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Digital cooperation on Facebook and Twitter and financial impact on political crowdfunding campaigns by Bruno González-Cacheda and Celso Cancela Outeda

### Abstract

Although political crowdfunding has been a growing digital tool for resource mobilisation over the last decade, there has been little academic analysis on this topic. To fill this gap, we analysed the impact of digital cooperation materialised through Facebook and Twitter on the financial results and number of individual donations in more than 200 campaigns. Statistical tests show a positive association between the number of endorsements for the dissemination of a campaign message received on Facebook and Twitter from public figures and social and political actors such as associations, trade unions and political parties and the financial results and number of individual donations obtained. In conclusion, we found that digital cooperation improves financial results and allows political crowdfunding campaigners to mitigate the limitations of Facebook and Twitter and to expand their message among new audiences characterised by high social and political engagement.

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#### Introduction

The proliferation and expansion of crowdfunding after the economic crisis of 2008 as a funding tool for collective action has received scant attention from the academic sphere. The development of this research

aims to fill the existing gap and enhance an understanding of this phenomenon from a political science approach, utilizing diverse elements linked to resource mobilization and collective action. To complete the theoretical and conceptual perspective of our work, we have gathered contributions from various research studies that analyse links between the mobilisation of resources for collective action, crowdfunding and the use of social networks, such as Facebook and Twitter.

This paper will try to analyze and measure the impact and results of cooperation on a digital basis to mobilize resources. For this purpose, firstly, we have collected and gathered the amounts raised and the number of individual donations received by all the political crowdfunding campaigns under study. Secondly, we have recorded the level of support received for the dissemination of campaign messages by promoting organisations on Facebook and Twitter, thanks to relevant personalities and social and political organisations. To achieve this objective, we consider the characteristics of the organizations that organize political crowdfunding campaigns. Generally, these organizations are characterized by a hybrid morphology, barely professionalized, formal basis of organisation, oriented towards participation, and articulated by flexible structures.

The adoption of digital tools such as political crowdfunding enables the substitution of internal weakness because of the low cost launching these campaign. Effectiveness is linked to the promoting the collective's ability to create bonds and external links that ease an exchange of information and resources. For this, it is essential to use a *media ecology* that includes social networks.

To analyse the results of digital cooperation in terms of funding and individual support, we examined an association between the amount of Euros raised and the level of individual support received during a campaign. In addition, we have studied the dissemination of messages by socio-political actors, such as political parties, trade unions, associations, social platforms and social political organisations. This work has been performed with a sample of more than 200 political crowdfunding campaigns organized throughout Spain between 2012 and 2017 and promoted by various advocacy groups. In the following section, we will develop the main concepts that articulate the theoretical framework of this research.

# Structures and models for resources mobilization oriented to collective action: The political crowdfunding campaigns

The development and sustenance of socio-political activity and collective action, in its protest phase as well as in its latency phase (Melucci, 1994), requires a minimum level of media, both human and financial (Selander and Jarvenpaa, 2016). In the literature linked to research on social movements and collective action, this question has been tackled by theorists on resource mobilization. From an economic point of view linked to a bureaucracy model and to structural rationality, McCarthy and Zald (1977) highlighted the importance of organizational formalization in order to obtain key resources for the achievement of previously determined socio-political objectives. In this way, centralized structures become more effective and efficient in mobilizing resources, due to a decrease in internal conflicts, faster decision-making and an accelerated ability to respond. Key would be internal distinction, articulated through formal leaderships, a statute of operation, specialization and structuring of tasks and activities. To a higher degree, it is important to achieve an integration and coordination of territorial units through units of command and a centralized decision-making process (Kriesi, 1999).

Contrary to the point of view of advocates of resource mobilization, Della Porta and Diani (2011) highlighted flaws of that theory. According to Della Porta and Diani, the configuration and organizational nature of social collectives oriented towards collective action would respond to a diversity and heterogeneity well beyond the hierarchical and centralized model belonging to the Weber paradigm (Tilly and Wood, 2011). In the 1960s and the 1970s, as Della Porta and Diani (2011) pointed out, several organizations and collectives linked with the values of the new political left appeared and adopted schemes

based on participation and autonomy. Several of these movements were articulated in sub-estate territorial areas.

