



## Effects of digital use on trust in political institutions among ethnic minority and hegemonic group – A case study

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### ARTICLE INFO

#### Keywords:

Internet use  
Digital uses  
Political trust  
Political institutions  
Trust in government  
Trust in parliament  
Trust in political parties

### ABSTRACT

The current study was based on data from a nationwide Annual Social Survey to investigate the correlation between types of Internet usage (seeking information, e-government use, e-mail, social media and peer-to-peer Internet telephony) and trust in political institutions in Israel's Jewish majority and Arab minority. Trust in government, parliament, and political parties was found to be significantly higher among Jews than Arabs. Our findings show that first level digital divide reflected in Internet use vs non-use does not correlate with political trust. Among Internet users we found different patterns of association between digital uses and trust in political institutions, which may presumably be explained by different group status. E-government use and social media use were positively correlated with political trust only among Jews. Seeking information and e-mail use were negatively associated with trust in political institutions only among Arabs. Peer-to-peer Internet telephony was negatively correlated with trust in government among both groups. Our important finding is that in spite of the processes of digitization, the effects of digital use on political trust are still relatively marginal. In both groups, the primary predictor of political trust is attitudes toward the functioning of different public institutions.

### 1. Introduction

Trust as a concept has drawn considerable attention in various academic disciplines, including psychology, sociology, governance, political science, communications, economics, management, and health care [1,2]. Research has demonstrated that *the concept of trust* is the key to our understanding of various human behaviors and that trust intervenes in almost every aspect of social life [3]. In fact, trust is a *sine qua non* for the legitimacy and sustainability of any democratic system [4]. As for institutions, trust is thought to facilitate effective institutional functioning [5]. High levels of trust in a social institution are more likely to be accompanied by satisfaction with that institution [6], cooperation and compliance with its policies [7,8], emotional attachment and commitment to it [9,10]. Moreover, trust in government and political institutions is critical as democratic systems rely on citizen trust to operate effectively [11]. In other words, trust plays an important role in ensuring the legitimacy and stability of governance, political systems, social order, and social cohesion. In contrast, extreme lack of trust in political institutions can weaken the rule of law and threaten democracy itself [12].

Trust has emerged as a central concept as a result of globalization, digitization, and renewed focus on the nature of the individual in the

information age [13]. The Internet and social media have changed the ways in which governments and institutions communicate with citizens [14,15]. The social media have radically changed the sharing of information online, whether through blogs and forums, wikis and content aggregators, and sites like Facebook and Twitter [16]. Innovative modes of communication can improve government transparency, augment public support for government and administration by enhancing the quantity and quality of information flow in both directions, and encourage citizen participation in decision-making processes [15, 17–20]. These changes are likely to encourage empowerment, making citizens less willing to defer to government authority [21].

Globally, many nations are pushing for incorporation of ICT into their repertoire of governance tools [22,23]. However, systemic research to assess the effects of Internet use on trust in political institutions is rare [19,24]. Most of the studies dealt with one or two types of digital uses and, as far as we know, none of them addressed a variety of digital uses in one research. Moreover, it is surprising that differences between majority and minority groups have been overlooked almost totally [25], as minorities in general and those defined as 'hostile sub-groups' or even 'fifth column' are likely to form critical attitudes toward government and other political institutions. Accordingly, the aim of this study is to investigate the association between digital uses and trust in

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<https://doi.org/10.1016/j.techsoc.2021.101633>

Received 9 March 2021; Received in revised form 3 June 2021; Accepted 5 June 2021

Available online 26 June 2021

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political institutions among ethnic minority and hegemonic group.

While studies of political trust and media have been conducted in the United States for the most part, this article is based on a survey conducted in Israel. Israel is an appropriate venue for such a study for three important reasons. First, its institutions, both political and public, have earned very low trust ratings (Herman et al., 2018; Herman et al., 2019). Second, Israel's society reflects deep divisions, as can be seen in the extensive segregation in force in terms of residential, educational, political and labor market parameters, and protracted conflict between the majority and minority groups (Jews and Arabs, respectively) [26]. Third, over the past decade, Israeli society has undergone dramatic ICT diffusion [27,28] that enables us to reveal initial indications as to which digital uses may be potentially useful to create and maintain political trust and among which groups.

The data for the current paper was collected in 2015, which means that they may have been affected considerably by Operation Protective Edge – the name given to the 2014 Israel–Gaza conflict. In July and August 2014, Israel's armed forces engaged Palestinian militants in Gaza in battles that included air and artillery strikes. Civilian targets were hit on both sides. More than 70% of Israel's population were in range of Palestinian fire [29].

## 2. Literature review

### 2.1. Israeli background

#### 2.1.1. Political system

Israel is a parliamentary democracy consisting of legislative, executive and judicial branches. Historically, the controversies facing the founders of the Jewish settlement on security, economic and religious issues have been debated on a political right-wing/left-wing continuum. Sensitivity to the rights of the Arab population, the development of the welfare state and consideration for world public opinion characterized those belonging to the leftist camp [30]. In contrast, belief in a free economy based on competition and private initiative, the adoption of an aggressive strategy towards the Arab world in general and to Israeli Arabs in particular, and minimal consideration of world public opinion, were integral parts of the right-wing profile [31].

Contemporary Israeli political map characterizes by an extreme multi-party system that led to frequent changes in the composition of their coalition governments [32]. During late November and early December 2014, parties in the governing coalition had serious disagreements, particularly over the budget and a “Jewish state” proposal, which led to the dissolution of the government in December 2014. In 2015 – the year that these study data were collected – and early elections for the twentieth Knesset were held in Israel. A coalition called the Zionist Union was formed by the Labor Party and Hatnuah in an attempt to defeat the ruling coalition led by the Likud party. The Likud, led by incumbent Prime Minister, Benjamin Netanyahu, received the highest number of votes and teaming up with other right wing parties and the religious parties, United Torah Judaism, Kulanu, and Shas, formed a coalition based on a bare minimum of 61 seats (of 120).

Political instability has only intensified in recent years so that when elections were held in March 2021 – the fourth round in two years – they once again failed to yield conclusive results, leaving the country to ponder whether any way could be found to end the current political stalemate. At the time of this writing, it is not clear whether a government will be formed or whether a fifth (!) round of elections is on the horizon. Prime Minister Netanyahu's pending trial on charges of corruption has generated serious debate in Israel about fundamental issues such as the extent to which ethical and legal limits apply to Israeli politicians.

#### 2.1.2. Jews and Arabs

Israel is a multicultural society, with a 75% Jewish and 20% Arab population (83% of them are Muslim). The Arab population is composed

of roughly 80% Sunni-Muslims, 10% Christians (affiliated with several sects, such as Greek-Catholic and Greek-Orthodox), and 8% Druze [33]. Most of the Jewish majority is composed of immigrants and their offspring. According to Israel's Law of Return (1950) and Law of Nationality (1952), every Jew has the right to immigrate, settle in Israel and receive Israeli citizenship immediately.

The declaration of statehood in 1948 granted the Arab minority Israeli citizenship but in practice, their rights were suspended until 1966 and they lived under military administrative rule. They were also limited to specific geographic areas as a security measure, as they were considered potentially hostile. This hampered educational and training opportunities outside their areas and thus made them less competitive for good jobs in the labor market. Despite relaxation of these formal restrictions after 1967, this two decade lack of free movement may have produced long-term effects on Jewish-Arab inequality [34]. Since 1966, when the military administration was abolished, Arab citizens officially have full civil and political rights, as long as they do not come into conflict with the national goals of the Jewish majority [35]. However, most Arab Israeli citizens live in constant fear in a reduction of their rights [36].

These circumstances have molded a complex identity marked by many facets, divisions, nuances and sub-identities [37]. According to a 2010 Brookings poll, 44% of Arab Israeli respondents identified as Palestinian while 33% of them identified as Israeli citizens [37]. While about 30% of Israeli Arab respondents listed “Israeli” as their most important identity in a survey conducted by the Index of Arab-Jewish Relations in Israel in 2003, that percentage dropped to 12% in 2013. Only 42% of Arab citizens identify themselves as a part of the State of Israel compared to 83% of Jews (Herman et al., 2018). Compulsory military conscription does not apply to Arab citizens because of potential conflict, placing their loyalty to the state in question. Moreover, far-right political discourse presents them as a “fifth column” [38].

Operation Protective Edge had the effect of increasing Arab Israeli identification with the Palestinian population in the Gaza Strip, at the expense of their identification with Israel, their own state, and surveys have shown many of them to side politically with any enemy that is attacked by Israel [39]. The shooting death of a 22-year-old Israeli Palestinian by Israeli police in the Galilee Arab village of Kafr Kana three months after Operation Protective Edge (8.11.2014), triggered a series of demonstrations in which Palestinian flags and checkered keffiyehs (a Palestinian symbol) were waved by Arab citizens. It should be noted that not all parts of Arab society were involved in the ongoing tension. Most of the Druze community in Israel did not participate in the anti - Israeli events mentioned above. While Israeli Druze serve in Israeli Defense Forces and integrate into Israeli society, other Arabs are largely segregated minorities [33].

