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Internet Social Capital and Its Mitigation Effect on Collective Action Problems in Active Political Participation

Sayed, Karim El

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Internet Social Capital and Its Mitigation Effect on Collective Action Problems in Active Political Participation

Supervisor: Rutger Hagen

Second Reader: Dr. N.R.J.B. Blarel

Karim El Sayed (s2072769)

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Abstract

The internet, for us individually, has created easier workflows, faster communication, at-home entertainment, and access to virtually infinite knowledge. But what about the collective sphere? The aim of this thesis is to explore the effects of the internet on collective action problems relating to active political participation by creating a causal mechanism connecting the variables. With the goal of answering this inquiry, this thesis conducts a theory testing process tracing study, incorporating both literature and case analysis into the examination. Using a modernized version of social capital theory, the analysis results highlight that the internet serves both as a creator and connector of community, while also supplementing traditional community variables such as trust and reciprocity. The selected case of Egypt before and during the Arab Spring uprisings proves the hypotheses posed in the thesis and confirms the internet's facilitation role as community, showing that while not directly responsible for the revolutionary events, the internet acted as a strong catalyst for the formation of active political participation by overcoming traditional collective action constraints.

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Introduction

In the last two decades, modern societies have seen a major shift in the way they work, communicate, and entertain themselves. At the core of this transformation lays a single technology: the internet. Active daily internet use in the last ten years alone has seen a threefold increase, going from a worldwide average of 74 minutes spent online, to 192 minutes (Johnson, 2021). Services like Facebook, Telegram, WeChat or WhatsApp, have dominated the traditional communication services and are actively shaping the way we behave and interact (Statista, 2016). Especially in the last two years, modern civilizations have not only embraced the internet for its capabilities but have become dependent on it. Work is done through online cloud workspaces, communication through social media and entertainment is accessible through providers such as Netflix or YouTube. To a considerable extent, the internet is replacing our traditional narrative of 'social sphere'. With the internet affecting and dictating our everyday life, the question arises how much internet has shaped our collective life; how much has it shaped our politics and political systems?

As early as the 2000s, authors such as Alvarez and Nagler (2001) and Delli Carpini (2000) contemplated the effects of the online environment on political participation. Since then, multiple studies have shown correlations between the use of the internet and social media in the younger generation and an increase in political participation (Bakker & Vreese, 2011; Polat, 2005; Weare, 2002). More influential political events such as revolutions and mass protests are also increasingly relying on the internet as a medium for collective action and political organization. When looking at real-world events of majority uprisings against hybrid and authoritarian governments, the internet and social media play a key role in their facilitation (Gotlieb, 2002; Kabanov & Romanov, 2017). The Egyptian '25th January' revolution, the Arab Spring rebellions, the Hong Kong protests, Alexey Navalny's anti-Putin campaign, and most recently the Belarusian protests, all relied heavily on the internet as a carrier device (Arif, 2016; Walker, 2020). With the growing reliance on the internet for political participation, such as depicted by these examples, another question arises: Why has the internet taken such a large role in political participation?

In line with this question, the focus of this thesis is on the mechanism that makes the internet an effective variable in facilitating political participation. Specifically, I propose an adaptation of Robert Putnam's (2000) social capital theory to fit more modern terms of 'community' and the drivers thereof, and connect it to both bridging and bonding social capital, concepts which themselves have proven effective in explaining political participation

(Glennan, 1996; Häuberer, 2011; 2000). The primary objective of this thesis is to first develop the proposed theory based on literature, and then test the theory, conducting an in-depth case analysis on the revolutionary events of the Arab Spring, specifically Egypt, in 2010 and 2011. This case is chosen because of its historical importance both in the political sphere, and the civic engagement sphere by new online means, notably being named the 'internet revolution' (Youniss, Barber, & Billen, 2013). The aim here is to provide sufficient evidence for the confirmation of the theoretical adaptation, which in turn would fill a significant gap in literature regarding the mechanism connecting the internet and active political participation. The findings, if correct, would add to the literature, and potentially give a better understanding why the internet has occupied such an influential role in our daily lives.

Considering these factors, the guiding question is: *What is the role of the internet in the facilitation of active political participation?*

The structure of the thesis proceeds the following. First, the literature review will give a brief overview into the state of the art in the academic debate that surround the topics and concepts used. Along with the current state of academia, this section will also highlight the gap in literature justifying the thesis topic selection. Next, the theoretical framework will describe the development of the main theory used here along with its theoretical assumptions, before concluding with three hypotheses to be tested. This is followed by the methodology, where the research design, analysis structure and data selection are presented along with the selection and justification of the case to be examined. The largest section in this thesis will consist of the qualitative analysis, where the previous hypotheses are tested in a stepwise approach on the case of Egypt in the Arab Spring, giving an understanding of the processes at play in my theoretical mechanism. Lastly, the conclusion will sum up how the assumptions and hypotheses held up in testing and offer concluding remarks such as the implications and constraints.

Literature Review

Having introduced the thesis topics and goals, the review of the literature will offer a deeper understanding of the state-of-the art in academia and highlight the gap in literature, justifying the guiding question and objectives. I structure the review in three parts, first offering insights into the relation between social capital theories and political participation, the internet and political participation and then moving on to the role of (mass) media and democratization.

Social Capital, Political Participation and Collective Action

The study of political participation dates back close to the inception of universal suffrage, and scholars of the discipline, such as Parry, Moyser and Day (1992), even argue the political participation field to be inseparable from democracy itself. While initially the term referred to voting or party memberships for example, the conception of political participation, and thus its research, has changed drastically (Deth, 2001). Political participation denotes a general drive for citizens to engage in communal, and thus political affairs, such as attentiveness to political issues, voluntary work, and electoral participation. Recent definitions break up the concept to highlight the distinctions between diverse types of participation, taking into account the collective nature of each type and its severity (Deth, 2001). Most notably, Ekman and Amna (2012) split the concept into 'latent political participation', also called civil participation, and 'manifest political participation, described as active or extra-parliamentary participation. While the former describes formal participation such as voting, personal interests, community engagement or party memberships, the latter split of the concept describes legal and illegal activities relating to social movements and engagement, activism, protests, and demonstrations (Ekman & Amna, 2012). With the evolution of the conception came the evolution of the research behind the factors motivating political participation. As early as 1948, researchers have been trying to find the factors influencing political citizen behavior, initially believed only to be dependent on personal sentiment and economic factors (Lazarsfeld, Berelson, & Gaudet, 1948). And while many of the initial predictors for political participation still partake in the research, such as personal sentiment, time, and economic factors, the inception of communal theories, and later the addition of the overarching social capital theories, changed the landscape of participation studies (Deth, 2001).

