Political Campaigns Utilisation of Social Media in the Republic of Ireland

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Declaration

I declare that the work described in this dissertation is, except where otherwise stated, entirely my own work, and has not been submitted as an exercise for a degree at this or any other university. I further declare that this research has been carried out in full compliance with the ethical research requirements of the School of Computer Science and Statistics.

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Abstract

The use of social media platforms such as Facebook has grown in the Republic of Ireland and elsewhere over the past number of years. At the same time the Republic of Ireland's political system has undergone significant changes both in response to local and world events. Both have obviously influenced election campaigns. As can be seen from the case studies by Babac and Podobnik (2018), Chou and Fu (2017), and Ktoridou et al. (2018) analysing elections in Croatia, Taiwan, and Cyprus respectively, this increased usage of social media platforms are playing an ever-greater role in election campaign strategies in many countries around the world. To date there has been little analysis of this within the Republic of Ireland. At the same time there have been several historic election campaigns and referendums in recent years that have utilised social media platforms such as Facebook for their campaigns. This study gathers information and analyses the use of Facebook as a campaign tool for several elections and referendums between the years 2011 to 2018. The methodology used for this study was a quantitative analysis of Facebook post data. The analysis of this data showed a growth in the use of Facebook as a campaigning tool between the years 2011 to 2018 and a clear rise in the level of engagement between parties using the platform for the purposes of political campaigning and the public. It also shows a shift in usage from the beginning of the decade where Facebook was used by parties and candidates to direct users to their websites, to the latter years where they began hosting more and more content on the Facebook platform itself in order to maximise engagement with the public.

Contents

List of Tables and Diagrams

Abbreviations

AAA	Anti-Austerity Alliance
ACM	Association for Computing Machinery
API	Application Programming Interface
CPI	Communist Party of Ireland
DDI	Direct Democracy Ireland
EP	European Parliament
FB	Facebook
GE	General Election
IA	Independent Alliance
IDP	Irish Democratic Party
PBP	People Before Profit
PE	Presidential Election
PP	Per Post
PPD	Posts Per Day
SD	Social Democrats
SKIA	South Kerry Independent Alliance
UK	United Kingdom
U.S.	United States (of America)
WUAG	Workers and Unemployed Action Group
WP	Workers' Party

1   Introduction

1.1   Background and Context

This study is primarily concerned with the use of social media in political campaigns and elections in the Republic of Ireland. It contrasts this use with political campaigns and elections in other democratic countries. It highlights several differences of use and posits an examination of this highlights some unique aspects of the Irish case study. This study focuses on the use of the largest social media platform – Facebook, according to Brennan and Croft (2012) and Aichner and Jacob (2015) – over an eight-year period from 2011 to 2018. The study comprises a quantitative analysis of Facebook post data over this period. Within this period the study examines four election campaigns and two referendum campaigns as follows:

1. 2011 Irish General Election
2. 2016 Irish General Election
3. 2011 Irish Presidential Election
4. 2018 Irish Presidential Election
5. Referendum Campaign on 34th Amendment to the Irish Constitution, 2015 (Subject: Same-sex marriage)
6. Referendum Campaign on 36th Amendment to the Irish Constitution, 2018 (Subject: Repeal of 8th Amendment)

The existing literature and research on the utilisation of social media for the purposes of political campaigning in other countries is reviewed and analysed. In line with the methodology used in several existing studies, a quantitative analysis of data extracted from a social media platform, is then used to examine data from the Facebook platform related to the elections and referendums outlined above. Chapter three outlines how data was extracted from the Facebook platform using an application called Netvizz and how the quantitative analysis of that data was structured in order to answer the research question. This analysis quantifies the total posts, reactions, comments, shares, and engagement on a page for the campaign period in question. It further calculates the average number of reactions, comments, shares, and engagement per post. The same analysis is then implemented for each post category e.g. link posts, photo posts, video posts etc… Finally, the link posts and video posts are categorised by their link domain groups and the same analysis is implemented on the link domain groups. The percentages that each post type comprises of the total for a given page is calculated and

the post data for each page is then compared with its competitors for the campaign in question. In chapter four the findings and resulting conclusions from this analysis are then outlined.

Following the 2008 Presidential election in the United States it has been put forward by Block (2013) and supported by Blumler (2013) and Vergeer et al. (2013b), that political communication is currently in a fourth age where social networking sites and other web 2.0 technologies play a leading role in political campaigning. There has been a consistent growth in the use of these technologies in political campaigns in many countries including the Republic of Ireland. There is a great deal of literature on the use of Facebook, Twitter, and other social networking sites in elections and political campaigns in other countries as this study will show during the literature review chapter. However, currently is there is a lack of peer-reviewed literature examining this usage in Irish political campaigns and elections. The closest example of a work that looks at this in an Irish context is Candon (2012) which examined data from election themed websites used in the Irish general election of 2011 and interviewed campaign staff from several political parties about their interactions with these websites. This study hopes to go some way towards addressing this problem by examining in depth how Facebook was used by parties in the two most recent general elections, presidential candidates in the two most recent presidential elections, and umbrella campaign groups (for example the Yes Equality Campaign) in two of the most recent referendum campaigns. This study aims to contribute to a better understanding of how social networking sites are utilised for the purpose of political campaigning in the Republic of Ireland and how this has evolved over the period 2011 to 2018.

1.2   Research Interest and Beneficiaries

This subject is pertinent for several reasons. As social media rises in prominence as part of political campaigns it is essential it be evaluated and properly understood by legislators and regulators when drafting rules to govern how these platforms are used in order to allow for free and fair elections with high ethics and standards of campaigning. Those using social media platforms like Facebook for the purposes of political campaigning will find it of interest to enable them to use these platforms more effectively and generate better engagement with the public. Engagement on a Facebook post is the measure of the total number of user reactions to and interactions with a post such as by "liking", commenting on, or sharing a post.

Academically this work will build on the existing research in the area and deepen the understanding of the Irish case. Finally, this study may be of interest to members of the public who would like to understand how these platforms can be used to influence public opinion and distribute information. Currently there is a lack of information available in relation to how Social Networking sites such as Facebook are utilised for the purpose of political campaigning in the Republic of Ireland and how this may differ with respect to other countries. The scope of this study runs from 2011 to 2018 and looks at Facebook pages for candidates in presidential elections, political parties in general elections, and umbrella groups in referendum campaigns in the Republic of Ireland. The list of elections and referendums and pages analysed for each of these will be outlined in the following paragraphs.

1.3   Scope of the Research

For the 2011 General Election a search was performed on Facebook for pages for the fourteen political parties and other groupings that contested the election. Of these only five used Facebook pages to post over the course of the election campaign. The Political parties/groupings that contested the election and the ones analysed are listed in Appendix 1. These pages were analysed from the data the election was called on 1st February 2011 until polling day on 25th February 2011.The term grouping is used because not all of these are registered political parties, but they do represent groups that campaigned under a single banner and as will be seen in the subsequent 2016 election some of these groups did maintain Facebook pages for this purpose. For the 2016 General Election searches were performed on Facebook for the eighteen political parties and other groupings that contested the election. Of these seventeen had Facebook pages they used for campaigning during the election. The Political parties/groupings that contested the election and the ones analysed are listed in Appendix 1. For the 2011 Presidential Election searches were performed on Facebook for the seven candidates that contested the election. Of these, two candidates maintained Facebook pages for the purposes of campaigning during the election. The Candidates that contested the election and the ones analysed are listed in Appendix 1. These pages are analysed from the date nominations for the election closed on 28th September 2011 until polling day on 27th October 2011. For the 2018 Presidential Election a search was performed on Facebook for the pages of the six candidates that contested the election. Of these, five had Facebook pages for the purpose of the election campaign. The Candidates that contested the election and the ones analysed are listed in Appendix 1. These pages are analysed from the date nominations for the election closed on 26th September 2018 until polling day on 26th October 2018. For the 2015 Same-Sex Marriage referendum this study analysed the Facebook posts of the umbrella

organisation that contested the referendum for the Yes side. This was under the "Yes Equality" banner so the Facebook post data from this page was analysed. The No side in this referendum did not have a corresponding umbrella organisation that could be analysed. For the referendum campaigns the start point for the formal campaign was the day the bill calling the referendum finished passing all stages of the Oireachtas, and the end date for this analysis was polling day. For the 2015 Same Sex Marriage referendum this equated to a campaign period running from 27th March 2015 to 22nd May 2015. For the 2018 Repeal Referendum there was an umbrella group from both sides to contest the referendum. On the Yes side there was the "Together for Yes" campaign and on the No side there was the "Love Both" campaign. Both pages were analysed over the course of the referendum campaign from 28th March 2018 to polling day on 25th May 2018.

The primary research question for this study is "How have social media platforms such as Facebook been utilised in Irish election and referendum campaigns during the years 2011 to 2018?" There are two main objectives of the study as follows:

1.   Examine how Facebook has been utilised in election and referendum campaigns in the Republic of Ireland in order to gain a greater understanding of how social media is used in elections and referendums in the Republic of Ireland by the candidates and organisations that use social media to engage with the electorate.

2.   Compare and contrast the way Facebook are used for political campaigning in the Republic of Ireland when compared to other democracies via an examination of the current research and literature available.

In this case utilisation means how did the different parties, candidates and campaign groups make practical use Facebook during this time. Specifically what this study is trying to discover is who used it, what type of posts did they use to try to engage with the public, and what did they use it for i.e. did they use Facebook to try to direct users to their party website for instance or were they simply looking to post content on the Facebook site to engage with the public there. This study is solely a data collection exercise. It does not explore if there is a link between a party that uses Facebook and a party that is more successful electorally. What this study does look at is which parties use Facebook and which of these is most successful in terms of user engagement generated on their posts.

1.4   Chapter Structure

Chapter two of this study outlines the literature review. Here the existing literature on the subject area is reviewed and critically analysed. The methodology for this study is outlined in chapter three, this is a quantitative analysis of Facebook post data. This builds on previous studies conducted in other countries to analyse the differences in the Irish case. A corresponding analysis of twitter data over this period was not implemented because Twitter only allows the last 3,200 tweets from a given page to be returned. This meant it was not possible to analyse some of the pages for the campaigns in question. This study builds on what previous studies have already done in order to inform the methodology. Data was extracted from Facebook on 9th March 2019 for the pages being analysed using a data mining application and then analysed over the course of the following weeks. The app used is an open source tool called Netvizz, developed by Rieder (2013), which can be programmed to extract data sets from particular time frames and regarding specific information (e.g. just posts, or posts and comments, etc.). Further details on this application and why it was chosen for this study are outlined in chapter three. The main limitation of this approach is it does not answer why Facebook was utilised this way in the campaigns in question. This remains outside the remit of this research. Chapter four presents the findings and analysis which resulted from implementing the methodology. Primarily this analysis discusses the increased usage of Facebook for the purposes of political campaigning among parties and candidates in the Republic of Ireland, the decline in the use of link posts and the rise in the use of video posts for political communication. in chapter five the conclusions of the present study are outlined and a brief analysis of how the work performed in this study could be expanded upon by subsequent studies is provided.

2   Literature Review

2.1   Introduction

This review will outline and discuss the existing literature on the use of social media in election campaigns solely in democratic countries. The literature for only democratic countries is examined because this review is then used to inform the methodology this study uses to examine the utilisation of social media in a democracy – the Republic of Ireland. It will review where the current research on this began and go on to discuss the development of this research thus far. The chapter will then look at some of the underlying theories behind the use of social media in political campaigns, followed by an examination of some of the more popular approaches and methodologies which previous studies have used to examine the use of social media within the context of election campaigns. This is followed with a discussion about some of the innovative ways social media is being used in election campaigns and a review of the structure of these studies. Some areas of future research identified in previous literature are mentioned as these show the previous research this study is building on and where this study fits within the existing research. An extensive search was performed as part of this study but found a gap in the existing literature, specifically, there is little current research which examines how social media has been utilised for elections in the Republic of Ireland. Therefore, the approach taken is to review literature on how it is used in other democracies and use these to inform the methodology selected to examine the use of social media in elections and referendums in the Republic of Ireland. This study intends to build on existing studies on social media usage in elections and political campaigns. Therefore, it is essential to review the underlying theories discussed in these studies, the methodologies used by these studies, and the areas of future research identified by these studies.

2.2   Existing Literature

There has been little study on the use of social media in elections in the Republic of Ireland. Despite an extensive search the closest example of a work that looks at this in an Irish context is Candon (2012) which examined data from election themed websites used in the Irish general election of 2011 but did not look at data from Facebook, Twitter, or any other social media platform. However, there is a wealth of literature focusing on the use of social media in elections in other democracies, particularly the United States. For example Jungherr (2016b) presented a systematic literature review of 127 separate studies specifically addressing the use of Twitter in election campaigns. Jungherr (2016b) found in his systematic literature review the United States was the country most focused on by studies written in English on the use of

Twitter during campaigns. As is demonstrated in the rest of this literature review there is a significant number of other studies focused on the use of Facebook and other social media platforms in addition to Twitter.

2.3   The Beginning

A series of recent studies have indicated the 2008 United States Presidential Election and the successful use of social networking sites by the Obama campaign ushered in a new age in political communication. Several authors have recognized social media played a bigger and more important role than in any election before. Shayo and Kersting (2016) mention the first wide use of mobilising voters was by the Obama campaign in the 2008 United States Presidential Election. Magin et al. (2017) states the Obama campaigns in 2008 and 2012 were the first to truly harness the power of Web 2.0 and set a pattern for other political campaigns around the world to follow. Ruth (2018) mentions many American political consultants are of the view the Obama campaign revolutionized the use of social media as a campaign strategy in the 2008 presidential election. Kumar and Natarajan (2016) states the 2008 Obama campaign was the initial campaign where the use of social media was pervasive.

Up until this point there were three overall ages in the history of political communication globally. In the first age - which lasted from the 1850s to the 1960s - political parties had a large base of traditional voters they mainly communicated with by printed press and face-to-face interactions between politicians and the party members (Gibson and Römmele, 2001). The second age evolved from the 1960s onwards as limited-channel television took over as the dominant medium for political communication and the grip of party loyalty on voters started to slip (Blumler and Kavanagh, 1999, p. 212). The third age began in the 1990s and saw a further intensification in party competition as non-voters, swing voters, and new parties became more commonplace. The internet became increasingly important as a communication channel during this period, although television was still the dominant medium (Blumler and Kavanagh, 1999, p. 212). It can be argued a new age has been ushered in by social media and other web 2.0 technologies since 2008. Magin et al. (2017) examined what political campaigning is like in this fourth age of political communication by implementing a multi-method study on the use of Facebook by German and Austrian parties in their 2013 national election campaigns. This fourth age as a way of designating major changes in eras of political communication has been put forward or supported by several other papers (Block, 2013,

Blumler, 2013, Vergeer et al., 2013b). An article by Block (2013) proposes the current state of affairs in political communication as a "fourth age". In his article on the fourth age of political communication Blumler (2013) proposes that the crux of the fourth age of political communication is its ever-expanding diffusion and utilisation of internet facilities throughout society. Vergeer et al. (2013b) breaks down and explains campaign models and the tools used for each of them in each of the ages in political communication, with the fourth age featuring personal campaigns delivered via weblogs, micro-blogs, and social networking sites.

However, on the other hand a series of recent studies and articles have indicated it could be more a case of the use of social media developing in each country at its own rate and the use of specific platforms in any given election being simply a continuation of the growth in use and importance of Social Networking sites and Web 2.0 technologies (Margetts, 2017, Nulty et al., 2016, Van Gyampo, 2017). Several authors when discussing the subject of social media use in election campaigns in a specific country like to select a single election they can frame as the first one where the use of social networking sites had a significant impact. Examples of this include Margetts (2017) on elections in the UK, Vakaoti and Mishra-Vakaoti (2015) on elections in Fiji and several authors such as Ahmed et al. (2017) and Halpern (2018) point to the 2008 U.S. Presidential elections as being the first one where social media had a major impact. In some other countries social media is not seen as a major factor and many candidates have yet to start using it in their campaigns. For example, in the 2014 European elections in the Czech republic only 5.8% of the candidates even had Twitter accounts (Nulty et al., 2016). In their study Nulty et al. (2016) note this low adoption rate in some countries appears to confirm previous research by Vergeer et al. (2013a) on new media adoption and web campaigning by EU politicians about a "North-South divide" across Europe. In his study on the use of social during the 2016 elections in Ghana, Van Gyampo (2017) found social media still did not play a major role on elections in Ghana.

If the idea that political communication is now in a fourth age as put forward by Block (2013), Blumler (2013), and Vergeer et al. (2013b) is accepted then it is also necessary to consider perhaps elections in some democracies are still stuck in the third age of political communication since the use of social networking sites in election campaigns is not widespread in these countries. Examples of countries where this may be the case include the aforementioned case of the Czech Republic during the 2014 European parliament elections where only 5.8% of candidates had Twitter accounts, Bulgaria where this figure was 8%, and

Portugal where only 6.5% of candidates had twitter accounts. This is in stark contrast to countries like Ireland and Sweden where more than 73.2% and 66.8% of candidates in the respective countries were using Twitter in their election campaigns (Nulty et al., 2016).

Table 1: Candidates and election-related Twitter communication during the 2014 European Parliament Elections, by country

Table 1
Candidates and election-related twitter communication during the 2014 EP Elections, by country (updating candidates accounts).

