

# Measuring the Impact of Network Heterogeneity of Governmental and political Stakeholder Social Media Page on Youth Political Persuasion

Hanya Riad

College of Management and Technology. Arab Academy for Science Technology and Maritime Transport. Alexandria, Egypt.

---

**Abstract:** Social media have proven to be convenient tools that can be used by government entities and political stakeholders to increase openness and publicity, gain a greater understanding of public opinions, promote participation, transparency and engagement, as well as to reach many users at low cost, especially among youth (the future generation). Thus, the aim of this study is to measure the impact of network heterogeneity and discussion disagreement on governmental and political stakeholder social media pages on youth political persuasion. A quantitative research approach was used in this study. Exercising intercept data collection sampling technique helped in the selection of the chosen respondents. The selected respondents were: young adults (18-35) who were educated social media users. 460 administrated questionnaires were used for the analysis. Results indicate that social media network heterogeneity and discussion disagreements have a significant and positive relationship with political persuasion. This paper has contributed academically by providing insights for understanding the general principle of social media use in government. There was an academic gap, which this paper attempted to fill. It was unclear to what factors contribute to the influence and impact of social media usage by public entities on the delivery of citizen knowledge using social media in conveying the entity's message and information, transparency, participation, engagement etc. This paper contributed practically by presenting a unique example of using social media in government communication. The government in Egypt has achieved remarkable progress in enabling technology-based transformation of public services. With the emerged knowledge practitioners can improve their existence in social media to promote public policy, legislation, and reform.

**Key Words:** (1) Government Entity (2) Network Heterogeneity (3) Political Persuasion (4) Public Policy Support (5) Social Media Interaction (6) Social Media News (7) Technology Commercialization

---

Date of Submission: 10-02-2021

Date of Acceptance: 24-02-2021

---

## I. Introduction

For years the media has continued to influence mass opinions and perceptions (Kotler and Armstrong, 2016). However, the emergence of social media sites, such as Facebook, Twitter, and YouTube has taken this very concept a step further, arguing that social media now shape the opinions, perceptions, and actions of the majority of the online population in a simple and informal manner (Diehl *et al.*, 2015). Online media expansion created the "information age" or "digital age", which allowed the overpowering of time and space in communication, information sharing and networking (Lee *et al.*, 2014).

Today's web and the new media emphasize the ability to create instant communication sensations. Various social media platforms (Facebook, YouTube, Twitter, and blogs, websites, etc.) can attract instant massive viewership - progress from zero to 20 million viewers overnight (Kushin and Kitchener, 2009). The viral nature of this highly social, user-driven environment enables complete strangers to connect over common beliefs, desires or interests and together create winners and losers (Diehl *et al.*, 2015).

Social media has influenced how people interact in the political sphere (Diehl *et al.*, 2015). Social media can be a potential tool for facilitating the social contract between the citizens and the state (Kim *et al.*, 2013). According to Kamp (2016), government can potentially use social media platforms to: "solicit feedback on its policies and political actions, while citizens can use the same platforms to express and vent their anger, frustrations or acceptance of whatever actions government is undertaking" (p.1). Social media is beneficial for citizens to seek new ways of cooperation and collective action in the political sphere; they can provide opportunities for mobilizing people around a common governmental, political, administrative, constitutional cause; or for sensitizing the public on specific public issues (Abdelhay, 2012).

Social media are an open space, potentially giving every individual a means to directly reach out to the public (Kamp, 2016). Online content and social media has greatly increased the variety of sources of

information (Kotler and Armstrong, 2016). Due to easy access of information and communication, it has proven to be convenient tools that can be used by government entities to increase openness and publicity, gain a greater understanding of public opinions, promote participation, transparency and engagement, as well as to reach many users at low cost (Gustavo *et al.*, 2013). Furthermore, it encourages variety of people to gain political knowledge and express their views to others on public issues that are relevant to society (Diehl *et al.*, 2015).