Social capital theory heavily relies on networks of community and social interaction as a driver for political participation and collective action. The term social capital was initially proposed by Bourdieu (1986) and describes the formation of social connections in a 'capital' form. Throughout the late 21st century, more and more adaptations of social capital and community theories were developed, incorporating different demographics and interaction variables to predict political behavior (Brady, Verba, & Schlozman, 1995; Huckfeldt, 1979; La Due Lake & Huckfeldt, 1998). Only with Putnam's (2000) adaptation of the term did social capital become a process of interactions intended to overcome issues of collective action and help in the formation and maintenance of citizen engagement and political affairs (Häuberer, 2011; Putnam, 2000). Looking at the causal mechanism of social capital as described by

Putnam, the initial driver for the concept are networks of civic engagement, meaning the formation of groups like associations, neighbourhood meetups, political parties, etc. Resulting from this, civic engagement leads to norms of reciprocity between people and increased generalized trust, both factors which encourage common action.

Exclusive to Putnam's concept of social capital is the differentiation of social capital outcomes into two distinct categories. Bonding social capital, implies *within* community civic engagement, and bridging social capital implies *between* community engagement (Häuberer, 2011). This distinction is important when considering the active nature of political participation this thesis is built on, where collective action is a key variable in the self-organizing nature of manifest political participation, requiring both strong inner- and inter-community ties (Ekman & Amna, 2012; Ostrom, 2010). The social capital mechanism thus increases the likelihood of collective action by overcoming the traditional constraints of collective action problems, which are knowledge, trust, and reciprocity, enabling it to be used for the explanation of conventional and non-conventional forms of civic political engagement. Specifically non-conventional participation forms, like political unrest, are co-dependent on collective action, make social capital theory an important, potentially still applicable tool for the analysis of countries where 'active' political participation is more prevalent than its conventional forms (Brady, Verba, & Schlozman, 1995; Deth, 2001; Ekman & Amna, 2012; Putnam, 2000).

Here however, is where the gap in literature presents itself. Even though social capital theories have been used for the prediction of political participation and citizen engagement, there is little research on the potential applicability of the theory in political unrest. Even when social capital theories have been applied in emerging democracies and crisis situations, the theory was only used for the explanations of the causes of citizen dissatisfaction or political instability, rather than for the explanation of overcoming collective action problems during these events (Haykal & Hariri, 2017; Knack, 2002).

The Internet and Political Participation

Intrinsically, political participation in the digital age has not changed much. Democratic systems and principles of voter choice still operate the same as they did before the invention of internet communication technologies. However, the internet has provided the participants of the political arena with new means to gather knowledge, share opinions and communicate.

Utilizing outcomes produced by the internet like more knowledge, a wider opinion base, more direct communication and more independent news, scholars such as Polat (2005)

have attempted to analyze the effects of the internet more directly on political participation. It was found that through the internet, political participation rises, but not only the traditional sense of voting participation. Activism and information sharing have gained significant impact as partaking values, despite their relatively low value as traditional predictor factors (Polat, 2005; Christensen, 2011). In studies conducted in the United States, when accounting for all traditional variables including wealth, education, and party affiliation, in e.g., the 2000s elections, there still seemed to be significant variation in participatory numbers that could not be explained (Tolbert & Mcneal, 2003). These variations can, however, be explained when looking at the distribution of internet access and comparing them to participation patterns. A similar study was conducted more recently in Germany and finds comparable results, showing that participation is higher in municipalities and communities with access to broadband internet compared to communities without it (Czernich, 2011; Campante, Durante, & Sobbrio, 2013).

The literature thus seems to agree that the internet fosters traditional political participation in its various forms and has significant effects on voting patterns (McClurg, 2003). A surprising phenomenon that was initially not considered due to the lack of significant political participation changes after the broad accessibility of radio or television in already established democracies (Tolbert & Mcneal, 2003). And while the research has found some indications of the internet fostering more active forms of political participation, the mechanisms behind this intervention are still limited in the literature, even though a large part of the world's regimes operate with general restrictions towards traditional political participation such as voting (Geddes, 1999). Articles examining the internet and grassroot activism for example, typically find the effects to be present, but merely pertaining to the online space, and thus accredit the increase to the group-formation capabilities of the internet without considering the real-world implications of such effects (Campante, Durante, & Sobbrio, 2013; Christensen, 2011; Shirky, 2011). Articles relating to the real-world effects of the internet, conversely, focus on formal types of political participation such as voting. Considering an article by Polat (2005), which most closely examines the explanatory effects of the internet on political participation, the extent of research is, again, merely focused on formal participation such as voting, even though the rationale applied in the article, namely conceptualizing the internet as 'information', 'communication' and 'public sphere', could account for active forms of political participation. It is thus the mixture of active political participation and internet-political participation that forms the gap this thesis seeks to close.

Media and Collective Action in the Democratization Process

Having discussed the effects of the internet on political participation, a potential hypothetical connection can be drawn between the internet and traditional media in the democratization process. While traditional news media did not affect political participation significantly in established democracies, that is not the case for emerging democracies, where the effects of more widespread, potentially independent media were more apparent (Ekman, 2009). Traditionally, the role of the media in state affairs, specifically in authoritarian regimes, has been a large one. Mass mobilizations, propaganda, and other measures to keep the population at bay have been in the primary repertoire of any dictator for decades (Effing, Van Hillegersberg, & Huibers, 2011). With the introduction of social media and the internet, however, government control over information has been more limited (Effing, Van Hillegersberg, & Huibers, 2011). Even in restrictive states such as China, which employ a censored, national internet, it still offers citizens communication media and online communities, just at a smaller scale, and an increasing number of ways to circumvent the censorship have been developed (Emerging Technology from the arXiv, 2012).

The idea behind the potential effects of the internet on the democratization process is connected to the previous section. The trend in political participation research has pointed towards a rise in 'new' or 'alternative' methods of citizen engagement, such as activism and information sharing communities (Christensen, 2011). These newly emerged forms of engagement have a strong connection to the principles of radical, citizen driven democratization processes, offering the people in emerging democracies a large opportunity to connect and disrupt (Chenoweth, D'Orazio, & Wright, 2014; Ekman, 2009). While the literature on the effects of the online media on democratic transitions started recently, and is thus under-developed, the consensus among the most notable articles seems to be close to the agreement among the literature on political participation. The digital era has offered people the opportunity to engage with one another and form coalitions to engage with government, whether in a peaceful manner or in violent uprisings (White, 2008).