The strategic selection of structures and techniques of mobilization appears to be associated with requirements arising from institutionalization and professionalization, the territorial dimension and by a typology of strategic objectives. Thus, base collectives that are non-hierarchical and oriented towards participation would prioritize the mobilization of "time" through activism and militant commitment. On the contrary, larger organizations orient their structures towards raising financial resources through diverse tools characterized by high fixed costs associated to increasing professionalization and externalization, such as telemarketing or direct mail (Edwards and McCarthy, 2004; Oliver and Marwell, 1992). The dilemma associated with different organizational models appears nuanced as a consequence of the irruption and extension of the Internet within repertoires and activities for collective action. In this sense, Chadwick (2007), warns about the hybridization of formulas for organizing resources:

The outcome is that some political organizations now simultaneously exhibit quite diverse ways of organizing and mobilizing, mashing together online and off-line efforts, combining narrowly channelled actions with looser ones, and crossing national boundaries while organizing town square fundraisers. This renders them "hybrid organizational types". [1]

Another characteristic of the hybrid model, in the words of Della Porta and Diani (2011), is related to the coordination and network articulation of entities and collectives in new flexible and horizontal models. In this sense, Castells (2009) pointed out the importance of technological transformations and the expansion of the Internet and advance of mobile technology. The omnipresence and decentralized structure associated with communication and information technologies facilitate relationships and networking. This way, individuals and collectives have greater ease in order to interact from any geographical point through a small temporary investment. Furthermore, network hybrid models articulated through the ICTs lead to relational formulas built on specific interests, based on alliances within a framework of specific campaigns (Vromen, 2017).

Within this organizational and relational framework, an expansion of the repertoire is produced for a mobilization of resources and collective action (Selander and Jarvenpaa, 2016; Chadwick, 2007). Crowdfunding is one of the innovations oriented towards fundraising in order to sustain collective action. Crowdfunding could be defined as a collective fundraising process started individually or collectively through an open and decentralized announcement on the Internet where specific objectives behind the campaign are stated. Apart from the main role of the individual or collective promoter, the importance of audiences should be pointed out which, through small donations, play a role of arbitration, deciding which projects secure sufficient funds to be carried out. Finally, the intermediary platform is the third component of crowdfunding campaigns. It plays a role in communicative and technical consultancy (Lehner and Harrer, 2019; Jovanović, 2019; Cumming and Zhang, 2017; Burtch, *et al.*, 2016).

The first implementation of online fundraising in order to fund political activities may be considered the activities in the United States of Howard Dean in 2003 (Sey and Castells, 2006). According to Hindman (2005), Dean's efforts entailed a break from funding formulas followed until at the time, improving efficiency and reducing transaction costs (Jett and Vlikangas, 2004). The second major milestone in funding occurred in the campaign of Barack Obama in 2008, with small donations collected over the Internet amounting to almost \$US700 million (Lipsitz and Panagopoulos, 2011).

In Spain, there have been different experiences with political crowdfunding. Several grassroots collectives associated with the 15-M movement developed fundraising campaigns for collective action linked to multiple themes and objectives. Some paradigmatic examples are related to the *Plataforma de Afectados por la Hipoteca* (PAH) [Platform for Mortgage Impact], *Juventud sin Futuro* [Youth without a Future],

*Asamblea Tribunal Ciudadano del 15M* [Citizen Court Assembly] or the lawsuit filed against Rodrigo Rato by the Platform 15mpaRato (Ramos and González-Cacheda, 2016). There were also some initiatives regarding the Catalan sovereign movement through campaigns started by the *Asamblea Nacional Catalana* [Catalan National Assembly] (ANC) or *Òmnium Cultural*. The use of political crowdfunding has gone beyond collectives and social movements, adopted by political parties such as Podemos (González-Cacheda and Vázquez-Refojos, 2020).

On a conceptual level, political crowdfunding may be defined in a differential way from other crowdfunding modalities depending on objectives at the start of the campaigns, characteristics and orientation of the collectives that lead or promote given projects. Political actors that participate in the management of social and political conflict through actions and activities focused on political and social change are linked to the political crowdfunding campaigns. Therefore, this categorization would include political parties, unions, social movements and other type of platforms, associations and collectives oriented towards social change.