Social media assists various government entities and other political stakeholders by improving transparency. It can allow these entities a means for releasing the information that citizens need (Kamp, 2016). These platforms can encourage participation by maintaining the citizens' engagement with their governments, and allowing citizens to express their opinions, experiences, and wisdoms (Diehl *et al.*, 2015). Social media and its networks aid teamwork among the government and the citizens, allowing citizens to participate by: "*creating the content of government topics and the government use and follow the content generated by citizens to fulfill government mission*" (Zavattaro and Sementelli, 2014, p.257)

This paper aims to provide insights for understanding the general principle of social media use among governmental entities and other political stakeholders. It has been known that user generated content is what differentiates social media power over other mass media tools (Ghoneim, 2016). However, there is nevertheless an academic gap, which this paper attempted to fill. It is unclear what factors contribute to the influence and impact of social media usage by public entities on the delivery of citizen knowledge using social media in conveying the entity's message and information, transparency, participation, engagement etc (Kamp, 2016). Thus, the objective of this study is to measure the impact of (1) network heterogeneity and (2) citizens discussion differences found on the governmental and political stakeholder social media page on youth political persuasion. The research aims to answer the following research question: *Does social media network heterogeneity impact youth political persuasion? Do citizens' discussion differences on social media pages impact youth political persuasion?*

## **II. Literature Review**

Social media offer various features that different entities can use to enrich the structure and appearance of their external communications. It integrates several forms of content, including text, pictures, videos, and content from other social media, increasing media richness (Ghoneim, 2016). These means of communication provide citizens with new communication tools to encourage demonstrations, freedom of speech, political debates and involvement (Diehl *et al.*, 2015). According to the *Uses and Gratification Theory*, audiences are responsible for selecting the media organization that would best serve their needs; and media outlets are used by audiences to fulfill specific indulgences (Katz *et al.*, 1973-1974). The individuals' desire for information from the media is the primary variable in explaining why media messages have cognitive, affective, or variable effects (Ball-Rokeach, 1985). Daren and Abu Shanab (2015) indicated that social media aids in: "*encouraging more participation by allowing citizens to express their opinions, experiences and wisdoms. Social media enables people to share the content between each other, to participate with their ideas and opinions, promote democratization, and to publish their generated content and publicizes it*" (p.1).

Literature has recognized that online media is powerful in influencing youth behavior and mindset because of the existence of diverse viewpoints and different types of expertise from citizens to craft more effective discussions and messages (Lee *et al.*, 2014). Political conversations are formed on the basic need for daily social interaction and conversation (Walsh, 2004). Social media facilitate cross-cutting political discourse (Scheufele *et al.*, 2004). It offers shared text (in the form of news and other political information) and provides easy opportunities to discuss politics, even if their primary motivation for using these sites is social (Mutz and Mondak, 2006). Social media also promote other potentially deliberative attributes, like diverse networks (Gil de Zúñiga *et al.*, 2013) and exposure to discussion disagreement (Kim *et al.*, 2013).

Researchers argue that social media use likely leads directly to increased cross-cutting political exposure and discussion; the enormous reach and penetration translates into huge potential for interaction between individuals of differing political views – including ideas and opinions underrepresented in traditional news media (Kushin and Kitchener, 2009). Simple exposure to differing views (cross-cutting exposure) broadens peoples' outlook and approach (Kushin and Kitchener, 2009).

Voicing opinions toward a person with a differing view is important not only because it keeps discussion going, but also because it is an expression of one's thoughts. Many researchers documented the positive impact of expression (vs. no expression) on information processing and learning (Pingree, 2007), working memory capacity (Klein and Boals, 2001), and civic participation (Shah *et al.*, 2005). Price *et al.*, (2006) found that the positive effects of news exposure on opinion formation were entirely mediated by one's own expression. Gil de Zúñiga and his colleagues (2013) found that informational uses of social media have an indirect effect on political engagement through political expression. Give-and-take dialogue is the essence of discussion, and discussion is likely to maximize its potential when participants with dissimilar views engage in free trade of opinions in a civil way (Lee and Myers, 2016).