This thesis aims to cover three interconnected gaps in academia. The first gap is related to the 'shifting' effects of the internet towards political participation. While most studies on the internet and political participation refer to a change in electoral behavior, most of them also mention the shift towards more activism focused engagement (Anduiza, Cantijoch, & Gallego, 2009; Campante, Durante, & Sobbrio, 2013). However, the mere mentioning of this shift is typically the extent of focus given to it. Further, while political participation has increased in

established democracies thanks to the internet, the study of emerging democracies and the role of internet there is under-researched. This thesis seeks to help close this gap. Lastly, I aim to shed light on the 'digitalization' of political participation. While scholars have established the effects of the internet on participation, it is usually mentioned alongside the traditional indicators such as interest, time, etc. (Czernich, 2011; Kabanov & Romanov, 2017). The literature has made some attempts to examine and identify the underlying factors that lead to the influence of the internet itself, but no coherent theories have found consensus among scholars yet. Filling these missing links in literature can potentially help further research in establishing more concrete theories and criteria regarding the internet and politics.

Theoretical Framework

Having addressed the relevant literature regarding social capital, the internet and collective action regarding emerging democracies, the theoretical framework combines these topics into a coherent theoretical foundation on which the thesis is built. After outlining the proposed theory, this section will develop hypotheses and assumptions to be tested in the analysis.

An Update to Social Capital

The concept of social capital, as outlined and contextualized by Putnam (2000), has had significant effects on the way academics approach political participation studies (Häuberer, 2011). Research has repeatedly shown how community theories, such as the one based in the context of social capital, can act as predictor variables for political outcomes and collective action problems; and little has changed regarding the base values the theory is built on (Ekman & Amna, 2012; Putnam, 1966; 2000). Delving deeper into the conceptualizations of the predictor variables, however, the digital age has led to certain concepts, like social networks, to now have double meanings. The main theoretical foundation of this thesis is that the new online meanings of certain, traditionally communal terms, have the same outcome effect on the manifest political participation variable.

The fundamental assumption that sets apart Putnam's social theory from earlier ones such as Bourdieu (1986) or Coleman (1988) is the definition of social capital. As previously conceptualized, Putnam differentiates between two outcomes of social capital, bridging and bonding social capital, as well as relying on three foundations as reinforcing variables to the creation of the social capital structure (Putnam, 2000). Examining these, bonding social capital is based on the creation of new communities and their reinforcement, as well as encouraging

civic engagement within communities. Bridging social capital is based on the creation of stronger inter-community ties and the subsequent exchange of knowledge (Häuberer, 2011; Putnam, 2000). The causal mechanism of social capital itself relies on three main foundations in its creation, namely generalized trust, norms of reciprocity and civic engagement (Häuberer, 2011; Putnam, 2000). When operationalizing these concepts to fit 'modern' interpretations, the similarities become apparent.

The theoretical digital adaptation and operationalization of the two social capital forms means the internet has to both substitute and contribute to traditional community, as well as encourage existing communities to actively participate in communal affairs and engage in knowledge sharing between communities. Doing so, however, the term 'internet' itself needs clarification. When merely considering the technical definition of the internet as a 'system of interconnected computers in constant communication', the notion of the internet creating communities or political participation seems unlikely (Abbate, 2017). Instead, the digital adaptation of social capital requires the internet to be conceptualized by its results, rather than its technology. In line with Abbate's (2017) concept, the internet is seen as both 'content' and 'social space'. By highlighting the user-driven nature of the internet, the internet can serve as a carrier of knowledge, communication, services, and interaction rather than just the data and packets that make up the content on the internet (Abbate, 2017; Polat, 2005).

Looking at the relative anonymity provided by the internet for otherwise influential factors like social class, region of living or religious segregation, creation of community can be substituted by e.g., the formation of online groups on social media, group discussion on forums and opinion exchange on social media both within 'communities' and between them. When looking at the reinforcing mechanisms to social capital, its foundations are also easily translatable into the online environment. User-based trust and reciprocity by means of 'liking' or 'sharing' content generated by others, or joining like-minded online communities and groups are the simplest operationalization of these concepts. More complicated realizations of trust and reciprocity are centered around effects such as the echo chamber. This phenomenon relates to the algorithms used by social media companies with the aim of providing user content specifically catered to their interests and views, which creates a one-sided perspective of issues like politics for example (Garimella, Morales, Gionis, & Mathioudakis, 2018). The third foundation, networks of civic engagement, is the most important pillar of communal social networks and the most notable online adaptation. Traditionally, community and networks of civic engagement are created through interactions and interdependence of various actors

through physical community locations such as neighbourhood meetups, town-halls, religious communities, or associations (Häuberer, 2011; La Due Lake & Huckfeldt, 1998; Putnam, 2000). Modern communication technologies, such as online social media, can reproduce the 'traditional' social networks in every regard, as is their intent (Leonardi, Huysman, & Steinfield, 2013; Norris, 2002). Further, specifically the engagement resulting from these social networks is not only transferrable to the online environment, but requires significantly less effort, leading to both addition and substitution of the variable by the internet (Anduiza, Cantijoch, & Gallego, 2009). Calls for action and self-organization of masses to engage in the political arena have all been made considerably more accessible and realizable through internet-based communication (Arif, 2016; Effing, Van Hillegersberg, & Huibers, 2011; Gotlieb, 2002; Julien, 2015).

Implications of Social Capital in the Digital Age

The adaptation of social capital offers, as noted above, a seamless transposition onto internet age concepts. Intrinsically, this does not mean that the holistic conception of social capital still plays a meaningful role in predicting or explaining patterns of political participation. When looking at theories of mass mobilization and political uprisings, however, the inherent factors that encourage mobilization are also vital to the functioning of social capital theories. Civic engagement specifically is a notable contributor to citizen mass mobilization, often aided by factors such as education (knowledge) or satisfaction with government (trust), variables that can be supplemented or created by internet use (Ekman, 2009; Ekman & Amna, 2012; Finkel, 2002). In experiments conducted by Finkel (2002), civic education programs led to a significant rise in politically motivated behavior and mobilization potential among the recipients of the education. Meta-analyses of democratization over the past two decades also indicate that factors that are nowadays associated with internet, such as forums for opinion exchanges and knowledge engagement, are important indicators for mobilization potential (Anduiza, Cantijoch, & Gallego, 2009; Geddes, 1999).

