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Womens Mobilisation in the Digital Age

Bertovic, Noa

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**Universiteit
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Bachelor Thesis

Women's Mobilisation in the Digital Age

Noa Bertovic (s3175200)

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Supervisor: Dr Babak RazaeeDaryakenari

Second reader: Dr Juan Masullo

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1. Introduction

The contemporary proliferation of the internet has had a significant impact on the way humans communicate with each other on a daily basis and how information is disseminated throughout the populace. According to most scholars, the official first birthday of the internet is attributed to the beginning of 1983 with the introduction of a revolutionary communications system called the Transfer Control Protocol/Internet Control (TCP/IC) (“Fortinet”, 2024). This system was the first of its kind to enable different computers to communicate with each other within a “network” (“Fortinet”, 2024). As of 2021, the global percentage of internet users stands at 63%, which encompasses nearly five billion people (World Bank Dataset, 2021). It is safe to assume that this trend will only continue to rise as countries adapt to the digitalisation of the world economically, politically, and socially.

In the context of political science research, communication can be a key confounding variable in many events. Specifically in the context of civil resistance, media, in general, is said to have a key role in mobilising dissent and could also be used to signal repression by the regime (Earl & Kimport, 2011). In the 2010s, the #MeToo movement was initiated by Tarana Burke, but was popularised several years later on Twitter, becoming one of the largest women-led digital movements to date (Mendes, 2018, p. 236). In sum, this movement provided a platform where women could share information about the perpetrators of their assaults and using techniques of naming and shaming to condemn and spread awareness of sexual harassment against women (Mendes, 2018, pp. 237-238). This campaign spread through the internet using the hashtag feature on social media platforms, keeping the campaign relevant for however long the hashtag remained trending (Mendes, 2018, p. 237). This form of activism is unique to the age of the

internet, since this kind of citizen-led relevance is difficult to achieve with traditional forms of media. However, there is still relatively low amounts of research on social media as a distinct form – or subset – of general media. The presence of such a medium of communication can be vital in some cases to organise and mobilise key actors.

Another key area of research that has recently been expanded upon in the field of civil resistance is the role and presence of women. Until recently, women in civil resistance have been underrepresented, ignored, and generally misunderstood. It is important to address these distinctions to promote gender inclusivity in the field of political science and in order to represent a large and pivotal group in civil resistance. The underappreciation of this topic can have several negative implications, as it may further perpetuate gender-exclusive ideology and potentially endanger women in times of political unrest. The internet and the presence of women in civil resistance should be better understood in order to create a more gender-inclusive space in political science and to deepen the understanding of civil resistance.

2. Literature Review

Political participation has long been a key feature of democracy studied by many scholars over the decades. In general, political participation refers to the voluntary effort of a populace to influence political policy via activities ranging from voting to protesting (Uhlener, 2015, p. 504). This factor is oftentimes used as a benchmark for democracy, as it is a statistic that shows the engagement of the citizens within the political system of their country. With the recent widespread presence of the internet, several scholars have attempted to assess how this change

has influenced civil society's engagement with politics. On the whole, it is suggested that the internet is used as a forum for the mobilisation of political activism by the demos (Lee, 2017). Specifically, research in Asia has recognized that the internet has also allowed for users to gain "self-efficacious feelings", which refers to the positive feeling people get when they finally understand a topic (Lee, 2017, p. 76). Furthermore, surveys conducted in several Western European countries suggest that student participants are more likely to participate in their respective politics, if they are active on the internet (Calenda & Meijer, 2009, p. 893). Overall, much of the literature on the internet's influence on political participation shows a positive trend. However, political participation is an umbrella term that encompasses many facets of engagement, such as voting, helping political campaigns, donating to a campaign or a cause, petitioning, contacting local officials, protesting, civil resistance campaigning, and more (Uhlener, 2015, p. 504). The various types of political participation are not fully explored in relation to the usage of the internet. Civil resistance campaigning is a particularly interesting form of political participation because the mobilisation aspect of these campaigns can potentially be influenced by the presence of the internet in multiple ways.

Traditional media – referred to as mass media – such as newspapers, television, and radio have been a part of society for hundreds of years as a means to disseminate information to a broad audience (Bimber & Copeland, 2013, pp. 125-126). Mass media has been studied by various scholars concerning the field of mobilisation in civil resistance. More recently, "new media" has been a term coined after the 1990s to denote the specific new advancements in technology, ushering in the advent of the internet (Hanrath & Leggewie, 2013). Importantly, new media is only accessible through the internet. Scholars identify three ways in which new media is

distinguishable and improved upon its predecessor: the rapid speed of communication, the ability to deliberate and coordinate activity without physical interaction, and the capacity for a very large many-to-many communication channel (Earl & Kimport, 2011). There are two broad ways in which civil resistance campaigns interact with the internet and how it improves their strategy. First, scholars identify a strong internal movement-building mechanism that campaigns exploit to better coordinate action, share information on key events and developments, build collective identity, and create a campaign culture (Caren, Andrews, & Lu, 2020, p. 444). Second, civil resistance campaigns use the internet and forms of new media in order to “advance external goals of communicating with larger audiences” (Caren, Andrews, & Lu, 2020, pp. 444-445). This allows campaigns to use new media’s ability of expansive many-to-many communication channels to recruit members of society into their cause (Andrews & Biggs 2006, Vliegenthart et al. 2005).