In contrast to the large left-right spectrum of political parties in Jewish sector, differentiated mainly by security, economic, ideological and sectorial agendas, positions taken by the Arab parties represent the ideological dimension (e.g., “two states for two nations,” “equality,” “peace”) which resemble the platforms promoted by leftwing Jewish parties [31,40]. In the elections of 2015, Arab parties garnered the highest percentage of Arab votes (83.2%) recorded in six elections, dating back to 1999 (when they received 68.6%).

Social stratification comparisons show that Arabs are at a disadvantage compared with Jews in aspects including occupational status, earnings, education, standard of living and health services [41–46]. A Statnet poll shows that 39% of Arab respondents report feeling genuine discrimination in Israeli institutions, while 53% believe they have only partial equality. A mere nine percent believe that Israeli institutions are completely equal and fair. Further support comes from the Index of Arab-Jewish Relations in Israel which in 2012 reported that almost 71% of Arabs believe that the government treats Arabs as second class citizens. Accordingly, Arabs were less satisfied than Jews with institutions, public officials, and the public sector performance [37].

In Israel, the digital divide between Jews and Arabs is manifested

both in terms of Internet access and uses [27,47–50]. These Jewish-Arab usage gaps reflect, in part, cultural differences. Whereas the Jewish sector is mostly modern and secular, Arab society is more traditional and conservative [51].

## 2.2. Political trust

**Political trust refers to how citizens assess the workings of a country's political actors and institutions** [52]. That is, in a scenario in which full information is lacking on the intentions and projected outcomes of political institutions, confidence still exists that power will not be misused, especially towards citizens [53]. Political trust involves trust in different political institutions. As such, scholars have measured it using multiple indicators [54–56]. Torney-Purta and colleagues [56]; for example, distinguished between political institutions (parliament, government, and political parties) and bodies that directly interact with citizens (schools or police). Based on this categorization, we will focus on the three types of political institutions.

Trust in political institutions is based on a simple assumption: if processes seem to be working effectively, people tend to trust the institutions implementing them. Effective political performance can be defined as the ability to treat citizens fairly, protect civil liberties and conduct administrative affairs transparently and effectively. These are called procedural goods and desired outputs [53,57]. Economic performance pertains to how a regime fulfills citizens' economic expectations [58] both on national and individual levels [59,60]. Consequently, levels of trust in political institutions have been found to be correlated with perceived political and economic performance [61].

Predictors of trust in political institutions may also include demographic characteristics, personal ideology, personal interests, and media consumption habits. Studies have found that males, younger and more educated will more probably develop higher levels of trust in political institutions than females, older respondents and less educated [62,63]. In multiethnic states, ethnicity has also been found to affect institutional trust significantly, and members of ethnic minorities manifest greater skepticism toward political institutions than do majority ethnic groups [50].

Trust in political institutions has been in a state of continuous decline over the last few decades [64,65]. Trust in *government* precipitously declined over the last fifteen years, partly due to the economic crisis. Surveys show that low levels of trust in government are attributed to widespread perceived government inefficiency. Examples are using money on the wrong things, and not providing citizens with needed and desired public services [66]. Furthermore, *political parties* earn very low levels of trust in all advanced industrial countries, hovering between 20% and 30%. In regard to *parliament*, however, trust varies across countries with no clear downward trend over time [67]. According to Norris, "There is widespread concern that the public has lost faith in the performance of the core institutions of representative government, and it is hoped that more open and transparent government and more efficient service delivery could help restore that trust" [68]; p. 113).

## 2.3. Internet use and political trust

Technology, both in terms of access and benefits, is not distributed equally between or within nations [69]. A digital divide separates those who have physical access to information and communication technologies as well as the capability to utilize them and those who do not [15, 70]. In the last decade, research into *digital divides* has evolved from the issue of access to a more multifaceted *digital exclusion* that takes in literacy, and participation through ICTs as well as traditional inequalities from other sources [15,71–74]. Participation through ICT as reflected in different digital uses is the focus of the current study.

The impact of Internet use on political trust was found to be potentially mixed (for a detailed review see Table 1).

Internet use may promote civic engagement, political knowledge and

political trust and support for democratic values, according to some empirical analyses [24,75–78,80,84]. Citizen e-government use was found to be positively correlated with trust in local authorities [76] and federal government [85,86]. In contrast, several studies found Internet use to be damaging [19,81,79]. Scholars make a distinction between different digital uses and found that use of news websites is associated with higher trust in the government, but use of social media seems to reduce that trust [80,78,81]. It should also be noted that a considerable number of studies found a null effect for Internet on political knowledge, political trust, and participation [83,82].

## 3. Theoretical background and research hypotheses

Two main theoretical approaches predominate in political science, the institutionalist and the culturalist [87,88]. The institutionalist approach perceives trust as endogenous and as linked to institutional performance. This means that how individuals perceive the benefits they derive from these institutions will determine their level of trust, above and beyond ethnic or cultural affiliation. Thus, the *institutionalist* approach allows the positing of H1:

**H1. Among both groups – Jews and Arabs – positive attitudes toward the functioning of public institutions will be positively correlated with political trust.**

According to the *culturalist* approach, in contrast, trust is exogenous, arising from norms absorbed by individuals during the process of socialization, outside the political sphere. Thus political trust, and concomitant trust in public institutions, becomes an extension of interpersonal trust, with all the concomitant factors such as socio-demographics, the national scene, religion and subjective perception of welfare that play a part in fostering such trust [89]. As an agent of socialization, the mass media may help to increase or corrode trust by playing up or playing down events entailing actors and institutions in the political arena [90]. At the same time, media effects on the audience may be moderated by its socio-demographic characteristics.

Scholars have proposed contrasting theories about media effects on political trust. The *media malaise theory* [91,92] posits that substantive political issues are less emphasized in the media than stories about personalities, scandals, sensational events and also conflicts and competition between political personalities [93,94]. Extensive exposure to content of this sort may engender mistrust, civic disengagement, and questions about political legitimacy [95,96].

On the other hand, the *virtuous circle theory* emphasizes the ease and greater access to political information that the media provide. The result of such media exposure to political issues may be a virtuous circle of increased civic engagement and political interest that increases trust in political institutions [97,98].

The *echo chamber theory* approaches the issue from a different viewpoint. In this theory, the media content that consumers actively select tend to echo their own ideologies, and to disregard content reflecting opposing viewpoints [99,100]. According to this theory, the only power the media have is to amplify and bolster consumers' preconceived opinions. The implication is that the media consumers most likely to be influenced by media support for the government and its institutions are those who already trust the government. Conversely, a negative media slant on government activity will most likely lessen trust in government mainly among consumers who are already negatively inclined toward it [101].

*Seeking information.* According to echo chamber theory, people tend to selectively consume content that reaffirms their own views [101]. People critical of the political institutions will seek similarly dissident information, which further reduces their trust in them. Those who are more satisfied with the institutions and are committed to them will more likely seek information and forums that reinforce their original view. This tendency is intensified by algorithms that provide Internet users with information consistent with their political view. Due to the

**Table 1**

Internet use and political trust – the summary of related work.

	Year of data collection	Method	Sample origin and size	Internet uses	Main findings
<i>Positive correlation between Internet use and political trust</i>					
Kenski, K., & Stroud, N. J [75]. Connections between Internet use and political efficacy, knowledge, and participation. <i>Journal of broadcasting &amp; electronic media</i> , 50(2), 173–192.	2000	National Annenberg Election Survey	US (N = 63,500)	Internet access News websites	Internet access and online exposure to information about the presidential campaign are significantly associated with, knowledge, and participation.
Tolbert, C. J., & Mossberger, K [76]. The effects of e-government on trust and confidence in government. <i>Public Administration Review</i> , 66(3), 354–369.	2001	National random digit-dialed telephone survey conducted by the Pew Internet and American Life Project	US citizens who had previously reported that they used government Web sites (N = 815).	e-government (federal, state, local level)	There is a statistically significant relationship between use of local government Web site and trust in government. The evidence suggests that e-government can increase process-based trust by improving interactions with citizens and perceptions of responsiveness.
Sharoni, S [77]. E-citizenship: Trust in government, political efficacy, and political participation in the internet era. <i>Electronic Media &amp; Politics</i> , 1(8), 119–135.	2012	“Trust and Online Engagement” survey	US (N = 924)	Internet use Social media Online government Online engagement Political activity	Social media use, online interactions with government, and online political activity are positively correlated with political trust.
Lu, J., Qi, L., & Yu, X [78]. Political trust in the internet context: A comparative study in 36 countries. <i>Government Information Quarterly</i> , 36(4), 1–10.	2010–2014	World Values Survey	60 countries (N = 90,350)	Internet infrastructure Internet censorship Internet participation (for information, consultation, decision-making)	Political trust is strengthened in the new informational context that is created by the Internet infrastructure.
<i>Negative correlation between Internet use and political trust</i>					
Im, T., Cho, W., Porumbescu, G., & Park, J [19]. Internet, trust in government, and citizen compliance. <i>Journal of Public Administration Research and Theory</i> , 24 (3), 741–763.	2009	The Knowledge Center for Public Administration and Policy (KCPAP) Survey	South Korea (N = 1213)	Internet use Social media	The more time individuals spend on the Internet, the lower their degree of trust in government and level of citizen compliance. However, the results also suggest that such negative effects of the Internet can be moderated through increased citizen use of e-government.
Zhou, D., Deng, W., & Wu, X [79]. Impacts of Internet Use on Political Trust: New Evidence from China. <i>Emerging Markets Finance and Trade</i> , 1–17.	2010, 2012	Chinese General Social Surveys (CGSS)	China	Internet use	Trust toward the local government, trust toward the central government, trust toward the central media and trust toward the judicial system—have all been negatively impacted by Internet use.
<i>Mixed findings</i>					
Ceron, A [80]. Internet, news, and political trust: The difference between social media and online media outlets. <i>Journal of Computer-Mediated Communication</i> , 20(5), 487–503.	2012	Eurobarometer survey data	27 European countries (N = 27,000)	Official news websites News consumption from social media	Consumption of news from information/news websites is positively associated with higher political trust, while access to information available on social media is linked with lower trust.
Lu, H., Tong, P., & Zhu, R [81]. Does Internet Use Affect Netizens' Trust in Government? Empirical Evidence from China. <i>Social Indicators Research</i> , 1–19.	2017	Netizen Social Consciousness Online Survey (NSCS)	Chinese Internet users (N = 2379)	Internet use for information search, online community and entertainment	The acquisition of information from independent blogs and foreign websites is negatively associated with trust in central government. The acquisition of information from social networking sites is linked with higher trust in central government.
<i>Null correlation between Internet use and political trust</i>					
Morgeson, F. V., III, VanAmburg, D., & Mithas, S [82]. Misplaced trust? Exploring the structure of the e-government-citizen trust relationship. <i>Journal of Public Administration Research and Theory</i> , 21 (2), 257–283	2008	American Customer Satisfaction Index study	US end users of US federal government services (N = 787)	Internet use e-government	Although e-government may help improve citizen confidence in the future performance of the agency experienced, it does not correlate with greater generalized trust in the federal government.
Horsburgh, S., Goldfinch, S., & Gauld, R [83]. Is public trust in government associated with trust in e-government? <i>Social Science Computer Review</i> , 29(2), 232–241.	No information	Telephone survey	Australia (N = 438) and New Zealand (N = 398)	e-mail e-government	The study found no relationship between trust in government institutions and various e-government functions.



