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Najin Jun

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**Strong-tie Diversity and Weak-tie Diversity: The Paradoxical Roles of
Internet Use and Political Tolerance in Supporting Political Diversity
and Participation**

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Internet Use and Political Tolerance in Supporting Political Diversity
and Participation**

by

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Dedication

To Father and Mother

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Strong-tie Diversity and Weak-tie Diversity: The Paradoxical Roles of Internet Use and Political Tolerance in Supporting Political Diversity and Participation

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The purpose of this study is: 1) to explore the ways in which the Internet may affect individuals' political diversity in different strengths of social relationships; 2) to identify which of strong-tie diversity and weak-tie diversity contributes more to political tolerance; and 3) to investigate the extent to which tolerant people are different from the less tolerant in their participation decisions when exposed to political diversity. In order to examine the contribution of Internet news use to political heterogeneity, the current study examines the moderation of the negative influence of politically selective exposure on the Internet on political diversity in social networks by Internet news use. To identify the better contributor to tolerance, the two diversities are compared. To assess the consequence of exposure to political difference for political participation for tolerant and less tolerant people, the present study examines any moderating effect of tolerance between political network heterogeneity and participation. It also observes the moderating effect in different tie strengths.

This study utilizes data obtained from the U.S. Citizenship, Involvement, Democracy (CID) survey conducted by a collaboration of Center for Democracy and Civil Society at Georgetown University and the European Social Survey. The sample is 1,001 adults aged 18 and over and representative of the contiguous United States. The dataset contains items concerning Internet use, informal social networks, the composition and diversity of ties and associations, democratic values and tolerance under the primary themes of democracy, social capital and civic engagement. The data are analyzed by hierarchical and OLS regression.

According to the findings, Internet news use contributes to individuals' overall political diversity by reducing the negative influence of the selective exposure occurring from online interaction with homogeneous people. When examined in different strengths of interpersonal relationships, selective exposure discourages strong-tie diversity while encouraging weak-tie diversity. Internet news use positively affects strong-tie diversity but had no influence on weak-tie diversity. Weak-tie diversity is found to be a better contributor to political tolerance. Politically tolerant individuals tend to be discouraged for political participation when exposed to difference in their social relationships. Therefore, while political tolerance may increase overall political diversity, it may as well threaten the balance between deliberation and participation. Closer interpersonal associations are not found to reduce the demobilizing effect of exposure to difference for tolerant individuals.

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Chapter 1: Introduction

STATEMENT OF THE PROBLEM

Discussing politics with friends, family and colleagues is a fundamental component of everyday political life. Indeed, public opinion formation tends to involve two main processes: 1) obtaining political information through various news outlets such as newspapers, radio, television and the Internet; and 2) political discussion (Kwak, Williams, Wang, & Lee, 2005). By providing a virtually unlimited number of easily accessed (for those with high quality Internet connections) news outlets and forums for political discussion, the Internet has, over the last two decades or so, become increasingly central to public opinion formation (Rainie & Horrigan, 2007). According to a national-level survey, 43% of Internet users surveyed reported that they obtained political information or discussed politics and government on the Internet (Democracy Online Project, 2002). More recently, nearly a quarter (24%) of general public went online for 2008 Presidential Election news compared to 13% in 2004 and 9% in 2000 (Pew Research Center for the People and the Press, 2008). Twenty six percent of Americans mentioned the Internet as their first or second main source of election news. Among those ages 18 to 29, the proportion was as large as 46%, a figure that has more than doubled from 21% in 2002. In particular, more than a quarter (27%) of this age group said they had gotten information about candidates and campaign through social networking sites.

As an arena of political discourse, the Internet has, for the past several decades or so, drawn attention as to how it would serve the goals of deliberative democracy. In particular, the increased control on the Internet in the consumption of political information and in the selection of political discussion partners pose the potential that people will increasingly expose themselves to pro-attitudinal perspectives and actively avoid counter-attitudinal perspectives. (Sunstein,

2007). This possibility threatens to undermine one of the goals of deliberative democracy: enhancing the quality of public opinion through rational exchanges among diverse groups of individuals (e.g., Berelson, Lazarsfeld & McPhee, 1958; Habermas, 1989; Mill, 1998). At the individual level, exchanging heterogeneous political viewpoints among citizens induces a critical evaluation of opposing opinions and reexamination of one's own views (Habermas, 1989). At the societal level, reflecting diverse opinions in policy decisions may enhance social inclusion of different groups of citizens and the legitimacy of the outcomes of those policy decisions (Huckfeldt, Johnson & Sprague, 2004).

Addressing this concern, a good deal of research has looked into the extent of selectivity involved in the consumption of political information on the Internet. Most empirical research reports that while exposure to attitude-consistent political information takes large part of people's experiences of online news use and political discussion, exposure to counter-attitudinal messages does occur (e.g., Knobloch-Westerwick & Meng, 2009; Wojcieszak & Mutz, 2009; Stromer-Galley, 2002; Stroud, 2007), suggesting that the Internet does not necessarily eliminate chances of exposure to difference. However, existing research tends to observe online selective exposure and heterogeneous exposure rather separately and provides limited understanding of how those experiences might interact with each other to result in people's overall experience of political diversity. Attention needs to be brought upon the combined implications of the selective and heterogeneous online experiences for people's overall political diversity in their everyday social relationships. There has been only a limited amount of research (e.g., Brundidge, 2010) that examines online behavior in conjunction with offline behavior, which gets us closer to a broader understanding of the role the Internet plays in broadening our political horizons. Further, there has been little attention on political diversity in different strengths of social relationships

individuals maintain. While individuals may exercise ideologically-based selectivity in forming and maintaining their interpersonal associations, some weaker relationships such as neighbors and coworkers may not always be conditioned by selectivity alone, but also by the structure and motivations that have little to do with political preferences. For some weaker relationships, for example coworkers, individuals may have the obligation to interact with them regardless of their willingness to do so and consequently be exposed to the coworkers' political positions, which may be consistent with or different from their own. Alternatively, individuals may deliberately choose to engage with the coworkers not because they are politically agreeable or disagreeable but, for instance, just for better peer evaluations. Therefore, there seems to be a gap in the literature, and political diversity in different strengths of interpersonal relationships needs to be explored in association with selective and heterogeneous Internet experiences.

Yet, there are also lingering questions about the extent to which diversity produced by the Internet or any other resource for that matter, may contribute to political tolerance. Most commonly defined as support of civil liberties for disliked groups (Mutz, 2006; Stouffer, 1955; Sullivan, Piereson & Marcus, 1982), political tolerance is one of the core values that support deliberative democracy. Research has recognized that political tolerance exists only in the presence of political difference (Huckfeldt, Johnson & Sprague, 2002). Essentially, political tolerance and political diversity are inseparable from each other and hold deliberative democracy together (Huckfeldt, Johnson & Sprague, 2004). Indeed, political diversity could facilitate increased tolerance (Gibson, 1999; Mutz, 2006). However, people's experience of encountering political difference in close relationships could vary with the strength/weakness of these associations due to different levels of shared understanding and affective mechanisms (Mutz, 2002b). While a number of studies have investigated the source of political tolerance (e.g.,

Gibson, 1999; Stouffer, 1955; Sullivan, Piereson & Marcus, 1982) such as political heterogeneity, quite surprisingly, there is only limited research addressing how political diversity experienced through different social relationships may influence tolerance (e.g., Gibson, 1999; Mutz, 2002b, 2006). More specifically, on one hand, it has been found that weak interpersonal associations contribute to tolerance because they bring more diverse political perspectives to individuals (Gibson, 1999). On the other hand, it has also been found that stronger interpersonal relationships facilitate increased tolerance through affective mechanisms (Mutz, 2002b, 2006). It is unclear which of strong and weak interpersonal relationships play a more important role in facilitating tolerance. Therefore, the extent to which political diversity in different strengths of interpersonal associations influences tolerance needs to be clarified. It will help increase our understanding of the source of political tolerance.

While political heterogeneity may foster greater tolerance, does it yield universally pro-democratic outcomes? In the conditions of “perfect” diversity, do we get any closer to “perfect” democracy? This question leads us to the relationship between the two models of democracy: deliberative democracy and participatory democracy. Indeed, many studies have documented political diversity experienced through deliberation among people with differing political viewpoints as affecting political participation. Some contend that exposure to heterogeneous views help enhance prospects for political engagement (e.g., Huckfeldt, Johnson & Sprague, 2002, 2004), while others assert that it tends to discourage participation, indicating a tension between the two models of democracy (e.g., Mutz, 2002a, 2006) as some scholars have put in the expression, “deliberation versus participation” (Jang, 2009, p. 881). What is noticed, however, in the study of social influences in individuals’ behavior is that the effects of some social attributes are not uniform across all individuals (Huckfeldt, 1979). This suggests the possibility that

exposure to political diversity as a social context may not affect all individuals in the same way. In support of this possibility, one study demonstrated that exposure to difference can encourage or discourage individuals' voting decisions based on the strength of their support for a particular election candidate (Jang, 2009). Another research showed that the discouraging influence could be more pronounced for conflict-avoidant individuals than the less conflict-avoidant (Mutz, 2002a, 2006). These studies suggest that deliberative democracy and participatory democracy may not be compatible for some individuals, while they may be for others.