New media facilitates better vertical linkages, referring to the political and social hierarchies, in regimes with great political and social unrest (Warren, 2015, p. 308). Scholars argue that the dissipation of information through traditional forms of media decreases tension throughout civil unrest (Warren, 2015, p. 309). This is argued to happen due to the increased awareness of current and potential events (Warren, 2015, p. 309). This further emphasises the influence that different forms of new media have on civil resistance, and more importantly, on repression and dissent within civil resistance. This dissemination and mobilisation effects of new media, has been demonstrated in several “domino” cases – Serbia, Georgia, and Ukraine – where nonviolent civil resistance has successfully challenged authoritarian regimes with the use of new media (Anable, 2006, p. 8). For instance, in Georgia, a popular television channel acted as a key mobiliser

against the incumbent authoritarian government (Anable, 2006, p. 12). Both violent and nonviolent civil resistance campaigns have been impacted by the presence of new media. Nonviolent movements, such as flashmobs or smart mobs have been mobilised through a sense of ‘civic responsibility’ that citizens experience due to the dissemination of information on social media platforms (Lim, 2017, p. 223). While this example of civil protest can be extrapolated to other forms of civil protest, the connection cannot be strongly argued without statistical analysis.

Finally, as mentioned previously, the presence of the internet has been an influential factor in the recruitment and mobilisation process of protesters. This can be seen specifically in the case of Egypt during the Arab Spring (Barrons, 2012, p. 64). In Egypt, protesters used social media to invite other citizens to join them on the “We Are All Khaled Said” page on Facebook (Tufekci & Wilson, 2012, p. 364). This page was used to disseminate information and coordinate strategies. Even during a brief internet shutdown from the government, tech-savvy protesters found ways to continue disseminating information online, which subsequently led to the resignation of the then-incumbent president, Mubarak. (Tufekci & Wilson, 2012, p. 364). This example demonstrates the mobilisation power and the use of many-to-many channels of communication that new media possesses.

The works of these scholars still underplay and ignore the distinction between male and female participation in the digital age. Certain literature suggests that women's participation in civil campaigns is hindered by opposition from external factors, such as families, ministries, and greater society (McAdam, 1992, p. 1222). This was certainly a more prevalent issue in older generations, but the phenomenon may still have remained intact in the modern day. Without

more recent research, the continuity of this concept still remains in question. It is said that women participants attribute the greatest personal significance to a protest (McAdam, 1992, p. 1234). McAdam explains this attribution effect as one in which women, on average, tend to experience a greater feeling of involvement and change after being part of a civil resistance campaign (McAdam, 1992, p. 1234). This research was conducted in the 1990s, a time when new media was barely in its infancy. It is therefore imperative to further these findings by addressing women's participation in civil resistance campaigns in relation to the relatively newly emerging new media age. This is one of the few noted gender differences that scholars found when investigating the mobilisation and participation of people in civil resistance campaigns.

Some research on women's mobilisation into violent political organisations (VPOs) has been conducted. One such article suggests that women are more likely to participate in VPOs when they are larger and have agendas that support gender equality (Thomas & Bond, 2015, pp. 490-491). Moreover, women's mobilisation into VPOs have also been argued to be classified into three motivating factors: pull, push, and persuasion factors (Viterna, 2006, p. 39). For women to be pulled into a VPO, they must already have developed strong opinions on the cause, and often be active participants in previous civil resistance campaigns of a similar nature (Viterna, 2006, p. 20). Push factors are those in which women have few alternative choices than to join VPOs— whether it be due to violence, famine, or other critical issues (Viterna, 2006, p. 21). Persuasion factors assume that women will engage in VPOs when the costs of joining are lower than the costs of absence. In this context, women cite a desire for adventure and a general lack of other important responsibilities in life (Viterna, 2006, p. 28). Although it is unknown to what extent new media can persuade women to join civil resistance campaigns, the amount of

negative – or positive – information being disseminated across various platforms can increase the perceived costs of absence.

It is also important to understand the engagement patterns and the differences between men's and women's activities on the internet. Statistically, in the US, younger women are more active on the internet compared to their young male counterparts (Pew Research Center [PRC], 2005). This statistic is profound as, in the same participant pool, the most politically engaged age group was the 18-24 year old age group (PRC, 2013). Although men are statistically more active on the internet in terms of robustness of activities and amount of usage, women are more communicative on the internet's platforms (PRC, 2005). However, information seeking and gathering has been, comparatively, more aggressively pursued by men (PRC, 2005). In the US, women are on average 7% more present across all platforms than men (PRC, 2024). These statistics, as a whole, indicate that both men and women are proficient and active on the internet, but the ways in which they interact with the medium differ. The difference that is shown by these statistics, incentivize more gendered research to be conducted in the field of new media studies.

In general, the research into the field of mobilisation and repression of gendered civil resistance has been understudied, hindering the advancement of gender-inclusive political science research. Furthermore, it is evident that mobilisation is an area in which internet presence can serve as a very important coordinator and communicator (Barrons, 2012, p. 64). As aforementioned, scholars have explored some of the main ways in which the internet, or new media, can impact mobilisation to civil resistance campaigns. Primarily, the internet increases the effectiveness of many-to-many communication, revolutionising the way information is disseminated to the

masses. However, it is also noted how gendered research into mobilisation for civil resistance campaigns is underdeveloped in the literature.

