



## **Dynamics of political usage of smart phones: Examining relationship of exposure patterns and polarization among young voters**

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### **Abstract**

Mobile phones are credited to be the fastest penetrating technology among Pakistani youth. The study examines the role of selective exposure in polarization among young voters during General Elections of Pakistan, 2013. It highlights the relationship between usage of mobile phones for political messages and tendency of users to attend and share selective as well as diverse views and alternative perspectives. Findings from 200 respondents through survey method reveal that selective exposure of young voters is on decline and they engage themselves to diverse contents as well. Thus, polarization patterns of Pakistani youth are changing in relation to mobile usage.

**Keywords:** *Political messages, Mobile communications, Selective exposure, Diverse exposure, Political polarization, Pakistan general elections, 2013*

### **Introduction**

In recent years, mobile communications have been emerged as a most interactive tool of political campaigning (Haiqing, 2004). Mobile phones massive availability and fast penetration has made it an important tool for democratic development (Castells, Fernandez-Ardevol, Qiu, & Sey, 2005; Rheingold, 2008). Mobile communications are bringing plurality of views and opening new patterns of interactions

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among diverse views (Campbell & Kwak, 2008; Gilmore & Howard, 2013). Although mobile communications are being considered important for democratic development, yet their outcomes are often dependent on preexisting attitudes and beliefs of users (Prete, 2007). As selective exposure exists in other interactive media platforms (An, Quercia, & Crowcroft, 2013; Henning, 2014; Himmelboim, McCreery, & Smith, 2013; Johnson, Bichard, & Zhang, 2009; Merakou, 2013) does it also interlink with polarization of users. Present study aims to describe the relationships of mobile exposure, selective exposure and polarization patterns among Pakistani youth.

Mobile phones usage is increasing in Pakistani society. According to Pakistan Telecommunication Authority (2013), approximately 129 million subscribers are using cellular services in Pakistan. Highest demand of this technology is also gaining much attention of political actors for propagation of political messages. In previous elections of 2008, there was little trend of political use of mobile phones. In recent elections, there was a prevalence of political messages on mobile phones and different political parties launched their political campaigns through mobile phones.

Riaz (2010) argues that new media technology has greatly accelerated political communication in different developing countries, including Pakistan. Therefore, developing countries are now giving more attention to promote communication technologies like internet and mobile phones etc. Although, mobile communication is considered an

important tool of political marketing, yet several scholars argue that its outcomes mostly depends on audience attitudes and beliefs. Prete (2007) while arguing that the credibility and effectiveness of mobile communications for political marketing, concludes that though mobile political communication is considered important for most voters, yet, its effect on their voting intention depends on certain factors, such as voters' political affiliations, attitudes and beliefs.

Rothstein (2003) cites Putnam's argument that the political engagement through social networks and associations is essential for a working democracy. The availability of mobile phones has democratized the power of persuasion, organization, and coordination in different parts of the world. Rheingold (2008) supports this argument with the citation of different examples from the world about the impact of mobile phones on politics. Similarly, in Pakistan, mobile communication is facilitating the political actors in mobilizing and motivating people.

Elections of 2013 were significant for Pakistan's democratic process. After observing several martial laws and incomplete democratic tenures, successful completion of democratic elected government and power transfer through constitution of Pakistan, made 2013 elections unique. A record voter turnout was observed in 2013 Elections. Overall voter turnout was 53-55%. The improvement ratio was 34% then previous record (Gallup Pakistan, 2013). The report of European Union Elections Observations Mission Pakistan (2013) declared

these 2013 Elections more representative than prior elections.

According to the report,

“Pakistan ratified the UN International Covenant on Civil and Political Rights (ICCPR) in 2010, making these the first national elections to be held under the obligations of the treaty. The legal framework has also been further improved through various amendments to the Constitution, which amongst other things provided for a parliamentary process for the appointment of the leadership of the Election Commission of Pakistan (ECP) and the Caretaker Prime Minister and Chief Ministers.”

