



HAL
open science

Does “chaining” always work towards compliance gaining? The case of the “but you are free” technique and social proof applied to charitable donation

A. Pascual, T. Salanova, I. Bouhassine, Cédric Denis-Rémis, D. Priolo, F. Girandola, N. Guéguen

► To cite this version:

A. Pascual, T. Salanova, I. Bouhassine, Cédric Denis-Rémis, D. Priolo, et al.. Does “chaining” always work towards compliance gaining? The case of the “but you are free” technique and social proof applied to charitable donation. *European Review of Applied Psychology / Revue Européenne de Psychologie Appliquée*, 2021, 71 (3), pp.100654. 10.1016/j.erap.2021.100654 . hal-03499985

HAL Id: hal-03499985

<https://hal.science/hal-03499985v1>

Submitted on 21 Dec 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Manuscript Number:

Title: Does "chaining" always really work towards compliance gaining? The case of the "but you are free" technique and social proof applied to charitable donation

Article Type: Original article

Keywords: evocation of freedom; descriptive norm; compliance gaining; money donation; meta-analysis

Corresponding Author: Dr. alexandre pascual,

Corresponding Author's Institution: univ. bordeaux

First Author: alexandre pascual

Order of Authors: alexandre pascual; thomas salanova; ikram bouhassine; cedric denis-remis; daniel priolo; fabien girandola; nicolas guéguen

Abstract: The chaining procedure consists in linking together two or more compliance gaining strategies in order to obtain greater behavioral compliance. In two studies we tested chaining that included two compliance gaining procedures: the "but you are free" technique (BYAF) and social proof (SP). A total of 2204 passersby were approached in different countries (France, Tunisia, China and Moldavia). They were asked to donate money for cancer research with, respectively, a control formulation, a BYAF formulation, a SP formulation or a BYAF + SP formulation. Results indicate that chaining did not work because the BYAF + SP condition produced the same behavioral compliance as BYAF or SP separately (studies 1 and 2). Furthermore, we analyzed the participants' justifications after complying with or rejecting the request and the reasons were substantially the same under each condition (study 2). Failure to observe the chaining process is interpreted through theoretical explanations whereby BYAF and SP are antagonistic.

Suggested Reviewers: valérie fointiat
valerie.fointiat@univ-lorraine.fr
spécialiste de l'influence sociale

jerry burger
jburger@scu.edu
social influence specialist

Opposed Reviewers:

Does “chaining” always work towards compliance gaining? The case of the “but you are free” technique and social proof applied to charitable donation

Alexandre Pascual¹,

Thomas Salanova¹

Ikram Bouhassine²

Cedric Denis-Remis³

Daniel Priolo⁴

Fabien Girandola²

Nicolas Guéguen⁵

¹ University of Bordeaux

² Aix Marseille University

³ MINES ParisTech, PSL Research University

⁴ University of Nice Côte d’Azur, LAPCOS

⁵ University of South Britain

***Correspondence**

Alexandre Pascual, Department of Psychology,

University of Bordeaux, 3ter Place de la Victoire, 33076 Bordeaux cedex.

E-mail: alexandre.pascual@u-bordeaux.fr

Phone number: +33557573026

Does “chaining” always work towards compliance gaining? The case of the “but you are free” technique and social proof applied to charitable donation

Abstract

The chaining procedure consists in linking together two or more compliance gaining strategies in order to obtain greater behavioral compliance. In two studies we tested chaining that included two compliance gaining procedures: the “but you are free” technique (BYAF) and social proof (SP). A total of 2204 passersby were approached in different countries (France, Tunisia, China and Moldavia). They were asked to donate money for cancer research with, respectively, a control formulation, a BYAF formulation, a SP formulation or a BYAF + SP formulation. Results indicate that chaining did not work because the BYAF + SP condition produced the same behavioral compliance as BYAF or SP separately (studies 1 and 2). Furthermore, we analyzed the participants' justifications after complying with or rejecting the request and the reasons were substantially the same under each condition (study 2). Failure to observe the chaining process is interpreted through theoretical explanations whereby BYAF and SP are antagonistic.

Key words: evocation of freedom, descriptive norm, compliance gaining, money donation, meta analysis

Introduction

Social psychology provides a wealth of compliance gaining strategies to influence behavior (Pratkanis, 2007; Dolinski, 2016 for a review). The chaining process consists in linking together two or more compliance gaining techniques in order to obtain greater behavioral compliance. It follows that the combined use of two techniques based on different

1 theoretical principles will be more effective in producing compliance than the use of either
2 one alone (Howard, 1995). For example, chaining is effective when combining foot-in-the
3 door and social labeling (Goldman, Seever & Seever, 1982), foot-in-the-door and door-in-the-
4 face (Goldman, 1986), foot-in-the-door and low ball (Joule, 1987), door-in-the-face and foot-
5 in-the-mouth (Fointiat, 2000), social proof and “even a penny will help” (Shearman, & Yoo,
6 2007), foot-in-the-door and “but you are free” technique (Dufourcq-Brana, Pascual &
7 Guéguen, 2006; Guéguen, Meineri, Martin & Grandjean, 2010), touch and “but you are free”
8 technique (Samson, 2009). However, relatively few publications have directly tested the
9 chaining process in the scientific literature because social psychologists have principally
10 focused on testing single or competing theoretical explanations of compliance gaining.
11
12
13
14
15
16
17
18
19
20
21
22
23

24 Furthermore, Pascual, Felonneau, Guéguen & Lafaille (2014) failed to obtain a chaining
25 effect when combining two particular strategies: the “but you are free” technique (BYAF) and
26 social proof (SP). In their study, they tried to induce smokers to drop their cigarette butts in an
27 ashtray rather than on the ground. SP was operationalized with a sign placed above ashtrays;
28 this sign mentioned that most people throw their cigarette butts in the ashtrays. The BYAF
29 technique was operationalized with a sign mentioning that people were free to throw their
30 cigarette butt in the ashtray. In a third condition the sign contained SP + BYAF messages.
31 Finally, in a control condition, no sign was present. Results indicated that the combined effect
32 of SP + BYAF was no more effective than SP or BYAF alone. The authors concluded that it
33 is theoretically conceivable that the combinations of SP and BYAF do not necessarily lead to
34 an additive effect. Influence is characterized by a source and a target. However, although the
35 source of influence is external to smokers within the framework of SP (behavior of the
36 majority), it is internal within the framework of the BYAF message. In paradigms of
37 compliance without pressure (such as BYAF), the source of influence is the subject himself
38 because he believes that he is the originator of his own behavior and is not under any external
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

pressure. On this basis, the authors argued that SP and BYAF could in fact be two opposing processes of influence. In order to accurately outline this assumption, the following sections will provide an overview of the SP and BYAF principles.