This research aims to further the theoretical arguments of traditional media research, while specifically examining the mobilisation of women. Historically, the involvement of women in violent civil resistance has been comparatively low compared with the participation of men, whereas women's participation in nonviolent campaigns has been notably high. Since the internet is a forum for nonviolent dissemination of information and mobilisation, it can be argued that women's involvement on this platform would increase. Over the past decade, psychology scholars have developed the theory of "digital activism". Broadly, this term refers to political activism that is communicated through online platforms (McCaughey & Ayers, 2003, p. 1). An example of the internet's use for mobilising participants into resistance campaigns is the 2007 National Mall march, where 400,000 members of the public arrived at the National Mall in Washington DC to protest the US involvement in the Iraq War (Earl & Kimport, 2011, p. 3). This was one of the first instances of successful digital activism, as the organisers – United for Peace and Justice (UPJ) – spread relevant information about the cause and the rally on their popular website (Earl & Kimport, 2011, pp. 3-5). However, digital activism as a theory has been heavily criticised for its broadness and perceived dysfunctionality (Ozkula, 2021, p. 62). Many scholars have used this middle range theory as a catalyst for further research. Nonetheless, the research on women's participation in the digital age using digital activism remains understudied.

Overall, the literature on the internet's influence on political participation has been clear; there has been a positive influence from the former to the latter. However, the specific types of

political participation have yet to be fully explored. This research will examine the role of the internet concerning political participation in the form of civil resistance. In general, the internet, as it pertains to mobilisation of political participation, has mainly been used as a proxy for new media. This investigation will also consider other critical aspects of the internet, such as accessibility to information, one-to-one communication, and cultural impact. The underutilization of gender as a significant demographic in political science, particularly in civil resistance campaigns, reveals a gap in the research. Addressing this gap can lead to a workable and contextually important research question

What is the effect of internet presence on women's participation in civil resistance?

3. Theoretical Argument

Civil resistance in this research will be defined within the scope of both nonviolent and violent maximalist resistance campaigns. More specifically, these campaigns will mainly consist of those which call for the toppling of an oppressive government or achieving territorial self-determination. It is also important to note that around 85% of movements in which women made up the majority of members were nonviolent from 1997 to 2020 (Dyvik, 2020). This distinction is important to note as it suggests that women's participation in civil resistance typically does not have violent goals at its onset. For this reason, the extent of violence in a campaign is influenced by or influences women's participation. In this research, there will be an assumption that the mobilisation of women increases the likelihood of nonviolence in a civil resistance campaign. This relationship needs to be distinguished because of its supposed

significant impact on the participation of women. However, this assumption will still be tested in the empirical analysis of the research.

Another aspect of the research question that may require further conceptualization is the internet itself. As previously mentioned, mass media has been the focal point of research in mobilisation for decades. It is also important to note that in this research, the terms “internet” and “new media” will be used interchangeably. As many academics observe, the media landscape significantly changed in the mid-to-late 2000s with the proliferation of social media and the internet (Zhuravskaya, Petrova, & Enikolopov, 2020, p. 416). In this research, new media will encompass social media platforms that provide users the right of communication and expression, as well as websites and forums of information dissemination accessible through the internet. In addition, the internet will encompass all other features, but social media, in general, will be used as an explanatory factor for women's participation. This decision is based on social media's capacity for many-to-many communication, which can serve as a mobilisation platform for campaign leaders or participants.

It also is important to note that the campaigns under study will encompass both democracies and autocracies. Recent research on media suggests that autocracies have started to increase the presence of media freedom for various self-interested reasons (Gleditsch, Medellin, & Rivera, 2022, pp. 234-235). Autocratic regimes might want to increase their external political validity by refraining from censoring new media. By doing so, these regimes can assert a presence of a free press within the populace, and therefore improving their external legitimacy (Gleditsch, Medellin, & Rivera, 2022, p. 235). However, many autocracies still do not believe that censoring

new media will reap as many benefits as it will cause unrest. The assumption in this study is that internet presence will be a resilient factor in both regime types, although the reasons for new media presence may differ between them. Moreover, traditional media, such as newspapers, television, and radio, will be distinguished from new media which provides citizens more of a many-to-many communication channel.

Since its beginnings, social media has significantly influenced the political landscape. Scholars have identified several areas in which social media has had an increased effect on political participation. The low entry barriers for information dissemination through new media networks contribute to a more informed and politicised citizenship within a country (Zhuravskaya, Petrova, Enikolopov, 2020, p. 429). During periods of civil unrest, this fast dissemination of information is very beneficial for mobilisation and recruitment as it spreads across the populace a lot faster than with traditional media. Traditional media is often run – or at least partially controlled – by certain regime types. To organise dissent and mobilise citizens against a repressive government, traditional media channels must be both widely accessible and free from government control. Instances such as Georgia's Rustavi-2 television station exemplify the success of traditional media in such contexts (Anable, 2006, p. 6). The Rustavi-2 case showcases the overall robustness of general media, which can only be improved by the addition of new media. With the advancement of technology and the presence of new media, the two criteria are more easily met. This integration introduces a more effective system of mobilisation, augmenting the robustness of traditional media.