In this context, it is meaningful to examine the ways in which political tolerance may or may not support the compatibility between the two democratic models. Does political tolerance translate the benefits of deliberation into the democratic outcome of political participation? Or does it create a tension between the two models of democracy? Does political diversity influence the tolerant differently from the less tolerant in participation decisions? If so, positively or negatively? Research has identified tolerant individuals as higher in the levels of political interest and political efficacy. They tend to be more politically informed, sophisticated, and participatory (Dineen, 2001; McClosky & Brill, 1983). Thus, any change in the level of participation among tolerant people may exert a greater influence on the overall level of participatory outcomes in society. Therefore, political tolerance in the context of political diversity and participation warrants much further attention.

PURPOSE OF THE STUDY

The goals of the current study are: 1) to explore the ways in which Internet use might affect individuals' political diversity in different types of social relationships, namely close friendships on the one hand, and the other more impersonal relationships we have with neighbors and coworkers; 2) to identify which type of political diversity (strong-tie or weak-tie) contributes more to political tolerance; and 3) to investigate the extent to which tolerant people are different from the less tolerant in their participation decisions when exposed to political diversity. For these goals, this study utilizes data obtained from the U.S. Citizenship, Involvement, Democracy (CID) survey conducted by a collaboration of Center for Democracy and Civil Society (CDACS) at Georgetown University and the European Social Survey (ESS). The CID survey contains items concerning Internet use, informal social networks, the composition and diversity of ties and associations, democratic values and tolerance under the primary themes of democracy, social capital and civic engagement. The survey was conducted between May and July, 2005. The survey used the classic cluster sample design method and provides data that are representative of the contiguous United States. The sample size is 1,001.

For the first goal, this dissertation examines how Internet news use may moderate the potential negative influence of selective exposure occurring through online discussion, and contribute to individuals' overall political diversity. It then investigates the extent to which Internet news use and selective exposure through online discussion influence political diversity in individuals' strong and weak social relationships, which this dissertation will call strong-tie diversity and weak-tie diversity respectively. From previous research, we know that selective exposure to political information occurs on the Internet. In fact, people's experiences of news use and political discussion on the Internet are largely politically homogeneous (Knobloch-

Westerwick & Meng, 2009; Wojcieszak & Mutz, 2009; Stromer-Galley, 2002; Stroud, 2007). We are also informed that, despite the large share of selective consumption of political information on the Internet, there are occurrences of encountering counter-attitudinal political messages either deliberately (Knobloch-Westerwick & Meng, 2009; Stromer-Galley, 2002) or inadvertently (Brundidge, 2010). Internet news offers chances for exposure to diverse political perspectives through various structural, psychological and behavioral mechanisms (Benkler, 2006; Brundidge, 2010; Garrett, 2009). People may also have motivations to deliberately seek counter-attitudinal news contents (Knobloch-Westerwick & Meng, 2009).

One of the ways through which selective exposure may occur on the Internet is online discussion. Online selective exposure by discussing politics with likeminded discussion partners may exacerbate individuals' political diversity in social networks by helping strengthen their preexisting positions (Sunstein, 2007). If Internet news use provides chances for encountering political diversity through the structural, psychological and behavioral mechanisms despite the tendency for the match between beliefs and news contents, it may also reduce the potential negative influence of selective online discussion on individuals' overall political heterogeneity. In other words, individuals who frequently engage in politically selective interactions on the Internet may not necessarily be homogeneous in their social relationships when they expose themselves to political difference through Internet news. The current study demonstrates this possibility by examining the moderating effect of Internet news use.

The basic premise of the common argument that experiences of exposure to likeminded or non-likeminded political information on the Internet affect political diversity in social relationships is the assumption that the extent of political heterogeneity and homogeneity, which is affected by the Internet experiences, exerts an influence on the ways in which individuals

choose their friends or discussion partners. This assumption presupposes that interpersonal relationships are based on selectivity guided by, among others, political preferences, which could be shaped by the information they encounter on the Internet. However, some weaker relationships, such as neighbors and coworkers, may not always be conditioned by selectivity alone, but also by social structure factors and individual choices guided by motivations that have little to do with political preferences. By examining the respective effects of selective online discussion and Internet news use on strong-tie diversity and weak-tie diversity, this dissertation demonstrates that political diversity in the weaker associations of neighbors and coworkers are less likely to be (or differently) affected by the extent of homogeneous and heterogeneous online exposure due to: 1) less effortful selection; 2) motivations for forming and maintaining relationships that are not guided by political preference; and 3) the structurally constructed nature of some weak relationships.

While online political discussion can still take place through chat rooms, message boards, emails and instant messages, the ever-developing technology has rendered discussion in many different newer forms of exchanging messages. Indeed, people may discuss politics by blogging, instant texting, tagging, Facebooking, “liking,” “disliking,” Tweeting, Retweeting, “following,” Youtubing, RSS-feeding, which may escape the traditional definition of “discussion.” Research also indicates that political discussion occurs in online spaces where political discussion is not the primary purpose (Wojcieszak & Mutz, 2009). Addressing this issue, in the assessment of selective online discussion, this study attempts to capture the extent to which individuals expose themselves to homogeneous political messages that is not limited to the traditional forms of online discussion taking place in chat rooms, message boards or email by observing selectivity in

the broader sense of online *interaction* (rather than just *discussion*) that generates exchanges of homogeneous political messages on the Internet.

For the second goal, the current study examines how strong-tie diversity and weak-tie diversity are related to political tolerance respectively. Political diversity helps foster political tolerance by providing perspectives that are different from one's own (Gibson, 1999), and increasing awareness of opposing rationales (Mutz, 2002b, 2006). People in weak relationships are more likely to be dissimilar from an individual and thus tend to bring more diverse political perspectives, which contribute to political tolerance (Gibson, 1999). It has been also found that more intimate relationship between politically heterogeneous discussants facilitates increased tolerance through affective mechanisms (Mutz, 2002b). This dissertation argues that, due to the higher likelihood of providing more informed, prepared and quality political information in political conversation in weak relationships such coworkers, political diversity in weak interpersonal associations fosters greater awareness of diverse perspectives, which in effect facilitates increased tolerance. Therefore, weak-tie diversity contributes to tolerance not only by providing more diverse opinions in the quantitative regard, but also ensuring more informed and quality political information and greater awareness of different perspectives in the qualitative aspect. Thus, given the possibility of both strong-tie diversity and weak-tie diversity increasing tolerance, this study identifies which of the two diversities contributes more to political tolerance.

For the third goal, the present study investigates if more tolerant people make participation decisions differently from the less tolerant when exposed to political diversity. Political tolerance is preconditioned by political disagreement (Huckfeldt, Johnson & Sprague, 2004). Indeed, being exposed to heterogeneous political perspectives can foster tolerance (Mutz,

2002b, 2006; Stouffer, 1955). In the prediction of how tolerant (and less tolerant) people might make their participation decisions when encountering political difference, the current study examines the research on consequences of exposure to difference for participation in the context of the cognitive mediation and O-S-R-O-R models of communication process, which identify different information processing strategies as a factor that may lead to making different participation decisions. Drawing from the thesis of cognitive complexity, it then investigates what specific cognitive and psychological mechanisms might be involved for the tolerant and the less tolerant people's processing of heterogeneous information, which could result in different participatory outcomes. Research suggests that tolerant people are more aware of rationales for opposing viewpoints and have higher perspective taking ability (Mutz, 200b, 2006), which allow them to understand and process conflicting messages and information more effortfully, methodically and systematically (Barker & Hansen, 2005). Being less informed of opposing rationales and less understanding of counter perspectives, the less tolerant may rather rely on heuristic cues such as partisanship and ideology, which may help strengthen their preexisting positions (Tesser & Conlee, 1975). By examining the moderating effect of political tolerance, this study demonstrates that political diversity is likely to discourage participation for tolerant individuals by inducing cognitive complexity and ambivalence, while it has no effect or encourages participation for the less tolerant by amplifying their preexisting beliefs. Further, this study examines if closer interpersonal relationship reduces the cognitive complexity tolerant individuals are likely to experience when exposed to difference.