Normative social influence and Social Proof (SP)

Originally, conformity (or majority influence) refers to the change in behavior that can be observed in an individual, who is then referred to as the target, in the direction of the behaviors displayed by other persons considered to be sources of influence or the majority group (Asch, 1951). Conformity is generally explained by the theory of normative influence.

Although the influence of social norms, i.e. social proof, on the behavior of individuals has been known to social psychologists for several decades (Cialdini & Goldstein, 2004; Goldstein & Cialdini, 2007), a distinction has been made between two types of social norms with, on the one hand, injunctive norms and, on the other, descriptive norms (Cialdini, Reno & Kallgren, 1990). The former involves the perceptions that an individual manifests concerning the degree of agreement or disagreement with others regarding a specific course of action. The latter refers to the perceptions concerning the actual behavior of others. Thus, the simple fact of giving prominence to social norms can influence the behavior of individuals in the direction of these norms (Cialdini, 2003). On the basis of research covering SP (descriptive norm), simply stating that others have displayed a given behavior could influence a given individual to adopt the aforementioned behavior himself or herself. Although people underestimate the extent to which their actions are determined by actions of others (Cialdini, 2005), they perceive this influence (Nolan, Schultz, Cialdini, Goldstein, & Griskevicius, 2008). Biel, Borgstede and Dahlstrand, (1999) present social norms as an external pressure. Thøgersen (2006) suggests that social norms represent a purely external, non-internalized, form of behavioral regulation. Moreover this author argues that descriptive norms are in fact

less integrated to the self than other types of norms.

In light of these findings, we consider that SP constitutes an external pressure to participants where others' behavior is the source and the participant is the target.

Compliance without pressure and “but you are free” technique (BYAF)

Compliance without pressure first appeared with Freedman and Fraser (1966) in their publication on the foot-in-the-door technique. It is a set of techniques “*likely to induce people to do what is expected of them of their own volition*” (Joule & Beauvois, 1998, p. 29). Under these procedures, individuals express various behaviors under the impression of acting of their own free will, from the use of the term compliance without pressure. The BYAF technique (Guéguen & Pascual, 2000) is a paradigm of compliance without pressure. The principle is simple: a request made to someone with the added proposal of BYAF will significantly increase the acceptance of said request. The simple verbal inference of a feeling of freedom will thus encourage the compliance of individuals with various types of requests. (Guéguen, Joule, Halimi-Falkowicz, Pascual, Fischer-Lokou & Dufourcq-Brana, 2013). To explain this effect, two non-exclusive theories can be put forward: the theory of commitment (Kiesler, 1971) and the theory of psychological reactance (Brehm, 1966).

According to Kiesler, several factors enable an increase in the degree of commitment of individuals in their actions. Among these factors, the feeling of freedom is, according to the author, one of the most powerful. So, the more an individual is placed in a context of freedom when he carries out a behavior, the more strongly he is committed to that behavior. But “*there is nothing easier than creating a context of freedom. You need only accompany the request made to the actor with a phrase asserting that he is free to do what is expected of him, or not. We believe this phrase to be one of the most fascinating in scientific literature.*” (Joule & Beauvois, 1998, p. 71) Thus, in the case of a request for money made by a stranger in the

1 street, for instance, when subjects are declared to be free to act, not only do they most often
2 agree to the request, but they also show themselves to be more generous in giving than those
3
4 in a controlled condition (Guéguen et *al.*, 2013). Indeed, it is as if the context of freedom
5
6 generated by the proposal BYAF binds subjects more to the expected altruistic behavior,
7
8 which translates into higher average amounts given.
9
10

11 But the theory of psychological reactance (Brehm, 1966) can also help us to interpret
12
13 the effects produced by the BYAF technique. Reactance is characterized by a negative state of
14
15 motivation following a (supposedly real) threat of restriction of individual freedom and this
16
17 translates into a resistance to the influence. This theory therefore reasons that the threat or
18
19 actual loss of freedom will motivate the individual to restore that freedom. So, when
20
21 individual A formulates a request to individual B, it is probable that in most cases B is likely
22
23 to feel reactance because A is trying to “dictate” to B the behavior to be executed. There is,
24
25 therefore, in some way a suggestion of restriction of B’s freedom. At this stage, in order to
26
27 recover his freedom, B would tend to reject A’s request. But, if A adds the phrase “but you
28
29 are free to...” to his proposal, it is highly likely that B’s rate of reactance will be significantly
30
31 lower, which would translate into a more probable acceptance of the request. It is important to
32
33 emphasize that the two theories that we have just mentioned are in no way mutually
34
35 incompatible.
36
37
38
39
40
41
42

43 We consider that BYAF constitutes internal pressure to an individual because this kind
44
45 of message refers directly to the subject’s own will (source), and the subject is also the target
46
47 of the influence.
48
49
50
51
52

53 **Overview**

54 We argue that SP and BYAF processes are related to different sources of influence. As
55
56 Freedman and Fraser wrote (1966), “*Work on attitude change, conformity, imitation, and*
57
58
59
60
61
62
63
64
65

obedience has all tended to stress the importance of the degree of external pressure” (p. 195).

Clearly, under most circumstances, the more pressure applied (with SP for example), the more likely individuals will comply. On the other hand, BYAF is a “compliance without pressure” technique. This kind of technique implies that “*factors other than external pressure are often quite critical in determining degree of compliance*” (Freedman & Fraser, 1966, p. 195). Although the BYAF technique could reduce reactance in a subject, SP could induce a normative pressure indicating the behavior to be adopted. Because of this contradiction, the two processes will probably not have any additional effect on compliance.

Finally, because of a potential antinomy between external pressure (SP) and internal pressure (BYAF), it is possible that the two kinds of influence sources (internal vs external) produce a non-additive effect on compliance; whereas in the framework of a chaining hypothesis, the higher the number of influence sources, the higher people’s compliance will be.