heterogeneity of Israel's political spectrum with a fragile right-left balance among Jews [31], we may assume that the voices of those who consume information supporting political institutions will be offset by those who criticize it. Therefore we may hypothesize that:

**H2a. Among Jews, the correlation between seeking information and trust in political institutions will be insignificant.**

In contrast, Arabs who have suffered overt and latent discrimination for generations in different spheres of life [41,43,44] will be likely to seek information which supports their resentment and criticizes political institutions. Accordingly, we may posit that:

**H2b. There will be a negative correlation between seeking information and trust in political institutions among Arabs.**

*E-government* is the use of information technologies to transform relations with citizens, businesses, and other arms of government [102] and provide better service, better governance and effective and efficient communication with citizens and business [103]. Previous studies distinguished three types of e-government use: e-information (information provided by governments to citizens), e-service (delivery of electronic services), and e-participation [86,104]. The aim of e-participation is "to foster citizen engagement in policy decision-making, to strengthen open and participatory governance, and to advance collaboration between citizens and governments" [105]; p. 125). In 2005, a form of e-participation appeared, demanding the highest level of public trust – internet voting. It has been conducted on a national scale in Estonia bi-annually [106], tested out as trial in some other European countries [107], but has not been assayed in Israel yet.

Successful implementation of e-government services may enable political institutions to provide citizens with better and more efficient, effective, transparent and customer-oriented public services. The result may be a reduction in the information gap, a renewal of the image of public institutions, construction of a platform for e-democracy, establishment of trustworthy institutions and the promotion of participation and collaboration [108,109]. Thus, in line with virtuous circle theory, citizens' greater involvement in political life through e-government services will increase their trust in democracy, in political processes, and institutions [110]. This claim was supported by previous findings [22, 76,111]. Accordingly, we may posit that:

**H3. There will be a positive correlation between e-government use and trust in political institutions among both populations – Jews and Arabs.**

*Social networking service (SNS)*. Social media also assist individuals who seek like-minded groups or peers with which to share common ideas and reinforce solidarity. Moreover, social networks supposedly reaffirm users' feelings and opinions by allowing them to manifest their commonality with others through built-in responses such as "likes" and "share" that have the effect of creating a sense of virtual affiliation in an imagined community [112]. As an example, during Operation Protective Edge, in 2014, Facebook was a platform through which civilians initiated campaigns to support residents of the south of the country by purchasing products manufactured there and recruiting participants for community service such as attending funerals of soldiers without families, visiting wounded soldiers in hospitals and organizing and sending packages to soldiers [38]. In keeping with the virtuous circle theory, this type of engagement increases trust in political institutions [101]. We may assume that e-mail and peer-to-peer Internet telephony use as forms of social capital-enhancing Internet uses [113] will be associated with political trust in the same way. Accordingly, we hypothesize that:

**H4a. There will be a positive correlation between social Internet uses (social media, e-mail and peer-to-peer Internet telephony) and trust in political institutions among Jews.**

However, the less-than-professional nature of social media operations allows the inclusion of news that is often false, deceptive, cynical, blatantly negative and generally suspect in terms of veracity. Pulling the

strings behind the scenes may be elusive agents intent on undercutting the credibility of specific persons or institutions [114]. Social media are also fertile ground for radical groups to disseminate misinformation, gain influence, raise funds, maintain ties with supporters, and express their highly negative rhetoric [115]. For example, during and after Operation Protective Edge, the Facebook platform was exploited for blatantly violent discourse, including verbal violence directed in particular against Israeli Arabs, with calls to boycott their businesses and "unfriend" them because of their political views [37]. Accordingly, based on media malaise theory we may posit that:

**H4b. There will be a negative correlation between social Internet uses (social media, e-mail and peer-to-peer Internet telephony) and trust in political institutions among Arabs.**

## 4. Method

### 4.1. Data source and sample

Our research data was based mainly on **Israel's Central Bureau of Statistics (CBS) Annual Social Survey of 2015**. The CBS annual survey recruits different respondents each year. Its two-part questionnaire contains a core of approximately 100 items pertaining to general subjects such household members' socio-demographic characteristics, economic status, employment, and skills (i.e., courses, languages, studies etc.). The second part is an in-depth module addressing one or two different topics each year. The subject of this variable model in 2015 was attitudes toward governmental institutions (the CBS has not investigated this subject again since then). For the survey, CBS interviewers conducted personal interviews in the participants' homes between January and December 2015. The 7078 persons in the survey were a representative sample of the Israeli population aged 20 and older and they represented about 4.5 million people in the relevant age bracket. The national Population Register was used a sampling frame. In the sample, 5817 were Jews and 1261 were Arabs. Response rate was approximately 83%.

### 4.2. Variables

#### 4.2.1. Independent variables

*Internet use in the last three months* was measured by the following item: "During the last three months, have you made use of the Internet, including e-mail?" Internet use was coded as 1 for users and 0 for non-users.

*Digital uses* were measured by the following five items: "Did you use a computer during the last three months (1) for seeking information (e.g., bank account, news, seeking information about people); (2) for e-mail (3) for discussion groups and social networks (e.g., chat rooms, forums, Facebook, Skype, WhatsApp, or Twitter); (4) to obtain services from government agencies, such as downloading or filling out forms, approvals, and certificates; and (5) for phone calls or video (e.g., Skype, or Video Conferencing). In each item, users were coded as 1 and non-users as 0.

*Attitudes toward the functioning of different public institutions* were measured by 11 items, which related to the Israeli health system, education system, police, courts, Tax Authority, National Insurance Institute, Population Authority, Welfare Services, public transportation (buses and railway), and the local or regional authority/municipality. Cronbach's alpha for attitudes toward functioning of different public institutions was 0.80. The index was constructed as an average of these 11 items and measured on a scale of 1–4, where 1 = Not good at all, 4 = very good.

#### 4.2.2. Dependent variables

*Trust in Parliament (Knesset), Government and political parties* was measured by three items on a scale of 1–4, where 1 = Not at all; 2 = Not

so much, 3 = Yes, to some extent, 4 = Yes, to great extent.

#### 4.2.3. Control variables

**Hebrew language proficiency.** Respondents were asked: "What is the level of your knowledge of the Hebrew language in speech, reading, writing, and comprehension?" Cronbach's alpha for proficiency in Hebrew language was 0.96. The Hebrew proficiency index comprised an average of the four language skills measured on a scale of 1 = not at all, to 5 = very well.

**Physical or health problems** was coded 1 for those who reported such problems and 0 for those who did not.

**Political involvement on a national or local level in the past 12 months** was measured by dichotomous variable. Those not involved were the comparison group.

**Interest in politics and public policy** was measured on a scale of 1–4, where 1 = Not at all; 2 = Not so much, 3 = Yes, to some extent, 4 = Yes, to great extent.

**Voting in the last elections** for the Israeli Parliament (Knesset) and in local elections was measured by two dichotomous items. Those who voted were coded 1 and afterwards a count variable was constructed on a scale 0–2 (0 = did not vote in both elections; 2 = voted both in the Israeli Parliament and local elections).