In order to test the research question, the mechanisms behind the theory of digital activism will be used. As mentioned earlier, scholars have developed a middle-range theory based on mobilisation and political participation in the digital age, utilising the internet as a platform for recruitment and information dissemination. To address criticism regarding the breadth of digital activism, this research will adopt a narrower conceptualization of the theory. Specifically, it will focus solely on the recruitment and mobilisation aspects of civil resistance campaigns, without delving into the usage of the internet as a medium for civil resistance itself. Bennet and Segerberg suggest personalised new media campaigns are effective at encouraging mobilisation where the participants are (1) plentiful, (2) diverse, (3) and engaged (2011, p. 785). In other words, the use of new media as a mobiliser generates a large and diverse pool of participants who are more politically engaged with the campaign compared to mobilisation techniques using traditional media (Bennet & Segerberg, 2011, p. 785). However, this conclusion does not fully explore the “diversity” aspect of new media. It is therefore important for new research to delve deeper into this aspect to advance the works of Bennet, Segerberg, and other scholars in the field.

The conceptualisation of this finding is however theoretically interesting, as it allows for the exploration of whether diversity also includes gendered diversity among participants. For this research, it is assumed that new media mobilisation garners a more diverse pool of participants, including a higher number of women. To test this assumption, the theory used in this research will be termed “Digital Network Mobilisation Theory” (DNMT). Using DNMT, it is hypothesised that the internet as a platform is an efficient space for campaigns to mobilise citizens to their cause, including a higher number of women compared to mobilisation without the use of the internet. It is therefore hypothesised that:

H1: The presence of the internet will positively impact the participation of women in civil resistance.

4. Research Design

For the statistical analysis of this research, a large-N quantitative study will be conducted. The research question will focus on the dependent variable (DV) of women's participation, while the independent variable (IV) will be the presence of internet usage across countries. The main dataset utilised will be the WiRe dataset curated by Erica Chenoweth (2019) comprising 338 maximalist civil resistance campaigns spanning from 1945 to 2014. Data on internet usage will be obtained from the World Bank database. This database includes information on 266 states, regions, and international communities that are coded annually in terms of percentages of the population that have access to the internet. Moreover, in this database, an internet user is coded as an individual who has accessed the internet via various devices (e.g. smartphone, computer, digital assistant, games machine, TV set, etc.) within the last three months. The World Bank dataset covers years from 1960 to 2022, with some missing data for the latter years, which will be coded as SYSMIS in the dataset. Overall, this research will focus on analysing 144 campaigns after accounting for the missing values.

In the dataset, women's participation is observed through a number of different variables. Firstly, the observed presence of women on the frontlines of both violent and nonviolent demonstrations will be coded as a binary variable labelled "frontlinerole". Furthermore, the database includes a variable coded "symbolicrole". This variable indicates whether women actively advocated for the campaign across different mediums, including social media. This variable is a valuable option to use as a proxy for the dependent variable but will not be used due to its binary nature. Ultimately, the extent of

women's involvement in these frontline roles will be assessed using the categorical variable “extenetfrontrole” where: 0 = no observed women, 1 = *limited participation* (under 25%) , 2 = *moderate participation* (25% - 50%), and 3 represents *extensive participation* (over 50%), where the majority consists of women. This particular variable serves as the primary indicator for women's participation, as it has a more robust output, when compared to the other dichotomous variables.

In this research, the focal dependent variable (DV) will be the extent of frontline women's participation in civil resistance campaigns. However, it should be highlighted that the raw number of women participating in a given campaign would be a more impactful statistic. As such, the extent of frontline participation is therefore used as the closest proxy given the absence of comprehensive data on the number of women participating in large civil resistance datasets at the time of this research.

For the independent variable (IV), the focus will be on the percentage of the population with access to the internet. Given that the theoretical premise of this research revolves around social media, the IV of this study will primarily emphasise the aspect of social media within the broader context of the internet. Since the unit of analysis for the research is at the campaign level, it is necessary to transform the IV. Civil resistance campaigns do often span over several years, so the average percentage of internet users for each year within the campaign period was calculated. However, as some campaigns extend over several decades, the averages for those campaigns were heavily skewed by earlier years. In order to negate this bias, the continuous variable was converted into a categorical one. To achieve this, the mean and standard deviation statistics were used to determine the interquartile ranges of internet usage. These interquartile ranges were then used to create four equally

distributed categories: none, low, moderate, and high. This categorical variable will be coded as “internetextent” in the dataset to represent the extent of internet usage.

In this quantitative study, the unit of analysis will be at the campaign level. This decision was based on the structure of the WiRe dataset, which is specifically designed for campaign research and already contains coding for a number of maximalist campaigns. Therefore, no transformation of variables is necessary. The data on internet usage is time-variant, which allows for a regression model to be used against the data on women's participation in civil resistance campaigns.

In order to test the hypothesis, an ordinary least squares (OLS) regression will be used. There are several reasons for this decision. Firstly, the hypothesis posits a linear relationship between the independent variable (IV) and the dependent variable (DV), which can be effectively estimated using OLS regression. Additionally, an OLS regression model allows for VIF statistics to be conducted in order to test for multicollinearity. Furthermore, logistic regression, which is commonly used for binary dependent variables, could not be performed because the DV in this research is not binary. Overall, OLS regression modelling offers a broad framework that accommodates the nature of the variables in this research and allows for the estimation of their relationships.