In order to verify that the chaining effect does not work when SP and BYAF are combined, two studies were conducted. In the first study, the interaction between SP and BYAF was tested in a field setting consisting in asking for money from passersby in the street to help cancer prevention and detection. Study 2 was a replication of study 1, but in addition participants were asked to give a justification for their acceptance or rejection of the request. This was an exploratory method in order to determine whether or not justifications differed among influence sources, i.e. the compliance gaining strategies used.

Study 1

Method

Participants

1
2 A total of 628 male and female passersby (308 Chinese and 320 French) between 20
3
4 and 60 years of age ($M = 38.15$; $SD = 10.9$) participated in the study.
5
6
7

8
9
10 *Procedure*

11 Twelve Chinese students (6 males and 6 females between 20 and 33 years old) and one
12 female French student (22 years old) were the experimenters in their respective countries.
13
14 They were instructed to approach passersby that were alone in pedestrian streets in the cities
15 of Shanghai, China, and Bordeaux, France (two urban cities) to ask them to give money for
16 cancer prevention and detection (dependent variable). The experimental design contains two
17 independent variables: SP (presence/ absence) and BYAF (presence/absence). So the
18 experimenters formulated their request in one of the following four ways:
19
20
21
22
23
24
25
26
27
28
29
30

31 Control formulation: *“Hello Madam / Sir, the Association X¹ is collecting donations for*
32 *cancer prevention and detection, would you help us please?”*
33

34 Social Proof formulation: *“Hello Madam / Sir, the Association X is collecting donations for*
35 *cancer prevention and detection, many people have already made donations to the*
36 *association, would you help us please?”*
37
38
39
40
41
42

43 BYAF formulation: *“Hello Madam / Sir, the Association X is collecting donations for cancer*
44 *prevention and detection, would you help us please? But of course, you are free to*
45 *accept or refuse.”*
46
47
48
49
50

51 Social Proof + BYAF formulation: *“Hello Madam / Sir, the Association X is collecting*
52 *donations for cancer prevention and detection, many people have already made*
53 *donations to the association, would you help us please? But of course, you are free to*
54
55
56
57
58
59

60
61

¹ In each country, the name of a specific association was given
62
63
64
65

accept or refuse.”

The first passerby was assigned to the first condition, the second passerby to the second condition, the third passerby to the third condition, the fourth passerby to the fourth condition, the fifth passerby to the first condition, and so one.

Participants who went on their way before the experimenter finished reciting the formulation were not accounted for in the study. Participants who directly donated money to the experimenter were counted as compliant participants and those who did not as non-compliant participants. Experimenters noted on a sheet whether participants agreed or not with the request.

Results

A 2 (SP) × 2 (BYAF) × 2 (country) × 2 (participant gender) binary logistic regression was performed using the participants' acceptance to donate as the dependent variable. Only two significant effects appeared.

A country main effect was statistically significant, Wald (1) = 9.30, $p < .001$. More participants agreed to the request in France (25.6%) than in China (14.6%).

A significant interaction between SP and BYAF was observed, Wald (1) = 6.51, $p < .01$. Figure 1 displays the percentage of those in each condition who agreed to give money for cancer prevention and detection. To analyze this effect of interaction, we compared each condition to each other with χ^2 of Pearson; only two significant effects were observed.

The BYAF condition generated more compliance than the control condition ($\chi^2(1, 314) = 10.88$; $p = .001$; $\phi = .19$; $OR = 2.63$). In the same way, SP generated more compliance than the control condition ($\chi^2(1, 315) = 4.49$; $p = .03$; $\phi = .12$; $OR = 1.91$).

None of the other main effects or interactions were statistically significant either.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Insert here figure 1

Discussion

Study 1 failed to observe a chaining effect between SP and BYAF. Furthermore, the SP + BYAF combination had no effect on compliance comparatively to the control condition whereas simple effects were observed with SP and BYAF separately.

Such results are consistent with our main hypothesis, namely that because of an antinomy between external pressure (SP) and internal pressure (BYAF), it is possible that the two kinds of influence sources (internal vs external) produce a non-additive effect on compliance; whereas in the framework of a chaining hypothesis, the higher the number of influence sources, the higher people's compliance will be.

Pascual, Felonneau, Guéguen & Lafaille (2014) already found no chaining effect between SP and BYAF. But in their study, SP + BYAF showed a significant effect comparatively to the control condition. So in order to determine if SP + BYAF simply produce a non-additive effect or if they produce a negligible effect, we did a replication in study 2.

In addition, participants were asked the reason for their compliance or refusal. This exploratory methodology was employed in order to determine whether justifications vary as a function of influence sources. This procedure could be useful to interpret our results. For example, it was used for the pique technique (Santos, Leve & Pratkanis, 1994) by (Guéguen, Meineri, Pascual, Girandola & Silone, under press). These authors found that the number of “no reason” explanations (i.e., “I don't know”) increased in the pique condition, supporting the assumption that the pique disrupts the script of refusal.

Study 2

Method

Participants

A total of 1576 male and female passersby (528 Tunisian, 520 French and 528 Moldavian) between 18 and 70 years of age ($M = 38.55$; $SD = 12.7$) participated in the study.

Procedure

Twenty-two Tunisian students (3 males and 19 females between 19 and 22 years old), two female French students (23 and 24 years old) and one female Moldavian student were the experimenters in their respective countries. They were instructed to approach passersby that were alone in pedestrian streets in the cities of Bizerte, Tunisia; Bordeaux, France; and Chişinău, Moldavia (three urban cities) to ask them to give money for cancer prevention and detection (dependent variable). The experimental design contains two independent variables: SP (presence/ absence) and BYAF (presence/absence). So the experimenters formulated their request in one of the 4 following ways:

Control formulation: *“Hello Madam / Sir, the Association X² is collecting donations for cancer prevention and detection, would you help us please?”*

Social Proof formulation: *“Hello Madam / Sir, the Association X is collecting donations for cancer prevention and detection, many people have already made donations to the association, would you help us please?”*

BYAF formulation: *“Hello Madam / Sir, the Association X is collecting donations for cancer*

² In each country, the name of a specific association was given.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

prevention and detection, would you help us please? But of course, you are free to accept or refuse.”

Social Proof + BYAF formulation: “*Hello Madam / Sir, the Association X is collecting donations for cancer prevention and detection, many people have already made donations to the association, would you help us please? But of course, you are free to accept or refuse.”*

The first passerby was assigned to the first condition, the second passerby to the second condition, the third passerby to the third condition, the fourth passerby to the fourth condition, the fifth passerby to the first condition, and so on.³

Participants who went on their way before the experimenter finished reciting the formulation were not accounted for in the study. Participants who directly donated money to the experimenter were counted as compliant participants and those who did not as non-compliant participants.