Considering the role of the internet in modern societies, the factors mentioned above have, at least partially, been replaced or supplemented by internet use. Creation of new communities, inter-community interaction and overarching knowledge pools are all responsible for the creation of social capital, as well as the development of mobilization potential or grassroot activism in societies. Thus, the overall connectedness between the factors forming the basis of both concepts would suggest the replaceability of those concepts with the modern, internet adaptations. To test these assumptions of adaptability, this thesis makes

multiple hypotheses in line with the rationale above. Assessing these in the subsequent analysis, the confirmation of these would offer potential proof of the adaptability of internet concepts onto the social capital framework and explain the process behind the internet's effects on active political participation.

H1: The internet replaces traditional community in the creation of civic engagement by 1) moving physical community online, and 2) creating new community online (bonding social capital).

H2: The internet creates bridging social capital by increasing the knowledge pool and acting as a communication medium for collective action.

H3: The internet plays a role as a reinforcing factor in the causal model of social capital, based on the same principles as its social capital creation.

Research Design

The aims of this thesis, as presented so far, have been twofold. First, I seek to determine, on a theoretical level, whether a digital adaptation to the traditional baseline variables of social capital theory would be plausible. On the basis of this, the theoretical framework proposes a structured approach to 'internet social capital', as well as makes assumptions on how the theory would manifest itself in the selected case. Second, and more importantly, I aim to test the hypotheses made in the theoretical section based on a process tracing approach to determine the validity of assumptions. For this, I have selected the case of the Arab Spring, more explicitly, the case of Egypt before and during the revolutionary uprisings. In this section, the research design is outlined, explaining, and justifying the selected methodological approach, data collection methods and hypotheses testing strategies, as well as the justification for the case selection.

Research Design

Following Beach and Pedersen's (2013) approach to process tracing, this thesis conducts the theory-testing variant of the method with the intent of finding the causal inferences made by the theoretical assumptions in a test case. The selection of this method is due to its ability to identify causal mechanisms, defined as "a complex system, which produces an outcome by the interaction of a number of parts" (Glennan, 1996). As suggested in the theoretical framework, the presumed link between the internet as an independent variable, and active political participation as a dependent, or outcome variable, relies on the social capital

foundations, merely switching the baseline variables to an online environment. Having already hypothesized the outcomes of the digital social capital adaptation, the next step is to test these assumptions of adaptability on the test case and deducing whether the mechanism still produces the same outcomes. Suited for the analysis of theory-testing process tracing, the selection of a single case in this thesis provides an in-depth view of the applicability of the theory at hand (Beach & Pedersen, 2013; Bennett, 2008).

Case Selection

Assessing the internet's role in facilitating political participation, the case selected is the Arab Spring, specifically Egypt, before and during the events of the 2011 revolution. The Arab Spring, starting with the Tunisian Revolution, occurred in late 2010, largely taking place in 2011. This, from a historical perspective, is far enough into the 21st century to ensure the sufficient and widespread adaptation of the internet and mobile phones with internet access (Aouragh & Alexander, 2011). Further, apart from smaller demonstrations and internet-based mobilizations, such as the Seattle protests in 1999, the Arab Spring signifies the first major event in which internet tools, such as social media, were an active part in planning and execution of mass mobilization; sometimes adequately called the 'Internet revolution' or 'Facebook revolution' (Aouragh & Alexander, 2011; Luo, Zhang, & Marquis, 2016).

For the selection of Egypt specifically, the reasons lie in the adaptation of internet technologies in the country (Abdulla, 2005). Egypt, since the early inception of internet use for education, has been the leader in internet access, user-content creation, and online visibility in the Middle East. While in the mid to late 2010s, other countries such as the UAE and Saudi Arabia took over general internet accessibility numbers, Egypt still maintained its leading information and entertainment position (Lerner, 2010). Further, in terms of social media use, Egypt has, by large, maintained its leading position in Facebook and Twitter use (Freedom House, 2013; Richter, 2010). Considering these factors, if there are observable causal mechanism linking the internet and active political participation in emerging democracies, the case of Egypt in the Arab Spring would be a likely candidate to show the effects. Both its long history of internet use and its accessibility at the time, mean that observational data, such as surveys and studies are numerous and verifiable. Lastly, seeing as the case of the Arab Spring, and specifically Egypt, did not occur in a political vacuum, the selection of this case has the potential for generalizability beyond the single case. Within the North African and Middle Eastern context, the case chosen represents a typical case in this context, adding to potential local generalizability. Almost all countries of the Arab League, except for the oil-producing

countries such as Bahrain, Oman, Qatar, Saudi Arabia, and the UAE, experienced a similar level of turmoil, and were in comparable economic situations.

Data Analysis & Collection

Having described and justified the selection for the research design, another important aspect to be considered for the execution of the analysis is the data collection and analysis methods. Since the selected process tracing approach is theory-testing process tracing, the proposed mechanism has to be 'taken apart' and evidence has to be found for each of the steps of the chain, leading to the overall causal mechanism (Beach & Pedersen, 2013). Here, the 'adaptation' nature of the theory is important to consider. While in 'traditional' theory testing process tracing the causal mechanism is identified, the assumption here is that the causal mechanism of social capital still works when switching its baseline variables. Important in the consideration of data analysis tests is the viability of alternative explanations for the assumptions made. As such, for the study of the individual steps in the proposed adaptation, the 'smoking-gun test' of causal inference provides the best confirmation capabilities for the hypotheses (Collier, 2011). This selection is based on the consideration that there are multiple factors that influence politically motivated behaviour, especially in times of economic and political unrest. This test, unlike the other three testing variants for the examination of causal chains, provides sufficient support for the confirmation or denial of the hypotheses while also not leading to the elimination of potential alternative explanations of the phenomena (Collier, 2011). Applied to the case, the assumption is that if a change in variable is followed by a change in outcome, that variable is presumed to have made the change.

The data collection process for qualitative methods, such as process tracing, while too broad to consider in-depth, relies on a few main criteria. Here, the important criteria pertain to the subjective nature of most of the variables (Curini & Franzese, 2020). As such, data collection is done mainly through desk research. Sources for the analysis largely fall in the field of 'observational data' or 'case studies', which includes peer-reviewed journal articles, survey reports and studies, and newspaper reports. These sources are gathered through academic search engines such as the 'Leiden University Catalogue', 'Google Scholar' and 'Web of Science'. For newspaper articles and other more commonly available data, normal 'Google' searches are conducted. Looking at the time period constraints in the analysis, most searches are limited to only include results produced after the year 2006, with a few exceptions from time periods before, for issues such as internet-infrastructure development, seeing as that is when internet culture started to appear broadly in Egyptian society.