Moreover, Youth is a major segment of Pakistan’s population. Figures released by the Election Commission of Pakistan (ECP) show that a significant proportion of this 2013’s electorate comprises of people under the age of 35. Nearly half of the 84 million registered voters (47.8%) were between the age of 18 and 35, while 16.88 million voters (19.77%) were under the age of 26 (Shakel, 2013). Mobile phone is rapidly diffusing among the youth. Kapucu (2011) findings show that the younger generation are socializing and meeting new people constantly, while the older age groups live a steadier and unchanging life. Therefore, the major target of political communication through mobile communications is the young voters. These elements give reason to study young voters. Furthermore, all these facts and figures provide enough reason to study the role of mobile media in polarization of young voters in the elections-2013.

This research aims to study the concept of selective exposure in the age of mobile communications with particular reference of political campaigning in Pakistan's General Elections of 2013. The study aims to study whether youth exposes themselves to political messages on phone according to their prior opinion and interests? Does mobile communication play any role to increase the diverse exposure of young voters? And to what extent selective and diverse exposure relates with polarization of young voters?

### **Democracy and Mobile Communications**

Mobile communication role is significant in political process. Haiqing (2004) revealed the power of thumbs and Chinese people use of SMS for making critical reflections, emotional support for one another, and mockeries of the 'China's war on SARS'. Ibahrine (2008) found that mobile phones political usage and accessibility is becoming a serious threat for Arab authoritarian regimes despite their tight control over information.

Castells et al. 2005 observed the influence of mobile communication on working democracies. They analyzed different case studies of wireless communications including mobile telephony in democratic process of different countries. In the Philippines, Korea and Spain, the effect was significant in so far as it influenced the government choice. In the United States, it had a partial influence on US politics. They concluded that cell phones and text messaging are expanding the information networks availability at interpersonal level.

Similarly, Campbell and Kwak (2008) administered an email based survey from 2000 respondents in US. They found that use of the technology for information sharing is positive predictor of civic participation and political engagement.

Although, mobile communications is playing a role in strengthening democracy, Miard (2012) provides a counter evidence by testing mobile tele density data and three political activism indicators in 191 countries. He found insignificant relationship between mobile tele density and anti-government protests, riots, or major government crises.

Mobile media provides platform for pluralism. It is comparatively easier and cheaper medium to access public. As Gilmore and Howard (2013) found the use of mobile applications and internet by Brazilians candidates in their campaign during 2010 elections. They argued that young and new comer candidate' used mobile technologies effectively for gaining political benefits. Social networking applications played significant role in successful Senate campaigns, and mobile media strategies brought a remarkable difference for the lower House of Deputies.

In Pakistan, Muslim, Kamboh, Saleem, and Jameel (2014) studied the role of political text messages in political socialization of citizens. Data was collected from the 500 respondents of Faisalabad city. Their findings suggested that educated mobile users not only liked but also responded back to the sender of political text messages and were instigated to participate in the political process as well.

**Selective Exposure in Digital Age**

Selective exposure theory has its roots in the theory of cognitive dissonance, presented by Festinger in 1957. The concept suggests, "people try to find a media environment for themselves in which the information coming to them supports (rather than undercuts) their beliefs" (Parmelee & Bichard, 2011). They further stated that many researchers have sought to discover whether mass media promote or discourage selective exposure. The results are mixed. Klapper (1960) observed that "the tendency of people to expose themselves to mass communications in accord with their existing opinions and interests and to avoid unsympathetic material". Selective exposure theory summed that people had certain attitudes, beliefs, or convictions that they were loath to change. These predispositions led people to seek out communications that were consistent with their beliefs and avoid material that challenged them.