For the research, several control variables are essential to consider. One crucial factor is the method of recruitment, as it can influence the data, hence it must be accounted for when testing the hypothesis. The WiRe database offers a dummy variable indicating whether women join voluntarily or not. Coerced participants might exhibit different levels of motivation for political engagement, making the motivations behind their actions harder to discern with the research. In the dataset, this

variable will be labelled “*voluntary*”. Another important variable in this research is literacy rates. Literacy is essential for individuals to effectively engage with and interpret information available on the internet. This data will be extrapolated from the World Bank dataset on literacy rates among individuals aged 15 and above. This variable will be coded as “*literacyr*” in the dataset. To account for the literacy rates over the duration of a civil resistance campaign, the average literacy rate for the years in which the campaign occurs will be calculated. By including these control variables, the analysis can better isolate the relationship between internet usage and women's participation in civil resistance campaigns, while accounting for potential confounding factors such as recruitment methods and literacy rates.

As previously concluded in the literature, the presence of violence in resistance campaigns is very indicative of the chances of women's participation. The variable “nonviol” is a part of the WiRe dataset as a binary variable. The previous literature suggests that the presence of violence in civil resistance campaigns significantly influences the participation of women (Dyvik, 2020). This variable has been incorporated into the model as a control variable to assess its influence in conjunction with the presence of the internet.

Additionally, the gender ideology of the campaigns themselves will serve as another control variable in this research. Specifically, the presence of gender-inclusive ideology will be coded as a “*gi_ideol*”, a variable already present in the WiRe dataset. This variable is relevant as it indicates whether the campaign embraces the rights and freedoms of women. It is then assumed that the increased presence of these rights and freedoms, will motivate a larger female audience as it might seem safer.

5. Empirical Analysis

Table 1: OLS Regression of women's participation

	Model 1	Model 2
(constant)	1.060*** (0.065)	0.095 (0.232)
Extent of internet usage	0.342*** (0.040)	0.268*** (0.410)
Nonviolence		0.038 (0.095)
Voluntary		0.546* (0.239)
Literacy rates		0.005** (0.002)
Gender inclusive ideology		0.257*** (0.068)
R ²	0.338	0.478
Adj R ²	0.333	0.453
N	144	144

*Note: OLS regression coefficients with standard errors in brackets. ***p < 0.001, **p < 0.01, *p < 0.05*

Table 1 above presents the OLS regression output illustrating the impact of internet presence on women's participation in civil resistance campaigns. Due to a significant amount of system missing information in the dataset, the number of data points has been reduced from 338 maximalist civil resistance campaigns to 144 (N = 144). Despite this reduction, the inclusion of 144 campaigns still qualifies the quantitative research as a large-N study.

As observed from the R^2 values, 33.8% of the variation in the independent variable (IV), *extentfrontlineroles*, is accounted for by the dependent variable (DV) in Model 1, which comprises only internetextent. However, upon the inclusion of control variables in Model 2, the R^2 statistic increases to account for 47.8% of the variation of the IV by both DV and the control variables. It is important to note that the R^2 statistic tends to increase with the addition of more DV variables, as evident with the increase from Model 1 to Model 2. To address this limitation, the adjusted R^2 statistic is utilised. In Model 1, the adjusted R^2 suggests that 33.3% of the variation of the IV is explained by the DV. With the introduction of control variables in Model 2, the adjusted R^2 suggests that 45.3% of the variation of the IV is explained by the DV and the additional control variables. The increase in the adjusted R^2 between Model 1 and Model 2 suggests that the added variables increase the explanatory power of the regression model concerning the relationship between the DV and the IV.

The constant statistic in Table 1 represents the Y- intercept of the regression model. While this statistic may not hold direct relevance, it demonstrates that the intercept does not originate from zero. In Model 1, this constant intercept is 1.060 with a standard error of 0.065. Notably, the constant of Model 1 is statistically significant, indicated by the p value of less than 0.01 ($p < 0.001$). In Model 2, the constant statistic increases to 0.095 with a standard error of 0.232. Similar to Model 1, the constant of Model 2 remains statistically significant ($p < 0.001$).

For the main dependent variable in Model 1, the regression analysis revealed that the extent of internet usage ($B = 0.342$, $SE = 0.040$) significantly predicted the frontline extent of women's

participation in civil resistance campaigns ($p < 0.001$). Specifically, for each additional internet usage category, the participation of women in the front line increased by an average of 0.342.

In Model 2, the regression analysis suggests that the extent of internet usage ($B = 0.268$, $SE = 0.410$) significantly predicted the extent of women's frontline participation in civil resistance campaigns ($p < 0.001$). For each additional internet usage category, the participation of women in the front line increased by an average of 0.268, after controlling for the other control variables in the model. The resultant statistic for the dependent variable seems to support the hypothesis aforementioned in the research as it is statistically significant to $p < 0.001$.

For the control variables, there are also some interesting relationships found within the regression. The regression analysis in Model 2 revealed that civil resistance campaigns ($B = 0.038$, $SE = 0.095$) did not significantly predict the extent of women's frontline participation in civil resistance campaigns ($p > 0.05$). However, the regression suggests that voluntary participation in civil resistance campaigns ($B = 0.546$, $SE = 239$) was found to significantly predict the extent of women's frontline participation in civil resistance campaigns ($p < 0.05$).