Validity & Reliability

There are multiple criteria for the determination of validity and reliability in this thesis, most of which are considered in the data collection process and following analysis. For single case theory testing process tracing studies, construct validity is the major determinant of validity, seeing as other types require set conditions associated with quantitative studies or predetermined variables (Curini & Franzese, 2020). Here, the construct validity is determined as part of the theoretical assumptions made. Variables such as community creation cannot be measured directly, however, the analysis takes into account various factors surrounding these measurements such as the influx of internet activities or respondent perception data on these issues. While not resulting in perfect validity, the theoretical nature of the argument makes more accurate validity claims unlikely.

In terms of reliability, two forms of reliability are considered in this thesis, specifically in regard to the data collection and analysis process. First, test-retest reliability describes the consistency of results of a survey for example, using the same subjects on two different occasions, thus confirming the first results (Curini & Franzese, 2020). Inter-rater reliability refers to the consistency of results by different data collectors (Curini & Franzese, 2020). Both test-retest and Inter-rater reliability are determined by using multiple data sources, such as surveys, testing for the same outcome variables in different time spans. This data 'triangulation' should aid in the production of reliable data, and as such a reliable analysis. Further, all data sources can be considered of high-quality, coming from either peer-reviewed academic journals or reputable newspapers. While, again, not resulting in perfect reliability, the consideration of these factors in the data collection and analysis significantly contributes to the overall credibility of the results produced.

Analysis

Developing on the theoretical foundations that suggest the internet to act as a modernized replacement or addition to social capital factors, this analysis section will give a detailed insight into why this could be the case by employing a theory testing process tracing approach, testing it empirically on the case of Egypt during the Arab Spring. The hypothesized connection between internet and political participation is explained using current literature on the theory and the case to draw potential causal inferences.

The Internet and its Role in the Creation of Social Capital

Based on the literature and theory in the previous sections, this analysis is based on a three-part causal mechanism connecting the internet and political participation. The concept adaptability is based on a two-step causal mechanism and is introduced and justified using theory and case specific evidence. The aim of this theory-testing process tracing is to evaluate whether the evidence supports the hypotheses made and links the variables together (Beach & Pedersen, 2013).

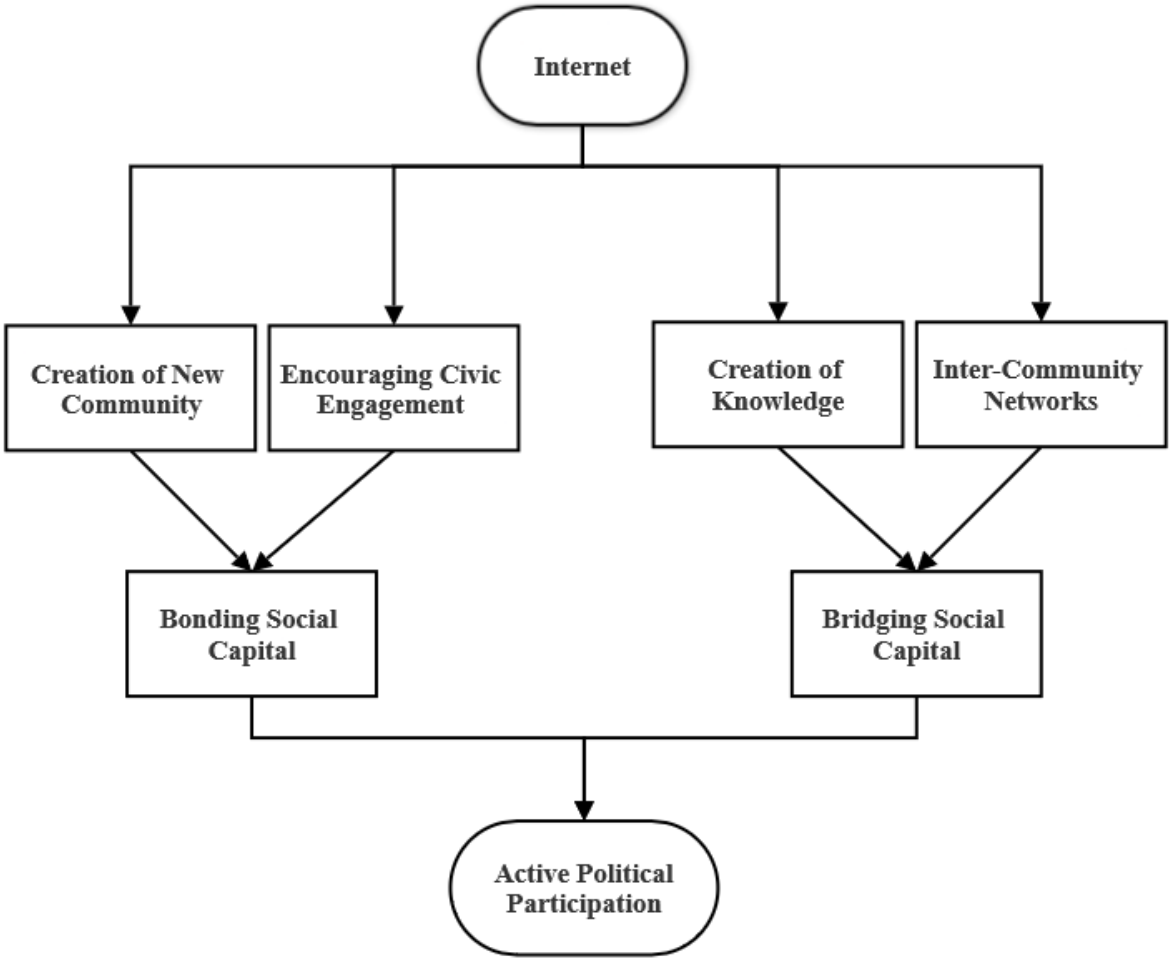

Figure 1: Internet Social Capital Causal Mechanism

Bonding Social Capital: The Internet as Community & Network of Engagement

The proposed causal mechanism leading to the creation of active political participation through collective action requires the internet to start the causal chain by fulfilling the preconditions to bonding social capital, namely community creation and encouraging civic engagement. The first hypothesis states that the internet replaces traditional community in the creation of civic engagement by moving physical communities online and creating new

communities. Addressing this, the case specific actualization of the assumption occurs in two stages. The first stage is the creation of networks of civic engagement prior to the events of the Arab Spring. Here, just like with issues such as uprising potential, the processes of implementation do not occur spontaneously, but in a slow build-up. Subsidising traditional community in the creation of civic engagement, the case of Egypt shows firm evidence of an increase in social media use and a change in general rhetoric towards a more online based community environment since the mid-2000s (Herrera, 2012). After a slow introduction to a publicly accessible world wide web, the years 2005-2008 saw an explosive expansion in general internet use, along with the first cases related to the community building properties of the internet (Lerner, 2010).