Country	Total parties	Total candidates	Cands w/Twitter	% Using Twitter	Total tweets
By country					
Ireland	7	41	30	73.2	7300
Sweden	12	373	249	66.8	36,483
Finland	9	249	166	66.7	16,797
Netherlands	10	345	229	66.4	42,109
Italy	8	653	355	54.4	70,414
Denmark	8	100	54	54	5513
United Kingdom	9	749	341	45.5	66,921
Latvia	6	170	64	37.6	4220
Slovenia	10	118	44	37.3	4150
Luxembourg	8	54	19	35.2	14
Cyprus	5	48	15	31.2	587
Estonia	7	88	26	29.5	1115
Austria	7	348	78	22.4	19,876
Greece	9	544	118	21.7	7460
Belgium	13	182	38	20.9	2345
Poland	8	1286	249	19.4	13,696
Germany	7	946	163	17.2	16,772
Lithuania	9	257	33	12.8	507
Spain	9	2105	266	12.6	76,784
France	7	3735	411	11	38,361
Slovakia	10	334	36	10.8	1193
Croatia	7	275	26	9.5	876
Hungary	6	322	29	9	218
Romania	10	580	48	8.3	411
Bulgaria	7	286	23	8	830
Portugal	5	336	22	6.5	4482
Czech Republic	9	829	48	5.8	1867
Total	222	15,353	3180		441,301
By incumbency status					
Non-incumbent		14,607	2641	18%	
Incumbent		746	539	72%	
Total		15,353	3180	21%	

(Nulty et al., 2016)

In some of the studies there is a limited use of Facebook among politicians. In their paper Parisopoulos et al. (2012) found despite the increasing use of Facebook by politicians identified by Ginnarou (2009) and Johannessen (2010), only 27 of the 132 candidates they studied had established a presence on Facebook. Parisopoulos et al. (2012) further found of those 27, 22 candidates created a personal profile while five created a general group concerning their candidacy. They furthermore found eight of these candidates had "restricted" profiles that did not allow access to any content other than the number of friends/supporters. It is important to note the study by Parisopoulos et al. (2012) examined candidate profiles for the Greek elections of October 2009 and the use of Facebook for electoral purposes may have been at an early stage. As is shown later in this study of the Irish case, use of Facebook

among both political parties and presidential candidates has grown over the last number of years in the Republic of Ireland.

2.4   Underlying Theories

This study is designed to look at how social media has been utilised in a single country. As part of this review other studies that examined the same theme in a different country were reviewed. From this review there are several different underlying theories and approaches used to examine the same subject, with some of these studies touching on several different theories in the course of their analysis. The most relevant ones are stated below and some of these are expanded upon further. Parisopoulos et al. (2012) looked at the use of Facebook in the 2009 Greek elections. They examined if Facebook was an online electioneering tool for Greek candidates and to what extent. They then clustered the factors for the increasing usage of Facebook in election campaigns into two groups – supply driven, and demand driven. They posited Politicians' use of social media is an example of what many scholars view as creation of social capital. In their study on the 2013 Presidential elections in Cyprus Ktoridou et al. (2018) proposed a hypothesis that most politicians use social media for short-term dissemination rather than long-term engagement and studied the use of social media through this frame. Ahmed et al. (2017) examined the use of twitter in the 2014 elections in India, framing the study using the innovation/equalisation hypothesis. Shayo and Kersting (2016) examined online electoral campaigning in the Tanzania 2015 elections asking if the use of Facebook had a significant impact on the campaign and proposing several hypotheses. López-Meri et al. (2017) studied the use of Twitter in the Spanish federal elections of 2016 and looked at the tendency towards hybridization between new and conventional digital media in the use of this platform interaction i.e. one way or two-way, personalisation, and intensification during campaigns. They then proposed a research question and a corresponding hypothesis off the back of this and examined how twitter was used, using these questions to guide their research. Romero (2016) studied the Costa Rican municipal elections of 2016 through the guise of the mobilisation – normalisation theses. Zhang (2018) looked at the 2016 Taiwanese general election and investigated the relationship between candidates' online popularity and election results.

Some theories focus on how the public engage with politics through social media while others focus on whether the use of social media in elections can confer an advantage to either the

campaigns of major parties or those on the fringes. One major theory is Habermas theory of the public sphere which is explained well in the following paper:

"The public sphere was identified by Habermas as that section of the lifeworld where rational critical discourse led to a wider inclusion of the citizen in public life and decision-making. If the public sphere ever existed, it was located within the literary and political milieux and facilitated members of the bourgeoisie to participate in public life, thereby contributing to the development of liberal democratic institutions as we might recognise them today. A key component of this sphere was what Habermas termed communicative action, whereby citizens sought to reach common understanding and to coordinate actions by reasoned argument, consensus and cooperation rather than strategic actions simply in pursuit of their own goals. Habermas traced the degradation and colonisation of the lifeworld and the public sphere in the nineteenth and early twentieth centuries. Previously accessible zones of discourse, civic participation and even sociability became co-opted into capitalism and were commodified. Largely, he suggests, this was brought about by the growth of commercial mass media. He thus bemoaned a move from 'a culture-debating society to a culture-consuming society'. (Candon, 2012, pp 60-61)

Social media and the Public Sphere have also been explored in studies by Ahmed et al. (2017), Ktoridou et al. (2018), Nulty et al. (2016), and Stier et al. (2018). Through a reading of the literature discussed above it can be argued social networking sites have yet to usher in an online public sphere. However the way these sites allow information to be disseminated much faster and the way they enable ordinary citizens to reach a larger audience than has ever previously been possible certainly raises the intriguing possibility that an online public sphere may emerge in the future with a more engaged and politically conscious and active citizenry to accompany it. Some sources discuss the theory of social capital, proposing the idea that politicians use social media to create social capital. In their paper Parisopoulos et al. (2012) discuss the possibility that politicians may use social media to create social capital which in turn can lead to a more engaged citizenry:

"Politicians' use of social media is an example of what many scholars view as creation of social capital (Bourdieu, 1986, Coleman, 1990, Coleman, 2014). The strong relationship between social capital and political participation identified by Putnam (2000) and others has led many

researchers to posit that civic socialization trust, mechanisms that encourage civic engagement, interpersonal and political knowledge among individuals will, in turn, build a citizenry that is more interested, motivated, and active politically (Putnam, 2000, Ronald La Due Lake and Robert Huckfeldt, 1998, Scheufele and Shah, 2000, Shah et al., 2001). The social features of SNS foster an environment that is ideal for virtual communities to expand and for social capital to develop."(Parisopoulos et al., 2012, p. 60)

Margetts (2017) focuses on the 2017 United Kingdom (UK) general election and discusses how the UK Labour Party built a campaign which resonated with young people. According to Margetts the Labour Party campaign that year was popular with the younger generation in the UK and as a result they played a leading role in communicating the party's message both among their peers and to older sections of the electorate. This can serve as an example of a politician using social media to create social capital. Social capital in this sense refers to the following the party and leader had built up over time. Whenever a post from the party or leader was made on social media these followers would like, share, retweet or take some other action to spread this message. The use of the term social capital is an attempt to give a definition to this behaviour and a recognition of its value since a message can be spread as easily this way as if they had spent money on advertisements on social media spreading it instead. Margetts (2017) notes that from 2015 the Labour Party had begun work on a wide-ranging and innovative social media presence across several platforms. According to Margetts (2017) this gave the Labour Party access to a base of followers and networks that could then be used to mount an effective advertising strategy and outreach campaign, particularly among young people.

In other words, they had used social media to create social capital. They then used this social capital during the election campaign to spread their message. Using social media specifically to create social capital is an example of how political parties and candidates can use social media innovatively in order to gain an advantage over their opponents. However, some parties and candidates need to use social media to be able to compete with better resourced opponents in the first place. The innovation/equalisation hypothesis suggests politically disadvantaged parties and candidates can bridge the gap with established parties, by campaigning through online media. This is a hypothesis that has been explored previously by Gibson and McAllister (2011) when studying the 2007 Australian elections and Schweitzer (2008) when studying the 2002 and 2005 German national elections. An example of the

equalisation side is Ahmed et al. (2017). Findings from Ahmed et al. (2017) support the equalisation hypothesis, but they noted there were several other factors that went beyond the lack of media coverage that may have contributed to these results:

"Within this context, a growing number of scholars have investigated whether the emerging trend of online campaigning levels the playing field for minor political parties and politically disadvantaged candidates. Yet, research to date has yielded mixed results. Some have found that candidates of well-established major parties and those with high campaign budgets use Internet technologies more actively than others (Gilmore, 2012, Peterson, 2012). This research is consistent with the normalization hypothesis (Margolis et al., 1999) which posits that online campaigning would only reinforce existing power relations of offline campaigns. The argument is that larger parties have strategic departments, are more experienced and better campaigners, and have more resources therefore they will replicate offline power in the online sphere" (Ahmed et al., 2017, p. 1378)

Another recent paper to examine the equalisation/normalisation hypothesis mentioned above includes Magin et al. (2017) who proposed a hypothesis that large parties with greater resources more extensively campaign on Facebook than small parties with fewer resources. In their results Magin et al. (2017) found the small and new parties were more interested in informing, interacting with, and mobilizing voters via Facebook than the mainstream parties but did not always realize the objective of increased campaigning via these platforms due to their insufficient resources. In contrast, the large parties relied on traditional forms of canvassing and mass media coverage and were more likely to put their increased resources into these channels. Studies by Candon (2012) and Vakaoti and Mishra-Vakaoti (2015) suggest social media can have almost no effect on a fringe candidates' chances. There are examples in elections as diverse as the Republic of Ireland and Fiji of social media use making almost no difference to small campaigns with scant resources. For example over the course of his study Candon (2012) found examples of candidates using their Facebook profile for their political campaign and collecting more Facebook friends over the course of the campaign than votes received in the subsequent election. Another example is Roshika Deo who ran in the 2014 elections in Fiji and attracted over 14,000 likes on her Facebook page but received only 1,005 votes in the elections (Vakaoti and Mishra-Vakaoti, 2015).

2.5   Approaches and Methodologies in Existing Literature

There is a degree of variance in the existing literature both in terms of approach and methodology in assessing how political campaigns and elections have been influenced by social media. This is borne out in Jungherr's review of literature on Twitter use in election campaigns. Jungherr (2016b) argues the diversity of research into uses of Twitter during election campaigns has led to the emergence not only of various methodological approaches, but also a great variety of different approaches to data collection and data selection. He goes on to state this is an area where research has yet to mature and says there is little awareness of potential biases connected to various approaches to data collection and selection. The most common methods used in the existing literature are quantitative analysis of data from the platforms, qualitative analysis of data from the platforms, and the use of surveys/interviews either with members of the public or members of political campaigns. Some studies also use a combination of methods. Quantitative analysis was used by López-Meri et al. (2017), Nulty et al. (2016), Parisopoulos et al. (2012), Romero (2016), Shayo and Kersting (2016) and Vergeer et al. (2013b) . Vergeer et al. (2013a), Nulty et al. (2016), and López-Meri et al. (2017) undertook quantitative analysis of tweet data for the 2009 European parliament elections, 2014 European parliament elections, and 2016 Spanish federal elections respectively. Parisopoulos et al. (2012) investigated what percentage of candidates had Facebook pages in the 2009 Greek elections and then performed a quantitative analysis of the content on these pages. Romero (2016) undertook a quantitative analysis of Facebook post data for the Costa Rican municipal elections of 2016. Shayo and Kersting (2016) undertook a quantitative analysis of Facebook campaign engagements of presidential candidates and compared this against election results for the 2015 elections in Tanzania. Qualitative analysis was used by Ahmed et al. (2017), Babac and Podobnik (2018), and Vakaoti and Mishra-Vakaoti (2015) . Ahmed et al. (2017) performed a qualitative analysis of tweet data for the 2014 Indian general election, while Vakaoti and Mishra-Vakaoti (2015) did the same for the 2014 Fiji general election. Babac and Podobnik (2018) performed a qualitative analysis of Facebook posts and comments for the 2015 Croatian general election.

Interviews or surveys were used by Ktoridou et al. (2018), Lilleker et al. (2015), Ohme et al. (2018), and Jungherr (2016b) . Ktoridou et al. (2018) undertook interviews with social media officers of five political parties with the aim of uncovering the frequency and type of social media usage in the 2013 Cyprus Presidential election. Lilleker et al. (2015) undertook a survey with campaign managers of 68 political parties within 12 European nations with a view to analysing strategic thinking around election campaign communication. Ohme et al. (2018)

undertook a survey of voters to understand the effects of political media exposure on young citizens' formation of vote choice in a digital media environment during the 2015 Danish national elections. Jungherr (2016a) undertook interviews with key personnel in the campaigns of six of the parties running for Parliament in the 2013 federal elections in Germany.

A mixture of methods were used by Magin et al. (2017), Stier et al. (2018), and Van Gyampo (2017). Magin et al. (2017) undertook face-to-face interviews with campaign managers for German and Austrian parties in the 2013 national election campaigns in each country and a quantitative content analysis of the respective parties' Facebook pages. Stier et al. (2018) undertook a survey of voters followed by a quantitative text analysis of the results of the survey in an attempt to better understand topic salience in relation to the German federal elections of 2013. Van Gyampo (2017) undertook a Qualitative study of library research as well as interviews with the General Secretaries of the four main political parties with representation in Ghana's parliament.

And finally, some unusual methods were used by Bastos and Mercea (2018), Kumar and Natarajan (2016), and Zhang (2018) . Bastos and Mercea (2018) mapped geolocation data to constituencies and compared this against election results for the 2016 Brexit referendum in the UK. Kumar and Natarajan (2016) used a combined evaluation methodology consisting of four methods including bellwether, policymaker rating, intense period debriefs and system mapping. Zhang (2018) undertook a regression analysis that incorporated data on results of previous elections and available opinion poll data with data from candidate Facebook pages in Taiwan's 2016 general election. Some papers take the approach of using sentiment analysis of Twitter or Facebook posts, reviewing the text of these posts and trying to uncover what the overall sentiment being expressed by the tweet is. A study on the use of Facebook during the 2015 Croatian general election campaign by Babac and Podobnik (2018) took this approach. The authors put together a team of 42 human reviewers who reviewed the data set and marked it with different sentiments such as positive, negative, cynicism, worry, suggestion, etc. This way of implementing a sentiment analysis study was a progression from earlier studies of the same such as those by Bakliwal (2013) and Golbeck et al. (2010) where only one or two reviewers assessed the text data as being either positive or negative. Sentiment analysis is also used in a number of other papers including Nulty et al. (2016). This is an emerging field and further research is needed in this area. Many of these studies are well structured and well-

grounded in their underlying theory but unfortunately some of them may be ahead of their time and suffer from an under-utilisation of the platforms they examine for the time period they look at. The study by Babac and Podobnik (2018) on the 2015 elections in Croatia contains some interesting information but the authors neglect to mention how widespread the use of Facebook or Twitter are in Croatia both among the public and among politicians at the time of the elections.

2.6   Innovation

Some campaigns can exploit a significant advantage over their opponents by using these platforms more effectively and innovatively. An example of this is found in Margetts (2017) which noted from 2015 the UK Labour Party had begun work on a wide-ranging and innovative social media presence across several platforms. According to Margetts (2017) this gave them access to a base of followers and networks that could then be used to mount an effective advertising strategy and outreach campaign, particularly among young people. Margetts (2017) noted in the election campaign two years earlier it had been the Conservative party that had best utilised social media over the course of the campaign. According to Margetts (2017) the conservative party had accomplished this through a combination of big data analytics, targeted Facebook advertising, and the assistance of Jim Messina, who had previously worked as Barack Obama's digital strategist. Another example is in the Spanish elections of 2016. In their study López-Meri et al. (2017) noted again and again the leader of one of the main parties - Pablo Iglesias – used Twitter in a much more personalized way than his opponents Mariano Rajoy, Pedro Sánchez, and Albert Rivera. López-Meri et al. (2017) state that other than Pablo Iglesias, all the political actors used Twitter mainly to provide information about their proposals and election program. The authors go on to state Pablo Iglesias was the only candidate surveyed to make personal use of twitter, with the other candidates and parties recording low use of twitter to publicize their personal lives and build a community of followers. This more personalised way of using Twitter differently from his opponents paid dividends in the form of extra coverage to Pablo Iglesias' campaign at least in the online sphere. The authors found the item with the most retweets (8,054) in the entire election campaign was a tweet from Pablo Iglesias in which he joked about his bonding with the leader of Izquierda Unida (political party), Alberto Garzón, and his communist ideology. A notable finding from their study related to the emergence of pop politics. The authors found the function of personalization on twitter took on characteristics of pop politics outlined previously by Mazzoleni (2009). This means political actors incorporate styles, narratives, and staging from the world of entertainment into their communication repertoires. Results from

López-Meri et al. (2017) on the Spanish elections of 2016 found evidence of this in the case of Pablo Iglesias. The authors noted this trend could be a precursor and have a significant influence in the future in raising the image of the political leader in social media. They further identified this as an aspect to be verified through future study.

One area that varies significantly is the way legislative differences affect political campaigns across the globe in the area of social media. This is because the way data can be stored and used varies among countries. In the UK and the U.S. for instance microtargeting on a great scale has been used in several elections to great effect as seen in studies including Halpern (2018) which refers to the use of Micro-targeting in elections even before social networking sites such as Facebook and Twitter were created. According to Halpern (2018) the kind of work Cambridge Analytica was hired to perform for the Trump campaign in the 2016 United States Presidential election is a derivative of 'micro-targeting'. The author goes on to explain micro-targeting is a marketing technique first adapted for politics in 2000 by Karl Rove, George W. Bush's chief strategist. In the election that year and in 2004, Rove and his team found voters who were most likely to vote for their candidates by uncovering and then appealing to their most salient traits and concerns. Micro-targeting – or a variant of it – has been used in elections in the UK as noted by Margetts (2017) who mentions its use by the Conservative party in the 2015 UK general election and again in the 2017 UK general election – where they spent over £1million on targeted ads on Facebook and Instagram. However, in countries such as Austria and Germany Micro-targeting is not widely utilised. This is noted by Magin et al. (2017) who stated German and Austrian parties rarely use Facebook as an individual-centred campaigning tool. They focus on top-down communication instead of tailoring messages to single or small groups of voters. Magin et al. (2017) put this reluctance to use micro-targeting down to strict data protection laws in both countries preventing this as previously stated by Piper (2014). But Magin et al. (2017) question whether the parties would make use of micro-targeting practices even if they were allowed considering their neglect of other new interactive and mobilizing opportunities Facebook provides. The ethics around micro-targeting bear consideration as it can be used to manipulate people and it could be argued this kind of microtargeting favours larger campaigns with greater resources, an example would be to examine the cost and effect of Cambridge Analytica for the Trump campaign for instance. Halpern (2018) found that for their five-month contract with the Trump campaign in 2016, Cambridge Analytica was paid nearly $6million. And as mentioned already by Margetts (2017) in the 2017 UK general election the Conservative party spent over £1million on targeted ads in this way.