Modern Information & Communication Technologies have enabled individuals to select and control communication content. Therefore, new forms of communications are transforming not only regional but also global shape of civil society (Castells et al., 2005). Due to the interactive nature of the Internet, users have become more selective and choosy for seeking out partisan information online (Johnson et al., 2009). Merakou (2013) found the audience's news interaction habits in social networking sites' influence on online exposure to political difference. She employed the methodology of

multidisciplinary discourse analysis, literature review and two case studies. She argued that the selective exposure hypothesis is still valid in the context of SNSs and concluded that some characteristics promote exposure to political diversity, especially when compared to traditional media.

Similarly, Himelboim et al. (2013) used network and content analysis approaches for examining exposure to partisan information on Twitter. They found that Twitter users usually seek content from the politically homogenous clusters of users. Johnson et al. (2009) also used an online panel of blog users to examine selective exposure. Their findings indicate that heavy blog users are more politically active, partisan, and educated as compare to light blog users.

Henning (2014) provides insight into how politics follows the selective exposure theory of communication in that individuals and organizations on social platforms only tweet material that advances their own biases and agendas. By analyzing content analysis of tweets, she found that selective exposure is a possible explanation for the kinds of social media posts people make on Twitter surrounding political events such as the State of the Union address.

The digital media platforms have gained the attention of scholars working on polarization. Because, digital media provide opportunities for individuals to sort themselves into like-minded networks that reinforce preexisting attitudes (Sunstein, 2009) and it increases the polarization among digital media users (Stroud, 2010). However, there is also an

evidence, although people are more selective in digital media, yet they don't avoid alternate perspectives (Warner & McKinney, 2013).

Most of the work regarding selective exposure has been done on Cable TV, Internet, Social Websites, Twitter, Blogs, Facebook etc. Present study aims to explore the concept of selective exposure and polarization regarding mobile communication.

### **Hypotheses**

Use of mobile phone for political purposes is in its early phases in Pakistan. However, its usage for marketing and advertising purposes is gaining popularity day by day. Different political parties used mobile communication for disseminating their political ideas, messages during 2013 general elections. They launch political campaigns through mobile phones. That was unprecedented in Pakistan democratic system. Mobile communication is serving as discussion forum and platform for disseminating the political ideas for young voters.

It has become so easy for a person to become a member of a political party by subscribing SMS membership of that party. This study tries to investigate the strength of mobile political campaigns of different political parties of Pakistan. Major parties includes; Pakistan Muslim League Nawaz (PML-N), Pakistan People Party (PPP), and Pakistan Tahrir-i-Insaf(PTI). After the review of the literature and observing Pakistani political culture, following hypotheses are

constructed.

H1: The more users exposed themselves to political messages on mobile, the more they propagate like-minded messages.

H1 takes its roots from selective exposure theory. In the arena of mobile communication a user has more freedom to accept, reject, delete, forward and propagate message than other forms of traditional medium. Therefore, audience has become more selective and choosy. They can seek and propagate information according to their existing attitudes.

H2: More the exposure of users towards like-minded messages; more the polarization among users.

H3: More the exposure of users towards diverse messages; lesser the polarization among users.

H2 and H3 also take their roots from selective exposure theory. People neither give attention, nor forward those messages that criticize or oppose their favorite party.

H4: More the selective exposure of users; more the diverse exposure of users.

Selective exposure and diverse exposure are often considered the rivals of one another. Contrastingly, Garrett (2009) argues that they both are essential for working democracy. They must be studied side by side in democratic societies. His analyses shows that Americans retrieve online information sources to strengthen their own views without avoiding alternate opinions. Garrett argument provides base for hypothesizing H4.

## **Methods**

The methodological design of study is based on cross-sectional survey. Population of study is the youth of Gujranwala city. A sample of 200 respondents are selected through stratified-purposive sampling technique. Gujranwala district composed of four tehsils; Gujranwala, Kamoki, Wazirabad, NoshahraVirkan. Fifty respondents from each tehsil are selected purposively. Strata are made on the basis of gender (100 Male & 100 Female). Criteria for the selection of respondents is a) Citizen of Gujranwala city b) Mobile user, c) having interest in political messages, d) having age between 18 and 35 years.