After an acceptance of the request, the experimenter debriefed the participant and asked him / her to explain why he / she complied.

After a rejection of the request, the experimenter debriefed the participant and asked him / her to explain why he / she refused.

Experimenters noted on a sheet whether participants agreed or not with the request and their justification.

Results

Impact of conditions on compliance

A 2 (SP) × 2 (BYAF) × 3 (country) × 2 (participant gender) binary logistic regression

³ Except in Tunisia where the first and second passersby were assigned to the first condition, the third and the fourth passersby to the second condition, and so on.

was performed using the participants' acceptance to donate as the dependent variable. Four significant effects appeared

As in study 1, a country main effect was statistically significant, $Wald(2) = 57.31, p < .001$. More participants agreed to the request in Moldavia (39.6.6%) than in France (27.7%) and Tunisia (18.2%).

A weak main effect concerns SP ($Wald(1) = 7.31, p < .01$) with 31.3% of compliance when present and 25.6% when absent ($\chi^2(1, 1576) = 6.31; p = .01; \phi = .06; OR = 1.32$).

Another weak main effect concerns the BYAF ($Wald(1) = 5.59, p < .02$) with 31.2% of compliance when present and 25.8% when absent ($\chi^2(1, 1576) = 5.76; p < .02; \phi = .06; OR = 1.31$).

Finally, as in study 1, a significant interaction between SP and BYAF was observed, $Wald(1) = 14.92, p < .001$. Figure 2 displays the percentage of those in each condition who agreed to give money for cancer prevention and detection. To analyze this effect of interaction, we compared each condition to each other with χ^2 of Pearson; three significant effects were observed.

The BYAF condition generated more compliance than the control condition ($\chi^2(1, 788) = 19.41; p < .001; \phi = .16, OR = 2.08$). In the same way, SP generated more compliance than the control condition ($\chi^2(1, 788) = 20.07; p < .001; \phi = .16; OR = 2.10$). However, contrary to study 1, the SP + BYAF condition was statistically different from the control condition ($\chi^2(1, 788) = 13.33; p < .001; \phi = .13; OR = 1.85$).

None of the other main effects or interactions were statistically significant either.

Insert here figure 2

Justifications for compliance or rejection of the request

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

In order to examine the types of explanations formulated by participants, we elaborated several categories based on Knowles, Hyde & White (2012). From this point, these categories (9 for rejection, and 9 for compliance with the request) were independently analyzed by three judges, as were the justifications of participants. If a judge considered a justification consistent with a category, it was coded 1; if not, it was coded 0. After the three judges coded each justification, categorizations were confronted with the following criterion: we considered that for a justification to belong to a given category, it must meet an inter-judge consensus equal to 100%. Of course, for each participant's justification, several categories could sometimes be present.

Table 1 presents the justifications and frequencies provided by non-compliant participants and compliant participants.

Insert here table 1

Justifications for request rejection by condition

In order to determine whether justifications depend on conditions, we conducted a multinomial logistic regression where the 9 rejection justifications were regressed on the four conditions.

Only one justification appeared statistically significant among the conditions (see figure 3); the “*Hurry, no time*” justification was more often provided in the control condition than in the three other conditions (Wald (3) = 7.96, $p < .05$).

Insert here figure 3

Justifications for request compliance by condition

1 We ran a multinomial logistic regression where the 9 acceptance justifications were
2 regressed on the four conditions.
3

4 Only one justification appeared statistically significant among the conditions (see figure
5 4); the *personal satisfaction to help, natural altruism* justification was more often provided
6 when SP was present than when absent (Wald (3) = 7.96, $p < .05$).
7
8
9
10
11
12
13

14 Insert here figure 4
15
16
17
18

19 Discussion 20

21 Whereas main effects were observed with SP and BYAF separately, as in study 1, this
22 second study again failed to observe a chaining effect with SP and BYAF. However, contrary
23 to the first study, in study 2 the SP + BYAF combination had an effect on compliance
24 comparatively to the control condition. This result is consistent with observations by Pascual,
25 Felonneau, Guéguen & Lafaille (2014).
26
27
28
29
30
31
32
33

34 Concerning justifications for rejection of the request, the most commonly cited reason
35 for declining to donate was *financial difficulty* (i.e., having no money to spare, not being able
36 to afford to donate), which was the same as that observed by Knowles, Hyde & White (2012).
37 However, this justification was provided in the same proportions in the four conditions. Only
38 the *hurry no time* justification, which was marginally cited (4.5%), appeared differently
39 among the conditions. We observed that this reason was invoked less when a compliance
40 gaining strategy was employed. One possible explanation could be that when an influence
41 strategy is employed (PS and / or BYAF), participants more often take the prosocial request
42 into account. So, because of social desirability, it would be less possible for them to justify
43 their rejection with a “*hurry no time*” explanation.
44
45
46
47
48
49
50
51
52
53
54
55
56
57

58 Concerning justification for compliance to the request, the most cited reason for
59
60
61
62
63
64
65

1 donating was that charity had personal significance for the donor (e.g., donating because a
2 family member has cancer). Again, this first justification was the same as that obtained by
3 Knowles, Hyde & White (2012). However, this justification is provided in the same
4 proportions in the four conditions. Only the *personal satisfaction to help, natural altruism*
5 justification, which was the third most cited (12%), ranked differently depending on the
6 conditions. This justification was significantly more employed when reference to the behavior
7 of others was present (SP). This result could be due to a self-presentation strategy. Indeed,
8 while it is clear that people often adopt others' behaviors in order to be normative, they do not
9 want to be publicly perceived as sheep. So it is possible that under SP conditions, in order to
10 save face (Goffman, 1974), many participants prefer to justify their acceptance by positive
11 personal attributes. Indeed, to be thought of as a sheep with the prosocial request could be less
12 valuable (in terms of self-presentation strategy) than helping because of personal attributes.
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