2.7   Changes from One Election to the Next

Jungherr (2016a) mentioned some of the differences between the way parties used social media in 2013 compared to 2009. Margetts (2017) likewise expressed differences in the way the Labour Party used social media in 2017 compared to 2015. Unfortunately, many studies such as Ahmed et al. (2017), Babac and Podobnik (2018), Ktoridou et al. (2018), López-Meri et al. (2017), Parisopoulos et al. (2012), Vakaoti and Mishra-Vakaoti (2015), and Zhang (2018) all focused on only a single election campaign. These studies cannot be considered as conclusive studies in the use of social media in election campaigns because of this. A critical open question is whether a different overall picture in the use of social media in elections would have emerged in these papers had the authors looked at the way social media was used in two successive elections.

2.8   Social Media Platforms

One noteworthy aspect found when reviewing the literature available is several papers only looked at a single platform. For example, Ahmed et al. (2017), Bastos and Mercea (2018), and López-Meri et al. (2017) only looked at Twitter use in election campaigns. On the other side Babac and Podobnik (2018), Chou and Fu (2017), Magin et al. (2017), and Parisopoulos et al. (2012) only examined Facebook use in election campaigns. Few looked at Snapchat and Instagram. One of the reasons for this is due to the difficulties posed in trying to access data from these platforms. Margetts (2017) noted in the case of Instagram little data is made publicly available and snapchat deletes all posts as soon as they are read, meaning data is not stored.

2.9   Conclusions

This review looked at several aspects as they relate to social media and elections. This review has discussed some of the existing literature and where the use of social media in election campaigns began. This review discussed several of the underlying theories behind the use of social media in elections. The review mentioned some of the approaches to studying social media use in elections such as the use of quantitative or qualitative analysis, surveys and interviews, and sentiment analysis. The study also reviewed how campaigns can use social media to build social capital that can then be used later. Finally, this study reviewed some of

the shortcomings of the existing literature such as a common focus of looking at only one election and/or one platform within that election. The study also briefly discussed some aspects of how social media can affect voting patterns or first-time voters as these are areas where the existing literature is somewhat sparse.

In an attempt to fit this study with the existing literature a review was conducted on areas for future research identified in the existing literature. Ahmed et al. (2017) mentioned a longitudinal research frame could better determine the impact of Web 2.0 technologies. Ktoridou et al. (2018) mentioned future research in the area of social media could explore the evolving use of social media for political purposes in Cyprus or across other countries. Magin et al. (2017) mention in future research more systematic cross-national and longitudinal comparisons are needed, particularly including countries other than Germany and Austria. This study fits in with existing literature looking at how Facebook and other social media platforms have been utilised for the purposes of political campaigning in specific countries. Examples of other studies that fit this frame include Babac and Podobnik (2018) who examined social media activities of parties in advance of the Croatian general election campaign of 2015, Magin et al. (2017) who examined the use of Facebook by German and Austrian parties in their elections in 2013, and then used other methods to further expand on this and discover why the platform was used in this way, and finally by Romero (2016) who analysed how Facebook was utilised by parties in the Costa Rican municipal elections of 2016. Since the research question for this study is framed to examine the way social media platforms such as Facebook were utilised in political campaigns in the Republic of Ireland in the same way these studies examined how the same platforms were used in other countries it was decided to use the same methodology used in several of these studies – quantitative analysis of data collected from the platforms. This methodology is outlined in the next chapter.

3   Methodology

3.1   Introduction

In this chapter the research question is broken down into sub questions for the four elections and two referendums. The plan for answering the research question is defined along with the framework and instruments used. This is followed by an explanation of the process implemented in collecting and analysing the data. The reasons this methodology was chosen for use in this study are outlined, followed by the problems encountered in and the lessons learned in implementing the methodology. Finally, the limitations and the necessary revisions to the original methodology are outlined. The primary research question for this study is "How have social media platforms such as Facebook been utilised in Irish election and referendum campaigns during the years 2011 to 2018?" Since this study evaluates the utilisation of Facebook in four elections and two referendums that occurred over this period, this question is divided into six sub-questions that will be answered independently as follows:

1. How was Facebook utilised by the Fianna Fáil, Fine Gael, Labour, Green, and Chomhdháil Phobail parties over the course of the 2011 Irish General election campaign?
2. How was Facebook utilised by the Sean Gallagher and Martin McGuinness campaigns during the 2011 Irish Presidential election?
3. How was Facebook utilised by the "Yes Equality" campaign in the 2015 Same sex marriage Referendum?
4. How was Facebook utilised by both major, minor, and fringe political parties over the course of the 2016 Irish general election campaign?
5. How was Facebook utilised by the "Together for Yes" and the "Love Both" campaigns in the 2018 referendum on repealing the eighth amendment?
6. How was Facebook utilised by the campaigns of the different Presidential candidates over the course of the 2018 Irish Presidential election campaign?

For the 2011 general election a quantitative analysis of Facebook post data is performed on pages of political parties that utilised Facebook for the purpose of campaigning in this election. There were only five examined for this election. For the 2011 Presidential election a quantitative analysis is performed on the two presidential candidates that contested the election and used Facebook pages as part of their campaigns. For the Same-sex marriage referendum campaign of 2015, a quantitative analysis is performed on the Yes Equality page.

Unfortunately, there was no corresponding umbrella group for the No side in the campaign so there is no direct competitor to compare against in this case. For the 2016 general election a quantitative analysis is performed on the eighteen parties that contested the election and utilised Facebook for the purpose of campaigning in this election. For this election the parties are split into three groups – major, minor, and fringe - based on later specified criteria. This approach is taken for this election because there were so many competitors in this campaign. For the 2018 Presidential election a quantitative analysis is performed on the Facebook pages of the five presidential candidates that contested the election and used Facebook pages as part of their campaigns. For the Repeal the 8th referendum campaign of 2018, a quantitative analysis is performed on the post data for the "Together for Yes" and "Love Both" campaign pages.

3.2   Research Methodology

This study comprises a quantitative analysis of the Facebook pages of each of the competitors identified in the six sub questions stated above. As has already been mentioned in the literature review chapter, several previous studies have used the same methodology which involves data mining from Facebook followed by a quantitative analysis of the content. These studies include Babac and Podobnik (2018) who examined social media activities of parties in advance of the Croatian general election campaign of 2015, Magin et al. (2017) who examined the use of Facebook by German and Austrian parties in their elections in 2013, and Romero (2016) who analysed how Facebook was utilised by parties in the Costa Rican municipal elections of 2016. Extensive searches were performed on the Facebook platform to take note of which parties, umbrella groups, and presidential candidates in the six campaigns identified had Facebook pages. For Facebook several tools were examined before a decision was made to use the Netvizz tool as this had previously been used by Romero (2016) in his paper analysing social media use in the Costa Rican municipal elections of 2016. The intention of this study had originally been to perform a quantitative analysis of posting data related to elections from the Facebook and Twitter platforms. However, Twitter only allows the last 3,200 tweets to be returned, therefore it was not possible to get enough data from this platform to perform a quantitative analysis since many of the parties and candidates have tens of thousands of twitter posts over the last couple of years. Therefore, the study was revised to analyse only data from the Facebook platform. Some candidates did not have Facebook pages and in one case although the page was setup in 2010 the first available post was from 2018. This page was the Michael D. Higgins campaign page. Michael D. Higgins was a candidate in the 2011 and 2018 Presidential elections and was won both elections. In addition,

in the case of Sinn Féin and the 2011 general election they had a Facebook profile that subsequently had to be deleted after the election and replaced with a new page as it violated Facebook's community rules. This is referenced in the first post on their current Facebook page.

The study looked at posting data over an 8-year period starting in 2011 and finishing in 2018. Within this period, Facebook posting data was analysed within the campaign periods of four general elections and two referendums. For the analysis of Facebook via the Netvizz tool the Facebook profile URL of each page being analysed was noted and then entered in the Lookup-ID.com search bar in order to get the page ID. This method of getting the page ID is the one recommended by Netvizz in their user guide. The page ID was then entered in the Netvizz search bar and the date range posting data was required for was specified. Netvizz then returned the post data for the period specified that could be downloaded in a zip file. The format of the post data is in a TAB file that can be opened in Microsoft Excel. For ease of use and to make sure there was a copy of the original data after opening these files for analysis these were saved again as Microsoft Excel worksheet files. A spot check of the posts contained in these files was performed in order to have absolute certainty it was the post data for the correct page.

3.3   Research Tools

The parties, presidential candidates, and campaigns that utilised Facebook for the purposes of campaigning in their respective elections/referendums were identified. A data mining tool called Netvizz was selected that can provide the necessary data from these pages for the purposes for the quantitative analysis. The Netvizz application was developed by Rieder (2013) and its capabilities are explained in his contribution to the 5th Annual ACM (Association for Computing Machinery) Web Science conference. The application can be programmed to extract data sets from specific time frames and regarding specific information (e.g. just posts, or posts and comments, etc.). When choosing the application for use this study first looked at applications that were used in recent studies of a similar nature i.e. quantitative analysis of Facebook post data. From this, two applications were selected and compared against each other to decide which one was best suited to this study. The applications were the aforementioned Netvizz application which was used by Romero (2016) in a previous study on the Costa Rican municipal elections of 2016 and the Facebook Graph API (Application Programming Interface) Explorer which was used by Babac and Podobnik (2018) in their study

on the use of Facebook during the 2015 Croatian General election. An examination was carried out and both were found to be reliable in terms of the accuracy of the sample data extracted. However only one application could be used, and it was decided this should be Netvizz. There were two reasons for this. The user documentation around Netvizz that explained how to use it was much more extensive. Secondly and more importantly, one of the major features when using Netvizz to extract data on a page is it easily and clearly allows for only the host page data to be retrieved. Other options within the application can allow for the extraction of user comments on posts on the page and posts to the page from other users. Ensuring both user comments and user posts to political pages were not extracted over the course of this study was a major ethical concern. Posts by the pages examined in this study – whether they are political party, candidate, or umbrella groups pages – are posted with the intention of being for political campaigning and are therefore intended to be in the public domain and reach as wide an audience as possible. Posts by users to these pages and comments by users however are a different matter. These represent personal data. Although the intention of these users may have been to have these posts and comments in the public domain many of them may not have been aware their data could be extracted and analysed in this way. Therefore, the view of this study is it would not represent good ethics to extract and store data such as this. The result of all of this was that a central ethical concern of this study was finding an application that would allow just the posts from the pages and the overall data on these posts be extracted with nothing else. The Netvizz application matched these requirements clearly and so was chosen for use in this study.

The necessary data was extracted using this tool and filtered. An analysis and comparison of how Facebook was utilised in each of the elections and referendums was then conducted based on this data. This analysis compared the way Facebook was utilised on each page over the course of a given campaign by examining posting data and how effective this usage was on each of the pages in terms of total engagement and the different types of engagement generated. After this was completed individually for each of the campaigns specified this study will be able to answer each of the six sub-questions on how Facebook was utilised in a given campaign. Once this is complete and the six sub questions have been answered this study will be able to answer the overall research question of how Facebook was utilised for the purposes of political campaigning in the Republic of Ireland between the years 2011 to 2018 along with observations on any changing trends over this period and where, when and by whom Facebook was utilised both successfully and less successfully in terms of generating engagement on posts.

The analysis in this study quantifies the total posts, reactions, comments, shares, and engagement on a page for the campaign period in question. It further calculates the average number of reactions, comments, shares, and engagement per post. The same analysis is then implemented for each post category e.g. link posts, photo posts, video posts etc… Finally, the link posts and video posts are categorised by their link domain groups and the same analysis is performed on the link domain groups. The percentage each post type comprises of the total for a given page is calculated and the post data for each page is then compared with its competitors for the campaign in question. The interest driving this research is to understand how social media sites such as Facebook were utilised in Irish elections and referendums during the years 2011 to 2018. To accomplish this, an analytical exercise was implemented by examining the online activity of the competing parties/candidates/organisations in each of the elections and referendums specified. This was achieved through a data mining technique that extracted and analysed data from each party, candidate, and organisation's Facebook page. These records contained data on posts, time, content and, particularly important, reactions, comments, shares, and total engagement on posts. This research is based on the data extracted from the public Facebook pages each party, candidate, and organisation used to publish content about their political programs or about their candidates in the case of parties, their candidacies and platforms in the case of presidential candidates, and their arguments in favour of a particular result in the case of the organisations campaigning for a yes or a no vote in the specified referendums. This information was "mined" utilising an external, third-party application that retrieves data such as total number of posts, likes or other reactions, comments, time-stamping and contents. The application used is an open source tool called Netvizz, developed by Rieder (2013), which can be programmed to extract data sets from specific time frames and regarding specific information (e.g. just posts, or posts and comments, etc.). The advantage this tool brings is the ability to classify and filter data through the different categories.

3.4   Data Collection

Utilising Netvizz for the 2011 General election, this study retrieved all posts from Fianna Fáil, Fine Gael, Labour Party, Green Party, and Chomhdháil Phobail Facebook pages published during the period from 1st February to 25th February 2011. These dates were selected since they constitute the formal campaign period for the general election. The Dáil was dissolved on 1st February and the general election was held on 25th February. For the 2011 Presidential election this study retrieved all posts from the Sean Gallagher and Martin McGuinness Facebook websites published during the period 28th September to 27th October 2011. These

dates were selected as the campaign period since the deadline by which nominations could be received was midday on 28th September and the election took place on 27th October. For the 2015 Same Sex Marriage Referendum this study retrieved all posts from the Yes Equality Facebook website published during the period 27th March to 22nd May 2015. These dates constitute the formal campaign period since the Thirty-fourth Amendment of the Constitution (Marriage Equality) Bill 2015 finished passing through the Oireachtas on 27th March and the referendum was held on 22nd May. For the 2016 general election, this study retrieved all posts from the Facebook websites of the eighteen parties listed below published during the period from 3rd February to 26th February 2016. These dates constitute the formal campaign period for the general election. The Dáil was dissolved on 3rd February and the general election was held on 26th February.

Table 2: Parties competing in 2016 Irish General Election that maintained Facebook Pages

| Fine Gael |
| Fianna Fail |
| Labour |
| Sinn Fein |
| Green Party |
| Independent Alliance |
| Anti-Austerity Alliance |
| People Before Profit |
| Social Democrats |
| Renua |
| Workers and Unemployed Action Group |
| Direct Democracy Ireland |
| Workers Party |
| Communist Party |
| Peoples Convention |
| Fis Nua |
| Irish Democratic Party |
| Catholic Democrats |

For the 2018 Repeal Referendum this study retrieved all posts from the "Together for Yes" and "Love Both" Facebook websites published during the period 28th March to 25th May 2018. These dates constitute the formal campaign period since the Thirty-sixth Amendment of the Constitution of Ireland (previously bill no. 29 of 2018) finished passing through the Oireachtas on 28th March and the referendum was held on 25th May. For the 2018 Presidential election

this study retrieved all posts from the Sean Gallagher, Michael D. Higgins, Joan Freeman, Liadh Ní Riada, and Gavin Duffy Facebook websites published during the period 26th September to 26th October 2018. These dates were selected as the campaign period since the deadline by which nominations could be received was midday on 26th September and the election took place on 26th October.

3.5   Analysis Techniques

The data was downloaded and stored in excel files. For the election and referendum campaigns dates were identified between which posting data would be analysed. The post data for the applicable pages for these time periods was then analysed by looking at several aspects. The overall data was analysed first – the total number of posts by a given page over this time period. The total number of reactions, comments, shares, and engagement on these posts were all noted, and this data was used to calculate the average number of reactions, comments, shares, and total engagement per post on a given page. Table 3 summarises the headings used in this section:

Table 3: Summary Data Headings for each of the elections and referendums

Total number of posts
Total number of Reactions
Total number of comments
Total number of shares
Total Engagement
Average number of reactions per post
Average number of comments per post
Average number of shares per post
Average level of engagement per post

Following this, posts were categorised by type. The types of posts most commonly used in the election and referendum campaigns analysed in this study were links, photos, videos, and statuses, but there were also some music and album posts. The same analysis completed for the overall data was performed on the post types by calculating what the post totals were for each post type, and what the total number of reactions, comments, shares, and engagement were for each post type. This data was then used to calculate the average number of reactions, comments, shares, and total engagement per post type on a given page. Finally, the percentage of total posts each post type comprised over the given campaign period for the

given page was then calculated. The following table summarises the headings used for this section, using the example of link posts:

Table 4: Post Type Data Headings

Total number of link posts
% of total posts
Total number of Reactions
Total number of comments
Total number of shares
Total Engagement
Average number of reactions per post
Average number of comments per post
Average number of shares per post
Average level of engagement per post

This study also looked at the link domains for posts on the pages identified. Photo posts and status posts all have a link domain of Facebook and so were not examined. The same applies for album posts. Music posts all have link domains outside of Facebook so not much could be gleaned from an examination of the handful of these. Link posts and video posts were examined. For link posts the posts were divided into four categories depending on the link domain:

1. Facebook
2. Party/Candidate site
3. Media site
4. Other

Some link posts linked to other areas on the Facebook site. This is what is referred to in 1. The party/candidate category refers to links to a party website or website of an election candidate. It also refers to the campaign websites used for either side in the referendum campaigns. A full listing of the sites that fall into this category is contained in Appendix 2. Category 3 refers to links that directed users to recognisable media, news, or current affairs websites. Some of these are more serious news websites than others. A listing of these is contained in Appendix 2. Other refers to all other link domains used. A full listing of these is contained in Appendix 2.

For video posts these were split into two categories:

1. Facebook link domains
2. All other link domains

The first group refers to all videos hosted on Facebook while the second group refers to all video posts hosted on domains outside of Facebook.