Deliberation theorists claim that having discussions with dissimilar others benefits individuals and society at large (Habermas, 1996). While it can also bring opinion polarization or ambivalence (Mutz, 2002), heterogeneous discussion networks are positively related to knowledge gain (Eveland and Hively, 2009; Scheufele et al., 2004), accuracy in perception of the climate of opinion (Huckfeldt et al., 1995), ideology distinction, reasoned opinion formation (Eliasoph, 1998; Gastil and Dillard, 1999; Huckfeldt et al., 2004), perspective taking (Price et al., 2002; Kwak et al., 2005), tolerance (Mutz, 2002), and political participation (Eveland and Hively, 2009; Kwak et al., 2005; McLeod et al., 1999; Scheufele et al., 2004). These studies suggest that having political discourse across lines of difference is an essential form of communication in a pluralistic society (Mutz and Martin, 2001).

People can persuade each other through discussion, having a heterogeneous discussion network tends to produce attitudinal ambivalence, that is, people's cognitions about and affect toward specific objects become less one-sided and polarized (Huckfeldt et al., 2004; Parsons, 2010). Changing a political view rarely occurs, and having heterogeneous discussion is extremely valuable because it opens up a door to political view change (Negm et al., 2012). Increased issue involvement is also a meaningful consequence of political discussion, which can result in further participatory behaviors (Pinkleton and Austin, 2001). As a result of engaging in a heterogeneous political discussion, individuals might be persuaded by their discussion partner and eventually modify their views (Kushin and Yamamoto, 2010; Pingree, 2007).

With network heterogeneity and differing views availability, Social media and its social media networks is the public's popular forums for engaging in government and public issues (Ghoneim, 2016). Immediate and transparent, social media has provided the public with greater control, participation, and influence over governmental issues and initiatives (Diehl et al., 2015). Social media is now the accepted voice of democracy (Lee et al., 2014). And with or without public sector engagement, citizens around the world are continuing to express frequently, freely, and spontaneously their opinions towards the governmental issues that surround them (Lee and Myers, 2016).

Persuasion is one of the communication processes taking place in the context of online engagement. As most researches explain, engagement is oriented towards social change (Kyllönen, 2015). A central component in involvement is a desire to influence or change the present situation. Influence is usually carried out intentionally through various campaigns and protests. Change is also one of the key components of persuasion, which can be achieved through various kinds of communication. (Diehl et al., 2015).

Research on attitude change suggests that persuasion can occur as a result of news consumption (Barker and Lawrence, 2006), and other work explains it as the result of a need to maintain social connectedness (Wood, 2000). According to certain researchers, an ideal context for political persuasion to occur is through conversation, this ideal context would include a shared text, a set of issues to discuss, the opportunity to speak and debate, as well as exposure to diverse opinions (Ryfe, 2005). In some studies, political persuasion occurs as a direct result of news media consumption (Diehl et al., 2015). Social interaction on social media should have direct effects on political persuasion because of the growing importance of social influences on opinion formation.

Theoretically, as Mutz (2006) argued, exposure to disagreement leads to awareness of the rationales behind the opposing view. Though some scholars have explored the potential for online discussion forums to increase exposure to diverse political views, which leads to political persuasions (Wojcieszak and Mutz, 2009). Thus, this study postulated two hypotheses:

**Hypothesis One:** *Discussion disagreement on governmental and political Stakeholder Social media Page impact Political Persuasion*

**Hypothesis Two:** *Network heterogeneity on governmental and political Stakeholder Social media Page impact Political Persuasion*

### **III. Research Methods**

This study was conducted using quantitative methods. This study was considered a conclusive research that used a cross sectional design and had a descriptive purpose (to gain more information and identify particular characteristics within a certain field of study). The citizens intercept data collection method was used to reach the respondents and to ensure the collection of large amounts of data in a relatively short period of time in order to test the hypotheses. The data collection was conducted during March and April 2017. Consumers were approached randomly in public locations and asked if they were willing to participate in a brief research study. Those who agreed were given a description of the survey process. The respondents were given an administrated questionnaire on the spot to fill in.