The dissemination and interaction of political crowdfunding campaigns seems to be articulated with a media ecology that integrates communicative methods associated with online and off-line spaces (Dumitrica and Felt, 2020; Mattoni, 2017). In the first group, we highlight the use of digital communication tools such as YouTube channels, Telegram, WhatsApp, Facebook or Twitter. The effectiveness of Facebook and Twitter for crowdfunding campaigns has been underlined in several studies (Nevin, *et al.*, 2017; Bi, *et al.*, 2017; Courtney, *et al.*, 2016). There are several digital newspapers in Spain with an informative agenda close to the demands of diverse collectives and social movements (Barranquero and Sánchez, 2018). In the second group, there are presentation sessions, posters, informative leaflets and dissemination through traditional communication media.

In this way, with the use of various communicative tools, Kriesi (1999) highlighted the relevance of external structure established for the relationship and interaction with its environment in a search for support and resources. In this respect, the values and ideological source of the narratives projected to the public space within the framework of the political contest play an essential role at generating sympathies and adhesions. The common definition of a frame articulated on a diagnosis and a set of a prescriptions related to a specific social problem is key when generating shared identities and specific solidarities (Snow and Benford, 1992; Gamson, 1992).

Table 1: Patterns of cooperation for mobilization among social collectives.Note: Retrieved from Della Porta and Diani [2]							
Cooperation No cooperation							
Competition for similar bases	Competitive cooperation	Factionalism					
No cooperation	Non-competitive cooperation	Neutrality					

According to Della Porta and Diani (2011), the openness of the generated identity will be a determining element when easing communication and interaction of collectives and organizations with individuals and political actors. Thus, an inclusive identity will enhance the efficiency of the external structure and relations with supporters, collectives and close organizations, easing the cooperation and establishment of key alliances for the mobilization of resources. Table 1 shows the possible cooperative or competitive patterns

between social and political organisations and collectives.

Therefore, from our point of view, the external structure and relations between political actors are crucial for resource mobilization. In this regard, it is important to consider the significant fragmentation and multiplicity of barely professionalized organizations structured on thin and simple organizational schemes. In this line, Tarrow (2004), pointed out the importance of cooperation and collaboration for the mobilization of resources and collective action in relation to the nature of current mobilization structures:

If the new organizations of the movement, lighter and more "externalized", have a weak spot, it is the lack of a permanent group of base activists. Partly due to this reason, they grow relations with other groups with similar ideas, trying to compensate the weakness of their base with the concentration of their followers in strategic moments and places. These groups seldom organize large demonstrations themselves, but in coalitions from time to time on *ad hoc* issues. [3]

Based on the aforementioned characteristics of digital communication channels (Vromen, 2017; Castells, 2009), we consider relevant the role of social networks within a *media ecology* (Mattoni, 2017) for the mobilisation of resources oriented to collective action through crowdfunding campaigns. These could facilitate the articulation of those structures that are external to social organisations with political objectives that seek to gather support far beyond the boundaries of the organisation and the closest support networks. Therefore, as Fehrer and Nenonen (2019) pointed out, the establishment of cooperative and collaborative relationships through social networks could be a key element for the financial success of crowdfunding campaigns.

# Cooperation and alliances to mitigate weaknesses of social networks in political crowdfunding campaigns

According to Borst, *et al.* (2018), the success of crowdfunding campaigns relies on two fundamental elements. First, the support of the network closest to the promoting organization during the first hours of the launch of the campaign is essential. Contributions collected during the first few hours will have a positive effect on mobilizing new support (Kuppuswamy and Bayus, 2017). Secondly, Borst, *et al.* (2018) pointed out the importance of social media as a channel to reach new audiences. According to Borst, *et al.*, the activation of latent links is directly related to the success of campaigns.

In this regard, first we focus on the characteristics of Facebook and debates surrounding its impact and effects on the development of crowdfunding campaigns. It must be underlined that there is hardly any literature related to this type of crowdfunding. On the contrary, most publications are related to crowdfunding in business. According to Tosatto, *et al.* (2021), the influence of Facebook on the success of artistic crowdfunding campaigns appears to be associated with an ability to promote relationships based on strong ties. In this way, Facebook could become an effective instrument for interaction between a campaign promoter and its closest network (Tosatto, *et al.*, 2021; Borst, *et al.*, 2018; Valenzuela, *et al.*, 2018).