After this analysis was completed for all the competing pages in a given campaign, the summary data was then extrapolated to a single summary page where the post data for each party/candidate/organisation for this campaign could be compared against their competitors. (The only exception to this was the 2015 Same-sex marriage referendum since there was no corresponding competitor on the No side in the referendum to the Yes Equality campaign on the Yes side). From the summary page it was then possible to complete an analysis of how each of the competitors used Facebook over the course of their campaign when compared to their opponents. From looking at them side by side the study could discern which party/candidate/organisation utilised Facebook most effectively based on total engagement and by examining the types of posts posted, how frequently posts appeared, and how the different post types performed in terms of the number of reactions, comments, shares, and total engagement each post type received. It was then possible to discern to a certain extent why certain pages performed well over the course of the campaign period and why some others performed badly. The approach of using quantitative analysis of data from the platform was chosen for this study as this approach best fits the research question this study seeks to answer and this approach is also where this study fits within the existing literature. Quantitative analysis of Facebook posts has been performed in several other studies focusing on how social media platforms were utilised for the purposes of political campaigning in other countries over the same time period. For example by Babac and Podobnik (2018) who examined social media activities of parties in advance of the Croatian general election campaign of 2015, by Magin et al. (2017) who examined the use of Facebook by German and Austrian parties in their elections in 2013, and then used other methods to further expand on this and discover why the platform was used in this way, and finally by Romero (2016) who analysed how Facebook was utilised by parties in the Costa Rican municipal elections of 2016. Since the research question for this study is framed to examine the way social media platforms such as Facebook were utilised in political campaigns in the Republic of Ireland in the same way these studies examined how the same platforms were used in other countries it was decided to use the same methodology of quantitative analysis.

3.6   Research Limitations

Originally the research plan had been to perform quantitative analysis of post data from both the Facebook and Twitter platforms. However, unfortunately Twitter only makes the last 3,200 tweets from a given Twitter account available via their API. As a result, this meant it was not possible to quantitatively analyse tweet data for the party accounts for the 2011 general election, candidate accounts for the 2011 presidential election, or several party accounts for the 2016 general election. Since it was not possible to perform adequate quantitative analysis for the Twitter accounts in question for the campaign periods specified a decision was taken to focus solely on quantitative analysis of Facebook post data instead. The chosen methodology answers the how referred to in the primary research question i.e. How have social media platforms such as Facebook been utilised in Irish election and referendum campaigns during the years 2011 to 2018? Unfortunately, what it does not answer is why the platform was utilised this way in the campaigns in question. This was not what the research question asked but it would give context. Some other studies such as Magin et al. (2017) used quantitative analysis to discover how social media platforms such as Facebook were utilised in a given election and then combined this with face-to-face expert interviews with the campaign managers of several parties involved in the elections to understand why the platform was utilised this way.

4   Findings and Analysis

A decision was made to evaluate how the platform was utilised by extracting data relating to the campaigns identified and analysing it. This study analysed each election/referendum cycle individually to answer each sub question individually. The findings for each of these are outlined and the overall findings of the quantitative analysis are summarised at the end of this chapter. The summary data for each election/referendum is shown in the tables for each over the course of the chapter. The rest of the data on post types is contained in Appendix 3.

4.1   2011 General Election

Table 5: 2011 General Election Summary Data

	Fine Gael	Fianna Fail	Labour Party	Green Party	An Chomhdháil Phobail
Total Number of Posts	115	22	94	43	4
Posts per day during Campaign	4.6	0.88	3.76	1.72	0.16
Total Number of Reactions	1271	212	1228	315	12
Total number of Comments	1548	423	377	52	6
Total Engagement	2821	635	1605	367	18
Average reactions per post	11.05	9.64	13.06	7.33	3
Average comments per post	13.46	19.23	4.01	1.21	1.5
Average engagement per post	24.53	28.86	17.07	8.53	4.5

This election is an example of the early development of the use of social media in political campaigning in the Republic of Ireland. In 2011 political parties in the Republic of Ireland were only beginning use Facebook. Of the fourteen organisations who contested the election only five had Facebook pages setup for the express purpose of political communication. A sixth – Sinn Féin – had setup a profile that later had to be deleted and replaced because it violated Facebook's community rules. There are several points to note from the 2011 general election and comparing the way the five parties utilised Facebook and the resulting engagement from users to this utilisation. Fine Gael had the most posts at 115. On average the Labour Party's posts received the most reactions but Fine Gael got more total reactions. Fine Gael's posts generated far more comments than any other with 1548 in total. This meant Fine Gael had more total engagement than any of the others. The share feature on Facebook had not yet been introduced by the time of the 2011 general election. Fianna Fáil had the highest average comments per post and the highest average engagement as a result. Fine Gael's posting was the most diversified. They most commonly posted link posts but also posted more status posts, photo posts and far more video posts than the other parties. Most of the posts from the other

parties were link posts. Link posts comprised 90% of Fianna Fáil posts, 60% of Labour Party posts, 72% of Green Party posts, and 75% of An Chomhdháil Phobail posts. On average link posts did not get as much engagement as other types of posts. Fianna Fáil's only exception to their link posting were two photo posts which received even less engagement than their link posts. The Labour Party posted three "music" posts which were audio recordings of their press conferences. Although these posts are audio recordings and not actual music Facebook only has one post category for audio posts which it calls music. These music posts did not receive much engagement and performed slightly worse than their other posts on average. No other party posted music posts during this election. Status posts for both Fine Gael, the Labour Party, and the Green Party did better on average than any other post.

For their link posts Fine Gael had a mix of party links, media links and other links. Their party links comprised the largest group but their media link posts which comprised just 18% of total link posts performed well above the other two categories, having better average engagement than any of the other types of link posts as well as above Fine Gael's average engagement per post and the average engagement for their video posts. Fine Gael posted two Facebook domain video posts, but these performed slightly worse on average than their other video posts. Fine Gael were the only party in this election to post videos hosted on Facebook. All the video posts from the Labour Party and the Green Party were for other domains such as Vimeo and YouTube. Fianna Fáil posted no videos and all their link posts were links to the party website or a section of it. Most of the Labour Party's links were either to the party website or a candidate website. They posted a couple of links to other parts of Facebook that performed a little better. Additionally, they posted some media posts and several posts that fall into the other category, but these did not perform well. Likewise, the largest proportion of the Green Party link posts were links to the party website or to candidate websites. They posted one Facebook link post, a single media posts and many posts that fall into the other category but none of these generated much engagement. An Chomhdháil Phobail only posted four times over the course of the campaign. They posted two links to the party website, one media link post, and one video post to a domain outside of Facebook. The engagement on their posts was low when compared to the other parties.

4.2   2011 Presidential Election

Table 6: 2011 Presidential Election Summary Data

	Sean Gallagher	Martin McGuinness
Total Number of posts	167	29
Total Number of Reactions	20227	1904
Total number of comments	4640	677
total number of shares	1173	184
total engagement	26040	2765
Average reactions per post	121.12	65.66
average comments per post	27.78	23.34
average shares per post	7.02	6.34
average engagement per post	155.93	95.34

The 2011 Presidential election is a good example of an early adopter using a new piece of technology effectively when Sean Gallagher's usage of Facebook is compared to his opponents' usage or lack thereof. Sean Gallagher was one of only two candidates of seven to use Facebook for the purpose of campaigning in this election and he used it more frequently and successfully than his rival, with his posts generating more engagement. The statistics for his posting are impressive when compared with those of the general election eight months earlier, although it should be noted the presidential campaign period in this study is approximately one week longer than the general election. Sean Gallagher's use of Facebook was more often and effective than his opponent Martin McGuinness when measured by the level of engagement these posts received. During the campaign the Sean Gallagher team posted almost six times more often. These posts received nine times more overall engagement when compared to posts on the Martin McGuinness page. In terms of average reactions per post Sean Gallagher had a score of 121.12 to 65.66 for Martin McGuinness. In average comments and shares per post the gap narrowed significantly with Sean Gallagher receiving 27.78 average comments and 7.02 average shares to 23.34 and 6.34 respectively for Martin McGuinness. The effect of these last two was to narrow the gap on average engagement per post but Sean Gallagher still received better average engagement with 155.93 per post compared to 95.34 for Martin McGuinness.

In post types the Sean Gallagher campaign used a mix comprised of 35.93% link posts, 29.34% photo posts, and 29.34% status posts with 4.79% video posts and a single album post comprising the remainder. By contrast 66% of Martin McGuinness posts were links, with status

posts comprising a further 31% and a single video post comprising the remainder. Sean Gallagher's album post and Martin McGuinness video post were the worst performing posts in engagement for their respective candidates. After these two the link posts were the worst performing on average. Status posts performed best, followed by Sean Gallagher's eight video posts and then his photo posts. This was where the Sean Gallagher social media campaign was most effective: in the status, photo and video posts, since these posts received the best average engagement. The Martin McGuinness campaign possibly had much less engagement because of an over-reliance on link posts, and a lack of other content besides status posts. Most Sean Gallagher's link posts were to his campaign website but the media link he posted, and a couple of Facebook link posts performed better in engagement while other links he posted performed slightly worse. In videos both candidates exclusively posted videos with link domains outside the Facebook website. The bulk of Martin McGuinness link posts were media posts, but these performed slightly worse than the party and candidate link posts for him, while other link posts performed slightly worse again for his campaign.

4.3   2015 Marriage Equality Referendum

Table 7: 2015 Marriage Equality Referendum Summary Data

	Yes Equality
Total Number of posts	334
Total Number of reactions	270512
Total number of comments	9285
total number of shares	62747
total engagement	342544
Average reactions per post	809.92
average comments per post	27.8
average shares per post	187.87
average engagement per post	1025.58

For the 2015 marriage equality referendum there was only one umbrella group - Yes Equality. There was no unified umbrella group to contest the campaign for the No side. Since an equivalent page did not exist for the No side this study focused solely on the posting data on the Yes Equality page during the referendum campaign. When compared to the general and presidential elections four years earlier the total and average engagement on posts on the Yes Equality page is higher. In the 2011 General election the highest average engagement per post for any of the parties was 28.86 for Fianna Fáil. In the 2011 Presidential election the

Sean Gallagher campaign had the highest average engagement with 155.93 per post. Over the course of the two-month Marriage equality campaign the Yes Equality team posted on their Facebook page a total of 334 times with average engagement of 1025.58 per post. The team mostly posted photo posts which comprised 64.07% of the total, followed by video posts which comprised 17.66%, link posts which comprised 15.57% and status posts which comprised just 2.70%. The photo posts had - on average - the most engagement, followed by video posts, link posts and status posts. The proportion of photo posts the Yes Equality campaign posted is notable because in both the 2011 General Election and the 2011 Presidential Election photo posts comprised a much smaller proportion of the total posts by all competitors.

Most Yes Equality link posts fell into the "other" category for link domain. This is down to the campaign posting links to a whole host of diverse websites over the course of the campaign. The next highest proportion were media link posts which performed well, generating higher average engagement than the average for link posts and for Yes Equality posts overall. Some links were posted to websites for the campaign, but these received much less engagement on average. When compared to both 2011 elections, Yes Equality posted much more videos with Facebook link domains - just over a third of all their videos. These videos performed about four times better in terms of average engagement than videos from other domains.

4.4   2016 General Election

In the 2016 general election there was a total of eighteen parties and organisations competing for engagement on Facebook. The only organisation contesting the election that did not have a Facebook page was the "Independents4Change" group. Over the course of the election and across these eighteen pages there were 1,190 posts, 169,023 reactions to these posts, 33,059 comments, 74,365 shares and total engagement of 276,452. In the general election five years earlier total engagement across the five pages was just 5,428. So, five years later there was fifty times more engagement on Facebook posts by political parties/organisations over the course of the election campaign. In order to analyse the 2016 general election, the competitors were divided into three categories. The first group are major parties - those that took 10 or more seats in the 2011. This group consists of Fine Gael, Fianna Fáil, the Labour Party, and Sinn Féin. The next group are the minor parties. This group includes parties that had TDs going into the general election including the Social Democrats, Renua, People Before Profit (PBP), and the Anti-Austerity Alliance. It also includes the Independent Alliance since they did have TDs going into the election, and the Green Party who previously had TDs. The final

group are the fringe parties. These are the ones that received less than 1% of the first preference vote. This group includes the Workers and Unemployed Action Group (WUAG), Direct Democracy Ireland (DDI), the Workers' Party, the Catholic Democrats, the People's Convention, Fís Nua, the Irish Democratic Party (IDP), and the Communist Party.

4.4.1   Major Parties in the 2016 General Election

Table 8: 2016 General Election Summary Data for the Major Parties

	Fine Gael	Fianna Fail	Labour Party	Sinn Fein
Posts	104	121	178	68
PPD	4.33	5.04	7.42	2.83
Reactions	24378	29244	5503	75558
Comments	14430	6498	711	7580
Shares	5334	6629	1361	48160
Engagement	44142	42371	7575	131298
Avg. reactions PP	234.40	241.69	30.92	1111.15
Avg. comments PP	138.75	53.70	3.99	111.47
Avg. Shares PP	51.29	54.79	7.65	708.24
Avg. Engagement PP	424.44	350.17	42.56	1930.85

Sinn Féin posts accumulated almost 50% of the total engagement across the eighteen pages in the 2016 general election. This was despite the party posting only 68 times on the page, less than the other major parties - Fine Gael, Fianna Fáil, and the Labour Party. Sinn Féin's success may be down to their posting mix. Over 70% of their posts were videos with photos comprising the remainder. Fine Gael were the next most successful after Sinn Féin. They posted more frequently than Sinn Féin but mostly posted photos. Photos comprised two thirds of their posts. Videos comprised about 29% of Fine Gael's posts with a handful of link posts comprising the remainder. As with Sinn Féin, Fine Gael's video posts performed the best on average out of their posts, followed by photos, with a notable drop off in engagement on their link posts. Fianna Fáil posted much differently on their Facebook page in 2016 when compared to 2011. For a start they posted more often and posted less links. In 2011, links comprised 90% of their posts over the course of the election. This time links comprised just 2% of their posts. Instead, in the 2016 general election campaign they overwhelmingly posted photos - these comprised 75% of their total posts. Their posts that received the most engagement on average though were their status posts which comprised just 21% of their

total posts. They posted a handful of videos, but these posts did not receive much engagement. The Labour Party's utilisation of Facebook did not go well in the 2016 general election when the level of engagement these posts received is compared to their opponents. They posted more often than any other major party in the election, but the total engagement on their posts was still lower than that of the other major parties and in terms of average engagement per post they were outperformed by most of the minor parties as well. Unusually among the major parties, the Labour Party posted a lot of link posts. Their posting comprised of 36.52% link posts, 28.09% photo posts, 15.17% status posts, and 20.22% video posts. Their link posts and video posts received little engagement while their status posts received slightly more. Their photo posts performed best. Most of their total engagement was on photo posts.

4.4.2   Minor Parties in the 2016 General Election

Table 9: 2016 General Election Summary Data for the Minor Parties

	Green Party	Independent Alliance	AAA	PBP	Social Democrats	Renua
Total No. of posts	73	35	57	47	156	102
Posts per day during campaign	3.04	1.46	2.38	1.96	6.5	4.25
Total No. of reactions	4984	2172	5863	2143	10578	1770
Total no. of comments	555	269	453	142	882	805
total no. of shares	1317	365	2958	2473	2797	475
total engagement	6856	2806	9280	4758	14257	3050
Avg. reactions	68.27	62.06	102.86	45.6	67.81	17.35
Avg. comments	7.6	7.69	7.95	3.02	5.65	7.89
Avg. shares	18.04	10.43	51.89	52.62	17.93	4.66
Avg. engagement	93.92	80.17	162.81	101.23	91.39	29.9

The minor parties examined in this study are a diverse group for several reasons. For a start the Independent Alliance is not a political party but rather a loose grouping - but most importantly for the purposes of this study they did maintain a Facebook page for the purposes of this election campaign. The Anti-Austerity Alliance and PBP campaigned on a joint platform(Little, 2017). The Social Democrats and Renua were both new parties having been setup the previous year (Little, 2017). The Green Party was the oldest member of this bracket, having had political representation in the Dáil from 1989 until they lost all their seats in the 2011 general election (Little, 2017). The Independent Alliance's status as a loose grouping rather than a centralized political party may offer a clue as to why their posting habits were

somewhat different to those of their competitors. They posted less often over the course of the campaign than any of the major or minor parties and even some of the fringe parties. In addition, most of their posts were links which again was unusual as none of the major or minor parties - not even the Labour Party - posted that proportion of links when compared to their total posts. They also posted videos, photos, and a handful of status updates but these posts all received less engagement than their link posts. Their link posts did well – receiving on average more engagement than link posts from any of the minor parties, the fringe parties, or even the Labour Party. When analysing which of the minor parties performed best the answer is less clear than for the major parties. The Social Democrats had the most total reactions and engagements but a large part of this was as a result of them posting more frequently than the Anti-Austerity Alliance, PBP, or the Green Party - whose posts all received more engagement on average than those of the Social Democrats. The Social Democrats poor average engagement may have been as a result of their posting more links than any of the other minor parties. Links comprised 38% of the Social Democrats posts and as was the case with most of the parties their link posts did worse than their photo or video posts.

The Anti-Austerity Alliance had the best average engagement among the minor parties, and this may be because video and photo posts comprised some 68% of their total posts. On average for the 2016 general election video and photo posts performed better than other types of posts. This is true for several other elections and referendums also. Video posts from the Anti-Austerity Alliance performed well, getting more than twice as much engagement as videos posted by PBP - whose videos were the next best performing in average engagement among the minor parties. Anti-Austerity Alliance videos even performed better than Fianna Fáil and Labour Party video posts on average. Posts from The Green Party and PBP both performed well on average. The Green Party mostly posted photos and videos while 72% of PBP posts were photos. Posts from Renua performed terribly in engagement when measured against the other minor parties. Their average engagement per post was 29.9, whereas for the other minor parties it varied from 80.17 for the Independent Alliance to 162.81 for the Anti-Austerity Alliance. Renua mostly posted links and photos with a small number of video and status posts in addition. Just like with the Independent Alliance, Renua link posts bucked the trend. On average link posts performed worse than video posts, photo posts, or status posts in the 2016 general election but for Renua link posts were their best performers in engagement. However, their link posts still received less engagement than link posts by any of the other minor parties that posted links regularly. Renua photo, video, and status posts performed poorly.