**Overall life satisfaction** was measured on a scale of 1–4, where 1 = Not satisfied at all, 4 = Very satisfied.

**Satisfaction with economic situation** was measured on a scale of 1–4, where 1 = Not satisfied at all, 4 = Very satisfied.

We also controlled for socio-demographic variables: gender, age, religiosity, marital status, area of residence, education, family income and employment status.

## 5. Findings

### 5.1. Descriptive findings

The findings in Table 2 show that for both groups, trust in all three types of political institution was low: level of trust in parliament and government was similar, whereas trust in political parties was the lowest. Trust in these three types of political institutions among Jews was significantly higher as compared to Arabs.

In line with the research literature, the percentage of Internet users among Jews was significantly higher than Arabs. Among Internet users, Jews reported significantly higher percentage of e-mail use, seeking information, peer-to-peer Internet telephony, and e-government use. Interestingly, the percentage of social media use was significantly higher among Arabs. The percentage for information seeking and e-mail use among Jewish users was close to saturation point. Arab Internet users were near saturation point in seeking information and social media use. However, in both groups, and especially among Arabs, adoption of peer-to-peer Internet telephony and e-government use were far from the saturation point.

**Table 2**  
Descriptive statistics.

	Jews	Arabs	$\chi^2$
Percentage of Internet users (total sample)	80.4%	62.4%	190.6**
Among Internet users	N = 4677	N = 787	
e-mail	87.4%	64.3%	269.5**
Social Media	83.2%	89.6%	20.7**
Peer-to-peer Internet telephony	47.8%	27.4%	112.9**
Seeking for information	95.0%	86.7%	79.2**
E-government	46.0%	24.5%	127.0**
	Mean (SD)	Mean (SD)	t-value
Trust the Knesset (Parliament)	2.25 (0.88)	2.05 (0.91)	5.65**
Trust the Government	2.23 (0.93)	2.05 (0.96)	5.01**
Trust the Political parties	1.90 (0.81)	1.77 (0.81)	3.86**

### 5.2. Multivariate analysis

To address our research questions, we performed a multivariate analysis in two steps, separately for Jews and Arabs. First, we ran three ordinal regressions predicting trust in government, parliament, and political parties in the total samples of Jews and Arabs. In the first stage, we entered our control variables, and Internet use over the past three months was added in the second stage. In all regression models, the effect of Internet use on trust in political institutions was insignificant (i. e., first level digital divide does not distinguish political trust).<sup>1</sup> In the second step, we applied ordinal regression analysis only among Internet users. The control variables were entered in the first stage, and digital uses were added in the second stage.

#### 5.2.1. Predicting trust in parliament (Knesset) among internet users

**Jews.** From Model 1a of Table 3 it can be seen that the higher the age, the higher were the odds of trust in parliament. The odds of political trust among respondents with academic degrees were higher, in comparison to those with elementary and secondary education. The higher the interest in politics and public policy and the extent of voting in the last elections, the higher were the odds of trust in parliament. However, the higher the political involvement, the lower were odds of trust. The more positive the attitudes towards the functioning of different public institutions, the higher was trust in parliament. The findings in Model 2a show that e-government use was positively correlated with the odds of trust in parliament. The positive effect of social media use was marginally significant. The quality measures of the model indicate that the control variables explained about 17% of the variance of the dependent variable and Internet uses added less than 1% to the model fit measures.

**Arabs.** The findings in Model 1b, Table 3 show that the odds of political trust in parliament were lower among respondents with academic degrees, compared to those with elementary and secondary education. The attitudes toward the functioning of different public institutions had positive powerful effects on the odds of political trust among Arabs. The findings in Model 2b show that of all digital uses, only peer-to-peer Internet telephony had a negative marginally significant effect on the odds of trust in parliament. The control variables and digital use explained about 23% of the variance for trust in parliament. The digital uses added 1% to the explained variance of the dependent variable beyond the effects of the control variables.

#### 5.2.2. Predicting trust in government among Internet users

**Jews.** From Model 1a of Table 4 it can be seen that the odds of trust in government among males and periphery residents were higher as compared to females and center residents. Elder and more religious respondents were likely to report higher trust in government. Interest in politics and voting in previous elections were positively correlated with the odds of trust, whereas the effect of political involvement on the odds of trust was negative. Positive attitudes toward the functioning of different public institutions were positively and strongly correlated with the odds of trust in government. From the findings in Model 2a, a positive association can be seen between social media use and e-government use (marginally significant effect), and the odds of trust in government, whereas peer-to-peer telephony use was negatively correlated with the dependent variable. Control variables and digital uses accounted for approximately 21% of variance for trust in government. Digital uses added less than 1% to the model fit beyond the effects of control variables.

**Arabs.** The findings in Model 1b of Table 4 show that periphery residents and people with physical or health problems had higher odds of trust in government compared to center residents and people without

<sup>1</sup> In the interest of space, we have omitted these regressions. These results are available from the author on request.

**Table 3****Predicting trust in Parliament (Knesset) – Ordinal Regression Findings.**

	Jews (N = 3490)				Arabs (N = 608)			
	Model 1a		Model 2a		Model 1b		Model 2b	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
[Category 1]	4.796***	0.394	4.863***	0.416	5.428***	0.725	5.276***	0.784
[Category 2]	6.642***	0.402	6.712***	0.423	7.249***	0.752	7.108***	0.808
[Category 3]	9.114***	0.415	9.189***	0.436	9.411***	0.792	9.284***	0.846
Gender (Male = 1)	0.102	0.066	0.109	0.066	−0.145	0.179	−0.105	0.180
Locality (Center = 1)	−0.055	0.066	−0.059	0.067	−0.285	0.207	−0.169	0.214
Religiosity	−0.022	0.036	−0.033	0.037	0.156	0.093	0.146	0.093
Age	0.006*	0.003	0.007**	0.003	−0.003	0.009	−0.003	0.009
Hebrew proficiency	0.074	0.048	0.045	0.050	0.078	0.093	0.051	0.097
Marital status (Married = 1)	0.111	0.077	0.098	0.078	−0.011	0.195	−0.024	0.198
Matriculation eligibility	0.206 <sup>#</sup>	0.107	0.186	0.109	−0.201	0.227	−0.090	0.232
Non-academic education	0.147	0.105	0.121	0.108	−0.250	0.244	−0.119	0.252
Academic degree	0.269**	0.095	0.232*	0.100	−0.582*	0.251	−0.463	0.273
Employment (employed = 1)	−0.045	0.086	−0.063	0.086	0.238	0.192	0.186	0.194
Health problem	−0.013	0.077	−0.013	0.077	0.267	0.219	0.283	0.221
Family income	0.010	0.005	0.009	0.005	0.009	0.015	0.013	0.015
Interest in politics and public policy	0.177***	0.033	0.171***	0.033	0.093	0.094	0.090	0.095
Voting in the last elections	0.175**	0.056	0.172**	0.056	−0.011	0.110	−0.013	0.112
Political involvement	−0.157*	0.078	−0.170*	0.078	0.160	0.295	0.154	0.296
Attitudes toward functioning of different public institutions	1.643***	0.080	1.651***	0.080	2.056***	0.195	2.050***	0.196
Overall life satisfaction	0.056	0.057	0.057	0.057	−0.044	0.121	−0.038	0.121
Satisfaction with economic situation	0.064	0.046	0.067	0.046	0.059	0.106	0.073	0.106
E-mail use			0.014	0.112			−0.217	0.203
Social Media use			0.161 <sup>#</sup>	0.090			0.084	0.264
Peer-to-peer Internet telephony use			−0.079	0.070			−0.351 <sup>#</sup>	0.194
Seeking information			0.040	0.157			−0.068	0.257
E-government use			0.170**	0.071			0.265	0.207
Cox and Snell	0.160		0.162		0.225		0.232	
Nagelkerke	0.174		0.177		0.245		0.253	

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ .**Table 4****Predicting trust in Government – Ordinal Regression Findings.**

	Jews (N = 3490)				Arabs (N = 608)			
	Model 1a		Model 2a		Model 1b		Model 2b	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
[Category 1]	2.500***	0.386	2.642***	0.408	4.978***	0.718	4.588***	0.779
[Category 2]	4.086***	0.390	4.233***	0.412	6.535***	0.738	6.168***	0.796
[Category 3]	6.540***	0.400	6.694***	0.421	8.594***	0.773	8.246***	0.829
Gender (Male = 1)	0.237***	0.066	0.252***	0.066	−0.159	0.178	−0.131	0.180
Locality (Center = 1)	−0.177**	0.066	−0.178**	0.066	−0.508*	0.208	−0.335	0.214
Religiosity	−0.321***	0.036	−0.323***	0.037	0.156	0.092	0.149	0.093
Age	0.005*	0.003	0.006*	0.003	−0.015	0.009	−0.016	0.009
Hebrew proficiency	−0.112**	0.047	−0.144**	0.049	0.123	0.092	0.139	0.096
Marital status (Married = 1)	0.044	0.077	0.028	0.077	−0.186	0.193	−0.264	0.196
Matriculation eligibility	0.120	0.107	0.143	0.109	0.061	0.224	0.229	0.231
Non-academic education	−0.056	0.105	−0.030	0.108	0.004	0.241	0.229	0.250
Academic degree	0.000	0.095	0.031	0.100	−0.335	0.249	−0.009	0.272
Employment (employed = 1)	−0.007	0.086	−0.031	0.086	0.301	0.191	0.239	0.193
Health problem	−0.061	0.077	−0.065	0.077	0.450*	0.220	0.461*	0.222
Family income	0.007	0.005	0.008	0.005	−0.006	0.015	0.004	0.015
Interest in politics and public policy	0.138***	0.033	0.136***	0.033	0.106	0.094	0.113	0.095
Voting in the last elections	0.175**	0.056	0.175**	0.056	−0.211 <sup>#</sup>	0.109	−0.224*	0.111
Political involvement	−0.311***	0.078	−0.317***	0.079	0.041	0.296	0.044	0.297
Attitudes toward functioning of different public institutions	1.686***	0.080	1.689***	0.080	2.033***	0.194	2.016***	0.195
Overall life satisfaction	−0.029	0.057	−0.017	0.057	−0.104	0.119	−0.111	0.119
Satisfaction with economic situation	0.011	0.046	0.017	0.046	0.114	0.105	0.136	0.106
E-mail use			−0.192	0.112			−0.476**	0.203
Social Media use			0.220**	0.090			−0.065	0.267
Peer-to-peer Internet telephony use			−0.193**	0.070			−0.370*	0.192
Seeking information			0.232	0.157			−0.141	0.255
E-government use			0.128 <sup>#</sup>	0.071			0.022	0.207
Cox and Snell	0.189		0.193		0.228		0.243	
Nagelkerke	0.205		0.209		0.248		0.264	