**Demographic Sheet**

For getting information about individual differences, demographic sheet was developed. Respondents were asked questions about; age, gender and education.

**Scale for Mobile Exposure**

In the context of present study, the concept of mobile communications was operationalized as the communications through the use of mobile phone and network services, specifically, Text messages, Audio Messages, Multimedia picture messages and voice calls. Mobile exposure of a user was measured at five point Likert scale of two question items; mobile usage and political use of mobile (Cronbach alpha  $r=0.9$ ). Questions were formed to ask respondents about use of mobile and political use of mobile (Annexure I).

**Scale for Selective Exposure**

The concept of selective exposure was operationalized as

the tendency of attending and sharing SMS in favor of respondents' favorite party and tendency of attending and sharing messages against other parties. For measuring the selective exposure of respondent, a scale was formed containing four question items at five point Likert scale (Cronbach alpha  $r = 0.7$ ). Questions were asked about tendency of attending and sharing messages that supports their favorite party and oppose other parties (Annexure II).

#### **Scale for Diverse Exposure**

Concept of diverse exposure is antonym to selective exposure. A five point Likert scale was formed to measure it (N=4, Cronbach alpha  $r=0.5$ ). Questions were asked about tendency of attending and sharing messages that supports other parties and oppose favorite party of respondents (Annexure III).

#### **Scale for Polarization**

Political polarization refers to cases in which individuals' attitude regarding a particular issue, policy, or person is strictly defined by their political affiliation or ideology (DiMaggio, Evans, & Bryson, 1996). The concept was operationalized as political affiliation of respondent with some party and level of inclination towards leaving that party and diverting towards other parties. For measuring it, a five point Likert scale was formed (N=3, Cronbach alpha  $r=0.42$ ). Questions were asked about political association of respondent and level of inclination towards leaving it and joining other parties (Annexure IV).

**Analysis and Results**

The findings show that mobile phones have penetrated deeply into the youth of Pakistan. Majority of youth is using mobile excessively. Mobile medium is also being used for political communication excessively (Annexure I). This indicates that the mobile phone has become an important source of political communication among Pakistani youth. This mobile exposure provided the base to further test the relationship of mobile communications with selective exposure, diverse exposure and political polarization. For data analysis SPSS version 20 was used. Scales items were computed and then Pearson correlation test was executed to test the relationship among these scales of; mobile exposure, selective exposure, diverse exposure and polarization. Individual items' frequencies can be found in annexure. Furthermore, independent sample t-test was applied to check gender differences influence and one way ANOVA test was applied to check education differences.

**Table 1**  
**Relationships among Mobile Exposure, Selective Exposure,**  
**Diverse Exposure and Polarization**

		Selective Exposure	Diverse Exposure	Polarization
Mobile Exposure	Pearson Correlation	-.049	.242**	-.634**
	Sig. (2-tailed)	.487	.001	.000
	N	200	200	200
Selective Exposure	Pearson Correlation		.400**	.264**
	Sig. (2-tailed)		.000	.000
	N		200	200
Diverse Exposure	Pearson Correlation			-.030
	Sig. (2-tailed)			.669
	N			200

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Findings indicate that there is no association between mobile exposure and selective exposure of respondents ( $r = -.049$ ). Correlation is insignificant at .487 level (Table 1). However, it

alone is not sufficient to test hypothesis. Independent sample t-test was applied to check the effect of gender on respondents’ mobile exposure and selective exposure. Independent sample t-test was conducted to compare the mobile exposure scores for males (M=3.45, SD=1.89) and Females M=3.35, SD=1.69;  $t(196)=0.40, p = 0.69$  (2-tailed). This shows that gender has no significant effect on mobile exposure of user. Further, One-Way ANOVA test was used to explore education differences’ effect on mobile exposure. For this purpose, Education of the respondent was divided into four groups (Group 1: Matriculation; Group 2: Intermediate; Group 3: Graduation; Group 4: Post Graduation). There was no statistically significant difference was found in scores of four education groups:  $F(3, 196) = 1.88, p = 0.14$ .