SIGNIFICANCE OF THE STUDY

Theoretically, the current study contributes to the existing research in two ways. First, this study addresses a gap in the literature by identifying that weak-tie diversity may not necessarily be influenced by homogeneous or heterogeneous political information encountered on the Internet in the way much of previous research has predicted so far. Existing research has well documented the effects of exposure to likeminded and non-likeminded political information through the Internet as well as the different mechanisms involved in such exposures. This dissertation directs our attention to social relationships of differing strengths in examining individuals' political diversity, and reminds us that not all interpersonal associations are subject to selectivity and formed and maintained by the same motivations. Individuals generally do not exert as much effort in the selection of weakly-associated people as they would for choosing close friends, and when they choose, their selection process might not have much to do with political preferences due to other functionally oriented motivations. In some cases, individuals may not be able to avoid interacting with people who are not chosen by them as a result of structural construction. Consequently, exposure to political difference occurring in these relationships will be less likely to be influenced by individuals' selectivity, which can be shaped by selective and heterogeneous Internet experiences. Introducing the concepts of strong-tie diversity and weak-tie diversity, this dissertation contributes to the literature by revealing that much of the discussion in the literature on the relationship between the Internet and political diversity might have focused on close social relationships, and that we might have been missing the context of weaker associations.

Second, this dissertation contributes to enhancing the understanding of the consequences of exposure to difference for political participation by identifying an individual characteristic that

may moderate the extent of the consequences. Despite the rich research documenting the association between exposure to difference and political participation (though with different findings), only a limited number of studies have focused on the possibility of differential influence of exposure to political difference on participation based upon certain individual attributes, for example, conflict avoidance (Mutz, 2002a, 2006) and the individual perception of election candidates (Jang, 2009). The current study focuses on political tolerance and examines how tolerance as an individual characteristic may or may not influence the ways in which people are affected by political difference in their decisions for political engagement. With its focus on political tolerance, this study contributes to the literature by identifying another individual factor that may explain the ways in which some individuals may be different from others in participatory outcomes in diverse political settings. Potentially, it provides an additional piece of evidence to reassert that the effect of exposure to difference on political participation decisions may not be uniform across all individuals. Further, by finding that tolerance could discourage participation for some individuals in the condition of exposure to conflicting political opinions, this dissertation informs the literature of the potential of the democratic norm of political tolerance for posing a problem in the balance between political diversity and political participation.

Methodologically, the present study adds to the existing literature in the conceptual and operational approach to measurement of political diversity in social networks. Most research measures political diversity in individuals' social networks with what is often called political network heterogeneity. In some previous studies, political network heterogeneity is captured by assessing the frequency of political discussion with people who are different from oneself in terms of political disposition and demographic characteristics (e.g., Scheufele, Hardy, Brossard,

Waismel-Manor & Nisbet, 2006). In some other research, political network heterogeneity is measured by evaluating the number of people that are dissimilar from oneself in the person's discussion network (e.g., Jang, 2009). Another group of research measures political network heterogeneity by assessing the extent of difference or disagreement between oneself and the discussion partners (e.g., Mutz, 2002a; 2006). While the three approaches appear to vary in the measurement approach, what is common in them is that they are confined to the limited network of political discussion partners.

Research has recognized that social context such as groups of friends, neighborhood and workplace influences the supply of political views and information (McClurg, 2006). Quite a deal of empirical evidence has supported this recognition as will be elaborated further in the following chapter (e.g., McClurg, 2006; Mutz, 2006; Mutz & Martin, 2001; Scheufele et al., 2006). Examining discussion partners alone does not capture the social contextual aspect as discussion partners are often chosen by the individual, who are likely to exercise selectivity. Rather than resting on political discussion network, the present study attempts to include the social context in the measurement of political network heterogeneity by assessing political diversity in each entire network of close friends, neighbors and coworkers. In essence, the current study broadens the scope of network from "individually selected" discussion partners to each entire "structurally constructed" network of close friends, neighbors and co-workers, thereby assessing political diversity within the social context (Huckfeldt, Johnson & Sprague, 2002, 2004).

The next chapter first reviews various concepts of political network heterogeneity, a key factor in this study, as employed by different studies in the existing research. It then discusses in detail theses and arguments that explain the relationship between the Internet and political

heterogeneity and presents the first set of hypotheses. Next, it reviews the literature on the relationship between exposure to difference and political participation, and what forms of participation are more relevant than others in the context of political heterogeneity. It then discusses three attributes of network with a focus on how different conceptual and operational approaches have presented different research findings. Next, it reviews discussions on political tolerance and poses the second set of hypotheses. Chapter 3 will introduce the data and variables of this study, followed by the presentation of the plan of analyses to address the hypotheses and research questions. Chapter 4 will report the findings from the hypotheses tested and results of the analyses. Lastly, Chapter 5 will discuss what can be drawn from the results and their implications, address limitations of the study, and provide suggestions for future research.

Chapter 2: Review of the Literature

THE INTERNET AND POLITICAL DIVERSITY

Political heterogeneity constitutes one of the important ingredients of pluralistic democracy. Calhoun (1988) identified that “democratic public discourse does not depend on preexisting harmony or similarity among citizens... but rather on the ability to create meaningful discourse across lines of difference” (p. 220). In contemporary society, in large part, political information is carried through media. What political information is carried and how it is carried have a lot to do with political heterogeneity in the sense that the information can be conveyed in multiple perspectives. Some people may find the information in agreement with their own perspectives, while others in disagreement. Among those who encounter counter-attitudinal information, for various reasons, some may choose to consume the information, while others do not.

When it comes to the Internet, there has been a great deal of research as to how the Internet as a communication medium might affect the extent to which people encounter political perspectives that are different from their own. In particular, the research has focused on the enhanced control on the Internet, which enables people to choose political messages. The enhanced ability to control what information to consume may influence the level of individuals’ selective exposure to political information, which is more likely to work against the democratic value of political heterogeneity. A growing body of empirical evidence, however, has found ample evidence of exposure to political difference through various structural, psychological and behavioral mechanisms.

This part of the chapter first discusses how selective and heterogeneous exposure may happen on the Internet and affect individuals’ overall political diversity. It then examines how

political diversity in some social relationships may be more or less likely to be influenced by the extent of political homogeneity or heterogeneity exposed on the Internet. More specifically, this dissertation will argue that weak-tie diversity is less likely to be influenced by selective and heterogeneous Internet experiences due to less effortful selection, motivations that are not driven by political preferences, and the structurally constructed nature of weak interpersonal relationships.

Selective Exposure on the Internet

The arguments for selective exposure rely on the theory of cognitive dissonance (Festinger, 1957). The theory of cognitive dissonance posits that people have a natural motivation to reduce dissonance, an uncomfortable clash of conflicting ideas. To reduce the psychological conflict or to maintain “cognitive equilibrium,” people tend to reconsider their beliefs and attitudes and compromise between the two ideas. Another way to avoid dissonance is to simply seek out agreeable ideas and avoid challenging messages. Indeed, “people are often biased in favor of previously held beliefs, expectation, or desired conclusions” when they seek new information (Jonas, Schulz-Hardt & Frey, 2005, p. 978).

The behavior of “seeking out agreeable ideas,” or selective exposure guided by this cognitive mechanism inspired research to look into the ways in which people make choices of media and media contents. The “limited effects model” (Klapper, 1960) postulates that individuals’ media and media content choices are informed by their preexisting beliefs, which circumvent encountering counter-attitudinal messages. In effect, media use only reinforces people’s preexisting beliefs and hardly instills any change in their attitudes, hence the “limited effect.” Attitude changes by media use, therefore, are unlikely to happen. Research provides compelling evidence for individuals’ selective exposure to media contents based on their

preexisting beliefs. A number of studies have found a correspondence between individuals' beliefs and information they obtain (Best, Chmielewski & Krueger, 2005; Chaffee, Saphir, Graf, Sandvig & Hahn, 2001; Clymer, 2004; Lazarsfeld, Berelson & Gaudet, 1944). Individuals are more likely to choose news outlets and contents that match their political beliefs and ideological inclination. For instance, the use of partisan news contents is associated with a decrease in exposure to other political perspectives (Mutz & Martin, 2001). Conservative Republicans are more likely than liberal democrats to watch FOX News and listen to conservative talk radio shows (Iyengar & Hahn, 2009; Stroud, 2007).