4.4.3   Fringe Parties in the 2016 General Election

Table 10: 2016 General Election Summary Data for the Fringe Parties

	WUAG	DDI	Workers Party	Communist Party	People's Convention	Fis Nua	IDP	Catholic Democrats
Total No. of posts	46	63	56	38	13	24	3	6
PPD during campaign	1.92	2.63	2.33	1.58	0.54	1	0.13	0.25
Total No. of reactions	164	4912	801	774	126	31	18	4
Total no. of comments	4	656	6	44	12	9	1	2
total no. of shares	79	1822	269	202	113	6	4	1
total engagement	247	7390	1076	1020	251	45	23	7
Avg. reactions	3.57	77.97	14.3	20.37	9.69	1.29	6	0.67
Avg. comments	0.09	10.41	0.11	1.16	0.92	0.38	0.33	0.33
Avg. shares	1.72	28.92	4.8	5.32	8.69	0.25	1.33	0.17
Avg. engagement	5.37	117.3	19.21	26.84	19.31	1.88	7.67	1.17

An analysis of posting patterns among the Fringe parties shows some major differences. The IDP and the Catholic Democrats barely posted at all over the course of the election campaign. Fís Nua and the People's Convention posted regularly but received little engagement on these posts. The WUAG received little engagement. The Workers' Party and the Communist Party received some engagement on their posts but not a lot. In the case of the Communist Party they received more reactions to posts over the course of the campaign than the votes they received in the election. DDI generated more engagement and better average engagement over the course of the campaign than some of the minor parties and also fielded more candidates than some of them but this failed to translate to the election results and they received more engagement on posts over the course of the election campaign than votes on polling day.

4.4.4   Link Posts and Link Domains in the 2016 General Election

Of the four major parties, the Labour Party was the only one to post links to its party website. These did poorly in engagement. Most of their link posts (57%) were to media websites which did better. The Labour Party also posted a significant number of link posts that fell into the other category and did poorly. Fine Gael only posted five link posts, four of these were links to media websites and the other one was a Facebook link. These did okay as link posts go but again engagement was below their average for other post types. In contrast with their last election Fianna Fáil only posted two link posts, both of which fall into the other category. Again, these did worse on average engagement than their other posts. Sinn Féin did not post any

link posts. In video domains 100% of the videos posted by Sinn Féin, Fianna Fáil, and Fine Gael were hosted on Facebook, as were 94% of the Labour Party's. The two posts posted to the Labour Party page with domains outside Facebook did noticeably worse than their Facebook videos. Link posts to the party website were unusual among the minor parties also, although one of the link posts from the Independent Alliance did well. This was a get-out-the-vote post summarising the platform the Independent Alliance were running on and was posted the evening before polling day with a link to the Independent Alliance website. Other than that, the only links to party websites were by Renua and the Social Democrats. One of the posts from Renua was another outlier as it did well in engagement. The link post that did well from Renua was posted on the 3rd of February 2016 at the start of the short campaign and briefly set out Renua's platform with a link for the donations section on their website. Media link domains were most commonly posted by the minor parties. Facebook was the most common video domain, but all the minor parties posted at least one or two videos from other domains. Renua was the exception as most of their video posts were for other domains. In almost every case these videos did worse than the Facebook ones for engagement. Most of the fringe parties did not post links to party or candidate websites. DDI posted two that did slightly better than their other link posts. The Workers' Party overwhelmingly posted links to either their party or candidate websites. 29 of their 56 posts for the campaign fell into this category and these did badly in engagement. Some media links were posted by most of the parties and some other links with only DDIs media links performing well. Fringe parties were more likely to post videos from other domains despite these performing worse in all cases than Facebook videos.

4.5   2018 Repeal Referendum

Table 11: 2018 Repeal Referendum Summary Data

	Together for Yes	Love Both
Total Number of posts	233	289
Total Number of reactions	218059	42042
Total number of comments	21476	5972
total number of shares	88090	13889
total engagement	327625	61903
Average reactions per post	935.88	145.47
average comments per post	92.17	20.66
average shares per post	378.07	48.06
average engagement per post	1406.12	214.2

The 2018 repeal referendum is the first referendum in the Republic of Ireland for which it is possible to analyse the Facebook posting data of the two campaign pages. The Love Both Campaign posted more often but the Together for Yes campaign received more total engagement on their posts. Together for Yes also received more engagement per post. The two campaigns mirror each other closely in the breakdown. Both campaigns posted two status posts in the course of the campaign. Link posts comprised 32% of the total for both. Video posts featured most heavily for Together for Yes, comprising 42% of their total, while the Love Both Campaign most commonly posted photos, with these comprising 35% of their total posts. Video posts received the most engagement on average for both. Link posts performed better than photo posts for the Together for Yes campaign. The Yes Equality page for the marriage equality referendum three years earlier generated more reactions than the two pages for this referendum combined but the 2018 referendum had higher total engagement as a result of users commenting on and sharing posts from the two campaign pages more frequently than had been the case with the Yes Equality page in the 2015 referendum.

100% of Together for Yes link posts were links to media websites while this proportion was low for Love Both. Instead most Love Both link posts – 63.44% - were to websites set up for the purposes of campaigning for a no vote in the referendum. 20.43% of Love Both link posts comprised of links that fell into the other category. And while links to media sites comprised just 16.13% of all Love Both links these posts performed much better - about three times better - on average than links for either of the two other categories posted by the Love Both Campaign. In video domains Together for Yes had a uniform approach again - with Facebook videos comprising 100% of their videos. Love Both almost followed suit with 97% of their videos being hosted on Facebook. The other three video posts for Love Both performed noticeably worse than their Facebook videos-racking up average engagement of 50.33 compared to 349.07 for their Facebook videos.

4.6   2018 Presidential Election

Table 12: 2018 Presidential Election Summary Data

	Michael D. Higgins	Sean Gallagher	Joan Freeman	Gavin Duffy	Liadh Ni Riada
Total Number of posts	115	120	233	45	58
Total Number of reactions	20369	21153	18605	896	10681
Total number of comments	3586	4140	1987	108	667
total number of shares	7936	2380	2714	220	5230
total engagement	31891	27673	23306	1224	16578
Average reactions per post	177.12	176.28	79.85	19.91	184.16
average comments per post	31.18	34.5	8.53	2.4	11.5
average shares per post	69.01	19.83	11.65	4.89	90.17
average engagement per post	277.31	230.61	100.03	27.2	285.83

The 2018 Presidential Election was a close contest in terms of Facebook post engagement, but Michael D. Higgins came out on top. Sean Gallagher had slightly more reactions and comments on his posts, but Higgins posts were more widely shared. Videos comprised just 44% of the total posts on the Michael D. Higgins page but accounted for around two thirds of total post engagement. Part of this is a result of these posts being much more widely shared than other posts on the page. Video posts accounted for 75% of the posts shared from the Michael D. Higgins page. Overall the Michael D. Higgins campaign mostly posted photos and videos, with a small number of link posts also mixed in over the course of the campaign.

As was the case in the 2011 Presidential election the Sean Gallagher team ran an effective campaign on Facebook - unfortunately though for him, they weren't the only campaign team to use Facebook effectively this time. The 120 posts on the Sean Gallagher page over the course of the election campaign generated more reactions and comments, and more comments per post than any of the pages of his opponents. These posts weren't shared as often as posts on the pages of his opponents Michael D. Higgins, Joan Freeman, and Liadh Ní Riada though. This may be as a result of his campaign team posting less videos to his page than his opponents' teams posted to their pages. The Sean Gallagher page had the lowest percentage of video posts at just 29% and less video posts in total than the Michael D. Higgins, Joan Freeman, or Liadh Ní Riada pages. Sean Gallagher's video posts had the highest average engagement when compared to his other posts. This was also the case for all his opponents. One area he differentiated from his opponents was in his use of status posts. He posted fourteen status posts over the course of the election campaign these did well in average engagement, almost as well as his video posts performed. Joan Freeman was the only other candidate to use status posts over the course of the election campaign, but her status posts generated much less engagement.

The Joan Freeman campaign utilised Facebook well overall though. They posted much more often than any other candidate - 233 times over the course of the campaign compared to 115 posts from Michael D. Higgins, 120 from Sean Gallagher, just 45 from Gavin Duffy and 58 from Liadh Ní Riada. The Joan Freeman page posted more links in total and a higher percentage of links than any of the other pages. These link posts did not generate much engagement, however. Likewise, her eight status posts performed poorly in engagement. Her video posts did well. Video posts comprised only 38% of her total posts but accounted for about 50% of the total engagement on her posts. The Gavin Duffy campaign ran a limited campaign on Facebook when compared to his opponents. There were just 45 posts on the page over the course of the campaign and these posts received little engagement. Most of his posts were videos. These generated more engagement than his photo or link posts but there was a noticeable gap between his campaign and his opponents' campaigns when total posts, total engagement, and average engagement are reviewed. The Liadh Ní Riada campaign posted to their Facebook page much less often than the Michael D. Higgins, Sean Gallagher, and Joan Freeman campaigns and they overwhelmingly posted videos. This is notable because Liadh Ní Riada was the Sinn Féin candidate in this election and as noted in the previous section, Sinn Féin also posted less often than their opponents in the 2016 general election, posted more videos, and only posted photos and videos. Videos comprised 90% of posts on the Liadh Ní Riada page, with photo posts accounting for the other 10%. The six photo posts posted over the course of the campaign on average generated more engagement than the video posts but were shared less often. The Liadh Ní Riada campaign had the highest average engagement per post but generated less total engagement the Michael D. Higgins, Sean Gallagher, and Joan Freeman pages, which posted twice as often over the course of the election campaign in the case of Michael D. Higgins and Sean Gallagher, and four times as often as in the case of Joan Freeman.

Liadh Ní Riada didn't post a single link post and 100% of her videos were hosted on Facebook. In video posts this was almost followed by the other candidates as well, with only two video posts for other link domains being posted over the course of the campaign from a total of 251 video posts from all the candidates. Link posts were limited for Michael D. Higgins, Sean Gallagher, and Gavin Duffy, but Joan Freeman posted a lot of them. 90% of MDH link posts were to media websites which did okay, dipping below his average engagement just slightly. His only link post to his campaign website performed poorly. Six of Sean Gallagher's eight link posts fell into the "other" category with media links comprising the other two. These were both

noticeably below his average engagement per post. Joan Freeman heavily posted links to her campaign website which did poorly. She also posted 20 media link posts which did better but the couple of posts she posted that fall into the other category performed poorly. All of Gavin Duffy's link posts were media links and as with much of the rest of his campaign on Facebook, these did poorly in engagement.

4.7   Conclusions

There are several conclusions to draw from the data and the results of the analysis outlined above. There was an increased uptake in the use of Facebook for the purposes of political campaigning among both presidential candidates and parties. In terms of the type of posts posted to each page there were several changes over the years also. There was a decline in the use of link posts. When link posts are broken down further there was a decline in the use of posts linking to a party, candidate, or campaign website. Instead link posts were more likely to link to media or other websites in the latter years. There was an increase in the use of photo and video posts in line with the better engagement these generated when compared to other posts. There was also an increase in the hosting of video posts on Facebook instead of other domains for the same reason – increased engagement.

Clear social media strategies can be gleaned in some cases from the statistics. For example, Sinn Féin only posted videos hosted on Facebook and photo posts in the 2016 general election. Their candidate in the 2018 Presidential election – Liadh Ní Riada followed the same pattern of posting. In the 2018 Repeal referendum the Together for Yes campaign followed a definite strategy also. 100% of their link posts were to major news outlets. They didn't post a single link to their campaign website or to any site outside of these. In addition, all their videos were hosted on Facebook. How each page performed in engagement can sometimes correspond with results. For example, Gavin Duffy was the worst performer in Facebook engagement in the 2018 presidential election and finished last in the actual election. The Labour Party performed poorly in Facebook engagement in the 2016 general election and had the worst election in the party's history in the actual election. Sometimes social media engagement does not correspond with results though as in the case of Sinn Féin who had better engagement than any other party in the 2016 general election but finished third in the actual election. In best practice, posts to domains outside of Facebook on average do not receive as much engagement as posts that keep the users on the Facebook site. An effective

social media strategy for anyone using Facebook for the purposes of political campaigning therefore would be to only put up posts that keep users on the site. An example of a party that's currently doing this is Sinn Féin. Some parties were pursuing posting patterns that did not lead to high engagement with users. An example of this is the Labour Party in the 2016 general election who continued to post links to their party website and videos hosted outside of Facebook.

Video and photo posts performed best in engagement, especially in the latter campaigns. Some parties changed the way they utilised Facebook from one election to the next. An example of this is Fianna Fáil. In 2011 90% of Fianna Fáil posts were links to the party website or a section of this. In 2016 they had a much more diverse mix of posting and not a single post over the course of the 2016 campaign on the Fianna Fáil page had a link to the party website. The total engagement a page generates can sometimes but not always be used as a barometer for success in the election. Of the pages analysed in the 2011 Presidential election, 2011 general election, 2018 Repeal referendum, and 2018 Presidential election the page that received the most total engagement over the course of the campaign performed best in the corresponding election/referendum. However, in the 2016 general election campaign Sinn Féin received the most total engagement on Facebook but finished third in the election. These findings are suspiciously in line with previous findings from Zhang (2018) who investigated the relationship between candidates' online popularity and election results, as a step towards creating a model to forecast the results of Taiwanese elections. Zhang (2018) found online popularity corresponded with election results 80% of the time.

5   Conclusions and Future Work

5.1   Introduction

The research uncovered several interesting aspects when investigating the use of social media in political campaigns in the Republic of Ireland over the years 2011 to 2018. The main findings have been outlined in Chapter Four and these findings will be expanded on here and connected to the wider discourse. The study of social media is still an evolving field in the Republic of Ireland, as is the growth of social media itself and thus far not all the major political parties have learned how to best utilise it to maximise engagement with the public. Engagement on a Facebook post is the measure of the total number of user reactions to and interactions with a post such as by "liking", commenting on, or sharing a post. An example of this in the case of the last general election was the Labour Party who continued to post links to the party website that generated little engagement. An example of a major party using social media effectively – at least in the case of Facebook – is Sinn Féin. Their posting entirely focuses on photos and videos hosted on the Facebook platform. This pattern was followed both in the 2016 general election on the Sinn Féin page and in the 2018 Presidential election on the page of the Sinn Féin party candidate Liadh Ní Riada. The equalisation-normalisation hypothesis touched on in the literature review could be seen in the presidential elections in 2011 and 2018. In 2011 an outsider at the outset of the campaign – Sean Gallagher - adopted effective social media utilisation early and perhaps as a partial consequence performed much better in that year's election might have been expected. This is considering he was not a front runner in the early-part of the campaign and arguably the least well known of the candidates (O'Malley, 2012). During later campaigns such as the 2015 Marriage Equality referendum in the case of the Yes Equality campaign, the 2016 general election in the case of most of the major parties and the 2018 Repeal referendum – many others had realised how to effectively utilise Facebook. And by the time the 2018 Presidential election rolled around the campaigns of several other presidential candidates were using Facebook effectively as part of their campaigns. So, in the 2011 Presidential election the Sean Gallagher campaign showed the equalisation side of the hypothesis where a campaign adopted effective social media use early and reaped the benefits of this in high engagement on posts. Over the intervening years social media use in politics became more ubiquitous. And by the time of the 2018 presidential election the normalisation side of the hypothesis could be seen as almost all the other candidate were now using social media, and most of them as effectively as the Sean Gallagher campaign this time.

Overall the effective utilisation of Facebook in political campaigning among the major parties has shown improvement over the years. Improvement in this case means an increase in total engagement to posts when compared to previous campaigns and an increase in engagement per post compared to previously. Moreover, for the most part political parties have stopped using Facebook to direct users to their own website as this was an ineffective way of generating user engagement. Instead they have started to make more use of photo and video posts which are more effective at generating engagement. And whereas previously their video posts would have been hosted on external domains now they are being hosted on Facebook. The major parties – or at least most of them – have changed their strategy in response to the lower engagement link posts receive when compared to other posts. All of these changes in utilisation are leading to increased engagement on posts in the Republic of Ireland as found in the 2016 general election where there was a marked decline among the major parties in the use of video posts with link domains outside of Facebook and link posts when compared to the 2011 general election five years earlier. There was also an increase in engagement on posts for these parties and when average engagement is compared for several of the elections and referendums such as the 2016 general election and the 2018 presidential election it's found posts hosted on the Facebook platform do perform better. Overall there are more similarities than differences in the way Facebook is used in Irish political campaigns compared to the way it's utilised in other European democracies. Some of the examples found abroad such as the more likes than votes aspect for fringe candidates like Roshika Deo can be found in the Republic of Ireland in the case of DDI. Roshika Deo was a candidate in the 2014 elections in Fiji who attracted over 14,000 likes on her Facebook page but only received 1,005 votes in the election (Vakaoti and Mishra-Vakaoti, 2015). DDI received total engagement of 7,390 on their posts over the course of the 2016 general election but only received 6,481 votes in the actual election.

The research did find there was an increased frequency in the use of Facebook for the purposes of political campaigning by both political parties, presidential candidates, and umbrella organisations over the course of the 8-year period in question. There was an increased uptake in the use of Facebook by political parties and presidential candidates when the 2011 general and presidential elections are compared with subsequent elections in 2016 and 2018 respectively. There was a change in the type of posts used over the years. A decline was found in the used of link posts and especially links to party/candidate/campaign websites over the years, especially among the larger parties. There was an increase in the use of photo and video posts in line with the increased engagement these posts received on average when

compared to posts of other types. There was also an increase in the posting of videos with link domains hosted on Facebook in line with the increased engagement these videos received and a corresponding decline in the posting of videos with link domains outside of Facebook. In some cases, a clear social media posting strategy has emerged such as in the case of Sinn Féin in the 2016 general and 2018 presidential elections. In both cases the party and the candidate page only posted photos and videos and put up a limited number of posts during the campaign when compared to opponents. There was a correlation between social media success and electoral success. In four of the five where there were competitors of the candidates that maintained Facebook pages, the one that received the most engagement performed best in the subsequent election.