However, the nature of Facebook and its algorithmic structure presents important limitations when it comes to the mobilisation of resources for collective action outside the promoter's immediate environment (Chen, 2020). This fact is related to the limited reach of Facebook posts. By doing so, Facebook users who establish a more intense relationship with the organization in promoting a campaign will have greater access to the information disseminated and more possibilities to establish interactive relationships (Kaun and Uldam, 2018). This fact has important implications for analysing the mobilisation of resources for collective action through this social network. As Chen (2020) underlined, Facebook's algorithmic filtering

could deepen the gap between sympathisers according to their degree of engagement. In relation to our object of study, it would be acceptable to think that Facebook could play an important role in mobilising financial resources through the contributions of promoter"s closest people during the first phase of the campaign (Borst, *et al.*, 2018; Kuppuswamy and Bayus, 2017). Conversely, it may exclude people who are potentially engaged but do not make intensive use of social networks or who do not appear in the campaigner"s closest network (Chen, 2020; Kaun and Uldam, 2018).

Therefore, from our perspective, the algorithmic structure of Facebook significantly limits its potential of mobilizing resources through political crowdfunding campaigns outside the closest network of the promoting organization. However, these algorithmic obstacles would not be insurmountable when it comes to getting a campaign message across to potentially participatory audiences that are outside the closest network of promoting social organisations. In this way, it is possible to structure an external network on Facebook through the campaign's support of public figures with social relevance and political organisations and groups with the capacity to disseminate campaign messages among their audiences. Moreover, this cooperation and intermediation in the transmission of the campaign message would have the potential to raise the trust and credibility level of the promoter among these audiences (Courtney, *et al.*, 2016). The conjunction of the aforementioned elements would have a positive impact on the amount of funds raised and the number of individuals supporting political crowdfunding campaigns through donations [4].

After pointing out the main elements of Facebook for the mobilisation of financial resources, we examine the characteristics of Twitter and its role as a tool for dissemination and interaction in crowdfunding campaigns. First, Valenzuela, *et al.* (2018) observed a differential structural configuration between Facebook and Twitter. Twitter has been more effective in mobilising individuals and actors united through weak ties (Valenzuela, *et al.*, 2018). In this regard, Lynn, *et al.* (2020) noted the importance of activating weak and latent ties and bonds for information dissemination and success in crowdfunding campaigns. In this case, they highlighted the importance of collaboration of external organisations and organised interest groups in spreading a campaign message and creating awareness and sympathy for a fundable cause. In this way, the difficulties generated by the structural configuration [5] of Twitter could be mitigated by a bridging function derived from the collaboration of external actors capable of activating weak and latent ties (Lynn, *et al.*, 2020). In the same vein, Solokova and Pérez (2018) indicated the convenience of contact and communication by the promoter collective on Twitter with those actors involved in social campaigns articulated around similar causes.

Although Tossato, *et al.* (2021) highlighted a higher level of association between success and the use of Facebook in campaigns, the debate on the relevance of different social networks remains open. Nevin, *et al.* (2017) demonstrated the relevance of both digital tools for the correct performance of crowdfunding campaigns. Thus, campaigns articulated through a higher level of intensity on Twitter and Facebook obtained greater financial backing. Likewise, support expressed in the form of likes or retweets contributed to a greater dissemination of a campaign (Nevin, *et al.*, 2017). This could be due to the configuration of Twitter algorithms, so that posts with strong support improve their visibility (Lynn, *et al.*, 2020). Finally, we should underline the functionalities of Twitter for the mobilisation of resources oriented towards collective action. In this regard, several studies (Theocharis, *et al.*, 2015; Vicari, 2013) pointed out the importance of disseminating messages aimed at mobilisation and collective action through tweets and retweets by links to videos, blogs or press releases.