As such, while selective exposure has been documented as present in various media (e.g., Iyengar & Hahn, 2009; Stroud, 2007), the Internet has renewed interest in the original theory of selective exposure primarily due to its ability to facilitate purposive control. The basic tenet of the arguments for selective exposure on the Internet is that people can seek cognitive consonance more easily online while parrying cognitive dissonance. It is because the technology allows an increased ability to select and customize what messages to view from a virtually unlimited amount of information available on the Internet. (e.g., Iyengar & Hahn, 2009; Mutz & Martin, 2001; Sunstein, 2007). With the enhanced control afforded by the Internet, people are prompted to seek out information that corresponds to their pre-established knowledge and beliefs and screen out information that disagrees with their views. In essence, these arguments emphasize that the enhanced ability of purposive control of exposure to political information on the Internet exacerbates human tendencies toward selectivity to maintain cognitive equilibrium.

Two of the most common ways to obtain political information on the Internet are online news and discussion. Most of the mainstream news sources such as CNN, FOX news and The New York Times have websites, and indeed, these websites serve as major online news sources

(Horrigan, Garrett & Resnick, 2004). They also provide message and discussion board options on their websites, where viewers can post their comments and exchange opinions. More recently, they support social networking services such as Facebook and Twitter, which provide much enhanced interactive features. Major cable as well as radio news shows have an account with those social networking services so that the audience can continue on the Internet what was left off on air. While online political discussion continue to take place in the more traditional venues for online political discussion, such as discussion websites (e.g., Quorum.org), message boards and chat rooms, social networking websites are increasingly taking their share as one of the primary channels of online communication. They serve as more instant, mobile, interactive and “app-friendly” spaces for political discussion, creating a “public sphere on the go” that is more continuous and untethered from sedentary requirements. Those spaces have rendered “discussion” in many different newer forms of exchanging messages. People are not confined to the more traditional discussion spaces such as discussion boards and chat rooms and online communication channels such as email. They may discuss politics by blogging, instant texting, tagging, Facebooking, “liking,” “disliking,” Tweeting, Retweeting, “following,” Youtubing, RSS-feeding, which may escape the traditional definition of “discussion.” Indeed, political discussion occurs about half the time nonpolitical discussion is held in online spaces where political discussion is not the primary purpose (Wojcieszak & Mutz, 2009). The traditional definition of “discussion” may miss out these newer forms of exchanging political messages that are increasingly becoming more prevalent on the Internet. Thus, political *discussion* in contemporary online environment may rather be *interaction*, which generates exchange of political messages.

Research has provided evidence of selective exposure in news use as well as discussion. In fact, empirical evidence indicates that most Internet users' experiences of online news use and political discussion are largely politically homogeneous (Knobloch-Westerwick & Meng, 2009; Stromer-Galley, 2002; Stroud, 2007; Wojcieszak & Mutz, 2009). In their lab experiment, Knobloch-Westerwick and Meng (2009) find that exposure to attitude-consistent news contents dominates, with 36% more reading time than exposure to counter-attitudinal news. Stroud (2007) finds the evidence that partisan Internet users are likely to seek out likeminded news websites, indicating a match between people's political beliefs and their news content choices. In support of this finding, Garrett (2009) demonstrates "opinion-reinforcing information" is a significant predictor of individuals' news story exposure, suggesting that people's Internet news use is guided by the correspondence between the contents and the users' preexisting opinions.

For online political discussion, Wojcieszak & Mutz (2009) find that 50% of online political discussion groups surveyed exposed visitors to agreement, compared to the much lower 10% that exposed visitors to disagreement. Stromer-Galley (2002) shows that 84% of online discussion space users surveyed discussed politics with friends and family, who are more likely to share political attitudes than acquaintance. These findings support the argument that online political discussion could be largely homogenous.

Partisan selective exposure has implications for democratic outcomes particularly for a pluralistic democracy. Stemming from the Federalist standpoint in early America, pluralistic democracy is guided by the idea of allowing many competing groups and ideas to prevent any one or a small number of factions dominating the opinion and the political system (Madison, 1787). Partisan selective exposure can increase communication within each individual faction while discouraging inter-factional interaction (Sunstein, 2007). Selective exposure to attitude-

consistent political information prevents encountering alternative views, which may affect individuals' opinion formation in the way that only strengthens their preexisting positions even when attitude change is more rational (Mutz & Martin, 2001). This can threaten to undermine the quality of public opinion, which builds on exchange of diverse perspectives. For some scholars, online selective exposure prompted by the increased purposive control has inspired concerns for pluralistic democracy. Some observers predict that the reinforcement of existing beliefs and positions of individuals on the Internet increases the possibility of political fragmentation while decreasing political heterogeneity at the society level (Galston, 2002; Sunstein, 2007). This view is most succinctly and effectively expressed in the term, "The Daily Me" (Negroponte, 1995), a hypothesized virtual daily newspaper that is customized for each individual's tastes.

For Sunstein (2007), the increased selectivity screens out any chances for exposure to difference and puts people into echo chambers where they hear intensified voices of their own. One of the consequences of the increased online selectivity is the exacerbation of the freedom of making choices regarding information and the chances of inadvertent exposure, through which people encounter political messages they would not otherwise. The deprivation of inadvertent encounters with novel and heterogeneous ideas leads to a lack of shared experience in society as a whole, which in turn harms social capital, the glue that holds society together. These rather strong arguments for increased selective exposure online seem to view the Internet as a "segment-making" medium that encourages "small slices of society to talk to themselves" rather than a "society-making" medium that has the "potential to get all those segments to talk to each other" (Turow, 1997, p. 3).

However, there appear to be possibilities that the Internet may not always support selectivity and that people may not always exercise selectivity in political information

consumption. First, corporate interests underlying the mechanisms of search engines such as Google may not always promote selectivity. For example, once a search word is entered, the yield from the first search result page does not vary much from major news sources such as ABC, NBC, FOX or CNN and other popular websites including Wikipedia. While this may suggest balkanization and polarization on the Internet as opposed to fragmentation (Sunstein, 2007), it nevertheless limits, rather than promotes, selectivity by rendering certain popular websites significantly more accessible than others and provides some common ground among the audience to a certain extent. Second, this structural-level mechanism that works against human selectivity is also observed operating at the psychological level. On some popular search engines such as Naver, the dominant search engine in Korea, next to the search word box is an instant real-time update of the top ten most-searched words along with the previous rank each word was in right before. To a lesser degree, the auto complete feature of Google and other comparable websites serves similar objectives. These features ensure an increased chance for popular news to catch attention and be read even more, and prompt people to expose themselves to mass-customized news rather than self-selected news in a way that may keep people on the same popular pages. The features effectively tap into the human psychology that people want to know about not only what they are interested in but also what most people are interested in or, quite simply put, “what’s hot.” This partly illustrates that individual decision for exposure to information may not be governed solely by human selectivity but also by environmental as well as social influence (Huckfeldt, Johnson & Sprague, 2002; Huckfeldt, Mendez & Osborn, 2004).

Third, the meta-structure that governs the structure of the Internet may work based on institutional cues rather than individual selectivity. Mueller (2004) goes as far back as to Enclosure Movement in 18th Century England to demonstrate how the Internet, a new territory,

has become a subject of intense debate involving multiple stakeholders domestically and internationally. He contends that, since domain names and address spaces were recognized as property, prompting private companies to claim them as their resource, government worked out with other stakeholders to set rules and regulations based on their judgment on who gains and who loses under certain regimes. What can be drawn from his conclusion in the context of selective exposure is that Internet space may not be free from the meta-structure and influence that best serve the governing authority's pursuit of power and legitimacy by rendering some information structurally as well as institutionally more easily accessible than others.

Therefore, while evidence supports the presence of selective exposure on the Internet, selective exposure does not seem to be the only way through which people expose themselves to political information, and selectivity on the Internet does not seem to weed out chances for exposure to difference as some observers predict. More importantly, exposure to political difference may indeed happen on the Internet. The next section discusses in what specific ways exposure to political difference could occur.

Exposure to Political Difference on the Internet

The study of media has recognized the potential of encountering dissimilarities in media. Perhaps it is most effectively captured in the statement, "in modern societies, most of the information we have about people different from ourselves comes not through any direct relationships, even the casual ones formed constantly in urban streets and shops. Rather it comes through print and electronic media" (Calhoun, 1988, p. 225). Mutz & Martin (2001) affirmed that individuals are exposed to far more dissimilar political views through news media than through interpersonal political discussions due to the lesser desire and the relative difficulty to select on media. Despite the concerns over the enhanced purposive control on the Internet and its

potential consequence of increased selectivity, research on the Internet also sees the potential of the medium offering chances of encountering political difference. While evidence suggests that exposure to attitude-consistent political messages takes large part of people's experiences of online news use and political discussion, it certainly does not account for all experiences. Indeed, empirical studies indicate that there are behaviors of political information consumption occurring on the Internet that are not explained by selective exposure alone and that exposure to diverse political views do happen in online spaces.