The regression analysis in Model 2 indicated that literacy rates ($B = 0.005$, $SE = 0.002$) significantly predict the extent of women's frontline participation in civil resistance campaigns ($p < 0.01$). This suggests that, on average, a one-unit increase in literacy rates is associated with a 0.005 increase in women's participation in the front line, after controlling for the other covariates in the model.

In the regression model, gender inclusive ideology ($B = 0.257$, $SE = 0.068$) emerges as a significant predictor of the extent of women's frontline participation in civil resistance campaigns ($p < 0.01$). This suggests that the presence of gender-inclusive ideology is associated with a 0.257 increase in the likelihood of women's participation in the frontline in civil resistance campaigns.

Table 2: VIF Statistics of OLS Regression of women's participation

	Model 1	Model 2
(constant)	-	-
Extent of internet usage	1,000	1.246
Nonviolence		1.198
Voluntary		1.127
Literacy rates		1.360
Gender-inclusive ideology		1.075

In order to test for multicollinearity in the regression model, the VIF statistics have been reported in Table 2. It is necessary to assess whether the regression model in Table 1 suffers from multicollinearity in order to see if any of the variables in the model are correlated to each other. The variance inflation factor (VIF) statistics from the predictor variables ranged from 1.000 to 1.360, indicating that there are no significant multicollinearity issues within the model. In order

for the model to show multicollinearity issues, this VIF statistic would have to be exceeding 10 which it is not.

6. Discussion

The findings presented in Table 1 and Table 2 provide empirical support for H1 in comparison to H0. H1 in the beginning of this report suggested that women's participation in civil resistance campaigns is influenced by the presence of internet usage in the respective country. The positive unstandardised coefficient for the main predictor variable supports this hypothesis, indicating a positive correlation between the extent of internet usage and the level of women's participation in civil resistance campaigns. This result is consistent with existing literature, particularly the work of Bennet and Segerberg on digital activism, which suggests that social media platforms, or new media, is able to attract a more diverse participant pool (Bennet & Segerberg, 2011). The empirical analysis suggests that DNMT does in fact lead to a higher participation of women in civil resistance campaigns.

The findings shed further light on digital activism in the context of women's mobilisation in civil resistance campaigns. They suggest that the internet serves as a platform through which women can be mobilised using various mediums. However, these results do not provide a detailed understanding on the underlying mechanisms driving women's participation in these campaigns. While the initial hypothesis proposed that the internet, as a forum of nonviolent civil resistance, would attract a larger number of women due to their historical participation in nonviolent movements, the empirical analysis did not find this relationship to be statistically significant.

Although this theory is suggested and elaborated upon by other scholars, this specific empirical data does not outright share the same findings. The regression analysis actually found that this relationship was not statistically significant. It's important to note that these results do not definitively disprove the theories posited earlier, as the data may not have been specifically tailored to test that particular predictor variable.

The findings from the empirical analysis presented in Table 1 resonate with various concepts and conclusions put forth in prior literature. Scholars in the field of internet studies suggested that the internet serves as an efficient platform for mobilisation, largely due to its many-to-many communication channels. While this specific relationship wasn't directly tested in the empirical analysis, the positive correlation observed between the independent variable (IV) and the dependent variable (DV) indirectly supports this notion. The fact that the internet positively correlates with the participation of women implies that a feature of the internet serves as a catalyst for mobilisation. Thus, the existence of communication channels within the internet ecosystem likely plays a crucial role in inciting mobilisation, serving as the most plausible mechanism to explain the observed phenomena.

The findings from the past literature concerning women's participation in civil resistance campaigns align with the observations made in this study. As previously discussed, women's participation in such campaigns appears to be influenced by the level of violence associated with the campaign. While violence is just one of several factors influencing participation, existing literature extensively explores its role in shaping women's involvement. It is worth noting that there is a higher level of participation in nonviolent campaigns compared to violent ones, a trend

documented in numerous studies. However, it is important to acknowledge that this relationship may suffer from an endogeneity problem, meaning it's unclear which variable ultimately affects the other. Unfortunately, due to the absence of an independent variable (IV) specifically addressing this issue, the research does not delve into complexities of endogeneity. Consequently, the relationship between these two variables in the empirical analysis remains inconclusive, with statistically insignificant coefficients. This lack of significance could be attributed to the unresolved endogeneity problem, underscoring the need for further investigation into the dynamics between violence and women's participation in civil resistance movements.

The empirical analysis revealed intriguing insights regarding the impact of literacy rates on women's participation in civil resistance campaigns. Although statistically significant, the relationship between literacy rates and women's participation in civil resistance campaigns appears to be weak ($B = 0.038$). This finding implies a limited or negligible association between these two variables.

Another noteworthy control variable discussed in Table 1 is gender-inclusive ideology. The results suggest that the presence of a gender-inclusive ideology within campaigns correlates with increased participation of women in said campaigns. This outcome aligns with prior theoretical discussions and expectations. A gender-inclusive ideology, by its nature, fosters an environment that is more welcoming and accommodating to women's involvement, thereby facilitating their participation in civil resistance campaigns.

7. Conclusion

This research aimed to explore whether the presence of the internet had an effect on the participation of women in civil resistance campaigns. Using an OLS regression, it was suggested that there was a positive relationship between these two variables to a statistically significant degree. This finding supports the Digital Network Mobilisation Theory in which the internet is an effective mobiliser because it acts as a platform for many-to-many communication.