31 **Meta-analysis**

32
33
34 As regards SP and BYAF, studies 1 and 2 failed to observe a chaining effect. This
35 result is consistent with Pascual, Felonneau, Guéguen & Lafaille (2014). However, in study 1
36 SP + BYAF had no effect on compliance comparatively to the control condition but in study
37 2, SP + BYAF had a positive effect on compliance gaining. In order to clarify these
38 inconsistent results, we conducted a fixed effect meta-analysis with our two studies. After
39 decomposing the studies by study, country, sex of participants and conditions, 30 subgroups
40 were found (see table 3 below). Column “r” indicates the effect size of using the SP, BYAF or
41 SP + BYAF techniques relative to a direct request control expressed as a correlation such that
42 positive correlations indicate that a strategy was more effective.
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Insert here table 2

1
2 The sample-size weighted correlations between the presence or absence of SP or the
3
4 BYAF technique and the proportion of those who complied with the request were respectively
5
6 $r = .14$, 95% CI [0.078, 0.201] and $r = .16$, 95% CI [0.100, 0.222] (see figure 5). These
7
8 findings are consistent with a weak-sized increase in effectiveness associated with using SP or
9
10 the BYAF technique instead of a direct request. It is notable that Carpenter (2013) found $r =$
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Because the SP + BYAF combination provides a lower contingency coefficient ($r = .10$, 95%
CI [0.044, 0.166]), in order to determine whether mean effect sizes (r) were significantly
lower in the BYAF + SP condition comparatively to the BYAF condition and the SP
condition, we ran a meta-regression as recommended by Filled and Gillett (2010). In this
meta-regression we entered the effect sizes as a criterion and participants' gender (Male vs
Female), countries (France vs. Tunisia vs. China vs. Moldavia) and conditions (BYAF+SP vs
SP and BYAF) as categorical predictors. More precisely, BYAF+SP was condition 1 and SP
and BYAF were aggregated in condition 2. The results indicate non-significant effects of
conditions ($\chi^2(1) = 0.57$, $p = .44$, *ns*), participants' gender ($\chi^2(1) = 0.025$, $p = .87$, *ns*) and
countries ($\chi^2(3) = 6.56$, $p = .09$, *ns*). These results indicate that none of these variables
moderate the effect of these influence techniques.

General discussion and conclusion

Our results suggest that we cannot conclude that SP + BYAF diminished the
compliance effect. However, our data provide strong evidence that chaining did not work with
SP and BYAF. As we hypothesized, because of an antinomy between external pressure (SP)
and internal pressure (BYAF), the two kinds of influence sources studied (internal vs
external) produced a non-additive effect on compliance. Because of this contradiction, the two
processes have no additional effect on compliance; whereas in the framework of a chaining

1 hypothesis, the higher the number of influence sources, the higher people's compliance will
2 be.
3

4 Finally, we observed that SP, BYAF and SP + BYAF produced behavioral compliance
5 in the same proportions. However, while their sources of influence are different, in study 2
6 participants' justifications after complying with or rejecting the request were substantially the
7 same.
8
9

10 Concerning rejection, we only observed that the "*hurry, no time*" justification was
11 higher in the control condition. It is possible that when a compliance gaining procedure is
12 employed (SP and / or BYAF), more attention is required by participants to prosocial requests
13 and it could be less socially acceptable to say they have no time to help others for a cause
14 such as cancer prevention.
15
16

17 For compliance, we only observed that the "*personal satisfaction to help, natural*
18 *altruism*" justification was higher when SP was employed. Such a result appears to be a
19 paradox because objectively, with SP, the source of influence is external to participants. It is
20 possible that participants are aware they are being influenced by SP (Nolan, Schultz, Cialdini,
21 Goldstein, & Griskevicius, 2008), but they feel uncomfortable confessing this to the
22 experimenter. So, in order to be seen as an altruistic person rather than an easily influenced
23 one, most of them choose to justify their compliance by a personal attribute.
24
25

26 In conclusion, our data suggest that chaining is not as programmed as Howard (1995)
27 suggested. It is possible that when sources of influence are incompatible, chaining is
28 disrupted. This is clearly the case with SP and BYAF, and future research should explore this
29 with other compliance gaining strategies.
30
31

32 For example, Reingen (1978) observed no additive effect when combining door-in-
33 the-face and the "even a penny will help" technique. The author concludes that "even a penny
34 will help" is sufficient in itself to make it difficult for participants to refuse to donate money.
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

In another example, studying social labeling and touch in a foot-in-the-door situation, Goldman, Kiyohara and Pfannensteil (1985) found that when taken separately, positive social labeling and touch increased compliance but that it decreased when positive social labeling and touch were combined. In this case, the authors suggest that participants may have simply believed that the confederate was a flatterer, which would alter their self-image.

In the same way, Meineri, Dupré and Guéguen (2016) failed to observe any chaining effect when combining door-in-the-face with BYAF. An interpretation could be that door-in-the-face led to stronger feelings of obligation to donate (Abrahams & Bell, 1994), which refers to an external source of influence (such as SP), whereas BYAF refers to an internal source of influence.

References

- Abrahams, M. & Bell, R. (1994). Encouraging charitable contributions: an examination of three models of door-in-the-face compliance. *Communication Research*, 21(2), 131-153.
DOI: 10.1177/009365094021002001
- Asch, S. E. (1951). Effects of group pressure upon the modification and distortion of judgments. In H. Guetzkow (Ed.), *Groups, leadership and men*. Pittsburgh, PA: Carnegie Press.
- Biel, A., Borgstede, C. V., & Dahlstrand, U. (1999). Norm perception and cooperation in large scale social dilemmas. In M. Foddy, M. Smithson, S. Schneider, & M. Hogg (Eds.), *Resolving social dilemmas: Dynamic, structural, and intergroup aspects* (pp. 245–252). Psychology Press.
- Brehm, J. W. (1966). *A theory of psychological reactance*. New York: Academic Press.
- Carpenter, C. J. (2013). A meta-analysis of the effectiveness of the “but you are free” compliance-gaining technique. *Communication Studies*, 64(1), 6–17. DOI:

10.1080/10510974.2012.727941

- 1
2 Cialdini, R. B. (2003). Crafting normative messages to protect the environment. *Current*
3
4 *Directions in Psychological Science, 12*, 105–109. DOI: 10.1111/1467-8721.01242
5
6
7 Cialdini, R. B. (2005). Basic social influence is underestimated. *Psychological Inquiry, 16*(4),
8
9 158–161. DOI:10.1207/s15327965pli1604_03
10
11
12 Cialdini, R. B., & Goldstein, N. (2004). Social influence: Compliance and conformity. *Annual*
13
14 *Review of Psychology, 55*, 591–621. DOI: 10.1146/annurev.psych.55.090902.142015
15
16
17 Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct:
18
19 Recycling the concept of norms to reduce littering in public places. *Journal of*
20
21 *Personality and Social Psychology, 58*, 1015–1026. DOI: 10.1037/0022-3514.58.6.1015
22
23
24 Cialdini, R. B., Wosinska, W., Barrett, D. W., Butner, J., & Gornik-Durose, M. (1999).
25
26 Compliance with a request in two cultures: The differential influence of social proof and
27
28 commitment/consistency on collectivists and individualists. *Personality and Social*
29
30 *Psychology Bulletin, 25*, 1242-1253. DOI: 10.1177/0146167299258006
31
32
33
34 Dolinski, D. (2016). *Techniques of Social Influence: The Psychology of Gaining Compliance.*
35
36 New York: Routledge.
37
38
39 Dufourcq-Brana, M., Pascual, A., & Guéguen, N. (2006). Déclaration de liberté et pied-dans-
40
41 la-porte. *Revue Internationale de Psychologie Sociale, 19*(3/4), 173–187.
42
43
44 Fointiat, V. (2000). The foot-in-the-mouth versus door-in-the-face requests. *The Journal of*
45
46 *Social Psychology, 140*, 2, 264-266. DOI: 10.1080/00224540009600468
47
48
49 Field, A. P., & Gillett, R. (2010). How to do a meta-analysis. *British Journal of Mathematical*
50
51 *and Statistical Psychology, 63*, 665–694. DOI:10.1348/000711010X502733
52
53
54 Freedman, J., & Fraser, S. (1966). Compliance without pressure: The foot-in-the-door
55
56 technique. *Journal of Personality and Social Psychology, 4*, 195-202. DOI:
57
58 10.1037/h0023552
59
60
61
62
63
64
65

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Goffman, E. (1974). *Les rites d'interaction*. Paris: Les Editions de minuit.

Goldman, M. (1986). Compliance employing a combined foot-in-the-door and door-in-the-face procedure. *The Journal of Social Psychology*, 126(1), 111-116. DOI: 10.1080/00224545.1986.9713577

Goldman, N., Kiyohara, O. & Pfannensteil, D.A. (1985). Interpersonal touch, social labeling, and the foot-in-the-door effect. *The Journal of Social Psychology*, 125(2), 143-147. DOI: 10.1080/00224545.1985.9922866

Goldman, M., Seever, M. & Seever, M. (1982). Social labeling and the foot-in-the-door effect. *The Journal of Social Psychology*, 117, 19-23. DOI: 10.1080/00224545.1982.9713402

Goldstein, N., & Cialdini, R. B. (2007). Using social norms as a lever of social influence. In A. Pratkanis (Ed.), *The science of social influence: Advances and future progress* (pp. 167–191). Philadelphia, PA: Psychology Press.

Guéguen, N., Joule, R. V., Halimi-Falkowicz, S., Pascual, A., Fischer-Lokou, J., & Dufourcq-Brana, M. (2013). I'm freebut I'll comply with your request: Generalization and multidimensional effects of the “evoking freedom” technique. *Journal of Applied Social Psychology*, 43, 116–137. DOI: 10.1111/j.1559-1816.2012.00986.x

Guéguen, N., Meineri, S., Martin, A. & Grandjean I. (2010). The combined effect of the foot-in-the-door technique and the « but you are free » technique: an evaluation on the selective sorting of household wastes. *Ecopsychology*, 2(4), 231-237. DOI: 10.1089/eco.2009.0051

Guéguen, N., Meineri, S., Pascual, A., Girandola, F. & Silone, F. (under press) Hey buddy, can you give me thirty-seven seconds of your time? Extension of the pique technique to a non-monetary solicitation and test of justification for compliance. *Current Psychology*. DOI: 10.1007/s12144-015-9324-z

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
- Guéguen, N., & Pascual, A. (2000). Evocation of freedom and compliance: The “but you are free of” technique. *Current Research in Social Psychology*, 5(18), 264–270.
- Howard, D. (1995). «Chaining» the use of influence strategies for producing compliance behavior. *Journal of Social Behavior and Personality*, 10(1), 169-195.
- Joule, R.V. (1987). Tobacco deprivation: the foot-in-the-door technique versus the low-ball technique. *European Journal of Social Psychology*, 17, 361-365.
<http://psycnet.apa.org/doi/10.1002/ejsp.2420170311>
- Joule, R. V., & Beauvois, J. L. (1998). *La soumission librement consentie*. Paris: PUF.
- Kiesler, C. A. (1971). *The psychology of commitment. Experiments linking behavior to belief*. New York: Academic Press.
- Knowles, S.R., Hyde, M.K. & White, K.M. (2012). Predictors of young people’s charitable intentions to donate money: An extended theory of planned behavior perspective. *Journal of Applied Social Psychology*, 42(9), 2096-2110. DOI: 10.1111/j.1559-1816.2012.00932.x
- Meineri, S., Dupré, M., Guéguen, N. & Vallée, B. (2016). Door-in-the-face and But-you-are-free: Testing the effect of combining two no-pressure compliance paradigms. *Psychological Reports*, 119(1), 276-89. DOI: 10.1177/0033294116657064
- Nolan, J. M., Schultz, P. W., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2008). Normative social influence is underdetected. *Personality and Social Psychology Bulletin*, 34(7), 913–923. DOI: 10.1177/0146167208316691
- Pascual, A., Felonneau, M.L., Guéguen, N. & Lafaille, E. (2014). Conformity, obedience to authority and compliance without pressure to control cigarette butt pollution. *Social Influence*, 9(2), 83-98. DOI: 10.1080/15534510.2013.778214
- Pratkanis, A. R. (Eds.). (2007). *The science of social influence: advances and future progress*. Frontiers of Social Psychology. Philadelphia, PA: Psychology Press.