The sample included both male and female young Adults (18-35), social media users, and educated, and from Alexandria or Cairo, due to highest population. The respondents included young adults from different backgrounds (age, income, gender, etc.). According to Baumgartner and Morris (2010), 18- to 34-year olds show that SNS are recognized by youth as a possible source of news and that many receive some of their news

from these sites. This target sample popularly interacts with one another and spread various messages that are believed credible - a good source of information (Negm *et al.*, 2012)

Administrated questionnaires were used to collect data. In this study, the questionnaire was divided into four main parts. The first part asked various statements that measured degree of discussion disagreement on governmental and political Stakeholder Social media page. The second section asked various statements that measured degree of network heterogeneity on governmental and political Stakeholder Social media page. The third section asked about political persuasion practice. The final section asked about the respondents' socio-demographic characteristics. The scales that measured the variables in the study were from prior studies of Diehl *et al.* (2015). Once the need questionnaires were filled out and collected back, the data were analyze using the SPSS 20.0® (Statistical Package for Social Science) program to test the hypotheses and conduct further examination.

#### IV. Research Analysis

This study's analysis is based on youth and young adults' opinions regarding discussion disagreement and network heterogeneity on governmental and political stakeholder social media page impact political persuasion. The following table (table one) illustrates the respondents' socio-demographic traits.

**Table One: Demographics**

Trait	Categories	Frequency	Percentage
Age	18-24	186	40%
	25-34	274	60%
Gender	Female	248	54%
	Male	212	46%
Education Level	High School	242	52.6%
	College Degree	173	37.6%
	Master Degree	44	9.6%
	PhD	1	0.2%
Household income	Less than 2000	66	14.3%
	2000-5000	67	14.6%
	5000-10000	85	18.5%
	Over 10000	242	52.6%
Marital Status	Single	410	89%
	Engaged	21	4.7%
	Married	25	5.4%
	Divorced	4	0.9%
City of Residence	Cairo	145	31.5%
	Alexandria	307	66.7%
	Other	8	1.7%
Number of Children	None	443	96.3%
	One	9	2%
	Two	6	1.3%
	More than two	2	0.4%
Current Job	Manager/Executives	73	16%
	Clerks	13	2.8%
	Professionals	74	16%
	Academics	38	8.3%
	Self-Employed	110	24%
	Laborers	11	2.3%
	Student	129	28%
	Other	12	2.6%

The reliability analysis was conducted to see if the scales that were created by Diehl *et al.* (2015) were reliable to use in this study. This analysis illustrates whether the scales were consistent, dependable, and steadfast to be used to test in the Egyptian context to measure discussion disagreement and network

heterogeneity on governmental and political Stakeholder Social media Page. According to the results, the scales were reliable. Table Two illustrates the Cronbach’s Alpha of the present study and Diehl *et al.* (2015) study.

**Table Two: Cronbach’s Alpha**

Variable	Number of Items	Current Research Cronbach’s Alpha	Prior Study’s Cronbach’s Alpha (Diehl <i>et al.</i> , 2015)
Discussion Disagreement	2	0.873	0.92
Network Heterogeneity	2	0.829	0.93
Social Media Political Persuasion	3	0.786	0.87

In order to test the hypotheses, the researcher used the correlational analysis. Table three shows that discussion disagreement on governmental and political stakeholder social media page impact political persuasion in a moderate, significant and positive relationship with political persuasion ( $r=0.377^{**}$  and  $p=0.01$ ). Therefore, H1 is supported, *and that agrees with the literature*. Much of the work on social networking sites suggests that persuasion occurs through exposure to discussion disagreement (Lee and Myers, 2016) Therefore, discussion disagreement, will increase the likelihood of opinion change and issue involvement (Diehl *et al.*, 2015).