Two instances specifically show strong associations with bonding social capital. First, the rise in internet-cafes led to the formation of a new type of community around internet-hotspots (Richter, 2010; Wheeler, 2007). This did not only apply to the 'average' internet cafe user at the time, namely a young male, but also included previously underrepresented women. In her report on internet empowerment, Wheeler (2007) specifically described this formation of community to have been a large stepping-stone for the empowerment of women in Egypt. More importantly, however, this emancipation did not only lead to more internet users and formation online but also manifested itself in the creation of offline community around internet-hotspots. With the introduction of such a large demographic to the internet, the formation of online groups and early forms of grassroot activism were quick to follow. Specifically, the 'repressive' nature of Egyptian culture towards women drove them to the creation of online groups not only associated with pleasant discussions such as fashion and food but also about sexual harassment, abuse, and domestic violence, which quickly led to online movements and calls for offline actions (Richter, 2010; Wheeler, 2007). Further, due to the largely public nature of internet accessibility in its earlier years like through internet cafes, the formation of online groups was mirrored by offline groups as well, for both the previously underrepresented women and for men, which led to a fundamental shift from the 'cafe-house-culture' typical for the Middle East, to 'internet-cafe-culture' for many young Egyptians (Abdulla, 2005; Aouragh & Alexander, 2011; Desouky & Ibrahem, 2015).

Another important incident affirming the internet's position as a community creator is the strike of April 6, 2008, some of the first large-scale politically motivated activities organized through the web (Richter, 2010). Here, workers of the largest state-owned factory in Egypt, a spinning and weaving factory, organized a strike to show their discontent with the

newly enacted industrial sector reforms by the government. Initially intended to be a 'normal' strike, the formation of a Facebook group for the workers attracted over 70.000 members within two weeks prior to the event, both from the worker base and supporters of the strike (Richter, 2010). While the physical attendance of the strike did not match the online support, it was the internet that was responsible for the creation of both the online and offline support, asserting its position as a community creator. More importantly, however, it presented the first case of within community, organized mobilization and civic engagement though the internet (Richter, 2010).

Having presented case data on the internet's ability to create community, for the overall theory to work, the internet also has to subsidize existing community ties on a larger scale, instead of 'onetime' instances such a mentioned above. For this smoking gun test, two studies highlight the strong association between internet use and community migration in Egyptian students. Both paper's authors, while based in the medical field and relating mostly to the mental wellbeing and excessive internet use of young Egyptians, find that the increased daily use of the Internet has partially substituted otherwise 'traditionally' communal activities such as daily meetups and peer-to-peer engagement (Arafa, Mahmoud, & Salem, 2019; Desouky & Ibrahem, 2015). The authors further note, specifically in the earlier study, that the buildup of reliance on the internet for community purposes has had to start much earlier than the 2014 data collection, possibly going back to the early 2010s to produce the significant results shown. This is confirmed when looking at internet use data throughout the 21st century, where Egypt has been an early leader in internet resources for education, entertainment, and social media such as Facebook (Abdulla, 2005; Youniss, Barber, & Billen, 2013).

The first hypothesis in this thesis states that the internet can create and substitute traditional community, as well as create civic engagement though those created networks. Summing up the cases analyzed above, all pass the smoking gun test, the data presented shows the growth of online communities and decline of traditional community over time, with the two specific instances serving as an accelerator for the rise of the internet as community. Overall, strong evidence was found to support the first hypothesis and connects the internet to the creation of bonding social capital.

Bridging Social Capital: The Internet as a Tool for Collective Action

Unlike bonding social capital described in the previous section, bridging social capital is not concerned with the creation and substitution of community, but with the connecting of

different communities (Putnam, 2000). In times of crisis specifically, bridging social capital brings communities together and is able to overcome collective action problems. Because of this attribute, bridging social capital rarely requires extended amounts of time for its build-up and creation, and instead serves more as a tool rather than a cause (Häuberer, 2011). Nonetheless, the bridging capabilities of the internet play a large role in the facilitation of active political participation in Egypt. As mentioned in the theoretical framework, I hypothesize the internet creates bridging social capital by increasing the flow of information and providing the means for communication between different communities and people. Applying this to the case, the timeline before and during the Arab Spring events are analysed based on smoking-gun tests of causal inference.

Referring to Figure 1, two factors play into the creation of bridging social capital and the resulting civic engagement, namely knowledge and communication (Häuberer, 2011; Putnam, 2000). In the case of Egypt, the internet has provided significant contributions to both factors. Education has historically been weak and combined with the economic struggles preceding the revolution, provided very negligible results in terms of civic engagement and knowledge provision (Anderson, 2011). Two studies in particular highlight the lacking education on civic engagement in Egyptian curricula, the e4e (Education for Employment) and Gerhart Centre study in the years 2010 and 2011 (Education for Employment, 2010; Gerhart Center for Philanthropy and Civic Engagement, 2011). Both survey studies underline the perceived lack of education on civic matters and education for employability, yet show that a significant number of youths utilize the internet as an alternative source for civic engagement education, such as political blogs and forums. The strong influence of the internet is highlighted when comparing these results to a study conducted in 2010, which exclusively focused its survey questions on traditional types of civic engagement such as volunteering, political participation and attitudes towards government (Population Council West Asia and North Africa, 2010). The exclusive use of ‘traditional’ factors in the study led the authors to conclude that “civic engagement in young people in Egypt is very weak […]”, and yet, one month after the survey, the protests of January 25th united the young people and contradicted the results (Youniss, Barber, & Billen, 2013). This clear discrepancy between the study results, as well as the following outbreak of the January 25th revolution, shows the extent to which the internet affects knowledge and civic engagement education when taken into account.

The second parameter for the creation of bridging social capital is communication and mutual understanding between communities. To outline the near-exponential expansion of the

internet as a communication tool for young Egyptians, it is necessary to draw a timeframe of that expansion. Around March 2008, there were 820.000 Facebook users in Egypt. After a stable growth to around 3.5 million in 2010, signifying the creation of around 1 million new accounts per year, the last two months of the year saw an increase from 3.5 million to 5.2 million (Herrera, 2011). By the year 2012, the total amount of users had jumped up to 10.7 million, marking Egypt as one of the top 20 countries in worldwide Facebook usage. Twitter experienced a similar expansion in that time, with the user base rising by over 100.000, a 65% increase from the year before (Ahram Online, 2012; Herrera, 2012).