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
- Reingen, P. H. (1978). On inducing compliance with requests. *The Journal of Consumer Research*, 5, 96-102. DOI: <http://dx.doi.org/10.1086/208720>
- Samson, L. (2009). *Soumission librement consentie: études interculturelles: France, Roumanie, Russie: procédure de toucher versus, procédure de ‘vous-êtes-libre-de’* [Voluntary compliance: Intercultural studies: France, Romania, and Russia: Touch technique versus “you are free?”]. Unpublished doctoral dissertation, Université de Provence Aix-Marseille I, Aix-en-Provence, France.
- Santos, M. D., Leve, C., & Pratkanis, A. R. (1994). Hey buddy, can you spare seventeen cents? Mindful persuasion and the pique technique. *Journal of Applied Social Psychology*, 24, 755-764. DOI: 10.1111/j.1559-1816.1994.tb00610.x
- Shearman, S.M. & Yoo, J.H. (2007). “Even a penny will help!”: Legitimization of paltry donation and social proof in soliciting donation to a charitable organization. *Communication Research Reports*, 24(4), 271-282. DOI: 10.1080/08824090701624148
- Thøgersen, J. (2006). Norms for environmentally responsible behaviour: An extended taxonomy. *Journal of Environmental Psychology*, 26, 247–336. DOI:10.1016/j.jenvp.2006.09.004

Social Proof and «But you are Free »

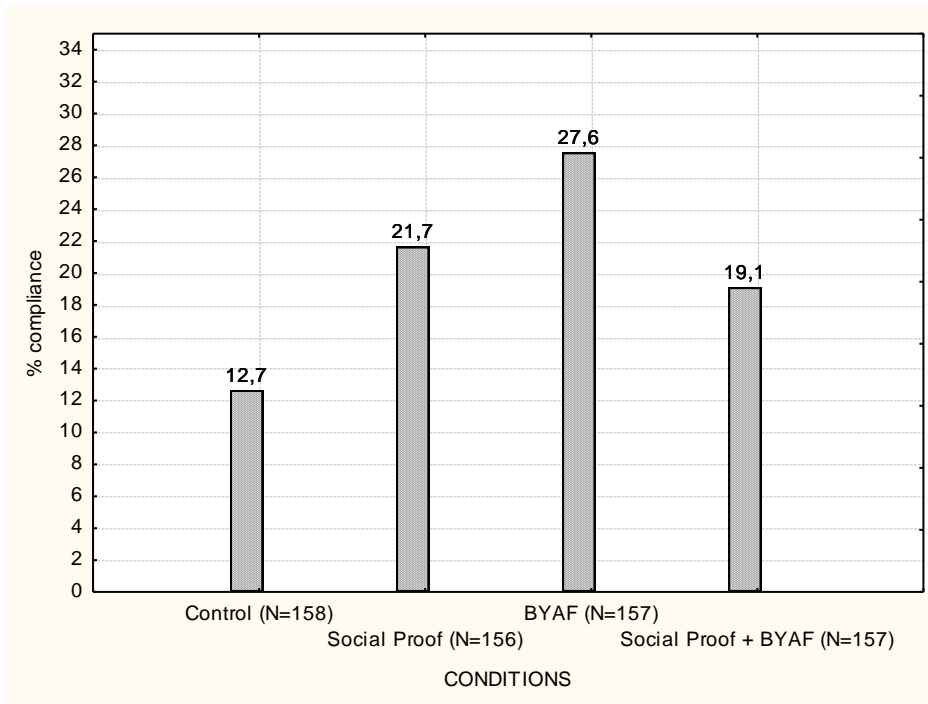


Figure 1. Impact of Social Proof and BYAF on compliance gaining.

Social Proof and «But you are Free »

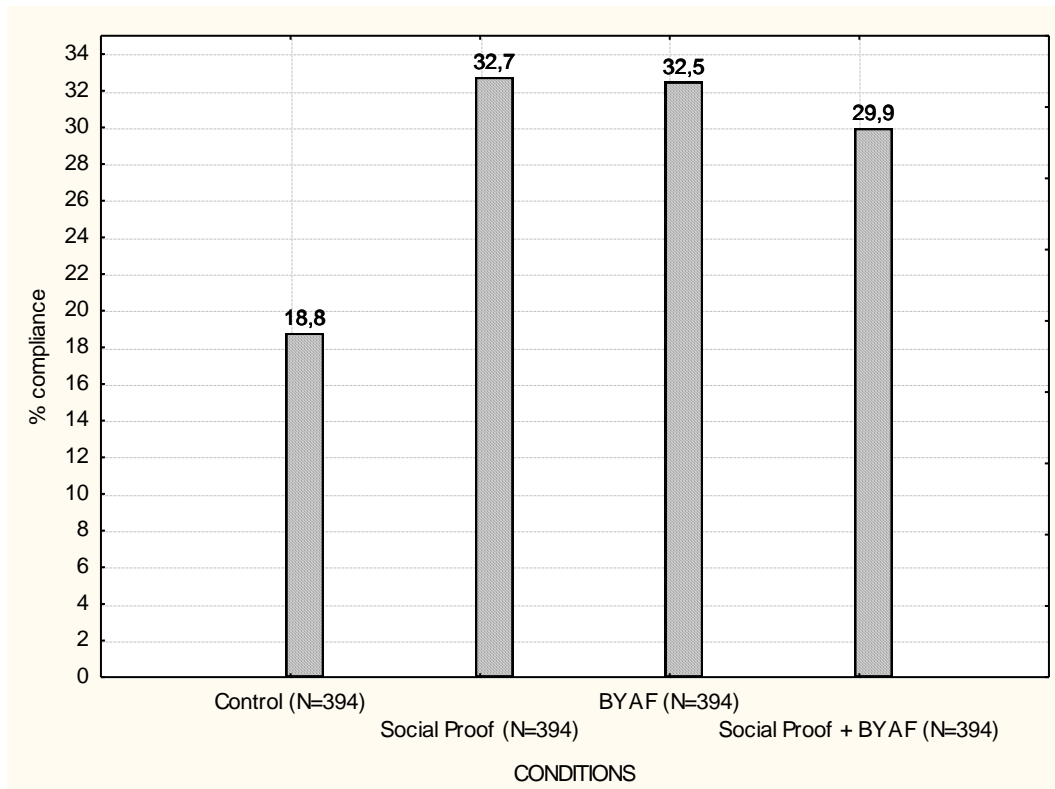


Figure 2. Impact of Social Proof and BYAF on compliance gaining.