**Table 2**  
**Gender Differences in the Mobile Exposure, Selective Exposure, Diverse Exposure and Polarization**

	Male		Female		t	S i g n i f i c a n c e
	M	S D	M	S D		
Mob ile expo sure	3 . 4 5	1 / 8 9	3 . 3 5	1 / 3 5	0 . 4 0	0 . 6 9

Selec tive	1 0	4 .	1 0	3 .	- 0	0 .
Exp osur e	4 5	1 4	5 0	3 7	0 9	9 2
Dive rse	7 .	2 .	6 .	2 .	1 .	0 .
Exp osur e	2 4	8 1	6 8	2 3	5 5	1 2
Pola rizat ion	7 . 6 5	1 . 7 8	7 . 7 6	1 . 8 4	- . 4 3	0 . 6 7

In case of selective exposure, independent sample t-test was conducted to compare the mobile exposure scores for males (M=10.45, SD=4.14) and Females M=10.50, SD=3.37;  $t(190) = -0.09$ ,  $p = 0.92$  (2-tailed). This shows that gender has no significant effect on selective exposure of user. One-Way ANOVA result shows significant difference of education on selective exposure of respondents:  $F(3, 196) = 3.19$ ,  $p = 0.025$ . Despite the significant difference of education on mean score of selective exposure, only the one group is found different from others. Post-hoc comparisons using the Tukey HSD test indicated that only the mean score of matriculate respondents (M=11.67, SD=4.14), is significantly different from intermediate respondents (M=9.39, SD=3.08).

Correlation value of 0.242 between two variables of mobile exposure and diverse exposure of respondents during Elections-2013 show high association between these variables. Correlation is significant at 0.01 level (Table 1). Independent sample t-test shows that gender has no significant difference in diverse exposure: Males (M=7.24, SD=2.81) and Females

( $M=6.68$ ,  $SD=2.23$ ;  $t(188) = 1.55$ ,  $p = 0.12$  (2-tailed)). Furthermore, One-Way ANOVA result shows significant difference of education on selective exposure of respondents:  $F(3, 196) = 5.88$ ,  $p = 0.001$ . Post-hoc comparisons using the Tukey HSD test indicated that the mean score intermediate group ( $M=5.74$ ,  $SD=1.02$ ), is significantly different from graduate group ( $M=7.53$ ,  $SD=3.19$ ) and post graduate group ( $M=7.53$ ,  $SD=2.03$ ).

Findings show high correlation between selective exposure of user and its diverse exposure. Correlation value is .40, significant at 0.01 level (Table 1). Correlation value between political polarization of respondents and selective exposure is .264, which is highly significant at .01 level. This shows that political polarization of respondents increases with the selective exposure of that respondent (Table 1). Independent sample t-test shows that there is no significant difference in mean scores of two gender groups in case of political polarization of respondents: Males ( $M=7.65$ ,  $SD=1.78$ ) and Females ( $M=7.76$ ,  $SD=1.84$ ;  $t(198) = -0.43$ ,  $p = 0.67$  (2-tailed)). One-Way ANOVA test indicates no significant difference between mean scores of different education groups on political polarization of respondents:  $F(3, 196) = 1.14$ ,  $p = 0.34$ . Study results demonstrate that there is no correlations exist between diverse exposure of user and political polarization of that user. Correlation value is -.030, significant at 0.669 level (Table 1).