When testing the next hypothesis, network heterogeneity on governmental and political stakeholder social media page impact political persuasion, the results show that the relationship is in a moderate, significant and positive relationship with political persuasion ( $r=0.403^{**}$  and  $p=0.01$ ). Therefore, H2 is supported, *and that agrees with the literature*. Research found that as a result of engaging in a heterogeneous political discussion, individuals might be persuaded by their discussion partner and eventually modify their views, they might influence their partner and become more convinced about their own view, or they might stay ambivalent (Kushin and Yamamoto, 2010). A large, diverse network of social connections should naturally lead to a higher volume of competing or conflicting views, and ultimately more ambivalent attitudes (Keele and Wolak, 2008).

**Table Three: Correlation Analysis**

Variable	Correlation Sig. (2-tailed)	Hypothesis Supported
Discussion Disagreement & Social Media Political Persuasion	0.377**	✓
Network Heterogeneity & Social Media Political Persuasion	0.403**	✓

The next analysis that was conducted is the multiple regression analysis. This analysis focused on the variables contribution to the model, the significance of the model, and the strength in the model. The results illustrate that the model was significant with ANOVA of 0.000. The analysis also showed that the variables have standardized regression coefficients of ( $\beta = 0.210$ ,  $p < 0.05$ ) regarding discussion disagreement on governmental and political stakeholder social media page, ( $\beta = 0.124$ ,  $p < 0.05$ ) regarding network heterogeneity on governmental and political stakeholder social media page.

## V. Research Conclusion

The aim of this study is to measure the impact of network heterogeneity of governmental and political stakeholder social media page on youth political persuasion. This research has contributed academically by providing insights for understanding the general principle of social media use in government. There was an academic gap, which this paper attempted to fill. It was unclear to what factors contribute to the influence and impact of social media usage by public entities on the delivery of citizen knowledge using social media in conveying the entity’s message and information, transparency, participation, engagement etc. The results of this study show that it is evident that an individual’s social media usage for interaction has an important role in the

political context. (1) Discussion disagreement and (2) network heterogeneity on governmental and political stakeholder social media page have a moderate, significant and positive relationship with political persuasion. This conforms to the findings of previous studies (Diehl *et al.*, 2015).

## **VI. Research Findings' Implications and Comparison with Prior Studies**

This study resembles many research that proved social media has direct effects on political persuasion because of the elevated importance of different social influences on opinion formation (Diehl *et al.*, 2015). This conclusion, which is similar to prior studies, contains many implications. When discussion starts for a political reason, as it often does on social media, this tendency may be stronger, because individuals are not primed to take a political decision-making heuristic based solely on partisanship or ideology. Individuals look to their network for a persuasion cue, either in the form of group consensus or the opinion of someone influential in their network. Studies confer and declared that in social media spaces, the demands of maintaining networks often encourage consensus (Donath and Boyd, 2004). Networks have also been found to influence political consensus directly through social pressure. Sinclair (2012) found that social pressure from those either within the family, or from the community, was a predictor of voter and other political activities' turnout.

The results in this study implies that everyday conversations in social networks can inadvertently lead to political discussion, and since networks tend to be diverse on, exposure to dissenting political discourse is possible and therefore persuasion can occur. This finding implies that dissent is a noticeable antecedent to shifting political opinions. Prior studies confirm this finding and indicated that persuasion is possible when behaviors are purely social because the tendency to maintain relationships leads to diverse networks, and in turn, exposure to political disagreement (Diehl *et al.*, 2015). Prior studies show that social media greatly expand the pool of potential discussion participants, offer an alternative means to consume news, learn about politics, and blur the boundaries between private social interactions (Yoo and Gil de Zúñiga, 2013).

This study illustrates that as a result of engaging in a heterogeneous political discussion, individuals might be persuaded by their discussion partner and eventually modifies their views, they might influence their partner and become more convinced about their own view, or they might stay ambivalent. This implication supports prior research on attitude change, which suggests that persuasion can occur as a result of news consumption (Barker and Lawrence, 2006), and other work explains persuasion as the result of a need to maintain social connectedness (Cialdini and Trost, 1998; Wood, 2000).