The findings of this study provide several implications to future activists and campaign organisers. The positive trend identified in the regression model underscores the influential role of internet usage in boosting women's participation in civil resistance campaigns. Consequently, campaign organisers and activists would be wise to recognize the internet and social media as effective tools for mobilising a diverse range of participants. Moreover, the correlation between women's participation and nonviolent civil resistance, as indicated in previous research and supported by the findings of this study, suggests that prioritising nonviolent strategies may enhance the likelihood of campaign success. By fostering inclusive and nonviolent movements facilitated by online platforms, organisers can potentially amplify their impact and achieve their objectives more effectively

Another important implication for future organisers of civil resistance campaigns is the aspect of gender-inclusive ideology within campaigns. The predictor variable "gi_ideal" was a control variable that showed a significant positive relationship with the women's participation in civil resistance. For campaign organisers, these results should raise the awareness about the importance of incorporating gender-inclusive ideologies within the campaigns goals. This would

be essential for organisers as it could increase mobilisation effectiveness and attract more participants to their cause.

However, there are some limitations to this research. Primarily, the low number of recorded instances of women's participation in civil resistance campaigns makes it challenging to replicate results. Women's involvement in these events is often underreported, and data on the actual quantity is inaccurate. This phenomenon was apparent in the WiRe dataset, where only the presence and extent of women's participation were recorded, not the quantity of estimated women's participation. This discrepancy could be intentional or due to the difficulty of estimating participation levels, as civil resistance campaigns are often informal and lack regular headcounts. Moreover, scholars and observers of these civil resistance campaigns might downplay women's roles to more supportive positions, which may not accurately reflect their actual involvement.

The strength of the correlations in the model can be called into question. While four out of five predictors were statistically significant, some of the predictor variables did not demonstrate a strong predicting power towards the outcome variable. For instance, literacy rates only indicated a 0.005 increase in predicting women's participation in frontline civil resistance campaigns. This value is relatively small, indicating that this variable is not a strong predictor of the outcome variable, despite its statistical significance and its perceived theoretical importance.

Another limitation of the research comes from the independent variables. Internet usage statistics, while increasingly available, may not always be accurate or comprehensive. The World

Bank database provides the most comprehensive archive of this indicator, but even this database lacks crucial information. This scarcity of data arises from the relatively recent emergence of the internet, and the limited governmental tracking of such data. More specifically, less developed countries and countries experiencing civil unrest, may lack the resources and technology to accurately record internet usage data, resulting in underrepresentation in the research. This limitation significantly impacted the number of usable campaigns in the regression analysis due to missing values. To enhance the significance of the results and improve the accuracy of the regression analysis, future research should utilise a larger and more comprehensive data pool. However, as tracking technology advances, this issue is expected to diminish, providing future researchers with a more accurate and informative data set.

There are several avenues of further exploration that future researchers can pursue. One potential area for improvement is the treatment of the dependent variable, women's participation, which was treated as a categorical variable in this database. However, conceptualising this variable as continuous, where the actual number of women participants in each civil resistance campaign was recorded, could provide valuable insights. If future databases include this data, it would be beneficial to replicate and test the findings of Table 1 using this empirical model.

Additionally, the inclusion of more control variables could enhance the robustness of the regression model. For example, incorporating a variable for economic development of a country could be valuable. Countries with higher GDPs may have better internet coverage, as they can afford to invest in infrastructure. Moreover, higher GDP per capita could also influence the number of internet-connected devices owned by citizens. By including such variables, future

research could provide a more nuanced understanding of the relationship between internet usage and women's participation in civil resistance campaigns.

8. References

- Anable, D. (2006). The Role of Georgia's Media—and Western Aid—in the Rose Revolution. *Harvard International Journal of Press/Politics*, 11(3), 7–43.
<https://doi.org/10.1177/1081180X06289211>
- Andrews KT, Biggs M. 2006. The dynamics of protest diffusion: movement organizations, social networks, and news media in the 1960 sit-ins. *Am. Sociol. Rev.* 71(5):752–77
- Barrons, G. (2012). 'Suleiman: Mubarak decided to step down #egypt #jan25 OH MY GOD': examining the use of social media in the 2011 Egyptian revolution. *Contemporary Arab Affairs*, 5(1), 54–67. <https://doi.org/10.1080/17550912.2012.645669>
- Bennett, W. L., & Segerberg, A. (2011). DIGITAL MEDIA AND THE PERSONALIZATION OF COLLECTIVE ACTION: Social technology and the organization of protests against the global economic crisis. *Information, Communication & Society*, 14(6), 770–799.
<https://doi.org/10.1080/1369118X.2011.579141>
- Bimber, B., & Copeland, L. (2013). Digital Media and Traditional Political Participation Over Time in the U.S. *Journal of Information Technology & Politics*, 10(2), 125–137.
<https://doi.org/10.1080/19331681.2013.769925>
- Calenda, D., & Meijer, A. (2009). YOUNG PEOPLE, THE INTERNET AND POLITICAL PARTICIPATION: Findings of a web survey in Italy, Spain and The Netherlands.