5.2   Data Interpretation

Several of the findings are in line with previous research. For instance, Zhang (2018) found 80% of the time social media popularity was a predictor of electoral popularity/success. The timeline in usage makes for an interesting comparison with some of the papers such as the study by Parisopoulos et al. (2012) on the 2009 Greek elections found only 27 of the 132 candidates they studied maintained some kind of online presence on Facebook and Vergeer et al. (2013a) when studying the 2009 European parliament elections found it was only the main candidates made use of social media as part of their campaigns. In the 2011 general election only the two outgoing government parties, the two largest opposition parties and one other party had Facebook pages for the purposes of political campaigning. Sinn Féin did also maintain an online presence as previously mentioned but this had to be deleted subsequently. This was out of a total of fourteen different political parties and groupings that contested the election. Likewise, in the presidential election in 2011 only two of the candidates posted on Facebook out of seven candidates for the presidency. By the subsequent general election in 2016 and the presidential election in 2018 all of this had changed. In the 2016 general election there were eighteen pages maintained by seventeen out of eighteen parties and groups contesting the election. The only exception was the "Independents4Change" group who did not maintain a Facebook page, and while the Anti-Austerity Alliance and PBP ran under a joint platform, they maintained separate Facebook pages. There is still a degree of variance between the way many of these parties use Facebook, even among the major political parties. Facebook has become a more integral part of political campaigning as evidenced by the increased uptake.

The Netvizz application used to find and extract the data necessary for this study constituted the main research tool used in this study. This produced a great deal of data from the Facebook pages examined which for the most part backed up findings in previous research. Netvizz provided data related on type of posts, the frequency of the posts and the link domains for these posts. Netvizz also provided the engagement each post received. This data was then grouped by post type and the summary data for each post type for each party/ candidate/ organisation was compared against competitors in the respective campaigns. The findings of this comparison were summarised. By categorising posts by type the data was analysed to ascertain which posts performed best, which competitor in the election or referendum received the most engagement and therefore could be judged to have utilised Facebook most effectively. The original data was preserved in its original files. Any data necessary for analysis for each of the six campaigns identified was extracted and analysed in separate files using Microsoft Excel. For the election and referendum campaigns dates were identified between which posting data would be analysed. The post data for the applicable pages for these time periods was then analysed by looking at several aspects. The overall data was analysed first – the total number of posts by a given page over this time period. The total number of reactions, comments, shares, and engagement on these posts were noted, and this data was used to calculate the average number of reactions, comments, shares, and engagement per post on a page. Following this, posts were categorised by type. The same analysis was completed for the overall data was performed on post types by calculating the post totals for each post type, and the total number of reactions, comments, shares, and engagement for each post type. This data was used to calculate the average number of reactions, comments, shares, and engagement per post type on a given page. The percentage of total posts each post type comprised over the campaign period for the page was then calculated. After this analysis was completed for all the pages in a given campaign, the summary data was then extrapolated to a single page where the post data for each party/candidate/organisation for this campaign could be compared against their competitors. Since elections and referendums are competitions where the competitors are trying to get as many votes as possible or more votes than the opposition it seemed appropriate to interpret the data in the context of who received the highest engagement for their posting.

5.3   Conclusions

This research has shown the utilisation of social media in political campaigns in Republic of Ireland and engagement from users via this medium have both grown greatly over the course of the last eight years. There has been a marked increase in usage with more parties and

candidates starting to use Facebook for the purposes of political campaigning. Posts that keep the user on the Facebook platform such as photo posts and videos hosted on Facebook receive more engagement than those that take the user to another site such as link posts to a political party website, link posts to a media website, or videos hosted on websites other than Facebook. This factor is shaping the way the platform is being used for political campaigning since as political parties and candidates become aware of this, they are changing their patterns in order to maximise user engagement on their posts. There are several best practices that can be applied to ensure high engagement during campaigns. A steady stream of photo posts and video posts hosted on Facebook during a campaign is a good posting pattern to pursue when trying to maximise engagement. Social media engagement can sometimes be a predictor of electoral success or at the least a correlation to success. In the Irish case there are several examples of this being true. In the 2011 Presidential election Sean Gallagher had much higher total engagement on his posts than Martin McGuinness and subsequently outpolled him on election day. In the 2011 general election Fine Gael had the highest engagement on their posts out of the five parties and performed best in the election results. In the 2018 Repeal referendum the Together for Yes campaign received much better engagement than the Love Both campaign and the Yes side subsequently won the referendum comfortably. And finally, in the 2018 Presidential election posts of the Michael D. Higgins campaign page received more total engagement than those on any of the competing pages. Michael D. Higgins subsequently won that election. The outlier among the competitive campaigns examined is the 2016 general election where Sinn Féin had the highest total engagement on their posts but only finished third in the general election. Still four out of five is in line with the findings from Zhang (2018) who stated social media popularity was a predictor of electoral success 80% of the time.

Overall, this study has shown how Facebook – the largest social media platform – has been utilised in election and referendum campaigns in the Republic of Ireland over the past eight years. This has been done by examining who has been using Facebook in terms of political parties, presidential candidates and umbrella organisations, and how that use has grown over the years. This study has shown which of these parties/ candidates/ organisations have used Facebook most effectively for the purposes of political campaigning and generating user engagement and which parties/candidates/organisations have used Facebook least effectively. What has also been shown is the type of posts used. This study has also shown where user traffic has been directed by analysing the link domains for the posts. The methodology of this research is generalisable and could be applied social media utilisation in

just about any democratic country when looking at how Facebook is utilised for electoral campaigning. A link to all the data for this study is contained in the appendix and summary data is provided throughout the findings chapter. When performing a quantitative analysis of Facebook utilisation in other settings in future researchers can compare both the type of posts used, where users are directed (whether they're kept on Facebook or directed to other websites by posts), and how much engagement posts receive.

5.4   Summary and Future Work

This research complements a number of findings by several other researchers on the use of social media for political campaigning such as those by Parisopoulos et al. (2012) regarding Facebook usage not being widespread among politicians in the early years, Vergeer et al. (2013a) in relation to the major parties being more likely to use social media in the early days at least and Zhang (2018) in relation to social media popularity sometimes being a useful predictor of electoral success. This study looks at several elections and at the usage of Facebook for the purposes of political campaigning over a longer period than had been examined in other studies outlined in the literature review. The statistics and the findings in this study in relation to the usage and type of usage of Facebook over the course of the years 2011 to 2018 also provide a benchmark for future studies in other settings. This research fills a gap that had previously existed on the use of social media for political campaigning in the Republic of Ireland. This research does not show how other social media platforms such as Twitter, Instagram, and Snapchat were used for the purposes of political campaigning over this period. It also does not show how individual candidates in the general elections examined used social media for campaigning. This research does not give the perspective of Facebook users. The latter is a prime area for future research i.e. a future study could analyse the comments on posts as well as the posts, since this study just looked at post data. What is shown in the research is certain approaches and types of posting lead to increased engagement. What is not clear is whether this engagement is positive or negative. A sentiment analysis of user comments would be necessary to determine this.

This study reviewed the existing literature on the use of social media in political campaigning. From this a methodology was chosen – quantitative analysis – to examine this use in an Irish context. Using a research tool identified in a previous study that used the same methodology, post data relating to four elections and two referendums were retrieved and analysed for the

purposes of answering the research question. This analysis quantified the total posts, reactions, comments, shares, and engagement on a page for the campaign period in question. It further calculated the average number of reactions, comments, shares, and engagement per post. The same analysis was then implemented for each post category. Finally, the link posts and video posts were categorised by their link domain groups and the same analysis performed on the link domain groups. The percentage each post type comprised of the total for a given page was calculated and the post data for each page then compared with its competitors for the campaign in question. The final answer to how social media websites such as Facebook have been utilised for political campaigning in the Republic of Ireland between the years 2011 to 2018 is this utilisation has changed over these years. In the beginning Facebook was only being used by a minority of competitors as in the case of the 2011 general election and the 2011 presidential election. This has now changed as in the 2015 and 2018 referendums all the umbrella groups made use of Facebook and in the 2016 general election and 2018 presidential election almost all the competitors used Facebook over the course of the campaigns. In the early campaigns Facebook was utilised almost as an intermediary with party and candidate Facebook pages being used to direct users to party/candidate websites, as well as news articles and videos on websites hosted outside of Facebook. This could be seen in the 2011 general election and the 2011 presidential election. This changed in later campaigns especially among successful proponents as posts more often kept the user on the platform and lead to higher engagement on page posts.

References

AHMED, S., CHO, J. & JAIDKA, K. 2017. Leveling the playing field: The use of Twitter by politicians during the 2014 Indian general election campaign. *Telematics and Informatics,* 34**,** 1377-1386.

AICHNER, T. & JACOB, F. 2015. Measuring the degree of corporate social media use. *International Journal of Market Research,* 57**,** 257-275.

BABAC, M. B. & PODOBNIK, V. 2018. What social media activities reveal about election results? The use of Facebook during the 2015 general election campaign in Croatia. 31, 327-347.

BAKLIWAL, A., FOSTER, J., VAN DER PUIL, J., O'BRIEN, R., TOUNSI, L. AND HUGHES, M. 2013. Sentiment analysis of political tweets: towards an accurate classifier. *Proceedings of the Workshop on Language in Social Media***,** pp. 49-58.

BASTOS, M. & MERCEA, D. 2018. Parametrizing Brexit: mapping Twitter political space to parliamentary constituencies. *Information, Communication & Society,* 21**,** 921-939.

BLOCK, E. 2013. A Culturalist Approach to the Concept of the Mediatization of Politics: The Age of "Media Hegemony".

BLUMLER, J. G. 2013. The fourth age of political communication.

BLUMLER, J. G. & KAVANAGH, D. 1999. The third age of political communication: influences and features. *Political Communication,* 16**,** 209-230.

BOURDIEU 1986. The forms of capital. *Handbook of Theory and Research for the Sociology of Education***,** pp. 241-258.

BRENNAN, R. & CROFT, R. 2012. The use of social media in B2B marketing and branding: An exploratory study. *Journal of Customer Behaviour,* 11**,** 101-115.

CANDON, P. 2012. A Triumph of Rhetoric over Practice? The 'Online Public Sphere' and Political Discourse in Ireland's General Election 2011. *Irish Studies in International Affairs***,** 59.

CHOU, L.-C. & FU, C.-Y. 2017. The Influence of Internet on Politics: The Impact of Facebook and the Internet Penetration on Elections in Taiwan. 24, 494-497.

COLEMAN, J. S. 1990. Foundations of social theory / James S. Coleman.

COLEMAN, J. S. 2014. Social Capital in the Creation of Human Capital. *In:* SPOLAORE, E. (ed.) *Culture and Economic Growth. Volume 1.*: Elgar Research Collection. International Library of Critical Writings in Economics, vol. 292. Cheltenham, UK and Northampton, MA: Elgar.

GIBSON, R. & MCALLISTER, I. 2011. Do Online Election Campaigns Win Votes? The 2007 Australian 'YouTube' Election. *Political Communication,* 28**,** 227-244.

GIBSON, R. & RÖMMELE, A. 2001. Changing Campaign Communications: A Party-Centered Theory of Professionalized Campaigning. *International Journal of Press/Politics,* 6**,** 31.

GILMORE, J. 2012. Ditching the pack: Digital media in the 2010 Brazilian congressional campaigns.

GINNAROU, L. 2009. Election campaigns on the Internet a la Greek.

GOLBECK, J., GRIMES, J. M. & ROGERS, A. 2010. Twitter use by the U.S. Congress. *Journal of the American Society for Information Science & Technology,* 61**,** 1612-1621.

HALPERN, S. 2018. MIND GAMES HOW CAMPAIGNS ARE USING MARKETING, MANIPULATION, AND 'PSYCHOGRAPHIC TARGETING' TO WIN ELECTIONS-AND WEAKEN DEMOCRACY. *New Republic,* 249**,** 16-25.

JOHANNESSEN, M. 2010. Genres of Participation in Social Networking Systems: A Study of the 2009 Norwegian Parliamentary Election. *Electronic Participation (9783642151576)***,** 104.

JUNGHERR, A. 2016a. Four Functions of Digital Tools in Election Campaigns: The German Case.

JUNGHERR, A. 2016b. Twitter use in election campaigns: A systematic literature review. *Journal of Information Technology & Politics,* 13**,** 72-91.

KTORIDOU, D., EPAMINONDA, E. & CHARALAMBOUS, A. 2018. Social Media in Election Campaigns: The Case of the 2013 Presidential Elections in Cyprus. *IEEE Technology and Society Magazine, Technology and Society Magazine, IEEE, IEEE Technol. Soc. Mag.***,** 32.

KUMAR, K. A. & NATARAJAN, S. 2016. Role of Social Media in Political Campaigning and its Evaluation Methodology: A Review. 10**,** 1-12.

LILLEKER, D. G., TENSCHER, J. & STETKA, V. 2015. Towards hypermedia campaigning? Perceptions of new media's importance for campaigning by party strategists in comparative perspective.

LITTLE, C. 2017. The Irish general election of February 2016: towards a new politics or an early election?

LÓPEZ-MERI, A., MARCOS-GARCÍA, S. & CASERO-RIPOLLÉS, A. 2017. WHAT DO POLITICIANS DO ON TWITTER? FUNCTIONS AND COMMUNICATION STRATEGIES IN THE SPANISH ELECTORAL CAMPAIGN OF 2016. *¿Qué hacen los políticos en Twitter? Funciones y estrategias comunicativas en la campaña electoral española de 2016.,* 26**,** 795.

MAGIN, M., PODSCHUWEIT, N., HASSLER, J. & RUSSMANN, U. 2017. Campaigning in the fourth age of political communication. A multi-method study on the use of Facebook by German and Austrian parties in the 2013 national election campaigns.

MARGETTS, H. 2017. Why Social Media May Have Won the 2017 General Election. 88**,** 386-390.

MAZZOLENI, G. S., ANNA 2009. Política pop. Da "porta a porta" a "l'isola dei famosi".

NULTY, P., THEOCHARIS, Y., POPA, S. A., PARNET, O. & BENOIT, K. 2016. Social media and political communication in the 2014 elections to the European Parliament. *Electoral Studies,* 44**,** 429-444.

O'MALLEY, E. 2012. Explaining the 2011 Irish Presidential Election: Culture, Valence, Loyalty or Punishment?

OHME, J., DE VREESE, C. H. & ALBAEK, E. 2018. The uncertain first-time voter: Effects of political media exposure on young citizens' formation of vote choice in a digital media environment.

PARISOPOULOS, K., TAMBOURIS, E. & TARABANIS, K. 2012. Facebook and Greek Elections: New Fad or Real Transformation? *IEEE Technology and Society Magazine, Technology and Society Magazine, IEEE, IEEE Technol. Soc. Mag.***,** 58.

PETERSON, R. D. 2012. To tweet or not to tweet: Exploring the determinants of early adoption of Twitter by House members in the 111th Congress. *The Social Science Journal,* 49**,** 430-438.

PIPER, D. 2014. Data protection laws of the world handbook.

PUTNAM 2000. Bowling Alone: The Collapse and Revival of American Community.

RIEDER, B. Studying Facebook via Data Extraction: The Netvizz Application. WebSci '13 Proceedings of the 5th Annual ACM Web Science Conference, 2013 New York. 346–355.

ROMERO, R. C. 2016. Internet politics: Towards a social networking typology — Costa rican municipal elections analysis. Infonomics Society.

RONALD LA DUE LAKE, A. & ROBERT HUCKFELDT, A. 1998. Social Capital, Social Networks, and Political Participation. *Political Psychology***,** 567.

RUTH, M. 2018. Social Media and Political Campaigns. Salem Press.

SCHEUFELE, D. A. & SHAH, D. V. 2000. Personality strength and social capital - The role of dispositional and informational variables in the production of civic participation.

SCHWEITZER, E. J. 2008. Innovation or normalization in e-campaigning? A longitudinal content and structural analysis of German party websites in the 2002 and 2005 national elections. *Eur. J. Commun. ,* 23**,** 449–470.

SHAH, D. V., KWAK, N. & HOLBERT, R. L. 2001. "Connecting" and "disconnecting" with civic life: Patterns of Internet use and the production of social capital.

SHAYO, D. P. & KERSTING, N. 2016. An Examination of Online Electoral Campaigning in Tanzania. IEEE.

STIER, S., BLEIER, A., LIETZ, H. & STROHMAIER, M. 2018. Election Campaigning on Social Media: Politicians, Audiences, and the Mediation of Political Communication on Facebook and Twitter.

VAKAOTI, P. & MISHRA-VAKAOTI, V. 2015. Social Media and the 2014 Elections in Fiji. 104**,** 189-198.

VAN GYAMPO, R. E. 2017. Political Parties and Social Media in Ghana. 10**,** 186-205.

VERGEER, M., HERMANS, L. & CUNHA, C. 2013a. Web campaigning in the 2009 European Parliament elections: A cross-national comparative analysis.

VERGEER, M., HERMANS, L. & SAMS, S. 2013b. Online social networks and micro-blogging in political campaigning: The exploration of a new campaign tool and a new campaign style.

ZHANG, X. 2018. Social media popularity and election results: A study of the 2016 Taiwanese general election. 13, 1-17.

Appendix 1. Election Tables

2011 GE	Party	FB Page
1	Fine Gael	Yes
2	Labour Party	Yes
3	Fianna Fáil	Yes
4	Sinn Féin	No
5	Socialist Party	No
6	PBP	No
7	WUAG	No
8	Green Party	Yes
9	New Vision	No
10	SKIA	No
11	Workers' Party	No
12	Christian Solidarity	No
13	Fís Nua	No
14	An Chomhdháil Phobail	Yes

2016 GE	Party	FB Page
1	Fine Gael	Yes
2	Fianna Fáil	Yes
3	Labour Party	Yes
4	Sinn Féin	Yes
5	Independent Alliance	Yes
6	AAA-PBP	Yes*
7	Independents 4 Change	No
8	Social Democrats	Yes
9	Green Party	Yes
10	WUAG	Yes
11	Renua	Yes
12	DDI	Yes
13	Workers' Party	Yes
14	Catholic Democrats	Yes
15	People's Convention	Yes
16	Fís Nua	Yes
17	Irish Democratic Party	Yes
18	Communist Party	Yes

*The Anti-Austerity Alliance-People Before Profit Grouping that appeared on ballot papers is made of two separate parties both of which maintained and continue to maintain separate Facebook pages for the purposes of campaigning.