## **VII. Research Contributions**

This paper contributed practically by presenting a unique example of using social media in government communication. The government in Egypt has achieved remarkable progress in enabling technology-based transformation of public services. With the emerged knowledge practitioners can improve their existence in social media to promote public policy, legislation, and reform

Social media offer various features that government and political stakeholders entities can use to enrich the structure and appearance of their external communications. It incorporates several forms of content, including text, pictures, videos, and content from other social media, increasing media richness. These entities can use these communication features to get citizens' attention and to improve the operational efficiency and accessibility of their services and promote various public topics.

Social media will open the dialogues between the government and its citizens, which started by broadcasting and posting information to public via social media and by listening to citizen's opinions and feedback on such information. Government and political stakeholders using social media could enable citizens to access information provided by their governments over social media and thus reducing the effort for searching for needed information. Governments can take advantage of by providing current information, such as news on upcoming events. Also, it can ease the delivering of government information and services, gaining a greater understanding of public opinion.

This study shows that people can persuade each other through discussion, having a heterogeneous discussion network tends to produce attitudinal ambivalence, that is, people's cognitions about and affect toward specific objects become less one-sided and polarized. Changing a political view rarely occurs, and having heterogeneous discussion is extremely valuable because it opens up a door to political view change. Increased issue involvement is also a meaningful consequence of political discussion, which can result in further participatory behaviors. As a result of engaging in a heterogeneous political discussion, individuals might be persuaded by their discussion partner and eventually modify their views, they might influence their partner and become more convinced about their own view, or they might stay ambivalent.

## VIII. Research Limitations and Suggestions for Future Research

A number of limitations prevent this study from being generalized. The first arises from the use of the intercept data collection method in order to reach the respondents. This method ensured the collection of large amounts of data in a relatively short period of time and in an economical way. However, this technique has the disadvantage of convenience sampling. Therefore, the end results are not truly representative and cannot be generalized. Future research in this area would benefit from drawing a larger probability sample using, for instance, random sample selection techniques. The data for this study were collected over a period of two months. The comparatively brief period of time allowed only a restricted number of respondents to participate. For future research, a larger sample is needed and the data should be gathered proportionately from all regions of the country. Second, the research was conducted in metropolitan cities in Egypt – Cairo and Alexandria. Thus, future researchers can visit and select participants in other cities. The final limitation is that this study is purely a quantitative study. Qualitative research may be adopted to elicit more in depth findings. Future research can also interview practitioners because they may have the awareness needed regarding the information on how social media to promote public policy, legislation, and reform.