Justifications for decision not to donate Money (N = 1127 participants)			Justifications for decision to donate Money (N = 449 participants)		
	%	example		%	example
Financial difficulties (i.e., no money to spare, can't afford it)	19.0	« I am poor and needy. I cannot help »	Concerned by cancer (self or relatives)	22.0	« My family is very concerned by cancer »
Not having spare change when asked	15.5	« My wallet is not with me »	Support act	19.8	« I support the associative actions and I wanted to help »
Don't trust the money goes to those who need it	10.8	« Excuse me, you will not convince me. I do not do gift, I do not trust »	Personal satisfaction to help, natural altruism	12.0	« I really enjoy helping others »
already donate to charitable causes	7.8	« I already have participated in charity work »	apologizes for the low amount	10.5	« If I had more money I would have given more »
Reference to God	7.0	« It will be for another time God willing »	Urgency / Importance of the cause	10.0	« Our health is the most important thing »
No interest in or not knowing about the cause the charity is collecting money for	5.2	« It really does not affect me, I do not feel concerned »	A cancer could happen (self or relatives)	7.8	« I'm not immune to catch cancer »
Hurry, no time	4.5	« I'm in a hurry my wife is waiting for me »	Sensitive to the cause	5.8	« This case interests me »
Promise help or deferred gifts	4.3	« I will come to the association to donate »	Reference to God / religion	5.3	« God wants us to help our neighbor »
None argumentation	1.4	Refuse to comment	Positive perception of the solicitor	5.3	« You inspire me confidence »

Note. Participants may have provided multiple reasons for not donating or donating.

Tables 1. Justifications for decision not to donate Money and donate money

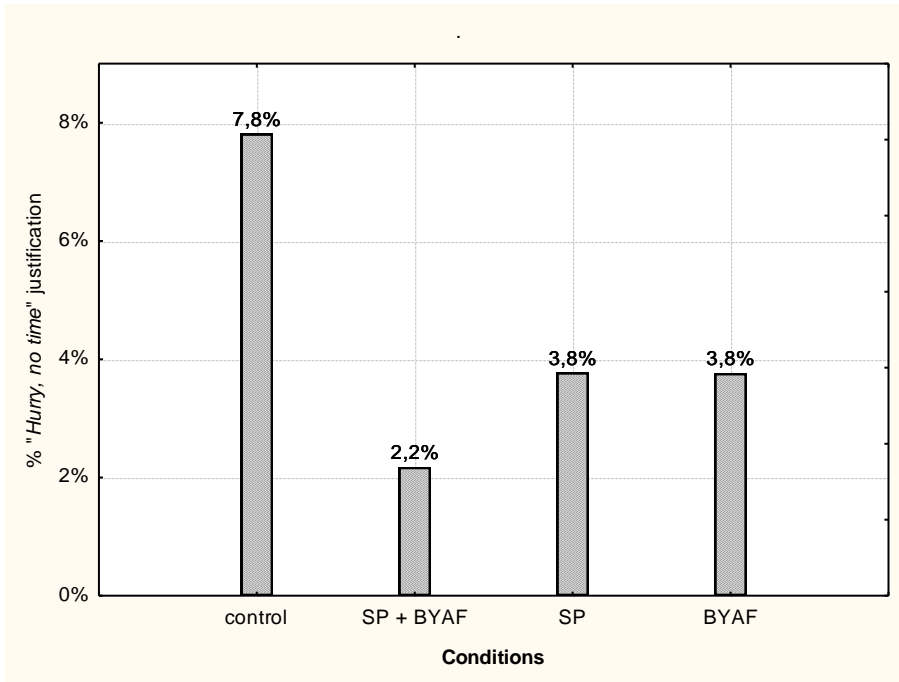


Figure 3. "hurry, no time" justification to reject the request among conditions

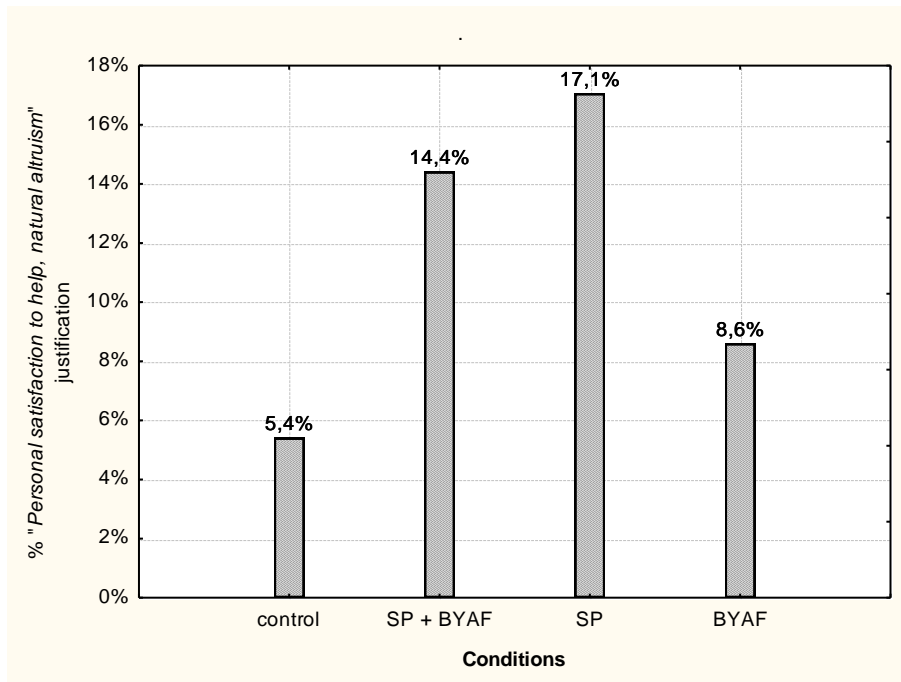


Figure 4. “personal satisfaction to help, natural altruism” justification to accept the request among conditions

Social Proof and «But you are Free »

Study	Country	Sex participant	condition	r
1	France	men	SP	0,13
			BYAF	0,3
			BYAF + SP	0,26
		women	SP	0,2
			BYAF	0,2
			BYAF + SP	0
	China	men	SP	0,01
			BYAF	0,14
			BYAF + SP	0,04
		women	SP	0,11
			BYAF	0,05
			BYAF + SP	0
2	Tunisia	men	SP	0,04
			BYAF	0,06
			BYAF + SP	0,02
		women	SP	0,18
			BYAF	0,08
			BYAF + SP	0,02
	France	men	SP	0,24
			BYAF	0,17
			BYAF + SP	0,15
		women	SP	0,29
			BYAF	0,22
			BYAF + SP	0,28
Moldavia	men	SP	0,14	
		BYAF	0,25	
	women	BYAF + SP	0,2	
		SP	0,07	
		BYAF	0,14	
		BYAF + SP	0,08	

Table 2: Contingency coefficient decomposition in study 1 and 2