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ .

such problems. Voting in the last elections was negatively correlated with the odds of trust. Positive attitudes toward the functioning of different public institutions were positively correlated with the odds of trust in government. E-mail use and peer-to-peer Internet telephony use were negatively correlated with the odds of trust. The model fit of Model 1b was 25%. Digital uses added 1.5% to the model fit beyond the effects of control variables.

### 5.2.3. Predicting trust in political parties

**Jews.** From Model 1a of Table 5 it can be seen that the odds of trust in political parties among males were lower, compared to females. Age and Hebrew proficiency were negatively correlated with the odds of trust in political parties. Interest in politics and public policy, voting in the last elections, political involvement, and attitudes toward the functioning of different public institutions were positively correlated with the odds of trust in political parties. Only social media use was positively correlated with the odds of trust in political parties, but its contribution to the model fit (a total of 13%) was less than 1% (See Model 2a).

**Arabs.** The findings in Model 1b of Table 5 show that males reported lower trust in political parties compared to females. Attitudes toward the functioning of different public institutions were positively correlated with the odds of trust in political parties. Those who reported seeking information were less likely to trust the political parties, as compared to those who did not use the Internet for this purpose. Digital uses added about 1.5% to the model fit beyond the effects of control variables. Total model fit was about 18%.

## 6. Discussion

The effects of Internet use on private, economic and social aspects of individual life are powerful [116–118]. In the political domain, a striking example is the so-called “Arab Spring,” a series of uprisings in the Middle East, and Israel’s Operation Protective Edge military

campaign in which social media played a critical role [38,119,120]. However, most research of the effects of internet use on the relationship of individuals to their political institutions has focused on e-government use, news websites and social media with no special emphasis on between-group differences. To the best of our knowledge, this is the first study to address a variety of digital uses in one research, including unexplored e-mail, information seeking and peer-to-peer Internet telephony and comparing the Jewish majority and Arab minority in a protracted conflict setting. To this end, we applied media malaise, virtuous circle and echo chamber theories. Our important theoretical implication is that in order to explain the effect of ICT use on political trust among majority and disadvantaged minority groups, the three theories should be integrated.

Consistent with the research literature, our descriptive findings show that trust in political institutions and especially political parties was low for both groups – Jews and Arabs [121–123]. Trust in political institutions among Arabs was significantly lower as compared to Jews, which can be partially explained by long standing discrimination against Arabs in Israeli society [41,44]. Our findings also indicate first- and second-level digital inequality between Jews and Arabs. The latter is most pronounced in e-mail, peer-to-peer Internet telephony and e-government use.

Our multivariate analyses show that H1, based on the institutionalist approach, was supported by the findings: positive attitudes toward the functioning of public institutions correlated positively with political trust in both groups. Moreover, in both Arab and Jewish groups, the primary predictor of political trust is the attitudes toward public institution functioning, justifying the well-known proverb, “Better well done than well said.”

H2a and H2b, about seeking information, were supported by the findings. In line with echo chamber theory the findings showed a negative correlation between seeking information and trust in political parties among Arabs. In line with the theory, we may assume that those Arabs who seek negative content in Internet may easily find it or

**Table 5**  
Predicting trust in political parties – Ordinal Regression Findings.

	Jews (N = 3490)				Arabs (N = 608)			
	Model 1a		Model 2a		Model 1b		Model 2b	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
[Category 1]	2.015***	0.401	2.184***	0.425	3.464***	0.728	3.087***	0.795
[Category 2]	3.944***	0.406	4.115***	0.429	5.430***	0.750	5.077***	0.814
[Category 3]	6.764***	0.425	6.937***	0.448	7.662**	0.798	7.318***	0.858
Gender (Male = 1)	−0.152*	0.067	−0.135*	0.068	−0.545*	0.185	−0.507**	0.187
Locality (Center = 1)	0.088	0.068	0.086	0.068	0.042	0.214	0.121	0.220
Religiosity	−0.060	0.037	−0.068	0.038	−0.066	0.096	−0.074	0.097
Age	−0.017***	0.003	−0.016**	0.003	−0.007	0.009	−0.006	0.009
Hebrew proficiency	−0.135**	0.050	−0.135*	0.052	0.097	0.096	0.116	0.101
Marital status (Married = 1)	−0.086	0.079	−0.084	0.079	−0.328	0.199	−0.389	0.203
Matriculation eligibility	0.129	0.110	0.146	0.112	0.374	0.234	0.509*	0.242
Non-academic education	0.161	0.108	0.188	0.111	−0.102	0.252	0.061	0.262
Academic degree	0.053	0.097	0.088	0.103	−0.450	0.266	−0.292	0.289
Employment (employed = 1)	−0.019	0.088	−0.031	0.089	0.295	0.198	0.251	0.200
Health problem	0.008	0.079	0.004	0.079	0.071	0.232	0.063	0.234
Family income	−0.003	0.005	−0.003	0.005	0.007	0.015	0.013	0.016
Interest in politics and public policy	0.100**	0.034	0.100**	0.034	−0.068	0.097	−0.077	0.099
Voting in the last elections	0.147*	0.058	0.149**	0.058	0.124	0.116	0.142	0.118
Political involvement	0.177*	0.079	0.175*	0.080	0.541	0.300	0.522	0.302
Attitudes toward functioning of different public institutions	1.393***	0.081	1.388***	0.081	1.252***	0.191	1.214***	0.192
Overall life satisfaction	−0.011	0.058	−0.004	0.059	0.165	0.125	0.162	0.126
Satisfaction with economic situation	0.067	0.047	0.071	0.047	−0.032	0.111	−0.003	0.112
E-mail use			−0.058	0.116			−0.259	0.209
Social Media use			0.190*	0.093			0.175	0.279
Peer-to-peer Internet telephony use			−0.050	0.071			−0.165	0.199
Seeking information			0.068	0.163			−0.610*	0.267
E-government use			−0.049	0.072			0.092	0.215
Cox and Snell	0.112		0.113		0.146		0.159	
Nagelkerke	0.125		0.126		0.164		0.178	

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ .



interpret any content negatively. According to the literature, the public responds much more strongly to negative media framing than to positive framing [124] and negative framing promotes greater pessimism [125], civic disengagement, mistrust and a crisis of political legitimacy [126]. Ethnic minorities suffering discrimination in different spheres of life may be more vulnerable to bad news effects, perceive glass ceilings and, as a result, grow embittered about their future. They therefore lose trust in political institutions and processes. Hegemonic groups, in contrast, may experience less straightforward opinion formation, contingent on channels of information distribution.

H3 about e-government use, inspired by virtuous circle theory, was partially supported by the findings. We may assume that embitterment among Arabs may be the reason for the insignificant effect of e-government use on trust among them, although visiting government sites was found to be positively correlated with trust among Jews and was repeatedly reported as a predictor of trust in political institutions in the research literature [76,85,86]. Moreover, other manifestations of citizen and political system interaction (political interest and political involvement) were not correlated with Arab political trust, in contrast to Jews.

H4a on social uses, which was based on virtuous circle theory, was partially supported by the findings. In line with this hypothesis, among Jews social media use was positively correlated with trust in the political institutions. In social media, users encounter group activity perceived as knowledgeable and trustful. We may assume that consuming content that evokes solidarity, of which there is much on social media, contributes to an enhanced sense of belonging to society, with a concomitant increase in trust in government. For example, during and after a crisis like Operation Protective Edge, social media may well serve the interests of the ruling class and their political agents by means of outsourcing efforts to professional lobbyists (in some cases anonymously) to create online political content perceived as trustworthy. Another possible explanation is that users not only implicitly trust social media content; they go on to share it in their social and familial circles [127]. In this way, government advertising in veiled form can be distorted in social media so as to be perceived as crowd wisdom [128].