Information, Communication & Society, 12(6), 879–898.
<https://doi.org/10.1080/13691180802158508>

Caren, N., Andrews, K. T., & Lu, T. (2020). Contemporary Social Movements in a Hybrid Media Environment. *Annual Review of Sociology*, 46(1), 443–465.
<https://doi.org/10.1146/annurev-soc-121919-054627>

Chenoweth, E. (2019). Women’s Participation and the Fate of Nonviolent Campaigns . One Earth Future Foundation.

Earl, J., & Kimport, K. (2011). *Digitally enabled social change : activism in the Internet age*. MIT Press.

Fortinet.com. (n,d). What is Transmission Control Protocol TCP/IP. Retrieved from <https://www.fortinet.com/resources/cyberglossary/tcp-ip>

Gleditsch, K. S., Macías-Medellín, M., & Rivera, M. (2023). A Double-Edge Sword? Mass Media and Nonviolent Dissent in Autocracies. *Political Research Quarterly*, 76(1), 224–238. <https://doi.org/10.1177/10659129221080921>

Hou, L. (2020). Rewriting “the personal is political”: young women’s digital activism and new feminist politics in China. *Inter-Asia Cultural Studies*, 21(3), 337–355.
<https://doi.org/10.1080/14649373.2020.1796352>

- Lee, S. H. (2017). Digital democracy in Asia: The impact of the Asian internet on political participation. *Journal of Information Technology & Politics*, 14(1), 62–82.
<https://doi.org/10.1080/19331681.2016.1214095>
- Lim, J. B. (2017). Engendering civil resistance: Social media and mob tactics in Malaysia. *International Journal of Cultural Studies*, 20(2), 209–227.
<https://doi.org/10.1177/1367877916683828>
- MacCaughey, M., & Ayers, M. D. (2003). *Cyberactivism: online activism in theory and practice*. Routledge.
- McAdam, D. (1992). Gender as a Mediator of the Activist Experience: The Case of Freedom Summer. *The American Journal of Sociology*, 97(5), 1211–1240.
<https://doi.org/10.1086/229900>
- Mendes, K., Ringrose, J., & Keller, J. (2018). MeToo and the promise and pitfalls of challenging rape culture through digital feminist activism. *The European Journal of Women's Studies*, 25(2), 236–246. <https://doi.org/10.1177/1350506818765318>
- Ozkula, S. M. (2021). What is digital activism anyway? Social constructions of the “digital” in contemporary activism. *Journal of Digital Social Research*, 3(3), 60–84.
<https://doi.org/10.33621/jdsr.v3i3.44>

Pew Research Center. (2005, December 28). *How women and men use the internet*. Retrieved from

<https://www.pewresearch.org/internet/2005/12/28/how-women-and-men-use-the-internet/>

Pew Research Center. (2013, May 13). *Youngest Americans are the most politically active on social networking sites*. Retrieved from

<https://www.pewresearch.org/short-reads/2013/05/13/youngest-americans-are-the-most-politically-active-on-social-networking-sites/>

Pew Research Center. (2024, January 31). *Social media fact sheet*. Retrieved from

<https://www.pewresearch.org/internet/fact-sheet/social-media/?tabItem=0ec23460-3241-4a1f-89bc-0c27fb641936>

Pinckney, D. (2016). Black lives and the police. *The New York Review of Books*.

Share of demonstrations involving women by type 2020. (n.d.). Statista. Retrieved March 19, 2024, from

<https://www.statista.com/statistics/1017844/share-demonstrations-involving-women-type/>

Sliwinski, S. (2022). The acoustics of civil resistance: Summoning the spirit of the law with a smartphone. *Journalism (London, England)*, 23(3), 614–631.

<https://doi.org/10.1177/14648849211060606>

- Thomas, J. L., & Bond, K. D. (2015). Women's Participation in Violent Political Organizations. *The American Political Science Review*, 109(3), 488–506.
<https://doi.org/10.1017/S0003055415000313>
- The World Bank. (2022). Individuals using the internet. Retrieved from https://data.worldbank.org/indicator/IT.NET.USER.ZS?end=2022&name_desc=false&start=1960&view=chart
- Tufekci, Z., & Wilson, C. (2012). Social Media and the Decision to Participate in Political Protest: Observations From Tahrir Square. *Journal of Communication*, 62(2), 363–379.
<https://doi.org/10.1111/j.1460-2466.2012.01629.x>
- Viterna, J. S. (2006). Pulled, pushed, and persuaded: Explaining women's mobilization into the Salvadoran guerrilla army. *The American Journal of Sociology*, 112(1), 1–45.
<https://doi.org/10.1086/502690>
- Vliegthart R, Oegema D, Klandermans B. 2005. Media coverage and organizational support in the Dutch environmental movement. *Mobilization* 10(3):365–81
- Uhlener, C. J. (2015). Politics and Participation. In *International Encyclopedia of the Social & Behavioral Sciences* (Second Edition, Vol. 18, pp. 504–508). Elsevier Ltd.
<https://doi.org/10.1016/B978-0-08-097086-8.93086-1>

Warren, T. C. (2015). Explosive connections? Mass media, social media, and the geography of collective violence in African states. *Journal of Peace Research*, 52(3), 297–311.

<https://doi.org/10.1177/0022343314558102>

Zhuravskaya, E., Petrova, M., & Enikolopov, R. (2020). Political Effects of the Internet and Social Media. *Annual Review of Economics*, 12(1), 415–438.

<https://doi.org/10.1146/annurev-economics-081919-050239>