The rising number of sign-ups, however, does not necessitate the creation of civic engagement through bridging social capital. To determine this, it is required to show that the internet, here depicted by social media, connected communities that previously would not interact in such fashion. The most prevalent example of this is the case of 'We Are All Khaled Said', a Facebook page devoted to the violent killing of the young male Khaled Said by Egyptian security forces, and what is said to be the 'spark' that incited the revolution (Herrera, 2012). While the page was initially created to mourn the death of the student, it quickly became a large community, bound by rules of engagement that defied current standards of appropriateness. As one administrator of the page highlighted, comments about religious differences, insults or harassments were all quickly corrected by members of the community in order to create a more unifying goal (Herrera, 2012). With the growing religious segregation in Egypt at the time, and the gaining popularity of parties such as the Muslim Brotherhood, these guiding principles were not common practice. All throughout the 21st century, the friction between religious groups specifically was high, with the minority Christian population often discriminated against, attacked, and otherwise harassed (Rauch, 2011; Zaki, 2010). With these rising general tensions in the country prior to the outbreak of the revolution, more and more attacks on Christian families and places of worship were recorded, with church bombings, arrests and harassment becoming a weekly norm in news media (BBC News, 2011; Rauch, 2011; Zaki, 2010). Examples of the unifying characteristics of social media at the time tie into the general protests and expressions of governmental dissatisfaction, where groups were created with the specific intent of protecting the religious opposition during prayers, an action that could not have taken place without the communication and exchange tools provided by the internet (Richter, 2010; Youniss, Barber, & Billen, 2013).

The second hypothesis states that the internet has the ability to increase the knowledge pool and act as a communication medium to overcome collective action problems. The

Egyptian case has shown strong segregation issues, which even before the outbreak of the revolutionary events were partially displaced by community interaction on the internet. The inter-community knowledge transfer and communication could not have occurred without the use of the internet, as displayed by the cases shown, only representing the largest instances in a steady build-up. Overall, there is strong evidence in support of the proposed causal mechanism by passing further smoking-gun tests and linking the internet to the creation of bridging social capital.

The Internet and its Role in Reinforcing Social Capital

Looking at the hypothesized adaptability of social capital concepts to a digital form, it is important to note how social capital itself works. Depicted in Figure 1, the two types of social capital act as one chain-link in the causal mechanism before leading to political participation, a result explained and tested by Putnam and other authors (Campante, Durante, & Sobbrio, 2013; Ekman & Amna, 2012; Häuberer, 2011; Putnam, 2000). Not depicted, however, is the fact that social capital itself is a causal mechanism. Displayed in Figure 2, the intricacies that lead social capital to result in collective action are, inherently, based on communal and collective actions, like reciprocity and trust (Häuberer, 2011; Putnam, 2000). This section of the analysis is devoted to the internet's reinforcement effect of the social capital mechanism, tying in with the previous argument that the internet creates civic engagement by initiating the factors explicit to either bonding or bridging.

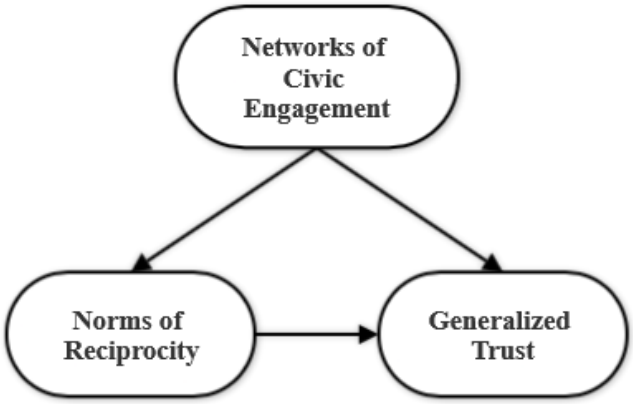

Figure 2: Putnam's Social Capital Mechanism

Adapting these principles in theory, specifically trust and reciprocity, the first 'online equivalent' that comes to mind related to social media use and its reciprocal, user-generated content model. More specifically, as highlighted in the theoretical framework, the expectations here fall in line with social media usage and an influx thereof. Examining the first variable, networks of civic engagement have already been covered in the previous steps of the analysis. As noted above, the internet has overall led to more community and more engaged community, exemplified by the case of women's activism, the 2008 strike, and most notably the planning and execution of the Arab Spring. Engaging with the second chain link, norms of reciprocity,

the Egyptian case shows strong support of the argument that the internet created additional reciprocity. Specifically, during the events of the revolution, the protection of places of worship and religious ceremonies such as the Muslim Friday prayers or the Christians Sunday masses by the opposite religion is a strong example of this phenomenon. Initially, these ideas came from various online interactions and Facebook groups after the rise of police brutality towards demonstrators (Aouragh & Alexander, 2011; Youniss, Barber, & Billen, 2013). This further falls in line with the bridging capabilities of the internet, where the previous tensions between religious groups were now transformed into unity by means of ideation and calls for action on online forums. The same case and logic are applied to the last variable in social capital, generalized trust. Here, the generalized trust within and between Egyptian community is due to multiple factors. First, the self-organizing nature of the online forums and groups lead members of that group to intrinsically trust each other, a phenomenon which likely would not have occurred if not 'discussed' prior to the offline mobilization (Mady, 2013).

Overall, the internet has repeatedly shown its facilitation role in the creation and execution of social capital. More importantly, this test confirms the last hypothesis, stating that the internet aids in the facilitation of the social capital mechanism and as such strengthens it. While the connection here is more debatable, specifically in regard to the direction of the reinforcement, the general effects are still visible. The case has shown sufficient evidence of the reinforcing properties, and as such adds to the academic discussion by showing the internet as both a creator and reinforcer of social capital mechanisms.

Conclusion

With the internet becoming a prevalent part of our everyday lives, the broad focus of this thesis is to examine what role the internet plays on a collective level when it comes to politics and political systems. While the ever-growing dependency on the internet has led to significant research relating to its capabilities and its measured effects on political participation, the aim here was not to find whether the internet plays a role, but why it would do so. As such, the guiding question this thesis aimed to answer is: What is the role of the internet in the facilitation of active political participation?

Findings & Summary

The findings made in this thesis can be broken down into two distinct categories. First, relating to the development and testing of the theoretical model, the analysis results show that the internet can indeed replace traditional community in the formation of social capital, which

creates civic engagement and more widespread political participation. This mechanism is in line with the classification of the internet as a user driven social sphere rather than just a technology, allowing the internet to substitute and contribute to traditional factors of social capital development, as well as negate some barriers associated with its traditional development. The theorized assumption is that because terms like 'social network', which traditionally referred to physical interaction, are now terms referring to the same social space but online, they should produce the same outcome, i.e., social capital. As such, the internet should be able to replace traditional community in creating civic engagement by moving physical community online, and creating new, online communities. Further, thanks to the communication capabilities produced by the internet, it should be able to increase the overall knowledge pool though community exchange and act as a communication medium to facilitate collective action.