**Discussion**

Pakistan is a country, where democracy is in its early phases. However, now the country is progressing towards democratic development. Media in Pakistan has become much vibrant and pluralist. Social media has also become much active in country. Pakistan is credited as one of the fastest growing country in telecommunication sector. Present study found that mobile medium has penetrated into the youth quite deeply. Majority of youth is using mobile excessively. Mobile medium is also being used for political communication excessively. This is a positive indicator for working democracy in Pakistan. These findings support Rheingold (2008) argument in Pakistan, that the availability of mobile phones has democratized the power of persuasion, organization, and coordination.

The major focus of the study was to check and measure the validity of selective exposure in the age of mobile phones. The study found that selective exposure doesn't exist in the age of mobile communication. Findings claimed that there are no association between mobile exposure and selective exposure of respondents ( $r = -.049$ ). Correlation is insignificant at .48 (Table 1). Thus H1 is not confirmed. Findings contradict with previous studies on Internet, and Social media (An et al., 2013; Henning, 2014; Himelboim et al., 2013; Johnson et al., 2009; Merakou, 2013) that selective exposure still valid in digital age of internet, and social media. Results also reverse to Prete (2007) findings that effects of mobile communications for political messages on voters' voting intentions, depend on

numerous factors, such as voters' political affiliations, attitudes and beliefs. Hence, H1 is disapproved in the context of Pakistani society.

Other than dictatorship regimes, only two parties PPP & PML-N have been working as major parties in country since 1971. In recent elections, PTI emerged as a third major party. PTI gained popularity in short time. The several analysts argue that the major reason of PTI popularity is its use of social media including SMS services. As Gilmore and Howard (2013) found in Brazil, that candidates' social media strategies particularly using mobile technologies, provided newcomers with electoral advantages.

Research outcomes illustrate high association between mobile exposure and diverse exposure of users:  $r=0.24$ ,  $p=0.01$  (Table 1). The findings provide an evidence to support the argument that people using digital political media do not avoid different perspectives (Warner & McKinney, 2013). Among the Pakistani youth, trend of selective exposure is emerging into diverse exposure due to the massive penetration of mobile phones. As Kapucu (2011) examined that the younger generation are socializing and meeting new people constantly, while the older age groups live a steadier and unchanging life. A strong correlation ( $r=0.26$ ,  $p=0.01$ ) between selective exposure and polarization of respondents show that these two phenomenon are highly associated with one another (Table 1). On the other side, insignificant correlation ( $r=0.67$ ,  $p=0.2$ ) between diverse exposure and

polarization also give an evidence to argue that polarization among the young Pakistani voters is declining. Youth is not strictly affiliated with one party. They can be inclined towards another party. As Campbell and Kwak (2008) noted that use of the technology for information sharing is positive predictor of civic participation and political engagement. Findings also relate with Gilmore and Howard (2013) findings in Brazil, that mobile technologies played crucial role for giving political benefits to young and new comers. All these findings support H2 and H3.

Findings show, although mobile communications are strongly correlated with polarization, mobile messages provide enormous opportunities for Pakistani youth to expose themselves to alternative perspectives instead of reinforcing existing attitudes. There is a strong correlation between selective exposure and diverse exposure (Table 1). Therefore, H4 finds support for confirmation. These findings relates with Garrett (2009) findings that audience retrieve online information sources to strengthen their own views without avoiding alternate opinions. In mobile communications, audience have more opportunities to select, reject and filter the information. Young voters in Pakistan, not only give attention to those messages that support their existing attitudes but also give attention to differing information.

### **Conclusion**

The advent of new media technologies, particularly mobile

phones have enhanced the audience experience of freedom of expression. Mobile political campaigning can serve as an effective tool for targeting youth in Pakistan. Its consequences on young voters' affiliations in 2013 General Elections are rampant. Mobile communications played vital role in providing opportunities for political sharing. Mobile phones provide enormous opportunities to attend and share different perspectives. Therefore, study suggests that political campaigning through mobile phones have the ability to undermine existing attitudes.