Thus, we consider the use of these social networks to be important for financing political crowdfunding projects organised by collectives and organisations defending socio-political causes. Firstly, they are effective in raising financial support among the closest networks to a promoting organisation. Secondly, they articulate an *ad hoc* external structure, often key to obtaining the minimum funding required for the success of a given project. As we have advanced in this section, despite the different characteristics of Facebook and Twitter, the literature has demonstrated a tendency in both cases towards an articulation based on homophily. In the case of Facebook, the very nature of its algorithms creates obstacles to the articulation of an external network based on weak and latent ties; these problems obstacles are not insurmountable. In the area of mobilising resources for collective action, it is possible to establish

collaborative and cooperative relationships with public figures and socio-political actors to disseminate campaign messages. In this respect, the key might lie in the identity-based nature of the promoter collective and its capacity to articulate alliances with other actors. We believe that this bridging function involves the dissemination of a message in political crowdfunding campaigns by external actors who sympathize with specific socio-political causes. In turn, it will have a positive impact on the amount of funds raised as well as the number of donors.

*H1*: The level of digital support received by a promoter collective's Facebook and Twitter posts from external social and political organisations will result in a higher impact on the results of political crowdfunding campaigns (measured in funds raised and in the number of people supporting a given campaign through donations).

*H2*: The degree of digital support that the promoter collective's publications on Facebook and Twitter received by figures of public and social relevance will result in a greater impact on the results of political crowdfunding campaigns (measured in funds raised and in the number of people who support the campaign through donations).

#### Methodology

For the verification of the hypotheses, quantitative information was assembled through the creation of a database about diverse categories related to relational, communicative and financial aspects of diverse political crowdfunding campaigns. First, we delimited the typology of projects subject to analysis, depending on the nature of the promoting collective and the main objective of the funding cause. In this way, 233 projects were selected, oriented towards collective action for social change, originating around various conflicting dimensions of social, political and economic reality. Of the total gathered projects, 109 were selected through the specialized platform Verkami, 80 from Goteo and 44 from Totsuma. In the obtained sample, there are Spanish campaigns from the years 2012-2017 by social collectives that supported the Catalan sovereignty movements and 15M, as well as diverse local, autonomous and state social organizations, and international collectives related to different socio-political causes.

Г	Table 2: Study variables.							
Acronym	Description							
Euros	Total amount received by campaign (in Euros)							
Funders	Total number of individuals supporting each campaign through donations							
Collective Actors Facebook	Total number of posts shared in each campaign by socio-political actors							
Collective Actors	Total number of tweets shared in each campaign by socio-political							

Twitter	actors
Public Figures Facebook	Total number of posts shared in each campaign by public figures
Public Figures Twitter	Total number of tweets shared in each campaign by public figures

In second place, on the basis of the selected projects and predetermined categories, quantitative information was assembled. Information collected for each of the variables is shown summarized in <u>Table 2</u>. Firstly, we quantified the impact of each campaign measured in the total amount of Euros raised and total number of donors. This information was collected from the Web sites of the crowdfunding platforms Verkami, Goteo and Totsuma in chronological order and retrospectively. Secondly, we have noted the information related to the dissemination of campaign information by external social and political organisations. For this purpose, we looked at the Facebook and Twitter pages of the organisations promoting the campaigns analysed. Thus, on Facebook we recorded for each campaign the number of times posts published by the promoting organisation were shared by other socio-political actors. Following the same logic, on Twitter we recorded for each campaign analysed the number of retweets made by external social and political organisations.

In addition, at the same time, we recorded the same interactions described previously, but in this case by personalities of public relevance, such as political representatives and leaders, as well as people from the world of art, culture, sport and journalism. In order to collect this information, each of the accounts of the promoting organisations on Facebook and Twitter was reviewed for the duration of each of the political crowdfunding campaigns.

	Table 3: Descriptive statistics.										
Variable	Mean	SD	Median	Max	Min						
Euros	8422.57	14961.58	4710	130505	75						
Funders	214.99	341.32	134	3589	2						
Collective actors Twitter	3.85	6.31	1	49	0						
Collective actors Facebook	2.67	4.26	1	28	0						
Public figures Twitter	0.33	1.10	0	11	0						
Public figures Facebook	0.11	0.56	0	7	0						

To analyse the information gathered and synthetized through the variables in Tables 2 and 3, we will

present the computation of various descriptive statistics. These include percentages, mean, median, standard deviation and interquartile range according to different models of digital cooperation analysed. Next, for the inferential and predictive analysis, we performed a negative binomial regression test. Its objective was to determine the relation between the dependent variables that collected information on the impact of crowdfunding campaigns and the independent variables that showed the level of interaction recorded on social networks. The choice of this statistical tool was based on the non-normality of data distribution and overdispersion adopted by dependent variables. In both cases, the value of the variance was considerably higher than the mean. This tended to occur with data obtained through the observation of phenomena in the social field, as is the case in this research. Moreover, the data of the dependent variables did not present an excessive number of zeros. For the statistical treatment of the information collected in our database, we used the Stata software package.