In terms of online discussion, Wojcieszak & Mutz (2009) demonstrate that disagreement in online chat rooms occurs at about five to one ratio to agreement (p. 45). They also find that among professional, leisure, political/civic and religious/ethnic discussion rooms, political disagreement is most likely to occur in leisure-oriented discussion boards, a space where political discussion itself is not very much expected to happen. Political/civic and religious/ethnic chat rooms were least likely for political disagreement to occur due to low usage and higher political homogeneity among users. This finding indicates that while, homogeneous political discussion dominates heterogeneous discussion, disagreement nevertheless occurs rather in unexpected spaces such as nonpolitical chat rooms. Stromer-Galley's research (2002) provides evidence of heterogeneous online political talks through more motivation-driven use of chat rooms. She reports that 29% of the responses from online discussion users for reasons of online talk was to hear other people's opinions and as many as 10% of the responses was to hear opinions of people living in different parts of the country, who are not necessarily expected to share political views. This research poses the possibility that people may actually enjoy discussing politics with strangers, who might not be politically homogeneous. The Internet's ability to overcome geographical constraints may also increase chances of confronting geographically-based political

difference. Mutz & Martin (2001) have observed that “Americans are increasingly [physically] separated from those with political views different from their own” (p. 98), creating “residential balkans.” While residential balkanization does not suggest people choose to live in a certain neighborhood for the neighbors’ political attitudes, the life style sought by the people in the neighborhood is correlated with political disposition (Mutz & Martin, 2001). Through online political discussion, people may expose themselves to people living in different “residential balkans,” who may have dissimilar political views.

There is richer literature researching exposure to political difference through Internet news use. In her empirical analysis of partisan selectivity in media use, Stroud (2007) concluded that partisan selective exposure is not so pervasive that people completely surround themselves with likeminded media outlets, indicating the potential of encountering difference even as people’s beliefs motivate their media content choices. This finding is in support of earlier studies by Zaller (1992) and Kinder (2003). Garrett (2009) adds that, while attitude-consistent (opinion-reinforcing) news promotes news story exposure, counter-attitudinal (opinion-challenging) contents make exposure only marginally less likely, a finding affirmative of Stroud (2007)’s conclusion that partisan selective exposure may not be so pervasive. In their lab experiment, Knobloch-Westerwick & Meng (2009) observed that as many as 43% of online news reading time were spent to counter-attitudinal messages even as pro-attitudinal messages dominate.

As suggested by the empirical evidence discussed thus far, exposure to political difference does occur on the Internet even though individuals exercise selectivity in political information consumption. Not surprisingly, scholars have attempted to research and theorize mechanisms involved in the ways in which exposure to difference happens (e.g., Benkler, 2006; Brundidge, 2010). The mechanisms involved in exposure to political difference on the Internet

suggested by the scholars can be summed at the structural as well as psychological level: the network structure of websites and the linking and forwarding feature of the Internet at the structural level, and the human psychological and behavioral tendency for non-avoidance and, in some occasions, deliberate seeking of counter-attitudinal political information.

In his structural analysis of the networks of websites and their contents, Benkler (2006) found that the networks of the Internet are a concentration of high-visibility websites attached by “nodes” or lower-visibility websites with similar contents. The concentration of websites exhibits more of a pattern of clusters, rather than that of smaller fragments. While this finding contests Sunstein’s (2007) proposition of fragmentation, it raises a question as to how then the Internet is any different from traditional mass media such as television in that it carries the same dominant, popular ideas. Benkler’s (2006) rejoinder contends that while the Internet does convey the mainstream, more homogenized messages for the most part, it offers an increased opportunity for minority, alternative and heterogeneous ideas to attract attention in a way that traditional media do not. Additionally, the ease of and lower cost associated with making messages public on the Internet allows less popular and minority opinions, which would go unnoticed otherwise, catch attention.

The “see-for-yourself” (Benkler, 2006, p. 256) mechanism of the Internet is another structural way through which exposure to different might occur. Benkler contends that the mechanism links popular websites to the less popular minority websites and allows higher visibility for minority ideas than traditional media, which contributes to an increased opportunity for exposure to dissimilar opinions that are less likely to come across through other media. Indeed, through such features as hyperlinks and tags, and the more interactive 2.0 technology on blogs, chat rooms and social networking sites on the Internet, people are not limited to the

particular piece of information they are seeking but are compelled to “browse” random messages as they are continuously directed, forwarded and referred to links to information they “might be interested in.” This seamless movement from one Internet space to the next is explained by the term, “traversability,” which is defined as the “ability to traverse with relative ease from one communication space to the next” (Brundidge, 2010, p. 685).

Summarizing the structural and psychological mechanisms through which exposure to difference occurs on the Internet, Brundidge (2001) offers a helpful interpretation with what she calls the “inadvertency” thesis. The thesis proposes that, although people are unlikely to actively seek out political difference, they are nevertheless likely to be exposed to at least some difference through inadvertency. The process of inadvertency takes place through: 1) less-than-perfect selective exposure strategies on the Internet; 2) non-avoidance of politically heterogeneous encounters; and 3) reduced social boundaries between distant geographic locations, between one discursive space to the next, between political and apolitical spaces of communication, and between the private and the public spheres (p. 687). The argument is demonstrated by the association between online news use and network heterogeneity being mediated by political discussion on the Internet and at work, through which inadvertent exposure to political difference is likely to take place. Chances of inadvertent heterogeneous encounters online are supported by Wojcieszak & Mutz’s (2009) finding that exposure to political difference is more likely to happen rather unexpectedly in an apolitical space.

Apart from inadvertent exposure to difference, studies provide a great deal of evidence of people’s deliberate exposure to heterogeneous political news on the Internet, which taps the psychological mechanism. First, people may choose counter-attitudinal stories when the issue is considered important or has utility. For instance, people may want to understand

counterarguments in order to strengthen their positions (Knobloch-Westerwick & Meng, 2009). Second, in some cases, it may not be disagreement why people decide not to read certain stories, but disinterest in the topic. Garrett (2009) found that once people decide a news story to view, evidence of an aversion to opinion challenges disappears. It suggests that people may choose to view messages regardless of consonance or dissonance as long as the topic is of their interest. Third, Zillman (1988) proposes that people may actually enjoy looking at contradicting news in a state of boredom for the purpose of mood management. Knobloch-Westerwick & Meng (2009) observed a similar behavior pattern among their research participants when time spent on counter-attitudinal stories increased toward the end of the browsing period suggesting the possibility that the participants exhausted their favored news or were simply bored. This is very likely on the Internet considering that people browse the Internet out of boredom with no particular purpose or habitually, just like people keep their television on as they do other things.

Fifth, people may be more likely to expose themselves to difference when counter-attitudinal information is placed with pro-attitudinal messages side by side. In fact, Knobloch-Westerwick & Meng's (2009) lab experiment shows that articles with both views were clicked significantly more frequently than purely counter-attitudinal pieces. In a similar vein, extremity, moderateness or balance of messages might affect individuals' decisions on exposure to dissonant information. Finally, some individual characteristics may moderate the effect of conflicting messages: political knowledge, attitude accessibility and attitude certainty (Knobloch-Westerwick & Meng, 2009), and defensive confidence (Albarracín & Mitchell, 2004). Defensive confidence is the ability to maintain one's own position regardless of conflicting messages received from others. Higher political knowledge and attitude accessibility,

lower attitude certainty and higher defensive confidence could contribute to reducing dissonance avoidance and increasing choices of conflicting messages.

As discussed thus far, therefore, there are occurrences of inadvertent as well as deliberate exposure to political difference through Internet news that are facilitated by the structural, psychological and behavioral mechanisms. And, indeed, exposure to political difference happens in Internet space even in the presence of selective exposure.

Political Network Heterogeneity: Conceptual and Methodological Considerations

The motivation for this part of the study is to examine the ways in which the Internet affects political diversity in individuals' everyday social and political lives. We have thus far reviewed the extent to which online selective exposure occurs through Internet news use and online discussion, and the ways in which exposure to political difference takes place on the Internet even as the tendency of selective exposure persists, in particular, through news use. As we look into how these experiences of exposure to homogeneous and heterogeneous political information on the Internet relate to individuals' political diversity, it is important to address how this study will conceptualize political diversity and what approaches to take to measure it.