The study can be applied to create buzz in digital social networks through political campaigns on mobile phones. It guides towards the use of mobile phone for motivating and mobilizing Pakistani youth. It reveals how mobile medium can be used effectively for strengthening democratic process in Pakistan. Political campaigning can be done in easy and cost effective way through mobile phones. The study suggests that further research is needed about emerging technologies in mobile phones and their impacts on political communication. For example, mobile internet, mobile applications of social sites, like Facebook, Twitter, Whatsapp, Google+ etc, are providing new dimensions of social life. These aspects of mobile communications should also be studied and explored.

**Limitations of Study**

Although, the study explored the concepts of mobile exposure, selective exposure, diverse exposure and

polarization in the age of mobile phones, yet it has limitations. The study does not address the emerging patterns of mobile communication and social media like mobile internet, Facebook, Twitter and YouTube mobile applications. Similarly mobile applications of media channels and radio channels are also excluded. The results are limited to affiliation patterns of young voters having age 18 to 35 year. Efforts were made to exempt personal biasness of researchers from the results, however human biasness element may involve in results.

**Annexure I**  
**Frequencies of Mobile Usage Scale (N=200)**

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I use mobile phone excessively.	78	25	2	70	2
I do political communication on mobile excessively.	97	8	9	64	2

**Annexure II**  
**Frequencies of Selective Exposure Scale (N=200)**

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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I give attention towards messages in favour of favorite party.	106	33	14	4	43
I share messages in favour of my favorite party.	96	28	4	54	18
I give attention towards messages against other	40	13	14	67	66

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part ies.					
I share mes sages against other part ies.	28	1 6	16	73	67

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**Annexure III**

**Frequencies of Diverse Exposure Scale (N=200)**

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I give attention towards messages against my favorite party.	34	1 7	42	22	85
I share mes sages against my fav	34	8	18	74	66

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orit e part y.					
I give atte ntio n tow ards mes sag es in fav or of oth er part ies.	12	2 3	20	77	68
I shar e mes sag es in fav or of oth er part ies.	2	6	20	81	91

Annexure IV  
Frequencies of Polarization Scale (N=200)

Item	Str ong ly Agr ee	A g r e e	Ne utr al	Dis agr ee	Str ong ly Dis agr ee
I am high ly asso	80	4 5	5	28	42

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ciate d with my polit ical part y.	28	1	12	10	31
I ofte n thin k to chan ge my polit ical affili atio n.		0	1		
I am high ly inter este d in joini ng othe r part y.	16	4	13 2	14	34

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**References**

An, J., Quercia, D., & Crowcroft, J. (2013). Fragmented social media: a look into selective exposure to political news. Paper presented at the Proceedings of the 22nd international conference on World Wide Web companion.

Campbell, S. W., & Kwak, N. (2008). Mobile Communication and the Public Sphere: Linking Patterns of Use to Civic and Political Engagement. Ann Arbor, 1001, 48104.

Castells, M., Fernandez-Ardevol, M., Qiu, J. L., & Sey, A. (2005). Electronic communication and socio-political mobilization: A new form of civil society. *Global civil society*, 6, 266-285.

DiMaggio, P., Evans, J., & Bryson, B. (1996). Have American's social attitudes become more polarized? *American journal of Sociology*, 102(3), 690-755.

European Union Elections Observations Mission Pakistan. (2013). A Competitive and Improved Election Process in Pakistan despite Militant Violence and Procedural Shortcomings. Islamabad: Retrieved from <http://www.eueom.eu/files/dmfile/eom-pakistan-preliminary-statement-13052013-en.pdf>.

Gallup Pakistan. (2013). The New Tide of Voter Turn-out: Report on Voter Turn-out in Pakistan's National Election: 2013. Retrieved from <http://gallup.com.pk/election/Report1.pdf>.