### Results

Data in <u>Table 4</u> show the percentage of political crowdfunding campaigns that obtained support from third parties on Facebook and Twitter. Firstly, we observed a higher level of digital cooperation in the dissemination of campaign publications by collective actors such as associations, trade unions or political parties. Thus, the percentage of political crowdfunding campaigns that obtained communicative support of other organisations was around 60 percent on both Facebook and Twitter. In contrast, the percentage of campaigns that obtained support from public figures with social relevance dropped to 16.7 percent on Facebook and 6.9 percent on Twitter.

Table 4: Percentage related to level of digital       cooperation established through social networks.									
Variables	Percentage	Standard error	Confidence interval (95%)						
Collective actors Facebook									
Yes	61.9	.0318304	(55.3–67.8)						
No	38.1	.0318304	(32.1–44.6)						
Collective actors Twitter									
Yes	60	.0320828	(53.6-66.2)						
No	40	.0320828	(33.7–46.3)						
Public figures Facebook		·	<u>.</u>						
Yes	16.7	.0245094	(77.8-87.5)						
No	83.3	.0245094	(12.4–22.1)						
Public									

figures Twitter			
Yes	6.9	.0166031	(89–95.7)
No	93.1	.0100031	(4.2–10.9)

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	Table 5: Central tendency and dispersion measures of impact variables according to the digital cooperation variable of social and political actors on Facebook.								
Collective actors Facebook (yes) (n=144)	actors actors Facebook (no)								
	Median	IQR	Mean	SD	Median	IQR	Mean	SD	
Euros	5798.5	8465	10624	18252	3280	4885	4859	5293	
Funders	157.5	201.5	265	412	90	126	134	141	

The information in Table 5 shows higher numbers in measures of central tendency and dispersion for political crowdfunding campaigns that obtained communicative support on Facebook from social and political actors. As we can see, the mean and median values were higher in relation to the number of people making a donation and the number of Euros raised.

	Table 6: Central tendency and dispersion measures of impact variablesaccording to the digital cooperation variable of social and politicalactors on Twitter.							
Collective actors Twitter (yes) (n=140)	Collective actors Twitter (no) (n=93)							
	Median	IQR	Mean	SD	Median	IQR	Mean	SD
Euros	6482.5	8855.5	11441	18500	2990	3911	3878	3549

Funders		160		192	282	418	81	115	113	107	
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With regard to measures of central tendency and dispersion of the variables of each campaign's impact according to the support obtained on Twitter, we observed a trend similar to that shown in <u>Table 5</u>. Thus, the campaigns that obtained support of socio-political actors demonstrated a higher level in central tendency and dispersion measures regarding the amount of Euros obtained and the number of donors (see <u>Table 6</u>).

	Table 7: Central tendency and dispersion measures of impact variablesaccording to the digital cooperation variable of public figures onFacebook.									
Public figures Facebook (yes) (n=16)Public figures Facebook (no) (n=217)										
	Median	IQR	Mean	SD	Median	IQR	Mean	SD		
Euros	7099.5	74375	14132.7	19246.5	4650	4650	8001.5	14564		
Funders	292.5	1945	411.3	517.2	129	3587	200.5	321.6		

The information presented in Table 7 follows a common pattern with data in Tables 5 and 6. The data related to measures of central tendency and dispersion of the variables Euros and Funders provided a higher level among campaigns that obtained support on Facebook from public figures of public relevance (see <u>Table 7</u>).

	Table 8: Central tendency and dispersion measures of impact variablesaccording to the digital cooperation variable of public figures on Twitter.									
Public figures Twitter (yes) (n=39)	ires figures   tter Twitter   es) (no)									
	Median	IQR	Mean	SD	Median	IQR	Mean	SD		
Euros	8030	130070	15520.5	24805.8	4330	128784	6995.6	11649.1		
Funders	200	3556	434.1	669.7	117.5	1966	170.9	200.1		

Lastly, the information in Table 8 reinforces the trends shown in previous tables. Once again, we find higher measures of central tendency and dispersion for the variables Euros and Funders among those campaigns that registered the presence of digital cooperative relationships on Twitter.