In the existing research, political diversity is most commonly presented as what is often called "political network heterogeneity." While a wide variety of approaches to the conceptualization of political network heterogeneity exists in the literature, the central idea of political network heterogeneity lies in the extent to which individuals expose themselves to political difference through discussing politics with people whose political views are different from their own. Typically, political network heterogeneity examines the network of discussion partners each individual discusses politics with (e.g., Huckfeldt et al., ; Jang, 2009; McLeod et al., 2006; Mutz, 2002a, 2006; Scheufele et al., 2004;). It assesses if the discussion partners are

different from the individual in terms of political views and other characteristics such as race that might generate political difference. The focus of political network heterogeneity in previous studies thus tends to rest on the network of political discussion partners each individual maintains. Table 2-1 presents different conceptual and operational approaches to political network heterogeneity.

In addition to this individual level approach, some studies have attempted to tap political heterogeneity in the social structure and examined how political heterogeneity at the social structural level might influence individuals' political diversity. Scheufele et al (2003, 2006) utilize multi layers of heterogeneity that tap three different levels of structure: the county-level structural heterogeneity is obtained by using a mathematical probability model; heterogeneity in social context groups is captured with the discussion frequency in volunteer groups, church and workplace individuals are involved in; and network heterogeneity is generated by eliciting frequency of discussion with dissimilar partners. Their findings show that all of the volunteer-, church- and work-based discussion networks contribute to political participation through network heterogeneity suggesting that exposure to difference – with political outcomes - occurs through the social context of those three communities, in particular, the workplace. The higher likelihood of exposure to dissonant political views in workplace has also been observed by other studies (Mutz, 2006; Mutz & Martin, 2001). In some cases, social context may not always be conducive to enhancing an opportunity to be exposed to political diversity. It may rather foster homogeneity as in the case of such homogeneous environment as gated communities (Mutz & Martin, 2001; for a discussion on residential balkanization and exposure to political difference, see Mutz, 2002b, 2006).

Indeed, McClurg (2006a) asserts that “the social context affects the supply of political views and information in a geographically (neighborhood) or socially (workplace) defined unit” and as a result, “the political views of friends, neighbors and coworkers ... reflect that supply” (p. 362). These social spaces have also been found to directly or indirectly contribute to political engagement through a number of factors, for example, recruitment (Scheufele et al., 2006), forging social expectations (Verba et al., 1995), and shaping discussion diversity (Huckfeldt & Sprague, 1995). As such, because these social contexts can exert an influence on individuals’ political discussion diversity, which may not be captured by primary political discussion networks, examining social context networks rather than circles of political discussion partners can render an understanding of the effect of political difference on participation that is different from when resting on discussion networks. In this respect, the present study investigates political network heterogeneity within these three social contexts by exploring political diversity in individuals’ each entire network of close friends, neighbors and coworkers rather than in the “artificially constrained” networks of primary discussion partners (Eveland & Hively, 2009, p. 209).

This social contextual approach serves this study’s purpose of examining political diversity in individuals’ everyday social and political lives because it actually assesses individuals’ everyday social surroundings, which involve not only political discussion partners but also all other friends, neighbors and coworkers who may have different political perspectives and characteristics that might inspire political difference. In other words, social networks, in comparison to discussion networks, could be more likely to capture in a broader sense the extent to which individuals expose themselves to political difference as they interact with friends,

neighbors and coworkers, who may be chosen by the individuals or imposed by the social setting.

Strong-tie Diversity and Weak-tie Diversity

The focus on individuals' entire social networks leads us to consider different strengths of relationships individuals maintain, which include strong ties and weak ties. Tie strength came under intense attention in studies of communication process particularly since Katz and Lazarsfeld (1955) proposed their two-step flow model as an alternative to the hypodermic needle model, thereby providing the foundation of the limited effect paradigm of media influence. Rather than new ideas being directly "injected" to individuals as the more direct hypodermic needle model hypothesizes, the process-oriented two-step flow model focuses on the role of opinion leaders in persuasion and transfer of ideas. Opinion leaders receive news and ideas directly from the source, and mediate, transfer and propagate them onto the less informed general public, which is where interpersonal relationship comes in. It was found that opinion leaders had a better chance of success in transferring ideas when they were "homophilous," sharing similarities in socio-demographic characteristics and attitudes and thus stronger relationships with a target group (Lazarsfeld & Merton, 1954), than when they were "heterophilous." Much attention on strong ties followed this seminal study (for a review, see McPherson, Smith-Lovin & Cook, 2001).

However, with Granovetter's (1973) strength of weak ties thesis, in which he proposed that non-redundant weak-tie associations or "bridges" bring new ideas to groups of strong-tie individuals, an important amendment to diffusion theory emerged. He argued weak ties help maintain social cohesion by bridging cliques and preventing fragmentation. Individuals and firms who effectively utilize these bridges, which fill the strategic "structural holes" (Burt, 1992), in

their social networks have a better chance of status attainment and survival (De Graaf & Flap, 1988; Kadushin, 1995; Uzzi, 1996).

Strong ties constitute the basis for bonding social capital. In comparison, weak ties tend to sustain bridging social capital (Putnam, 1995). Gleaning from the classical sociological rendering of the structure of society, strong ties provide ingredients for the community-oriented *Gemeinschaft* (Tönnies, 1957), which may depend on, among others, the homogeneity-based mechanical solidarity (Durkheim, 1893). On the other hand, weak ties could help nurture a different type of solidarity that is based on heterogeneity (Durkheim, 1893), and *Gesellschaft* (Tönnies, 1957) that is more functional and self-interest-pursuing. Strong ties and weak ties, therefore, seem to have different roles in the functioning of society.

At the individual level, strong ties are an important resource for political recruitment leading to political participation (Katz & Lazarsfeld, 1955). Through strong ties, people gain emotional support (Krackhardt, 1992; Kraut et al., 2002), and share intimacy, trust, respect, access and mutual regard (Kenny, 1994). Strong ties provide more casual, informal relationships and the comfort of being similar and familiar in various aspects. Weak ties, on the other hand, tend to be more dissimilar, formal, positional and functional (Lin, 2001). Through weak ties, people who are more likely to have resources that do not overlap with their own, individuals obtain a better chance of entering new social groups and attaining higher status (e.g., Burt, 1992; Granovetter, 1973; Lin, 2001). The non-redundant resources possessed by people in weak relationships offer opportunities that might not be available by close friends, and provide newer opportunities for individuals to engage in society as a member of society. Therefore, strong ties and weak ties may serve different purposes in individuals' lives as types of agency that affect and can be affected by society as structure. For this reason, individuals may have different

strategies for selecting close friends and weak associations such as neighbors and coworkers (McClurg, 2006).

Moreover, as opposed to the more relational close friends, some of the more positional weak associations (Lin, 2001) may not always be dependent on individual choices alone but also on factors determined by the structure. Indeed, previous studies found that social structure influences the characteristics of individuals' friends and acquaintances more so than deliberate selections of association and interaction (Blum, 1984). Earlier studies of social networks also demonstrated that diversity at the macro level is a significant predictor of the composition of individual social networks and individual associational choices (e.g., Blau, 1977; Blum, 1984; Feld, 1984; Verbrugge, 1977). Recent research has confirmed the significant relationships among macro-level (county), intermediate-level (church, workplace and volunteer groups) and individual heterogeneity (e.g., Brundidge, 2010; Scheufele et al., 2006). Therefore, social structural factors are likely to exert influences in the ways in which individuals' political diversity is shaped.

In this context, examining the separate networks of strong relationships and weak relationships in addition to the overall network can provide additional information about the extent to which Internet use as an individual action affects different aspects of political diversity. Moreover, it serves this dissertation's purpose of investigating the extent of political diversity in the broader sense of individuals' everyday political and social lives that are not limited to political discussion networks. In this study, political diversity in strong tie relationships is operationalized by political network heterogeneity in the network of close friends, which this dissertation will call "*strong-tie diversity*." Political diversity in weak ties is measured by political network heterogeneity in the networks of neighbors and coworkers, and will be called

“*weak-tie diversity*.” While the strength of interpersonal associations may not be determined by such labels as neighbor and coworker alone, previous studies have successfully researched tie strength with this approach (e.g., Gil de Zúñiga & Valenzuela, 2011).

Hypotheses

The purpose of this part of the study is to examine the ways in which the Internet affects political diversity in individuals’ social networks in the presence of online selective exposure. Thus far, we have reviewed the extent to which online selective exposure happens through online news and discussion, and the ways in which exposure to political difference may occur with a focus on Internet news use.