Garrett, R. K. (2009). Politically motivated reinforcement seeking: Reframing the selective exposure debate. *Journal of Communication*, 59(4), 676-699.

Gilmore, J., & Howard, P. N. (2013). Does Social Media Make a Difference in Political Campaigns? Digital Dividends in Brazil's 2010 National Elections. Center for Communication and Civic Engagement Working Paper(2013-2).

Haiqing, Y. (2004). The power of thumbs: The politics of SMS in urban China. *Graduate Journal of Asia-Pacific Studies*, 2(2), 30-43.

Henning, J. (2014). Selective Exposure and Social Media: Discussion on Twitter During Political Events. <http://juliaehenning.files.wordpress.com/2014/05/selective-exposure-and-social-media-e28094-discussion-on-twitter-during-political-events.pdf>

Himmelboim, I., McCreery, S., & Smith, M. (2013). Birds of a feather tweet together: Integrating network and content analyses to examine cross- ideology exposure on Twitter. *Journal of Computer- Mediated Communication*, 18(2), 40-60.

Ibahrine, M. (2008). Mobile Communication and Sociopolitical Change in the Arab World. *Handbook of mobile communication studies*, 257.

Johnson, T. J., Bichard, S. L., & Zhang, W. (2009). Communication Communities or "CyberGhettos?": A Path Analysis Model Examining Factors that Explain Selective Exposure to Blogs1. *Journal of Computer- Mediated Communication*, 15(1), 60-82.

Kapucu, N. (2011). Social capital and civic engagement. *International Journal of Social Inquiry*, 4(1), 23-43.

Klapper, J. (1960). *The effects of mass communication*. Glencoe: The Free Press.

Merakou, A. (2013). *The Selective Exposure Hypothesis Revisited: Does Social Networking Make a Difference?* [http://dspace.library.uu.nl/bitstream/handle/1874/262829/AMerakou\\_3776964\\_Thesis.pdf?sequence=1](http://dspace.library.uu.nl/bitstream/handle/1874/262829/AMerakou_3776964_Thesis.pdf?sequence=1)

Miard, F. (2012). Call for power? Mobile phones as facilitators of political activism. *Cyberspaces and global affairs*, 119-144.

Muslim, I., Kamboh, M. K., Saleem, A., & Jameel, M. (2014). Diffusion of Political Communication through Text Messages on Mobile Phones. *Educational Research International*, 3(2), 107-115.

Pakistan Telecommunication Authority. (2013). Annual Report 2013. Retrieved from [www.pta.gov.pk](http://www.pta.gov.pk).

Parmelee, J. H., & Bichard, S. L. (2011). *Politics and the Twitter revolution: How tweets influence the relationship between political leaders and the public*. UK: Lexington Books.

Prete, M. I. (2007). M-politics: Credibility and effectiveness of mobile political communications. *Journal of Targeting, Measurement and Analysis for Marketing*, 16(1), 48-56.

Rheingold, H. (2008). Mobile Media and Political Collective Action. In J. E. Katz (Ed.), *Handbook of mobile communication studies* (pp. 225-239). Massachusetts: MIT Press.

Riaz, S. (2010). Effects of New Media Technologies on Political Communication. *Journal of Political Studies*, 1(2), 161-173.

Rothstein, B. (2003). Social capital, economic growth and quality of government: The causal mechanism. *New Political Economy*, 8(1), 49-71.

Shakel, S. (2013, March 24). Pakistan's Youth Buldge, The Express Tribune. Retrieved from <http://tribune.com.pk/story/525778/pakistans-youth-bulge/>

Stroud, N. J. (2010). Polarization and partisan selective exposure. *Journal of Communication*, 60(3), 556-576.

Sunstein, C. R. (2009). *Republic. com 2.0*. Princeton, NJ: Princeton University Press.

Warner, B. R., & McKinney, M. S. (2013). To unite and divide: The polarizing effect of presidential debates. *Communication Studies*, 64(5), 508-527.