Table 9: Regression results.								
	Euros	Funders						
Collective actors Twitter	0.058*** (0.000)	0.052*** (0.000)						
Collective actors Facebook	0.061*** (0.000)	0.042** (0.006)						
Public figures Twitter	0.150** (0.002)	0.159** (0.001)						
Public figures Facebook	-0.007 (0.945)	0.139 (0.240)						

In the following, we will focus on the results of the negative binomial regression test. As we can see in Table 9, the level of digital cooperation on Twitter and Facebook seems to be associated with a higher level of support measured in the number of people making donations and the total amount of Euros raised. In this way, we could predict that political crowdfunding campaigns that receive communicative support on Twitter and Facebook from trade unions, political parties, associations, or advocacy groups will obtain a greater amount of support and funding.

Similarly, the degree of support obtained on Twitter from public figures with social relevance appeared to be associated with a higher level of fundraising and a higher volume of people supporting political crowdfunding campaigns through donations. By contrast, the level of statistical significance did not allow us to establish an association between support shown by relevant public figures on Facebook and the results of political crowdfunding campaigns (see Table 9).

#### Discussion

In this research we analysed the effects produced by digital cooperation between groups promoting political crowdfunding campaigns and various public figures with social relevance and socio-political actors on the level of fundraising and the number of individual supporters. The results demonstrated a positive association between support received and dissemination carried out by public figures and socio-political actors through Twitter and Facebook. Thus, we found a higher level of fundraising and individual support in those campaigns that managed to articulate a higher degree of digital cooperation with other collective actors. These findings allow us to validate hypothesis 1 (H1). Regarding the association between individual support received, funds raised and dissemination by public figures with social relevance, we consider hypothesis 2 (H2) to be partially validated. In this way, while the interactions registered through Twitter showed a positive effect on support received, dissemination by third parties on Facebook did not show a positive association with the results of the political crowdfunding campaigns.

The findings allowed us to make a series of contributions to various debates related to the mobilisation of resources for collective action and the role of social networks. Firstly, it is important for a mobilisation of resources through political crowdfunding campaigns to overcome factionalism and establish links and bridges with other organisations and individuals outside their immediate network. This fact becomes even more relevant in a context in which the hegemony of collective action is led by organisations with weak but

highly flexible organisational structures (Tarrow, 2004). In this framework of organisational hybridisation (Chadwick, 2007), resource mobilisation structures become more dependent on an external environment. In this way, organizations depend to a greater extent on the articulation of a support network based on elements of reciprocity and mutual support. We consider that those organisations based on inclusive identities and frames capable of generating specific solidarity and adherence are more likely to obtain external support through political crowdfunding campaigns (Della Porta and Diani, 2011; Snow and Benford, 1992; Gamson, 1992).

Currently, social and political collectives replace a shortage of internal resources with an intelligent use of technological tools in order to articulate external alliances that facilitate a mobilization of financial resources. Even though some work has highlighted the efficiency of digital channels for organization, coordination and communication for funding political campaigns (Hindman, 2005; Jett and Välikangas, 2004), the results of our research point to an insufficiency of theses analyses that focus predominantly on technological dimensions in sociopolitical processes. The growth of specific campaigns (Vromen, 2017) requires organizations that have a capacity to build and sustain a strong external structure, with attention on both online and off-line spheres. This external structure should focus on the creation of links, affinities and shared identities with other socio-political actors. Its correct articulation and support will facilitate an exchange of information and resources through cooperation (Selander and Jarvenpaa, 2016; Sommerfeldt, 2013; Della Porta and Diani, 2011; Klandermans, 1992).