One of the ways through which selective exposure to political messages might occur is online political discussion. Newer technologies such as social networking services are increasingly taking their share as one of the primary channels of online communication. As mentioned earlier, major online news websites such as CNN.com, FOX.com and The New York Times.com support the more instant and interactive blogs and social networking services such as Facebook and Twitter. While online political discussion can take place through chat rooms, message boards, emails and instant messages, the ever-developing technologies have rendered “discussion” in many different newer forms of exchanging messages, which the traditional definition of “discussion” may miss out. Therefore, political *discussion* in contemporary online environment may be better represented by *interaction* that generates exchange of political messages. Through such interaction among politically homogeneous Internet users, people can expose themselves selectively to political information.

Due to the relative difficulty and lesser desire to select on media than in interpersonal relationships, for most people, selectivity tends to be lower in media news use than in

interpersonal networks (Mutz & Martin, 2001). Anonymity online may also contribute to lower selectivity on media than in interpersonal relationships by reducing the burden of being known and the entailing accountability (Sobel, 2000). Individuals who tend to expose themselves to homogeneous ideas could lack the common understanding of certain issues, which may comprise a set of diverse perspectives (Sunstein, 2007). It is also likely that individuals who expose themselves selectively are more likely to be unaware and understanding of opposing political views, and thus be reluctant to deal with dissimilar political views held by people in their social networks (Mutz, 2002a, 2006). Thus, individuals who are selective on the Internet are likely to be even more selective in interpersonal associations. In other words, selective online interaction with people who share political perspectives is likely to exert a negative influence on individuals' overall political diversity. Therefore:

H1: Selective online interaction is negatively related to political network heterogeneity in overall network.

While individuals exercise selectivity by interacting with politically homogeneous people on the Internet, they may still expose themselves to political difference. One of the ways through which it could happen is Internet news. Individuals can encounter counter-attitudinal news stories inadvertently (Brundidge, 2010). Through the features of linking, forwarding, tagging and blogging, individuals may click on a link and be directed to a website not knowing that it would lead them to counter-attitudinal political news coverage, which they may not deliberately avoid (Garrett, 2009). Apart from inadvertency, individuals' motivation may also explain some of the ways in which they might expose themselves to political difference through Internet news use.

Individuals may choose to view attitude-inconsistent online news regardless of the political position it assumes as long as the topic is of their interest (Garrett, 2009). Some individuals might be more politically knowledgeable than others that they feel confident and comfortable in dealing with cognitive dissonance and be able to defend their positions. Indeed, Internet news can enhance political knowledge of individuals, which in turn can develop higher defensive confidence and attitude accessibility (Albarracín & Mitchell, 2004). Consequently, those individuals may have less resistance to and higher motivation for conflicting political messages.

The same explanation can account for exposure to political difference offline. As Internet news use enhances chances for encountering political difference and prompts people to expose themselves to diverse political views online through the structural and psychological mechanisms, those experiences of politically heterogeneous online encounters can help reduce resistance to political difference in their social networks. Using Internet news enhances political knowledge, which can prepare individuals for encountering diverse perspectives. Much the same way as online, political knowledge may also increase confidence and motivate people to discuss politics regardless of the discussion partners' political leaning. Indeed, a great deal of research has documented the positive association of media news use with political discussion. Most relevant to this study, Brundidge (2010) found that Internet news use is positively related to the frequency of political discussion with non-likeminded discussion partners.

These positive influences of Internet news use on individuals' political network heterogeneity may reduce to a certain extent the potential negative effect of selective online interaction. Because experiences of exposure to difference through Internet news use prepare individuals for interaction with politically diverse people in their social networks in various ways, for those who use Internet news more frequently, the potential negative effect of politically

selective online interaction may not be so strong for their political network heterogeneity. In contrast, for those whose Internet news use is lower, the potential negative effect of selective online interaction could be, at least, stronger than for more frequent Internet news users. Thus, it is likely that Internet news use moderates the potential negative influence of selective exposure and contributes to political network heterogeneity. Therefore:

H1a: The relationship between selective online interaction and political network heterogeneity in all ties is moderated by Internet news use.

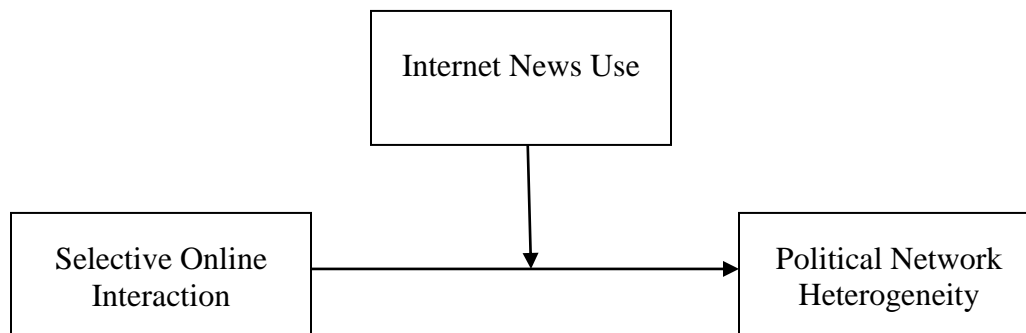


Figure 2-1: Selective online interaction and Political Network Heterogeneity Moderated by Internet News Use

While the extent to which individuals expose themselves to political homogeneity and diversity on the Internet may affect the extent of political diversity in their social relationships, the effect may not necessarily be same for all kinds of interpersonal relationships individuals maintain. The individual action of exposing themselves to pro-attitudinal or counter-attitudinal information may affect the diversity of their relationships to the extent that the relationships are

based on individual preferences that could be shaped by the political information they encounter. It might be the case that not all relationships are subject to individual selections. It might also be the case that not all selections are guided by the same preferences. That is, individuals may have different motivations for forming and maintaining different relationships. This possibility can be elaborated in three ways.

First, individuals may have lesser desire for effortful selection for weak relationships. Close personal relationships tend to constitute the core of individuals' social networks (Marsden, 1987). For most people, forming and maintaining strong relationships is a deliberate, effortful process. For example, individuals commit time, effort and money to be with their close friends, relax and enjoy entertainment together, share various kinds of ideas and experiences, and exchange advice and emotional support with them (Krackhardt, 1992; Marsden, 1987). For this reason, individuals can have higher expectations for their close friends and it is important for most individuals that their close friends meet their expectations in various aspects, which might include political orientation. People may make more effortful and conscious selection in order to ensure that their expectations are satisfied. Thus, it is likely that the set of personal expectations individuals have for their strong relationships can be influenced by their pre-established political as well as other types of dispositions, which may be influenced by the extent to which they expose themselves to heterogeneous or homogeneous political information on the Internet. In comparison, individuals may not necessarily have high expectations for weaker associations. For instance, people generally do not spend extended personal time with their neighbors unless they develop a closer relationship. It is okay for them that their not-so-close neighbors do not give them emotional support when they are in difficult situations because they do not expect it. It is also likely that they do not care much if their next door neighbor or a coworker in the next

department is a registered Democrat or Republican. A Republican individual would not give much consideration in deciding to maintain an arms-length relationship even though the neighbor or coworker is a registered Democrat because whether or not they share political views is not as big a deal as it might be for close friends. People usually know their close friends' personalities and likings and disliking of many sorts in detail but not necessarily in the case of their not-so-close neighbors and coworkers. The extent to which individuals' neighbors or coworkers agree or disagree with them in political issues may not be as important as in the case of their strong relationships. As such, individuals are likely to exert less effort in selecting people for weaker associations. Thus, due to the lesser effort exerted, individuals' political dispositions (either pre-established or developed through exposure to political homogeneity or difference on the Internet) may not be manifested in their selection process. Therefore, the extent of exposure to political homogeneity or heterogeneity may not affect political diversity in their weak relationships or weak-tie diversity.

Second, individuals may have different motivations for forming and maintaining weak associations that are not guided by their own or their interaction partners' political preferences. Research shows that choosing a particular neighborhood may not be based on political agreement, but rather based on other considerations such as proximity to local co-ops or a golf course, or what educational opportunities individuals' children have in the particular neighborhood (Mutz & Martin, 2001). In a similar sense, most individuals choose their jobs for considerations other than political preferences. Individuals may choose to talk to their next door neighbors and coworkers and maintain a relationship, though weak, rather than not talking at all for various reasons. They might not want to be considered rude by not talking when met on the street when it is obvious that they are next door neighbors. They might assume that knowing

their neighbors and keeping a relationship with them is safer than not knowing their neighbors at all. In terms of coworkers, people might deliberately develop associations with their coworkers because it could be helpful for accomplishing their tasks or advantageous for better peer evaluations. Often times, social skills are considered one of the preferred resources for employees, and the ability to be at ease, keep pleasant conversations with coworkers and maintain well-rounded social circles displays better social skills than not talking at all or keeping exclusive social networks. For these reasons, individuals may choose to keep relationships with their neighbors and coworkers regardless of their political dispositions. Thus, the motivations for maintaining these sorts of relationships are less likely to be guided by political preferences. Consequently, the extent to which individuals expose themselves to homogeneous or heterogeneous political information on the Internet is likely to exert little influence in individuals' selection to form and maintain the relationships initiated and maintained with these motivations.