In contrast, we found that among Jews, peer-to-peer Internet telephony was negatively associated with trust in government. We may assume that private conversation, which is not biased by professional governmental lobbyists, may more potentially reflect resentment against and dissatisfaction with the functioning of political institutions. These feelings of resentment shared by peers in Internet telephony may be negatively associated with political trust.

The findings for Arabs partially supported H4b, which was derived from media malaise theory. Arabs who reported e-mail and peer-to-peer Internet telephony use – the uses which are usually more private, and less influenced by political lobbyists – were less likely to trust parliament and government.

In summary, two main points can be emphasized from our findings. First, Jews and Arabs are characterized by different patterns of association between digital uses and trust in political institutions. These may be explained to some extent by differential group status (hegemonic majority vs. discriminated ethnic minority), cultural differences and, in our case, lasting impressions of Operation Protective Edge. Second, powerful digitization processes have not changed the fact that the effects of digital uses are still relatively marginal. In other words, our findings indicate that accelerating digital divide closure may nevertheless be insufficient to exert a significant effect on political trust. Thus, the current tendency of erosion of trust in political institutions may continue.

## 7. Limitations and the future research

Research limitations were imposed by the constraints of the database of the CBS social survey. Its cross-sectional design did not enable the analysis of variation in trust in political institutions after adoption of

digital uses. Nor did it enable proof of a causal effect of Internet use on political trust. Therefore, we suggest conducting longitudinal research as a corrective measure.

The fieldwork was conducted in the year after Operation Protective Edge, a military campaign which left a swath of destruction behind it. We cannot determine the extent to which our findings were influenced by this historical context and whether and how they may be replicated in another historical period. Therefore, we suggest considering our findings a case study and replicate it in studies further removed in time from difficult crises.

Because of the database size and research design, it was not possible to address the heterogeneity of Israeli Arabs. We may assume that the association between Internet use and political trust may work in different ways among integrated Druze and segregated Muslims.

Each digital use was examined by only one item in our study, which did not facilitate distinguishing between the effects of different types of social media, kinds of information or uses of e-government sites. In order to interpret correlation patterns between digital uses and trust, we recommend more comprehensive analysis in future research. Moreover, a qualitative research design would enable more thorough analysis of e-mail, peer-to-peer Internet telephony, and information seeking content and provide a more accurate explanation of our findings.

Finally, further research should compensate for the CBS social survey database not including respondents' political views, a variable which may serve as a moderator of association between Internet use and political trust. Further research may look into more refined models, addressing this moderator and other possible moderators and mediators and applying structural equation modeling.

## 8. Practical implications

The present study addresses data collected after the 2014 military campaign. In light of the events in Israel in May 2021, which include military operation "Guardian of the Walls" and severe violent clashes between Jews and Arabs in mixed cities involving the Jewish and Arab populations, which severely violated the basic principles of peace and coexistence, it is very important to draw insights from the findings of this study.

The findings of the study among the Arabs indicated that various Internet uses had no correlation – or negative correlations – with trust in political institutions. In light of the fact that the most common Internet uses among this group are seeking information and social media use, it is important for policy makers to provide balanced and objective information in the Arabic language that relates to the functioning of governmental institutions in various fields. The content should reflect full transparency, emphasize everything that has been done to provide equal opportunities and to promote the Arab population in Israel, and to help them to succeed. Such content should appear in both official digital media sources and in social media. Fake news that distorts facts and incites hostility in digital sources both in Hebrew and Arabic should be identified and neutralized.

The findings indicated a low penetration of e-government among Arabs, which may be explained by low awareness of the services offered and/or limited translation of the content into the Arabic language. This very limited use of a channel that according to the literature may provide information, services and participation to geographically remote populations (especially to Arabs who live mainly in the periphery) [50] may in and of itself be a source of exclusion and discrimination. This point seems to be very important despite the fact that e-government use was found in this study not to be associated with political trust. It is possible that greater exposure to these services among the Arab population, and explanation of the expected benefits from their use, may attract new users and increase use among existing clients, and ultimately lead to an improved image of government institutions, higher positive engagement and consequently, increased political trust.

## Author statement

Sabina Lissitsa: Conceptualization; Data curation; Project administration; Writing – original draft; Writing – review & editing; Formal analysis; Investigation; Methodology; Supervision; Validation.

