifestyle that in other cultures has been started to be analysed (see, e.g., O'Neill & Buckley, 2019).

In terms of future research agenda, in addition, it would be interesting to analyse in deeper details the different rhetorical strategies used by children of different ages. In particular, it seems to us mandatory to study pre-schooler kids, a particular target belonging a lot of time to the solely family context. According to research developed in other countries and related to pester power and food consumption habits (see, e.g., Sigman-Grant et al., 2013), pre-schooler kids could be aware of personal health so that it would be possible to start specific nutrition education before unhealthy behaviors are fully established.

Considering the methodological framework of our research, we hope to have shown how powerful is the mix of different data type and data analysis, allowing quantitative data to express their power in terms of ecological validity and allowing qualitative data to express their power in terms of theories development.

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