Secondly, the results of this research provide new information about the potential of Facebook and Twitter for mobilising financial resources for collective action. Regarding Facebook, several studies have indicated its importance in mobilising those belonging to a campaign promoter's closest circle (Tosatto, *et al.*, 2021; Kuppuswamy and Bayus, 2018). Nevertheless, the mobilisation of a promoter's strong ties through Facebook would not be sufficient for the success of a given campaign. Borst, et al. (2018) pointed out the need to reach new audiences outside a promoter's immediate network. However, Facebook's structure and algorithmic configurations do not facilitate the articulation of an external structure that facilitates the continuity of political crowdfunding campaigns outside an organisation's perimeter. This deduction appears to be associated with homophily that characterises interactions established on Facebook (Chen, 2020). The findings of this research illustrated how digital cooperation for the dissemination of a campaign message with other social and political actors through Facebook could contribute to break this algorithmic barrier. From our point of view, a message's dissemination by associations, trade unions, political parties or advocacy groups through Facebook could facilitate the development of bridges with audiences outside a given promoter's collective. In this regard, the results of our research demonstrated an association between the level of dissemination and the number of posts shared by socio-political actors and the volume of funds raised and individual support.

Twitter provided a pattern similar to the findings related to Facebook. In the case of Twitter, the results revealed a greater importance of dissemination. The collaboration on Twitter of socially relevant people was related to a higher volume of support. In this manner, we confirmed the informative importance of Twitter in resource mobilisation campaigns reported in earlier studies (Theocharis, *et al.*, 2015; Vicari, 2013). Although Valenzuela, *et al.* (2018) pointed to Twitter's effectiveness for the activation of weak ties for collective action, others noted its limitations as a consequence of dispersion and homophily (Lynn, *et al.*, 2020). The results of this study demonstrated how digital cooperation and support received by the publications made by a campaigning collective from third parties improved the results of political crowdfunding campaigns. These findings are consistent with observations made by Solokova and Pérez (2018) and Lynn, *et al.* (2020). Consequently, establishing interactive relationships with relevant public and social figures and socio-political actors would mitigate limitations associated with network dispersion and homophily. The consequences would be a greater activation, potentially beneficial, of weak ties for a political crowdfunding campaign.

## Conclusion

The results of this study illustrated how external support on social media promoted political crowdfunding campaigns, increasing fundraising and individual support. Digital cooperation with third parties made it possible to mitigate structural weaknesses of Facebook and Twitter, associated with homophily and dispersion. The results of collaboration on Facebook and Twitter led to an articulation of *ad hoc* external networks in turn facilitating diverse connections between actors and public figures. These findings will assist the performance of political crowdfunding campaigns, especially small organizations with few resources. These participation-oriented organizations can mitigate their structural weaknesses through a creation of efficient external structures articulated on notions of a media ecology.

The circulation of campaign messages among audiences considered closer to specific agents, formed by individuals with high social and political commitments, are key.

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### Notes

- 1. Chadwick, 2007, p. 286.
- 2. Della Porta and Diani, 2011, p. 205.
- 3. Tarrow, 2004, p. 250.

4. As an example, in 2016, the campaign called *Correscales* promoted by *Marea Azul* which obtained a total amount of €128,859. It also attained support for the dissemination of the campaign message on Facebook and Twitter from various personalities and actors in the social and political sphere. On Twitter we can mention the following accounts: Podemos El Hierro, Anticapitalistes, Arran Paisos Catalans, Gatzara Valencia, Autonomia Sur Cooperativa Andaluza, La Tuerka, CGT Villarobledo, CUP Guixols, Proces constituent Osona, EH Bildu Zierbena, Puede Pasaia, PCE-EPK, CGT Metal Madrid, Podemos Euskadi, Arran Conca Barbera, Endavant Maresme, Associació Espai Socio-Cultural l'Aurora-CGT Rub, Antimilitaristas Madrid, Acampada Badalona, Proces constituent Segria, Podemos Andalucia, Corriente Revolucionaria de Trabajadores. On Facebook, the supporters were as follows: Irabazi Barakaldo, Bilgune feminist, Esquerda Alternativa-CUP Barbera, ESK-Movistar, Floresta 15M, Podemos Blgica, Sindicat COS, 15M, Podemos Sant Boi and CGT. Finally, we must underline the support of the following representatives and leaders of the political left: Teresa Rodrguez (Twitter), Miguel Urban (Twitter), David Fernndez (Facebook) and Alberto Garzón (Facebook).

5. According to Lynn, *et al.* (2020) Twitter is configured as a dispersed network with a tendency towards homophily.

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