## References

- [1] P.M. Doney, J.P. Cannon, M.R. Mullen, Understanding the influence of national culture on the development of trust, *Acad. Manag. Rev.* 23 (3) (1998) 601–620.
- [2] J. Spiteri, M. Briguglio, Does Good Governance Foster Trust in Government? an Empirical Analysis Governance and Regulations' Contemporary Issues, Emerald Publishing Limited, 2018.
- [3] Y. Tsfati, J.N. Cappella, Do people watch what they do not trust? Exploring the association between news media skepticism and exposure, *Commun. Res.* 30 (5) (2003) 504–529.
- [4] T.D. Beshi, R. Kaur, Public trust in local government: explaining the role of good governance practices, *Publ. Organ. Rev.* 20 (2) (2020) 337–350.
- [5] J.A. Hamm, J. Lee, R. Trinkner, T. Wingrove, S. Leben, C. Breuer, On the Cross-Domain Scholarship of Trust in the Institutional Context Interdisciplinary Perspectives on Trust, Springer, 2016, pp. 131–156.
- [6] S. Dahlberg, J. Linde, Socialization or experience? Institutional trust and satisfaction with democracy among emigrants in different institutional settings, *J. Polit.* 80 (4) (2018) 1389–1393.
- [7] S. Richey, K.I. Ikeda, Institutional incentives and trust: marginalized groups and the creation of trust in local government, *Soc. Sci. Q.* 90 (4) (2009) 911–926.
- [8] S. Tsang, M. Burnett, P. Hills, R. Welford, Trust, public participation and environmental governance in Hong Kong, *Environmental Policy and Governance* 19 (2) (2009) 99–114.
- [9] M. Festenstein, Political trust, commitment and responsiveness, *Polit. Stud.* 68 (2) (2020) 446–462.
- [10] M. Salmela, C. Von Scheve, Emotional roots of right-wing political populism, *Soc. Sci. Inf.* 56 (4) (2017) 567–595.
- [11] M. Grimes, Organizing consent: the role of procedural fairness in political trust and compliance, *Eur. J. Polit. Res.* 45 (2) (2006) 285–315.
- [12] T.W.G. Van der Meer, S. Zmerli, The Deeply Rooted Concern with Political Trust Handbook on Political Trust, Edward Elgar Publishing, 2017.
- [13] R.D. Putnam, Bowling alone: America's declining social capital, *J. Democr.* 6 (1) (1995) 65–78.
- [14] V.J. da Silva Neto, T. Chiarini, Technological progress and political systems: non-institutional digital platforms and political transformation, *Technol. Soc.* 64 (2021) 101460.
- [15] J. Van Dijk, The Network Society, fourth ed., Sage, London, 2020.
- [16] D. O'Connor, The apomediated world: regulating research when social media has changed research, *J. Law Med. Ethics* 41 (2) (2013) 470–483.
- [17] M. Ekström, A. Shehata, Social media, porous boundaries, and the development of online political engagement among young citizens, *New Media Soc.* 20 (2) (2018) 740–759.
- [18] A. Haro-de-Rosario, A. Sáez-Martín, M. del Carmen Caba-Pérez, Using social media to enhance citizen engagement with local government: Twitter or Facebook? *New Media Soc.* 20 (1) (2018) 29–49.
- [19] T. Im, W. Cho, G. Porumbescu, J. Park, Internet, trust in government, and citizen compliance, *J. Publ. Adm. Res. Theor.* 24 (3) (2014) 741–763.
- [20] C. Waeterloos, M. Walrave, K. Ponnet, Designing and validating the Social Media Political Participation Scale: an instrument to measure political participation on social media, *Technol. Soc.* 64 (2021) 101493.
- [21] L.A. Brainard, Citizen organizing in cyberspace illustrations from health care and implications for public administration, *Am. Rev. Publ. Adm.* 33 (4) (2003) 384–406.
- [22] R. Pérez-Morote, C. Pontones-Rosa, M. Núñez-Chicharro, The effects of e-government evaluation, trust and the digital divide in the levels of e-government use in European countries, *Technol. Forecast. Soc. Change* 154 (2020) 119973.
- [23] J.D. Twizeyimana, A. Andersson, The public value of E-Government—A literature review, *Govern. Inf. Q.* 36 (2) (2019) 167–178.
- [24] M. Echeverría, E. Mani, Effects of traditional and social media on political trust, *Commun. Soc.* 33 (2) (2020) 119–135.
- [25] D. Rosenberg, Ethnic Perspective in E-Government Use and Trust in Government: A Test of Social Inequality Approaches, *new media & society*, 2020, 1461444820920655.
- [26] S. Heilbrunn, N. Kushnirovich, Entrepreneurial Finance of Minority and Migrant Groups in Israel Research Handbook on Entrepreneurial Finance, Edward Elgar Publishing, 2015.
- [27] S. Lissitsa, Patterns of digital uses among Israeli Arabs—between citizenship in modern society and traditional cultural roots, *Asian J. Commun.* 25 (5) (2015) 447–464.
- [28] A. Lev-On, S. Lissitsa, Digital divide: access and usage gaps, Israel 2008, in: Proceedings of MCIS2010 (5th Mediterranean Conference on Information Systems), 2010, 12–14 September, Tel Aviv-Jaffa.
- [29] E. Shamir, Rethinking operation protective edge, *Middle East Q.* 22 (2) (2015) (Spring 2015). Available at: <http://www.meforum.org/5084/rethinking-operation-protective-edge>.
- [30] R.I. Malka, S.R. Shenhav, G. Rahat, R.Y. Hazan, The collective memory of dominant parties in parliamentary discourse, *Party Polit.* 27 (3) (2021) 489–500.
- [31] Y. Peres, E. Ben-Rafael, Cleavages in Israeli Society, Am-Oved Publishers, Tel-Aviv, 2006.
- [32] A. Rubabshi-Shitrit, S. Hasson, The Effect of the Constructive Vote of No-Confidence on Government Termination and Government Durability, *West European Politics*, 2021, pp. 1–15.
- [33] R. Zeedan, The role of military service in the integration/segregation of Muslims, Christians and Druze within Israel, *Societies* 9 (1) (2019) 1.
- [34] B.S. Okun, D. Friedlander, Educational stratification among Arabs and Jews in Israel: historical disadvantage, discrimination, and opportunity, *Popul. Stud.* 59 (2) (2005) 163–180.
- [35] G. Shafir, Y. Peled, Being Israeli: the Dynamics of Multiple Citizenship, vol. 16, Cambridge University Press, 2002.
- [36] A. Buettner, Religion as law: the Israeli-nation state law and the Palestinians, *Wash. Univ. Global Stud. Law Rev.* 19 (2020) 113.
- [37] I. Radai, M. Elran, Y. Makladeh, M. Kornberg, The Arab citizens in Israel: current trends according to recent opinion polls, *Strategic Assessment* 18 (2) (2015) 101–116.
- [38] A. Lev-On, The anti-social network? Framing social media in wartime, *Social Media+ Society* 4 (3) (2018), 2056305118800311.
- [39] S. Hamanaka, The ground operation sent citizens into a frenzy: the rally around the flag effect during operation protective edge, *Global Security: Health, Science and Policy* 5 (1) (2020) 142–152.
- [40] G. Doron, Right as opposed to wrong as opposed to left: the spatial location of 'right parties' on the Israeli political map, *Isr. Stud.* 10 (3) (2005) 29–53.
- [41] E. Bar-Haim, C. Blank, Second-chance alternatives and maintained inequality in access to higher education in Israel, *Soc. Incl.* 7 (1) (2019) 28–37.
- [42] N. Kushnirovich, A. Sherman, Dimensions of life satisfaction: immigrant and ethnic minorities, *Int. Migrat.* 56 (3) (2018) 127–141.
- [43] S. Lissitsa, S. Chachashvili-Bolotin, It's not what you know but where you come from: cognitive skills, job autonomy and latent discrimination of ethnic minorities in Israel, *Int. Rev. Educ.* (2020) 1–22.
- [44] M. Yaish, L. Gabay-Egozi, Cumulative disadvantage dynamics for Palestinian Israeli Arabs in Israel's economy, *Sociology* (2021) 1–21 (Forthcoming).
- [45] Karin Amit, Chachashvili-Bolotin Svetlana, Satisfied with less? Mismatch between subjective and objective position of immigrants and native-born men and women in the labor market, *Front. Sociol.* 3 (2018) 33.
- [46] S. Lissitsa, S. Chachashvili-Bolotin, The less you know, the better you'll sleep—Perceived job insecurity in the Internet age, *Comput. Human Behav.* 62 (2016) 754–761.
- [47] G. Abu Kaf, A. Schejter, M.A. Jafar, The bedouin divide, *Telecommun. Pol.* 43 (7) (2019) 101810.
- [48] S. Lissitsa, S. Chachashvili-Bolotin, Y. Bokek-Cohen, Digital capital as A mobility channel for ethnic minorities, *J. Curr. Issues Media Telecommun.* 9 (1) (2017).
- [49] S. Rafaei, E. Leck, Y. Albo, Y. Oppenheim, D. Getz, An Innovative Approach for Measuring the Digital Divide in Israel: Digital Trace Data as Means for Formulating Policy Guidelines, Samuel Neaman Institute for National Policy Research, 2018.
- [50] D. Rosenberg, Use of e-government services in a deeply divided society: a test and an extension of the social inequality hypotheses, *new media & society* 21 (2) (2019) 464–482.
- [51] G.S. Mesch, I. Talmud, Ethnic differences in Internet access: the role of occupation and exposure, *Inf. Commun. Soc.* 14 (4) (2011) 445–471.
- [52] M.J. Hetherington, J.A. Husser, How trust matters: the changing political relevance of political trust, *Am. J. Polit. Sci.* 56 (2) (2012) 312–325.
- [53] K. Lühiste, Explaining trust in political institutions: some illustrations from the Baltic states, *Commun. Post Commun. Stud.* 39 (4) (2006) 475–496.
- [54] N. Allum, S. Read, P. Sturgis, Evaluating change in social and political trust in Europe, *Cross-cultural analysis: Methods and applications* (2011) 35–53.
- [55] B. Rothstein, D. Stolle, How political institutions create and destroy social capital: an institutional theory of generalized trust, in: Paper Presented at the Delivery at the Annual Meeting of the American Political Science Association, Boston, August–September, 2002.
- [56] J. Torney-Purta, C.H. Barber, W.K. Richardson, Trust in government-related institutions and political engagement among adolescents in six Countries<sup>1</sup>, *Acta Politic.* 39 (4) (2004) 380–406.
- [57] N. Antoniadou, P. Haan, Facilitating political performance in the USA, *Econ. Bull.* 38 (4) (2018) 1762–1768.
- [58] D.F. Meyer, A quantitative assessment of the impact of government activities on the economy of Poland, *Journal of Eastern European and Central Asian Research (JEECAR)* 6 (2) (2019) 220–233.
- [59] D. Lee, C.Y. Chang, H. Hur, Economic performance, income inequality and political trust: new evidence from a cross-national study of 14 Asian countries, *Asia Pacific Journal of Public Administration* 42 (2) (2020) 66–88.
- [60] T. Van der Meer, A. Hakhverdian, Political trust as the evaluation of process and performance: a cross-national study of 42 European countries, *Polit. Stud.* 65 (1) (2017) 81–102.
- [61] E. Vigoda-Gadot, F. Yuval, The state of bureaucracy: public opinion about the performance of government agencies in Israel, *Int. J. Publ. Opin. Res.* 16 (1) (2004) 63–80.
- [62] G. Enli, L.T. Rosenberg, Trust in the age of social media: populist politicians seem more authentic, *Social Media+ Society* 4 (1) (2018), 2056305118764430.
- [63] D.B. Kuhlmeier, C.A. Lipscomb, The effect of local and federal government website use on trust in government: an exploratory analysis, *Int. J. Electron. Bus.* 11 (4) (2014) 297–331.
- [64] J. Citrin, L. Stoker, Political trust in a cynical age, *Annu. Rev. Polit. Sci.* 21 (2018) 49–70.