## Reference

- [1]. Abdelhay, N. (2012), "The Arab uprising 2011: new media in the hands of a new generation in North Africa", *Aslib Proceedings*, Vol. 64 Iss 5 pp. 529 – 539.
- [2]. Ball-Rokeach, S. (1985). The origins of individual media-system dependency: A sociological frame- work. *Communication Research*, 12, 485–510.
- [3]. Barker, D., & Lawrence, A.B. (2006). Media favoritism and presidential nominations: reviving the direct effects model. *Political Communication* 23(1), pp. 41–59.
- [4]. Baumgartner, J. & Morris J. (2010) My FaceTube Politics: Social Networking Web Sites and Political Engagement of Young Adults. *Social Science Computer Review*, 28 (1), 23-44.
- [5]. Cialdini R.B. and Trost M.R. (1998) Social influence: social norms, conformity and compliance. In: Gilbert D, Fiske S and Gardner L (eds) *The Handbook of Social Psychology*. New York: McGraw-Hill, pp.151–192.
- [6]. Diehl T., Weeks B., De Zúñiga H. (2015), Political persuasion on social media: Tracing direct and indirect effects of news use and social interaction, *new media & society*, Sage Pub.
- [7]. Donath J and boyd D (2004) Public displays of connection. *BT Technology Journal* 22(4): 71–82.
- [8]. Eliasoph, N. (1998). *Avoiding politics: How Americans produce apathy in everyday life*. New York: Cambridge University Press.
- [9]. Eveland, W. P., & Hively, M. H. (2009). Political discussion frequency, network size, and “heterogeneity” of discussion as predictors of political knowledge and participation. *Journal of Communication*, 59, 205-224.
- [10]. Kamp, M. (2016). *Assessing The Impact Of Social Media On Political Communication and Civic Engagement in Uganda*. Konrad-Adenauer-Stiftung, pp.1-98.
- [11]. Katz, E, Blumler, J.G., & Gurevitch, M. (1973-1974). Uses and Gratification Research. *The Public Opinion*, Quarterly, vol.37, JSTOR, pp. 509-523.
- [12]. Keele L. and Wolak J. (2008) Contextual sources of ambivalence. *Political Psychology* 29: 653–673.
- [13]. Klein, K., & Boals, A. (2001). Expressive writing can increase working memory capacity. *Journal of Experimental Psychology: General*, 130(3), 520–533.
- [14]. Kotler P., Armstrong G., (2016) *Principles of Marketing*, 16th Edition.
- [15]. Kim, Y., Hsu, S.-H., & Gil de Zúñiga, H. (2013). Influence of social media use on discussion network heterogeneity and civic engagement: The moderating role of personality traits. *Journal of Communication*, 63(3), pp. 498–516.
- [16]. Kushin M.J & Kitchener K. (2009). Getting political on social network sites: Exploring online political discourse on Facebook; *First Monday*, Volume 14, Number 11.
- [17]. Kushin, M. J., & Yamamoto, M. (2010). Did social media really matter? College students’ use of online media and political decision making in the 2008 election. *Mass Communication and Society*, 13, pp. 608–630.
- [18]. Kwak, N., Williams, A. E., Wang, X., & Lee, H. (2005). Talking politics and engaging politics: An examination of the interactive relationship between structural features of political talk and discussion engagement. *Communication Research*, 32(1), 87–111.
- [19]. Kyllönen E. (2015), *Online Activism as Persuasive Communication*, M.A. University of Jyväskylä, Department of Communication.
- [20]. Lee, J. K., Choi, J., Kim, C. & Kim, Y. (2014), Social Media, Network Heterogeneity, and Opinion Polarization. *Journal of Communication*, 64: 702–722. doi:10.1111/jcom.12077
- [21]. Lee J.K. & Myers T.A. (2016) Can Social media change your mind? SNS use, Cross-cutting Exposure and discussion and Political View Change. *Social Media Studies*, MacroWorld Vol. 2, pp. 87-97.
- [22]. Gastil, J. & Dillard, J. P. (1999). Increasing political sophistication through public deliberation. *Political Communication*, 16, 3-23.
- [23]. Ghoneim W. (2016). Let's design social media that drives real change | TED Talk Subtitles and Transcript | TED.com. [ONLINE] Available at: [https://www.ted.com/talks/wael\\_ghonim\\_let\\_s\\_design\\_social\\_media\\_that\\_drives\\_real\\_change/transcript?language=en](https://www.ted.com/talks/wael_ghonim_let_s_design_social_media_that_drives_real_change/transcript?language=en). [Accessed 18 May 2017].
- [24]. Gil de Zúñiga H., Bachmann I. & Hsu S.H., (2013) Expressive vs. consumptive blog use: implications for interpersonal discussion and political participation. *International Journal of Communication* 7: 1538–1559.
- [25]. Gustavo, H., Maultasch, O., Eric, W. (2013), Social media use in local government: Linkage of technology, task, and organizational context. *Government Information Quarterly* V.30, pp. 397–405.
- [26]. Habermas, J. (1996). *Between facts and norms*. Cambridge, MA: MIT Press.
- [27]. Huckfeldt, R., Beck, P. A., Dalton, R. J., & Levine, J. (1995). Political environments, cohesive social groups, and the communication of public opinion. *American Journal of Political Science*, 1025–1054.
- [28]. Huckfeldt, R., Mendez, J. M., & Osborn, T. (2004). Disagreement, ambivalence, and engagement: The political consequences of heterogeneous networks. *Political Psychology*, 25(1), 65–95.
- [29]. McLeod, J.M., Scheufele, D.A. & Moy, P. (1999) Understanding deliberation the effects of discussion networks on participation in a public forum. *Communication Research* 26(6): 743–774.