2011 PE	Candidate	FB Page
1	Sean Gallagher	Yes
2	Michael D. Higgins	Yes*
3	Mary Davis	No
4	Dana Rosemary Scallon	No
5	Martin McGuinness	Yes

2018 PE	Candidate	FB Page
1	Michael D. Higgins	Yes
2	Liadh Ní Riada	Yes
3	Sean Gallagher	Yes
4	Peter Casey	No**
5	Joan Freeman	Yes

6	Gay Mitchell	No
7	David Norris	No

6	Gavin Duffy	Yes

*Michael D. Higgins had a page created in 2010 but the first post on the page was from 2018.
**Peter Casey had a Facebook page but there has been no posting on it since 2014

Appendix 2. Link Domains

Party/Candidate/Campaign Domains	Media Link Domains	Other Link Domains
connect.finegael2011.com	98fm.com	8thamend.blogspot.ie
directdemocracyireland.ie	advertiser.ie	adrianandshane.bigcartel
dominichannigan.com	amp.irishexaminer.com	ballotbox.ie
election.fiannafail.ie	answersafrica.com	bit.ly
europeangreens.eu	belfastlive.co.uk	boards.ie
fiannafail.ie	beo.tg4.ie	castle33.com
finegael.ie	breakingnews.ie	checktheregister.ie
finegael.org	broadsheet.ie	cormaclucey.blogspot.ie
finegael2011.com	buzzfeed.com	countytipperarychamber
grn.ie	carlowpeople.ie	eepurl.com
independentalliance.ie	channel4.com	eventbrite.ie
jasonomahony.ie	clonmelonline.com	fairsociety.ie
labour.ie	corkman.ie	flickr.com
labr.ie	dailyedge.ie	giphy.com
loveboth.ie	donegaldaily.com	gofundme.com
lucindacreighton.ie	donegalnow.com	goo.gl
michaeldhiggins.ie	droghedalife.com	harpersbazaar.com
prolifecampaign.ie	dublin.ie	hittheroad.ie
renuaireland.com	eastcoast.fm	iahip.org
right2change.ie	euronews.com	igg.me
seangallagher.com	eveningecho.ie	indiegogo.com
sinnfein.ie	examiner.ie	instagram.com
socialdemocrats.ie	farmersjournal.ie	ipsc.ie
tedtynan.wordpress.com	fm104.ie	irishpoliticalmaps.blogspot
thepeoplespresident.ie	fpif.org	march-against-monsanto
vote.greenparty.ie	her.ie	ow.ly
votejoan.ie	herald.ie	paddypower.com
votewithus.org	herfamily.ie	periscope.tv
workersparty.ie	highlandradio.com	pic.twitter.com
workerspartyelection.wordpress.com	hotpress.com	play.google.com
yesequality.ie	independent.ie	player.fm
yesequality.myshopify.com	irishcentral.com	politicaleconomy.ie
yes-for-love.com	irishexaminer.com	politicalpeopleblog.com
	irishmirror.ie	politics.ie
	irishpost.com	poll.fbapp.io
	irishtimes.com	refcom2015.ie
	iti.ms	replayapp.com
	itv.com	scribd.com

joe.ie	shar.es
jrnl.ie	slideshare.net
limerickleader.ie	smockalley.com
lovindublin.com	soundcloud.com
m.independent.ie	t.co
m.rte.ie	thinkorswim.ie
mayotoday.ie	thunderclap.it
meathchronicle.ie	tiny.cc
medium.com	tinyurl.com
morningstaronline.co.uk	twibbon.com
nationalist.ie	twitter.com
nearfm.ie	twitter.twimg.com
newseveryday.com	us2.campaign-archive1
newstalk.com	us2.campaign-archive2
newstalk.ie	ustream.tv
northernsound.ie	vimeo.com
reuters.com	voteproudly2016.org
rte.ie	votomatic.ie
shannonside.ie	wp.me
spunout.ie	youtube.com
telesurtv.net	
thecollegeview.com	
theepochtimes.com	
theguardian.com	
thejournal.ie	
thesun.ie	
thetimes.co.uk	
tipptatler.ie	
todayfm.com	
totallydublin.ie	
trendster.ie	
trinitynews.ie	
tv3.ie	
universitytimes.ie	
video.irishtimes.com	
westmeathexaminer.ie	
westmeathindependent.ie	

Appendix 3. Election and Referendum Data

The summary data for each election/referendum is shown in the tables for each in the findings chapter. The rest of the data on post types is contained here.

2011 General Election	Fine Gael	Fianna Fail	Labour Party	Green Party	Chomhdháil Phobail
Link Posts	50	20	57	31	3
% of total posts	43.48%	90.91%	60.64%	72.09%	

Reactions	398	195	591	198	
Comments	532	417	206	27	
Engagement	930	612	797.00	225	
Avg. reactions PP	7.96	9.75	10.37	6.39	
Avg. comments PP	10.64	20.85	3.61	0.87	
Avg. engagement PP	18.6	30.6	13.98	7.26	
Party Link Posts	22	20	36	14	2
% of link posts	44%	100%	63%	45%	67%
Reactions	137	195	433	95	7
Comments	241	417	155	10	3
Engagement	378.00	612.00	588.00	105.00	10.00
Avg. reactions PP	6.23	9.75	12.03	6.79	
Avg. comments PP	10.95	20.85	4.31	0.71	
Avg. engagement PP	17.18	30.60	16.33	7.50	
Media Link Posts	9		2	1	1
% of link posts	18%	0%	4%	3%	33%
Reactions	132		11	4	2
Comments	124		3	1	3
Engagement	256		14	5	5
Avg. reactions PP	14.67		5.50	4.00	
Avg. comments PP	13.78		1.50	1.00	
Avg. engagement PP	28.44		7.00	5.00	
Facebook Link Posts			2	1	
% of link posts			4%	3%	
Reactions			43	10	
Comments			1	1	
Engagement			44	11	
Avg. reactions PP			21.5	10	
Avg. comments PP			0.5	1	
Avg. engagement PP			22	11	
Other Link Posts	19		17	15	
% of link posts	38%	0%	30%	48%	
Reactions	129		104	89	
Comments	167		47	15	
Engagement	296		151	104	
Avg. reactions PP	6.79		6.12	5.93	
Avg. comments PP	8.79		2.76	1.00	
Avg. engagement PP	15.58		8.88	6.93	
Photo Posts	14	2	6	1	
% of total posts	12.17%	9.09%	6.38%	2.33%	
Reactions	220	17	127	10	
Comments	229	6	18	1	
Engagement	451.00	23	145	11	
Avg. reactions PP	15.71	8.5	21.17	10	
Avg. comments PP	16.36	3	3.00	1.00	
Avg. engagement PP	32.21	11.5	24.17	11.00	
status posts	21		18	4	

% of total posts	18.26%		19.15%	9.30%	
Reactions	360.00		360.00	56.00	
Comments	473.00		110.00	19.00	
Engagement	833.00		470.00	75.00	
Avg. reactions PP	17.14		20.00	14.00	
Avg. comments PP	22.52		6.11	4.75	
Avg. engagement PP	39.67		26.11	18.75	
video posts	30		8	7	1
% of total posts	26.09%		8.51%	16.28%	25.00%
Reactions	293		113	51	3
Comments	314.00		29	5	0
Engagement	617.00		142	56	3
Avg. reactions PP	9.77		14.125	7.29	
Avg. comments PP	10.47		3.625	0.71	
Avg. engagement PP	20.57		17.75	8	
Facebook video posts	2				
% of video posts	7%				
Reactions	20				
Comments	17				
Engagement	37				
Avg. reactions PP	10				
Avg. comments PP	8.5				
Avg. engagement PP	18.5				
other video posts	28		8	7	1
% of video posts	93%		100%	100%	100%
Reactions	273		113	51	3
Comments	297		29	5	0
Engagement	570		142	56	3
Avg. reactions PP	9.75		14.125	7.29	
Avg. comments PP	10.61		3.625	0.71	
Avg. engagement PP	20.36		17.75	8	
music posts			3		
% of total posts			3.19%		
Reactions			34.00		
Comments			7.00		
Engagement			41.00		
Avg. reactions PP			11.33		
Avg. comments PP			2.33		
Avg. engagement PP			13.67		

2011 Presidential Election	Sean Gallagher	Martin McGuinness
Link Posts	60	19
% of Total Posts	36%	66%
Reactions	3566	737
Comments	986	312
Shares	387	130
Engagement	4939	1179

Avg. reactions PP	59.43	38.79
Avg. comments PP	16.43	16.42
Avg. Shares PP	6.45	6.84
Avg. Engagement PP	82.32	62.05
Candidate Link Posts	36	4
% of Link Posts	60%	21%
Reactions	2152	173
Comments	411	72
Shares	215	18
Engagement	2778	263
Avg. reactions PP	59.78	43.25
Avg. comments PP	11.42	18.00
Avg. Shares PP	5.97	4.50
Avg. Engagement PP	77.17	65.75
Media Link Posts	17	11
% of Link Posts	28%	58%
Reactions	904	432
Comments	476	181
Shares	88	64
Engagement	1468	677
Avg. reactions PP	53.18	39.27
Avg. comments PP	28.00	16.45
Avg. Shares PP	5.18	5.82
Avg. Engagement PP	86.35	61.55
Facebook Link Posts	2	
% of Link Posts	3%	
Reactions	269	
Comments	36	
Shares	20	
Engagement	325	
Avg. reactions PP	134.5	
Avg. comments PP	18	
Avg. Shares PP	10	
Avg. Engagement PP	162.5	
Other Link Posts	5	4
% of Link Posts	8%	21%
Reactions	241	132
Comments	63	59
Shares	64	48
Engagement	368	239
Avg. reactions PP	48.2	33
Avg. comments PP	12.6	14.75

Avg. Shares PP	12.8	12
Avg. Engagement PP	73.6	59.75
Photo Posts	49	
% of Total Posts	29%	
Reactions	4572	
Comments	923	
Shares	128	
Engagement	5623	
Avg. reactions PP	93.31	
Avg. comments PP	18.84	
Avg. Shares PP	2.61	
Avg. Engagement PP	114.76	
Status Posts	49	9
% of Total Posts	29%	31%
Reactions	10918	1136
Comments	2487	361
Shares	462	38
Engagement	13867	1535
Avg. reactions PP	222.82	126.22
Avg. comments PP	50.76	40.11
Avg. Shares PP	9.43	4.22
Avg. Engagement PP	283.00	170.56
video posts	8	1
% of Total Posts	5%	3%
Reactions	1103	31
Comments	237	4
Shares	191	16
Engagement	1531	51
Avg. reactions PP	137.88	31.00
Avg. comments PP	29.63	4.00
Avg. Shares PP	23.88	16.00
Avg. Engagement PP	191.38	51.00
Album posts	1	
% of Total Posts	1%	
Reactions	68	
Comments	7	
Shares	5	
Engagement	80	
Avg. reactions PP	68	
Avg. comments PP	7	
Avg. Shares PP	5	
Avg. Engagement PP	80	

2015 Referendum	Yes Equality
Link Posts	52
% of Total Posts	15.57%
Reactions	24609
Comments	1433
Shares	6957
Engagement	32999
Avg. reactions PP	473.25
Avg. comments PP	27.56
Avg. Shares PP	133.79
Avg. Engagement PP	634.60
Campaign Link Posts	6
% of link posts	12%
Reactions	1806
Comments	67
Shares	253
Engagement	2126
Avg. reactions PP	301.00
Avg. comments PP	11.17
Avg. Shares PP	354.33
Avg. Engagement PP	354.33
Facebook Link Posts	1
% of link posts	2%
Reactions	162
Comments	0
Shares	0
Engagement	162
Avg. reactions PP	162
Avg. comments PP	0
Avg. Shares PP	0
Avg. Engagement PP	162
Media Link Posts	18
% of link posts	35%
Reactions	13413
Comments	928
Shares	4377
Engagement	18718
Avg. reactions PP	745.17
Avg. comments PP	51.56
Avg. Shares PP	243.17
Avg. Engagement PP	1039.89

Other Link Posts	27
% of link posts	52%
Reactions	9228
Comments	438
Shares	2327
Engagement	11993
Avg. reactions PP	341.78
Avg. comments PP	16.22
Avg. Shares PP	86.19
Avg. Engagement PP	444.19
Photo Posts	214
% of Total Posts	64.07%
Reactions	211510
Comments	6396
Shares	44505
Engagement	261411
Avg. reactions PP	988.36
Avg. comments PP	29.89
Avg. Shares PP	207.97
Avg. Engagement PP	1221.55
Video Posts	59
% of Total Posts	17.66%
Reactions	31652
Comments	1301
Shares	11057
Engagement	44010
Avg. reactions PP	536.47
Avg. comments PP	22.05
Avg. Shares PP	187.41
Avg. Engagement PP	745.93
Facebook Video Posts	21
% of video posts	36%
Reactions	21476
Comments	951
Shares	8087
Engagement	30514
Avg. reactions PP	1022.67
Avg. comments PP	45.29
Avg. Shares PP	385.10
Avg. Engagement PP	1453.05
Other video posts	38
% of video posts	64%

Reactions	10176
Comments	350
Shares	2970
Engagement	13496
Avg. reactions PP	267.79
Avg. comments PP	9.21
Avg. Shares PP	78.16
Avg. Engagement PP	355.16
Status Posts	9
% of Total Posts	2.69%
Reactions	2741
Comments	155
Shares	228
Engagement	3124
Avg. reactions PP	304.56
Avg. comments PP	17.22
Avg. Shares PP	25.33
Avg. Engagement PP	347.11

2016 Major Parties	Fine Gael	Fianna Fail	Labour Party	Sinn Fein
Link Posts	5	2	65	
% of Total Posts	5%	2%	36.52%	
Reactions	699	434	1140	
Comments	399	99	120	
Shares	143	96	252	
Engagement	1241	629	1512	
Avg. reactions PP	139.80	217.00	17.54	
Avg. comments PP	79.80	49.50	1.85	
Avg. Shares PP	28.60	48.00	3.88	
Avg. Engagement PP	248.20	314.50	23.26	

Party Link Posts			7.00	
% of link posts			11%	
Reactions			102	
Comments			8	
Shares			14	
Engagement			124	
Avg. reactions PP			14.57	
Avg. comments PP			1.14	
Avg. Shares PP			2.00	
Avg. Engagement PP			17.71	

Media Link Posts	4		37	

% of link posts	80%		57%	
Reactions	556		754	
Comments	342		81	
Shares	143		133	
Engagement	1041		968	
Avg. reactions PP	139.00		20.38	
Avg. comments PP	85.50		2.19	
Avg. Shares PP	35.75		3.59	
Avg. Engagement PP	260.25		26.16	

Facebook Link Posts	1			
% of link posts	20%			
Reactions	143			
Comments	57			
Shares	0			
Engagement	200			
Avg. reactions PP	143.00			
Avg. comments PP	57.00			
Avg. Shares PP	0.00			
Avg. Engagement PP	200.00			

Other Link Posts		2	21	
% of link posts		100%	32%	
Reactions		434	284	
Comments		99	31	
Shares		96	105	
Engagement		629	420	
Avg. reactions PP		217.00	13.52	
Avg. comments PP		49.50	1.48	
Avg. Shares PP		48.00	5.00	
Avg. Engagement PP		314.50	20.00	

Photo Posts	69	91	50	20
% of Total Posts	66%	75%	28.09%	29%
Reactions	16132	19867	3123	18072
Comments	8584	3467	386	1610
Shares	3216	4370	654	8323
Engagement	27932	27704	4163	28005
Avg. reactions PP	233.80	218.32	61.24	903.60
Avg. comments PP	124.41	38.10	7.57	80.50
Avg. Shares PP	46.61	48.02	12.82	416.15
Avg. Engagement PP	404.81	304.44	81.63	1400.25

Video Posts	30	3	36	48
% of Total Posts	29%	2%	20.22%	71%
Reactions	7547	157	865	57486
Comments	5447	31	137	5970
Shares	1975	31	290	39837
Engagement	14969	219	1292	103293
Avg. reactions PP	251.57	52.33	24.03	1197.63
Avg. comments PP	181.57	10.33	3.81	124.38
Avg. Shares PP	65.83	10.33	8.06	829.94
Avg. Engagement PP	498.97	73.00	35.89	2151.94

Facebook Video Posts	30	3	34.00	48
% of video posts	100%	100%	94%	100%
Reactions	7547	157	823	57486
Comments	5447	31	137	5970
Shares	1975	31	282	39837
Engagement	14969	219	1242	103293
Avg. reactions PP	251.57	52.33	24.21	1197.63
Avg. comments PP	181.57	10.33	4.03	124.38
Avg. Shares PP	65.83	10.33	8.29	829.94
Avg. Engagement PP	498.97	73.00	36.53	2151.94

Other video posts			2	
% of video posts			6%	
Reactions			42	
Comments			0	
Shares			8	
Engagement			50	
Avg. reactions PP			21.00	
Avg. comments PP			0.00	
Avg. Shares PP			4.00	
Avg. Engagement PP			25.00	

Status Posts		25	27	
% of Total Posts		21%	15.17%	
Reactions		8786	865	
Comments		2901	137	
Shares		2132	290	
Engagement		13819	1292	
Avg. reactions PP		351.44	24.03	
Avg. comments PP		116.04	3.81	
Avg. Shares PP		85.28	8.06	

Avg. Engagement PP		552.76	35.89			

2016 Minor Parties	Green Party	IA	AAA	PBP	SD	Renua
Link Posts	12	19	11	5	60	38
% of Total Posts	16%	54%	19%	11%	38%	37%
Reactions	835	1911	984	65	3059	877
Comments	65	259	93	1	180	542
Shares	125	307	131	14	658	161
Engagement	1025	2477	1208	80	3897	1580
Avg. reactions PP	69.58	100.58	89.45	13.00	50.98	23.08
Avg. comments PP	5.42	13.63	8.45	0.20	3.00	14.26
Avg. Shares PP	10.42	16.16	11.91	2.80	10.97	4.24
Avg. Engagement PP	85.42	130.37	109.82	16.00	64.95	41.58