- [65] C. Foster, J. Frieden, Crisis of trust: socio-economic determinants of Europeans' confidence in government, *Eur. Union Polit.* 18 (4) (2017) 511–535.
- [66] M. Baldassare, California in the New Millennium: the Changing Social and Political Landscape, Univ of California Press, 2000.
- [67] E. Severs, A. Mattelaer, A Crisis of Democratic Legitimacy? It's about Legitimation, Stupid! The European Elections: what Is at Stake for the Citizen? an Analysis of the EU's Legitimacy and Policy Challenges, 2014, pp. 25–37.
- [68] P. Norris, Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide, Cambridge University Press, 2001.
- [69] P. Guerrieri, S. Bentivegna, The Economic Impact of Digital Technologies: Measuring Inclusion and Diffusion in Europe, Edward Elgar publishing, 2011.
- [70] B.M. Compaine, The Digital Divide: Facing a Crisis or Creating a Myth? Mit Press, 2001.
- [71] J.G. Davis, K.K.Y. Kuan, S. Poon, Digital Exclusion and Divide in the United States: Exploratory Empirical Analysis of Contributing Factors, 2020.
- [72] E.J. Helsper, B.C. Reisdorf, The emergence of a "digital underclass" in Great Britain and Sweden: changing reasons for digital exclusion, *New Media Soc.* 19 (8) (2017) 1253–1270.
- [73] A.J.A.M. Van Deursen, E.J. Helsper, The Third-Level Digital Divide: Who Benefits Most from Being Online? Communication and Information Technologies Annual, Emerald Group Publishing Limited, 2015.
- [74] J. Van Dijk, The Digital Divide, Cambridge Polity Press, Cambridge, 2020.
- [75] K. Kenski, N.J. Stroud, Connections between Internet use and political efficacy, knowledge, and participation, *J. Broadcast. Electron. Media* 50 (2) (2006) 173–192.
- [76] C.J. Tolbert, K. Mossberger, The effects of e-government on trust and confidence in government, *Publ. Adm. Rev.* 66 (3) (2006) 354–369.
- [77] S. Sharoni, E-citizenship: trust in government, political efficacy, and political participation in the internet era, *Electronic Media & Politics* 1 (8) (2012) 119–135.
- [78] J. Lu, L. Qi, X. Yu, Political trust in the internet context: a comparative study in 36 countries, *Govern. Inf. Q.* 36 (4) (2019) 101386.
- [79] D. Zhou, W. Deng, X. Wu, Impacts of internet use on political trust: new evidence from China, *Emerg. Mark. Finance Trade* (2019) 1–17.
- [80] A. Ceron, Internet, news, and political trust: the difference between social media and online media outlets, *J. Computer-Mediated Commun.* 20 (5) (2015) 487–503.
- [81] H. Lu, P. Tong, R. Zhu, Does internet use affect netizens' trust in government? Empirical evidence from China, *Soc. Indic. Res.* (2019) 1–19.
- [82] F.V. Morgeson Iii, D. VanAmburg, S. Mithas, Misplaced trust? Exploring the structure of the e-government-citizen trust relationship, *J. Publ. Adm. Res. Theor.* 21 (2) (2011) 257–283.
- [83] S. Horsburgh, S. Goldfinch, R. Gauld, Is public trust in government associated with trust in e-government? *Soc. Sci. Comput. Rev.* 29 (2) (2011) 232–241.
- [84] E. Stoycheff, E.C. Nisbet, What's the bandwidth for democracy? Deconstructing Internet penetration and citizen attitudes about governance, *Polit. Commun.* 31 (4) (2014) 628–646.
- [85] H. Hong, Government websites and social media's influence on government-public relationships, *Publ. Relat. Rev.* 39 (4) (2013) 346–356.
- [86] E.W. Welch, C.C. Hinnant, M.J. Moon, Linking citizen satisfaction with e-government and trust in government, *J. Publ. Adm. Res. Theor.* 15 (3) (2005) 371–391.
- [87] J.S. Coleman, Social theory, social research, and a theory of action, *Am. J. Sociol.* 91 (6) (1986) 1309–1335.
- [88] R. Leonardi, R.Y. Nanetti, R.D. Putnam, Making Democracy Work: Civic Traditions in Modern Italy, Princeton university press, Princeton, NJ, 2001.
- [89] R. Inglehart, Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies, Princeton university press, 2020.
- [90] P. Moy, M. Pfau, With Malice toward All? the Media and Public Confidence in Democratic Institutions: the Media and Public Confidence in Democratic Institutions, ABC-CLIO, 2000.
- [91] K.H. Jamieson, J.N. Cappella, Setting the record straight: do ad watches help or hurt? *Harvard International Journal of Press/Politics* 2 (1) (1997) 13–22.
- [92] D.C. Mutz, B. Reeves, The new videomalaise: effects of televised incivility on political trust, *Am. Polit. Sci. Rev.* 99 (1) (2005) 1–15.
- [93] G.J. Gulati, M.R. Just, A.N. Crigler, News coverage of political campaigns, *Handbook of political communication research* (2004) 237–256.
- [94] R. Gunther, A. Mughan, The Political Impact of the Media: A Reassessment. Democracy and the Media: A Comparative Perspective, 2000, pp. 402–447.
- [95] A.R.T. Schuck, Media malaise and political cynicism, *The international encyclopedia of media effects* (2017) 1–19.
- [96] P. Van Aelst, Media malaise and the decline of legitimacy, Myth and reality of the legitimacy crisis: Explaining trends and cross-national differences in established democracies 95 (2017).
- [97] P. Norris, Democratic Deficit: Critical Citizens Revisited, Cambridge University Press, 2011.
- [98] J. Strömback, A. Shehata, Media malaise or a virtuous circle? Exploring the causal relationships between news media exposure, political news attention and political interest, *Eur. J. Polit. Res.* 49 (5) (2010) 575–597.
- [99] R.K. Garrett, Echo chambers online?: politically motivated selective exposure among Internet news users, *J. Computer-Mediated Commun.* 14 (2) (2009) 265–285.
- [100] K.H. Jamieson, J.N. Cappella, Echo Chamber: Rush Limbaugh and the Conservative Media Establishment, Oxford University Press, 2008.
- [101] J. Gainous, J.P. Abbott, K.M. Wagner, Traditional versus internet media in a restricted information environment: how trust in the medium matters, *Polit. Behav.* 41 (2) (2019) 401–422.
- [102] H. Al-Rashidi, Examining Internal Challenges to E-Government Implementation from System Users Perspective, 2010, 2010.
- [103] G. Rooks, U. Matzat, B. Sadowski, An empirical test of stage models of e-government development: evidence from Dutch municipalities, *Inf. Soc.* 33 (4) (2017) 215–225.
- [104] T. Nam, Determining the type of e-government use, *Govern. Inf. Q.* 31 (2) (2014) 211–220.
- [105] E. United Nations Department of, S. Social Affairs, United Nations E-Government Survey 2012: E-Government for the People, United Nations Publications, 2012.
- [106] K. Vassil, M. Solvak, P. Vinkel, A.H. Trechsel, R.M. Alvarez, The diffusion of internet voting. Usage patterns of internet voting in Estonia between 2005 and 2015, *Govern. Inf. Q.* 33 (3) (2016) 453–459.
- [107] M. Germann, Internet voting increases expatriate voter turnout, *Govern. Inf. Q.* 38 (2) (2021) 101560.
- [108] L. Carter, V. Weerakkody, B. Phillips, Y.K. Dwivedi, Citizen adoption of e-government services: exploring citizen perceptions of online services in the United States and United Kingdom, *Inf. Syst. Manag.* 33 (2) (2016) 124–140.
- [109] A. Chadwick, C. May, Interaction between states and citizens in the age of the internet: "e-government" in the United States, Britain, and the European union, *Governance* 16 (2) (2003) 271–300.
- [110] J. Curran, S. Coen, S. Soroka, T. Aalberg, K. Hayashi, Z. Hichy, S. Papatthanassopoulos, Reconsidering 'virtuous circle' and 'media malaise' theories of the media: an 11-nation study, *Journalism* 15 (7) (2014) 815–833.
- [111] M. Janssen, N.P. Rana, E.L. Slade, Y.K. Dwivedi, Trustworthiness of digital government services: deriving a comprehensive theory through interpretive structural modelling, *Publ. Manag. Rev.* 20 (5) (2018) 647–671.
- [112] J.E. Shenton, Divided we tweet: the social media poetics of public online shaming, *Cult. Dynam.* 32 (3) (2020) 170–195.
- [113] S. Lissitsa, S. Chachashvili-Bolotin, Use of the internet in capital enhancing ways-ethnic differences in Israel and the role of language proficiency, *International Journal of Internet Science* 9 (1) (2014).
- [114] W. Schulz, Mediatization and New Media Mediatization of Politics, Springer, 2014, pp. 57–73.
- [115] R. Thompson, Radicalization and the use of social media, *J. Strat. Secur.* 4 (4) (2011) 167–190.
- [116] P. DiMaggio, B. Bonikowski, Make money surfing the web? The impact of Internet use on the earnings of US workers, *Am. Socio. Rev.* 73 (2) (2008) 227–250.
- [117] J.G. Fowler, J.W. Gentry, T.H. Reisenwitz, Analyzing Chinese older people's quality of life through their use of the internet, *Int. J. Consum. Stud.* 39 (4) (2015) 324–334.
- [118] N. Khvorostianov, "Thanks to the internet, we remain a family": ICT domestication by elderly immigrants and their families in Israel, *J. Fam. Commun.* 16 (4) (2016) 355–368.
- [119] S. Bebbawi, D. Bossio, Social Media and the Politics of Reportage: the Arab Spring, Springer, 2014.
- [120] A. Hermida, S.C. Lewis, R. Zamith, Sourcing the Arab spring: a case study of andy carvin's sources on twitter during the Tunisian and Egyptian revolutions, *J. Computer-Mediated Commun.* 19 (3) (2014) 479–499.
- [121] P. Gronke, T.E. Cook, Disdaining the Media: the American Public's Changing Attitudes toward the News, 2007.
- [122] J.M. Jones, Trust in Government Remains Low, 2008. Gallup (18 de setembro de 2008).
- [123] E. Severs, A. Mattelaer, A Crisis of Democratic Legitimacy? It's about Legitimation, Stupid!, Egmont Royal Institute for International Relations, 2014. <http://www.egmontinstitute.be/wp1/content/uploads/2014/03/EPB21-def.pdf> (July 22, 2014).
- [124] J.S. Levy, Applications of prospect theory to political science, *Synthese* 135 (2) (2003) 215–241.
- [125] A. Hetsroni, Z. Sheaffer, U. Ben Zion, M. Rosenboim, Economic expectations, optimistic bias, and television viewing during economic recession: a cultivation study, *Commun. Res.* 41 (2) (2014) 180–207.
- [126] J. Kleinijnjenhuis, A.M.J. Van Hoof, D. Oegema, Negative news and the sleeper effect of distrust, *Harvard International Journal of Press/Politics* 11 (2) (2006) 86–104.
- [127] Z. Zhang, B.B. Gupta, Social media security and trustworthiness: overview and new direction, *Future Generat. Comput. Syst.* 86 (2016) 914–925.
- [128] X.-L. Shen, M.K.O. Lee, C.M.K. Cheung, Exploring online social behavior in crowdsourcing communities: a relationship management perspective, *Comput. Hum. Behav.* 40 (2014) 144–151.