This adaptation, when tested on the case of Egypt, proves accurate for all baseline variables of social capital. Community creation was done by the internet through the increase of online communities on all types of issues, allowing for previously 'unheard' demographics such as women and low-skilled workers to express their discontent and group together (Abdulla, 2005; Aouragh & Alexander, 2011; Richter, 2010; Wheeler, 2007). Substitution was also strong in Egypt, where research has shown a strong tendency for youths to forgo traditional community for online community, lessening peer-to-peer interaction and increasing screen time, a phenomenon not only displayed by the studies but also when looking at the primary position of Egypt as a content creator in the Middle East. (Arafa, Mahmoud, & Salem, 2019; Desouky & Ibrahem, 2015; Youniss, Barber, & Billen, 2013). Further, looking at civic engagement, the tendency of the internet to lessen the barriers of communication played a large role in facilitating the events of the January revolution, allowing the discussion and calls for action for the large demonstrations. This was also supplemented by the inter-community engagement provided by internet forums and social media, connecting and enhancing the interaction between different demographics, allowing for knowledge exchange, cultural exchange and vital communication on the planning of protests (Anderson, 2011; Herrera, 2011; 2012; Lerner, 2010; Richter, 2010; Youniss, Barber, & Billen, 2013).

Second, relating to the internet as an intervening variable in the social capital mechanism, the theorized influence of the variable exceeds expectations. Looking at the causal mechanism responsible for the social capital variable, the internet proves to be a large influencing factor, at least qualitatively, substantially adding onto the existing variables such

as trust and reciprocity with technologies like social media and their preference algorithms in theory, and by reinforcing trust and reciprocity between protesters in practice thanks to prior planning abilities. Specifically, this reinforcement came from the ability to communicate both within and between communities before and during the Egyptian revolution, allowing for previously disengaged religious communities to protect each other during prayers, heightening trust and reciprocity between them to add to the collective sentiment necessary for active political participation (Aouragh & Alexander, 2011; Herrera, 2011; Mady, 2013; Rauch, 2011; Youniss, Barber, & Billen, 2013; Zaki, 2010).

Overall, the process tracing approach to this case study suggests that the internet's main role in the facilitation of political participation is through its ability to create and recreate community, and act as a driver for exchange and progress, based on both the literature's theorized effects and the mechanisms found here (Abdulla, 2005; Delli Carpini, 2000; Polat, 2005). Further, looking at the case specific date, the Egyptian population, through the use of internet technologies, was able to lessen collective action problems associated with active political participation. Particularly in terms of self-organization, as suggested by Ostrom (2010), the internet aids significantly in the reduction of trust issues between previously 'rival' communities and enhanced the organizational capabilities of the protesters. Moreover, due to the larger reach provided by the internet, the outcome effects of the participation were arguably much higher. While it is implausible to say that the internet *caused* the Arab Spring, looking at the analysis results and the internet's capabilities, it would be fair to imply that the revolutionary uprisings would likely not have occurred the way they did if it were not for the internet as both a community, and a tool.

Constraints

Considering the constraints in this thesis, two main issues stand out. The first issue concerns the case selection at the specific timeframe chosen. Even though a large part of the analysis considers variables and events prior to the revolutionary outbreak of the Arab Spring, the inferences made about the time of the Arab Spring could have potential flaws relating to the direction of the causal links. The analysis shows that there is a strong association between the community variables (the internet) and political participation. And while the internet is certainly not a cause for the Egyptian Revolution, the argument implies that without the internet the formation of collective action, like demonstrations, would have required significantly more effort and would thus likely not have occurred as such. However, a case could potentially be made that the initial spikes in smaller scale protests and general dissatisfaction in the country

led to a substantial increase in willingness to engage in public affairs, using the internet as a medium for this. While the second part of the analysis partially covers this issue, this still presents a possible constraint. Put simply: Did the internet facilitate active political participation, or did the existing willingness to engage in active political participation lead to a rise of internet use?

Second, the theorized effect of the internet in community building is hard, if not impossible, to measure on a quantitative scale. The data gathering capabilities necessary would be beyond the individual capabilities of researchers, and as such the most likely way of obtaining such data would be through observational data such as surveys and interviews. Their subjective nature however makes a precise determination of the accuracy and replicability implausible. Further, the case analysed here makes the generalization of the phenomenon weak, because of the specific circumstances under which it happened. While there is a potential to replicate this kind of analysis on more modern cases of active citizen engagement in politics, such as the Hong Kong, or Belarusian protests, the Arab Spring occurred in a time where the internet did not play the role it does today. As such, the analysis of the steady build-up and community replacement variables of the Egyptian case are unique. Most closely resembling the case would likely be the other countries involved in the Arab Spring, seeing as they have similar conditions.

Recommendations & Relevance

To conclude, I will give some general remarks towards the recommendations for future research and outline how this thesis has contributed to the general field of political participation research. As described in the previous section, the main constraints found here are the generalizability and the direction of causality. Both factors could be addressed utilizing a mixed methods approach, incorporating the theory proposed here, along with defined variables for community growth in relation to the internet, such as district internet access along with political participation numbers in voting districts. While validity issues would arise in this conception of the research, it could also produce more generalizable results.

Last, in terms of relevance, this thesis adds to the gaps in literature in multiple ways. The theoretical adaptations of the foundations of social capital can lead to potential improvements in the predictor and analysis effects of social capital on political participation and collective action problems. Moreover, the previously under-researched causal mechanism connecting the internet to active forms of political participation have been partially uncovered

by the adapted theory posed here. Comparing the results to other studies of the effects of the internet on political participation, as mentioned in the literature review, most scholars only consider the internet as a technology, or the internet in democratic systems, and thus come to conclusions that might highlight the internet's capabilities, but do not consider the mechanisms behind the function (Arif, 2016; Delli Carpini, 2000; Polat, 2005). Even when the mechanism is considered, the conclusion pertains to democratic systems and thus to the individual drive of citizens to utilize the communal aspects of the internet. When considering revolutionary events and repressed societies, however, the internet and its capabilities signify an opportunity for discourse, change and freedom. Ultimately, this thesis has possibly paved the way for more accurate and more generalizable research into the specific role of the internet as a facilitation variable on the collective action constraints in active political participation.

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