Party Link Posts		2.00			2.00	5.00
% of link posts		11%			3%	13%
Reactions		1450.00			60.00	263.00
Comments		242			1	360
Shares		185.00			9.00	30.00
Engagement		1877			69	653
Avg. reactions PP		725.00			30.00	52.60
Avg. comments PP		121.00			0.50	72.00
Avg. Shares PP		92.50			4.50	6.00
Avg. Engagement PP		938.50			34.50	130.60

Media Link Posts	11	12	8	1	16	19
% of link posts	92%	63%	73%	20%	27%	50%
Reactions	829	409	925	35	791	467
Comments	65	13	88	1	85	111
Shares	125	111	131	6	222	82
Engagement	1019	533	1144	42	1098	660
Avg. reactions PP	75.36	34.08	115.63	35.00	49.44	24.58
Avg. comments PP	5.91	1.08	11.00	1.00	5.31	5.84
Avg. Shares PP	11.36	9.25	16.38	6.00	13.88	4.32
Avg. Engagement PP	92.64	44.42	143.00	42.00	68.63	34.74

Facebook Link Posts		2	3		2	
% of link posts		11%	27%		3%	
Reactions		8	59		61	
Comments		2	5		0	
Shares		0	0		0	
Engagement		10	64		61	
Avg. reactions PP		4.00	19.67		30.50	

Avg. comments PP		1.00	1.67		0.00	
Avg. Shares PP		0.00	0.00		0.00	
Avg. Engagement PP		5.00	21.33		30.50	

Other Link Posts	1	3		4	40	14
% of link posts	8%	16%		80%	67%	37%
Reactions	6	44		30	2147	147
Comments	0	2		0	94	71
Shares	0	11		8	428	49
Engagement	6	57		38	2669	267
Avg. reactions PP	6.00	14.67		7.50	53.68	10.50
Avg. comments PP	0.00	0.67		0.00	2.35	5.07
Avg. Shares PP	0.00	3.67		2.00	10.70	3.50
Avg. Engagement PP	6.00	19.00		9.50	66.73	19.07

Photo Posts	36	9	27	34	33	46
% of Total Posts	49%	26%	47%	72%	21%	45%
Reactions	2758	205	3166	1659	4298	665
Comments	275	7	184	124	512	235
Shares	729	42	1037	2003	889	247
Engagement	3762	254	4387	3786	5699	1147
Avg. reactions PP	76.61	22.78	117.26	48.79	130.24	14.46
Avg. comments PP	7.64	0.78	6.81	3.65	15.52	5.11
Avg. Shares PP	20.25	4.67	38.41	58.91	26.94	5.37
Avg. Engagement PP	104.50	28.22	162.48	111.35	172.70	24.93

Video Posts	22	4	12	7	27	6
% of Total Posts	#REF!	21%	21%	15%	17%	6%
Reactions	1255	25	1480	363	1677	41
Comments	208	1	157	15	117	5
Shares	378	2	1691	439	701	20
Engagement	1841	28	3328	817	2495	66
Avg. reactions PP	57.05	6.25	123.33	51.86	62.11	6.83
Avg. comments PP	9.45	0.25	13.08	2.14	4.33	0.83
Avg. Shares PP	17.18	0.50	140.92	62.71	25.96	3.33
Avg. Engagement PP	83.68	7.00	277.33	116.71	92.41	11.00

Facebook Video Posts	21.00	3.00	10.00	6.00	25.00	1.00
% of video posts	95%	75%	83%	86%	93%	17%
Reactions	1211.00	19.00	1342	356.00	1602.00	7.00
Comments	198	1	143	15	106	1
Shares	354.00	0.00	1652	437.00	684.00	0.00

Engagement	1768	20	3137	808	2392	8
Avg. reactions PP	57.67	6.33	134.20	59.33	64.08	7.00
Avg. comments PP	9.43	0.33	14.30	2.50	4.24	1.00
Avg. Shares PP	16.86	0.00	165.20	72.83	27.36	0.00
Avg. Engagement PP	84.19	6.67	313.70	134.67	95.68	8.00

Other video posts	1	1	2	1	2	5
% of video posts	5%	25%	17%	14%	7%	83%
Reactions	44	6	138	7	75	34
Comments	10	0	14	0	11	4
Shares	24	2	39	2	17	20
Engagement	78	8	191	9	103	58
Avg. reactions PP	44.00	6.00	69.00	7.00	37.50	6.80
Avg. comments PP	10.00	0.00	7.00	0.00	5.50	0.80
Avg. Shares PP	24.00	2.00	19.50	2.00	8.50	4.00
Avg. Engagement PP	78.00	8.00	95.50	9.00	51.50	11.60

Status Posts	3	3	7	1	35	12
% of Total Posts	4%	9%	12%	2%	22%	12%
Reactions	136	31	239	56	1457	187
Comments	7	2	19	2	68	23
Shares	85	14	99	17	516	47
Engagement	228	47	357	75	2041	257
Avg. reactions PP	45.33	10.33	34.14	56.00	41.63	15.58
Avg. comments PP	2.33	0.67	2.71	2.00	1.94	1.92
Avg. Shares PP	28.33	4.67	14.14	17.00	14.74	3.92
Avg. Engagement PP	76.00	15.67	51.00	75.00	58.31	21.42

Music Posts					1	
% of Total Posts					1%	
Reactions					87	
Comments					5	
Shares					33	
Engagement					125	
Avg. reactions PP					87	
Avg. comments PP					5	
Avg. Shares PP					33	
Avg. Engagement PP					125	

2016 Fringe Parties	WUAG	DDI	WP	CPI	Peoples Convention	Fis Nua	IDP	Catholic Democrats
Link Posts	13	21	36	6	7	13	1	
% of Total Posts	28%	33%	64%	16%	54%	54%	33%	

Reactions	55	696	485	93	33	14	1	
Comments	0	131	3	11	4	8	0	
Shares	24	331	140	28	7	3	0	
Engagement	79	1158	628	132	44	25	1	
Avg. reactions PP	4.23	33.14	13.47	15.50	4.71	1.08	1.00	
Avg. comments PP	0.00	6.24	0.08	1.83	0.57	0.62	0.00	
Avg. Shares PP	1.85	15.76	3.89	4.67	1.00	0.23	0.00	
Avg. Engagement PP	6.08	55.14	17.44	22.00	6.29	1.92	1.00	

Party Link Posts		2.00	29.00					
% of link posts		10%	81%					
Reactions		64.00	402.00					
Comments		8	1					
Shares		87.00	115.00					
Engagement		159	518					
Avg. reactions PP		32.00	13.86					
Avg. comments PP		4.00	0.03					
Avg. Shares PP		43.50	3.97					
Avg. Engagement PP		79.50	17.86					

Media Link Posts	3	12	5	5		11		
% of link posts	23%	57%	14%	83%		85%		
Reactions	10	536	61	76		13		
Comments	0	76	1	8		8		
Shares	18	190	13	26		3		
Engagement	28	802	75	110		24		
Avg. reactions PP	3.33	44.67	12.20	15.20		1.18		
Avg. comments PP	0.00	6.33	0.20	1.60		0.73		
Avg. Shares PP	6.00	15.83	2.60	5.20		0.27		
Avg. Engagement PP	9.33	66.83	15.00	22.00		2.18		

Facebook Link Posts		1						
% of link posts		5%						
Reactions		9						
Comments		0						
Shares		0						
Engagement		9						
Avg. reactions PP		9.00						
Avg. comments PP		0.00						
Avg. Shares PP		0.00						
Avg. Engagement PP		9.00						

Other Link Posts	10	6	2	1	7	2	1	

% of link posts	77%	29%	6%	17%	100%	15%	100%	
Reactions	45	87	22	17	33	1	1	
Comments	0	47	1	3	4	0	0	
Shares	6	54	12	2	7	0	0	
Engagement	51	188	35	22	44	1	1	
Avg. reactions PP	4.50	14.50	11.00	17.00	4.71	0.50	1.00	
Avg. comments PP	0.00	7.83	0.50	3.00	0.57	0.00	0.00	
Avg. Shares PP	0.60	9.00	6.00	2.00	1.00	0.00	0.00	
Avg. Engagement PP	5.10	31.33	17.50	22.00	6.29	0.50	1.00	

Photo Posts	22	32	12	25	2	3	2	
% of Total Posts	48%	51%	21%	66%	15%	13%	67%	
Reactions	72	3249	176	581	10	11	17	
Comments	3	377	3	24	0	0	1	
Shares	18	1326	22	142	0	0	4	
Engagement	93	4952	201	747	10	11	22	
Avg. reactions PP	3.27	101.53	14.67	23.24	5.00	3.67	8.50	
Avg. comments PP	0.14	11.78	0.25	0.96	0.00	0.00	0.50	
Avg. Shares PP	0.82	41.44	1.83	5.68	0.00	0.00	2.00	
Avg. Engagement PP	4.23	154.75	16.75	29.88	5.00	3.67	11.00	

Video Posts	2	7	8	4	4	7		
% of Total Posts	4%	11%	14%	11%	31%	29%		
Reactions	8	754	140	78	83	6		
Comments	0	100	0	3	8	0		
Shares	0	118	107	30	106	2		
Engagement	8	972	247	111	197	8		
Avg. reactions PP	4.00	107.71	17.50	19.50	20.75	0.86		
Avg. comments PP	0.00	14.29	0.00	0.75	2.00	0.00		
Avg. Shares PP	0.00	16.86	13.38	7.50	26.50	0.29		
Avg. Engagement PP	4.00	138.86	30.88	27.75	49.25	1.14		

Facebook Video Posts		3.00	2.00			4.00		
% of video posts		43%	25%			57%		
Reactions		520.00	48.00			6.00		
Comments		86	0			0		
Shares		0.00	24.00			0.00		
Engagement		606	72			6		
Avg. reactions PP		173.33	24.00			1.50		
Avg. comments PP		28.67	0.00			0.00		
Avg. Shares PP		0.00	12.00			0.00		
Avg. Engagement PP		202.00	36.00			1.50		

Other video posts		4	6	4		3		
% of video posts		57%	75%	100%		43%		
Reactions		234	92	78		0		
Comments		14	0	3		0		
Shares		118	83	30		2		
Engagement		366	175	111		2		
Avg. reactions PP		58.50	15.33	19.50		0.00		
Avg. comments PP		3.50	0.00	0.75		0.00		
Avg. Shares PP		29.50	13.83	7.50		0.67		
Avg. Engagement PP		91.50	29.17	27.75		0.67		

Status Posts	9	3		3		1		6
% of Total Posts	20%	5%		8%		4%		100%
Reactions	29	213		22		0		4
Comments	1	48		6		1		2
Shares	37	47		2		1		1
Engagement	67	308		30		2		7
Avg. reactions PP	3.22	71.00		7.33		0.00		0.67
Avg. comments PP	0.11	16.00		2.00		1.00		0.33
Avg. Shares PP	4.11	15.67		0.67		1.00		0.17
Avg. Engagement PP	7.44	102.67		10.00		2.00		1.17

2018 Repeal Referendum	Together for Yes	Love Both
Link Posts	74	93
% of Total Posts	32%	32%
Reactions	60348	11284
Comments	7946	1139
Shares	13288	2437
Engagement	81582	14860
Avg. reactions PP	815.51	121.33
Avg. comments PP	107.38	12.25
Avg. Shares PP	179.57	26.20
Avg. Engagement PP	1102.46	159.78
Campaign Link Posts		59
% of link posts		63%
Reactions		5269
Comments		464
Shares		1235
Engagement		6968
Avg. reactions PP		89.31
Avg. comments PP		7.86
Avg. Shares PP		20.93

Avg. Engagement PP		118.10
Media Link Posts	74	15
% of link posts	100%	16%
Reactions	60348	4250
Comments	7946	446
Shares	13288	873
Engagement	81582	5569
Avg. reactions PP	815.51	283.33
Avg. comments PP	107.38	29.73
Avg. Shares PP	179.57	58.20
Avg. Engagement PP	1102.46	371.27
Other Link Posts		19
% of link posts		20%
Reactions		1765
Comments		229
Shares		329
Engagement		2323
Avg. reactions PP		92.89
Avg. comments PP		12.05
Avg. Shares PP		17.32
Avg. Engagement PP		122.26
Photo Posts	59	101
% of Total Posts	25%	35%
Reactions	34591	11606
Comments	1888	1014
Shares	8992	2773
Engagement	45471	15393
Avg. reactions PP	586.29	114.91
Avg. comments PP	32.00	10.04
Avg. Shares PP	152.41	27.46
Avg. Engagement PP	770.69	152.41
Video posts	98	93
% of Total Posts	42%	32%
Reactions	122976	19092
Comments	11635	3812
Shares	65791	8663
Engagement	200402	31567
Avg. reactions PP	1254.86	205.29
Avg. comments PP	118.72	40.99
Avg. Shares PP	671.34	93.15
Avg. Engagement PP	2044.92	339.43

Facebook video posts	98	90
% of video posts	100%	97%
Reactions	122976	18966
Comments	11635	3800
Shares	65791	8650
Engagement	200402	31416
Avg. reactions PP	1254.86	210.73
Avg. comments PP	118.72	42.22
Avg. Shares PP	671.34	96.11
Avg. Engagement PP	2044.92	349.07
Other domain video posts		3
% of video posts		3%
Reactions		126
Comments		12
Shares		13
Engagement		151
Avg. reactions PP		42.00
Avg. comments PP		4.00
Avg. Shares PP		4.33
Avg. Engagement PP		50.33
Status Posts	2	2
% of Total Posts	1%	1%
Reactions	144	60
Comments	7	7
Shares	19	16
Engagement	170	83
Avg. reactions PP	72.00	30.00
Avg. comments PP	3.50	3.50
Avg. Shares PP	9.50	8.00
Avg. Engagement PP	85.00	41.50

2018 Presidential Election	Michael D. Higgins	Sean Gallagher	Joan Freeman	Gavin Duffy	Liadh Ni Riada
Link Posts	10	8	58	3	
% of Total Posts	9%	7%	25%	7%	
Reactions	1594	669	2708	63	
Comments	218	116	334	10	
Shares	488	119	432	3	
Engagement	2300	904	3474	76	
Avg. reactions PP	159.40	83.63	46.69	21.00	
Avg. comments PP	21.80	14.50	5.76	3.33	
Avg. Shares PP	48.80	14.88	7.45	25.33	
Avg. Engagement PP	230.00	113.00	59.90	7.00	

Candidate Link Posts	1		36		
% of link posts	10%		62%		
Reactions	25		684		
Comments	1		20		
Shares	12		113		
Engagement	38		817		
Avg. reactions PP	25.00		19.00		
Avg. comments PP	1.00		0.56		
Avg. Shares PP	12.00		3.14		
Avg. Engagement PP	38.00		22.69		
Media Link Posts	9	2	20	3	
% of link posts	90%	25%	34%	100%	
Reactions	1569	167	1950	63	
Comments	217	25	314	10	
Shares	476	23	309	3	
Engagement	2262	215	2573	76	
Avg. reactions PP	174.33	83.50	97.50	21.00	
Avg. comments PP	24.11	12.50	15.70	3.33	
Avg. Shares PP	52.89	11.50	15.45	1.00	
Avg. Engagement PP	251.33	107.50	128.65	25.33	
Other Link Posts		6	2		
% of link posts		75%	3%		
Reactions		502	74		
Comments		91	0		
Shares		96	10		
Engagement		689	84		
Avg. reactions PP		83.67	37.00		
Avg. comments PP		15.17	0.00		
Avg. Shares PP		16.00	5.00		
Avg. Engagement PP		114.83	42.00		
Photo Posts	54	63	79	15	6
% of Total Posts	47%	53%	34%	33%	10%
Reactions	6913	11369	6505	230	2193
Comments	833	1367	456	8	128
Shares	1487	1006	794	46	399
Engagement	9233	13742	7755	284	2720
Avg. reactions PP	128.02	180.46	82.34	15.33	365.50
Avg. comments PP	15.43	21.70	5.77	0.53	21.33
Avg. Shares PP	27.54	15.97	10.05	3.07	66.50
Avg. Engagement PP	170.98	218.13	98.16	18.93	453.33
Video Posts	51	35	88	27	52
% of Total Posts	44%	29%	38%	60%	90%

Reactions	11862	6668	9129	603	8488
Comments	2535	1858	1187	90	539
Shares	5961	993	1472	171	4831
Engagement	20358	9519	11788	864	13858
Avg. reactions PP	232.59	190.51	103.74	22.33	163.23
Avg. comments PP	49.71	53.09	13.49	3.33	10.37
Avg. Shares PP	116.88	28.37	16.73	6.33	92.90
Avg. Engagement PP	399.18	271.97	133.95	32.00	266.50
Facebook Video Posts	51	34	87	27	52
% of video posts	100%	97%	99%	100%	100%
Reactions	11862	5699	9006	603	8488
Comments	2535	1624	1171	90	539
Shares	5961	854	1451	171	4831
Engagement	20358	8177	11628	864	13858
Avg. reactions PP	232.59	167.62	103.52	22.33	163.23
Avg. comments PP	49.71	47.76	13.46	3.33	10.37
Avg. Shares PP	116.88	25.12	16.68	6.33	92.90
Avg. Engagement PP	399.18	240.50	133.66	32.00	266.50
Other video posts		1	1		
% of video posts		3%	1%		
Reactions		969	123		
Comments		234	16		
Shares		139	21		
Engagement		1342	160		
Avg. reactions PP		969.00	123.00		
Avg. comments PP		234.00	16.00		
Avg. Shares PP		139.00	21.00		
Avg. Engagement PP		1342.00	160.00		
Status Posts		14	8		
% of Total Posts		12%	3%		
Reactions		2447	263		
Comments		799	10		
Shares		262	16		
Engagement		3508.00	289.00		
Avg. reactions PP		174.79	32.88		
Avg. comments PP		57.07	1.25		
Avg. Shares PP		18.71	2.00		
Avg. Engagement PP		250.57	36.13		