- [30]. Mishaal, Dareen & Abu-Shanab, Emad. (2015). The Effect of Using Social Media in Governments: Framework of Communication Success. 10.15849/icit.2015.0069.
- [31]. Mutz, D.C., & Martin, P.S., (2001). Facilitating communication across lines of political difference: the role of mass media. *American Political Science Review* 95(1): 97–114.
- [32]. Mutz, D. C. (2002). The consequences of cross-cutting networks for political participation. *American Journal of Political Science*, 46, pp. 838-855.
- [33]. Mutz, D. C. (2006). *Hearing the other side*. New York, NY: Cambridge University Press.
- [34]. Mutz, D. & Mondak, J. (2006). The workplace as a context for crosses cutting political discourse. *Journal of Politics*, 68 (1), 140-155.
- [35]. Negm, E.M., Tantawi, P., Yehia, A. & Sharabassy, A. (2012). Investigating the power of interpersonal social influence on citizens' attitude towards civic engagements in Egypt. *American Academy and Scholarly Research Journal Special Issue*, 4(5), 1-11
- [36]. Parsons, B. M. (2010). Social networks and the affective impact of political disagreement. *Political Behavior*, 32, 181-204.
- [37]. Pinkleton, B. E. & Austin, E. W. (2001). Individual motivations, perceived media importance, and political disaffection. *Political Communication*, 18(3), pp. 321-334.
- [38]. Pingree, R. J. (2007). How Messages Affect Their Senders: A More General Model of Message Effects and Implications for Deliberation. *Communication Theory*, 17: 439–461. doi:10.1111/j.1468-2885.2007.00306.x
- [39]. Price, V., Nir, L., & Cappella, J. N. (2006). Normative and informational influences in online political discussions. *Communication Theory*, 16(1), 47–74.
- [40]. Ryfe, D.M. (2005). Does Deliberative Democracy Work? *Annual Review of Political Science*.
- [41]. Shah, D. V., Cho, J., Eveland, W. P., & Kwak, N. (2005). Information and expression in a digital age modeling Internet effects on civic participation. *Communication Research*, 32(5), 531–565.
- [42]. Scheufele, D. A., Nisbet, M. C., Brossard, D., & Nisbet, E. C. (2004). Social structure and citizenship: Examining the impacts of social setting, network heterogeneity, and informational variables on political participation. *Political Communication*, 21, 315-338.
- [43]. Sinclair B (2012) *The Social Citizen: Peer Networks and Political Behavior*. Chicago, IL: University of Chicago Press.
- [44]. Wood, W. (2000). Attitude change: persuasion and social influence. *Annual Review of Psychology*. 51:539– 70
- [45]. Wojcieszak, M.E., & Mutz, D.C. (2009). Online groups and political discourse: do online discussion spaces facilitate exposure to political disagreement? *Journal of Communication* 59(1):40–56.
- [46]. Walsh KC (2004) *Talking About Politics: Informal Groups and Social Identity in American Life*. Chicago, IL: University of Chicago Press.
- [47]. Yoo SW and Gil de Zúñiga H (2014) Connecting Blog, Facebook, and Twitter use with gaps in knowledge and participation. *Communication & Society* 27(4): 33–48.
- [48]. Zavattaro, S.M. & Sementelli, A.J. (2014). A critical examination of social media adoption in government: Introducing Omnipresence. *Government Information Quarterly*, 31(2), 257-264.

Hanya Riad. "Measuring the Impact of Network Heterogeneity of Governmental and political Stakeholder Social Media Page on Youth Political Persuasion." *IOSR Journal of Business and Management (IOSR-JBM)*, 23(02), 2021, pp. 40-47.