Third, some weak associations, in particular worked-based relationships, tend to be structurally imposed, which allows limited room for individual selectivity to enter (Huckfeldt, Sprague & Johnson, 2002; Mutz, 2006; Scheufele et al., 2004). Workplace tends to be an environment with an eclectic collection of individuals who have diverse sets of backgrounds and political attitudes because it is a relatively apolitical place that is less likely to be selected based on political preferences (Mutz, 2006). In most cases, individuals do not get to choose who they work with. Rather, it is more likely that individuals are given to work with their coworkers. In the structurally set environment, individuals may be able to exercise limited selectivity in forming and maintaining relationships based on political preferences. They may interact with their coworkers regardless of their political dispositions out of necessity, responsibility or

accountability based on the requirement of the job they are supposed to perform or their positions in the organization. Exposure to political homogeneity or diversity may occur inadvertently while the interaction takes place regardless of the willingness of the individuals to expose themselves to such information. The fewer chances to exercise selectivity leave little room for their political preferences, which may be influenced by the extent of homogeneous or heterogeneous exposure to political information on the Internet, to affect their choices of who to include in their networks of weak relationships. Therefore, it is less likely that their politically selective or diverse Internet experiences would influence their choices of these weak associations.

Earlier, it was hypothesized that the extent to which individuals expose themselves to selective online interaction negatively affects individuals' overall political diversity in their social relationships. When the relationships are examined separately in terms of strength, it is likely that political diversity in strong relationships or strong-tie diversity is influenced by the extent to which individuals expose themselves to selective and diverse political information on the Internet because individuals' selection of close friends could be influenced by political preferences. Homogenous exposure to political messages through selective online interaction is likely to exert a negative influence on individuals' strong-tie diversity. The chances of exposure to heterogeneous political information offered by Internet news through the structural, psychological and behavioral mechanisms are likely to contribute to their strong-tie diversity. Therefore:

H2: Selective online interaction is negatively related to political network heterogeneity in strong relationships.

H3: Internet news use is positively related to political network heterogeneity in strong relationships.

In comparison, political diversity in weak relationships or weak-tie diversity may not be affected by the extent of online selective exposure or heterogeneous exposure to political information through Internet news because individuals' selection process for weaker relationships may not necessarily be influenced by political preferences, which could be shaped by those Internet experiences. Thus far, we have identified three ways in which political diversity in some weak relationships might be less likely to be affected by political preferences: 1) lesser desire for effortful selection; 2) motivations for forming and maintaining relationships that are not guided by political preferences; and 3) the structurally constructed nature of some weak relationships. For these reasons, the extent to which individuals are exposed to political diversity in such weak associations may have less to do with the extent of homogeneous online exposure as well as heterogeneous exposure through Internet news. Thus, selective online interaction and Internet news use may not affect the levels of weak-tie diversity. Therefore:

H4: Selective online interaction is unrelated to political network heterogeneity in weak relationships.

H5: Internet news use is unrelated to political network heterogeneity in weak relationships.

The next part discusses the consequences of political network heterogeneity for political participation. It examines contribution of strong-tie and weak-tie diversity to political tolerance

and how different levels of political tolerance affect individuals' participation decisions differently when exposed to political diversity.

Table 2-1: Conceptual and Operational Approaches to Political Network Heterogeneity

Competing Concepts	Description	Example Studies & Findings (relation to political participation)
Socio-demographic & Attitudinal Characteristics	Dissimilarity in socio-demographic attributes and political views	McLeod et al. (1999) + Kwak et al. (2005) + Scheufele et al. (2006) +
vs. Disagreement	Dissimilarity in political views	Huckfeldt, Johnson & Sprague (2002, 2004) + Mutz (2002a, 2006) -
Dissimilarity between Discussants	Dissimilarity from the ego	Leighley (1990) + Mutz (2002a, 2006) -
vs. Dissimilarity among Discussants	Dissimilarity in the network	Huckfeldt, Johnson & Sprague (2002, 2004) + Nir (2005) network ambivalence +
Opposing Viewpoints	Viewpoint in direct opposite from the ego's (e.g., Republican vs. Democrat)	Mutz (2002a, 2006) -
vs. Lack of Agreement	Viewpoint different from the ego's (e.g., Republican vs. Democrat vs. Independent)	Huckfeldt, Johnson & Sprague (2002, 2004) +
Limited # of Discussants	Network generated by eliciting 3 to 5 identified discussants	Leighley (1990) + McClurg (2006b) -
vs. Indefinite # of Discussants	Network generated by the frequency of discussion with an unlimited # of unspecified dissimilar discussants	Kwak et al. (2005) + Scheufele et al. (2006) +
Size	Number of dissimilar discussants in the network	Jang (2009) -, +
vs. Frequency	Frequency of discussion with dissimilar partners	Scheufele et al. (2006) +
vs. Degree of Difference	Extent of disagreement with a partner weighted by discussion frequency	Mutz (2002a, 2006) -

POLITICAL DIVERSITY, TOLERANCE AND PARTICIPATION

It is said that the hallmark of a democracy is the ability of the people to participate in it (Eveland & Hively, 2009; Huckfeldt, Johnson & Sprague, 2002; Stouffer, 1955). Political participation is a means through which people can put their voice in public matters and hold accountable those who actually run public affairs. This process of self-empowerment in turn increases individual political efficacy, which is one of the key ingredients that nurture core values of democracy. The traditional studies of political participation focused on how individual characteristics such as socioeconomic status influence the likelihood of participation (e.g., Verba & Nie, 1972; Verba et al, 1997; Wolfinger & Rosenstone, 1980). Most of the studies revealed that such individual characteristics as race, income, age and education largely predict the levels of political participation. Departing from these socio-economic status (SES) models, some scholars shifted their attention to indirect, contextual influence on participation. Relying primarily on aggregate measures, for example, of socioeconomic status or voting turnout of the neighborhood, the studies generally agreed on the significant influence of neighborhood social economic status on participation (Butler & Stokes, 1974; Huckfeldt, 1986; Putnam, 1966). Higher neighborhood social economic status was usually associated with higher participation (for discussion of the self-selection issue potentially associated with neighborhood status, see Huckfeldt, 1979).

Moving further, studies looked at social interactive factors in addition to the aggregate context. Group membership, community integration and solicitation for participation were generally found to be associated with political involvement (e.g., Verba & Nie, 1972; Zipp & Smith, 1979). Yet another advance investigated the role of interpersonal context such as social networks. Often times, researchers observed political discussion networks to examine social

networks. More specifically, studies focused on what characteristics of social networks enhance political involvement. Characteristics of social networks most frequently studied are size of network, frequency of political discussion, network heterogeneity, political interest, relationship between discussants, and political efficacy including knowledge, expertise and reasoning ability. Network heterogeneity has been the center of debate not only because political diversity constitutes an essential element of democracy (Huckfeldt, Johnson & Sprague, 2004) but also because there is a lack of general agreement in the research as to how heterogeneity affects political involvement in comparison to other major attributes of networks, i.e., network size and discussion frequency.

This section first reviews the current debate on the relationship between political network heterogeneity and political participation. It closely examines the research in the context of the process-oriented models of O-S-O-R and cognitive mediation, and identifies an additional factor (information processing) that might be at work in the relationship between political diversity and participation. It then discusses how tolerant individuals may make different political participation decisions from the less tolerant due to different information processing strategies. More specifically, this dissertation argues that tolerant individuals are less likely to participate when exposed to difference due to cognitive complexity they experience, while the less tolerant are encouraged to participate due to amplified pre-existing beliefs. It also examines if the potential disabling influence of political tolerance by increasing cognitive complexity is smaller in strong-tie diversity than in weak-tie diversity.

Consequences of Exposure to Political Difference for Political Participation

Demobilizing vs. Mobilizing

Studies on social contextual influences on political participation were a departure from the dominant model of political participation of the past that attributed different levels of political involvement to individual characteristics (e.g., Verba & Nie, 1972). In their models, the studies placed an emphasis on social context that requires some level of social involvement. Recruitment (soliciting participation) is a good example of how social interaction contributes to political actions. In the textual dimension, the studies demonstrated the efficacy of interpersonal communication in affecting political participation decisions (Lazarsfeld, Berelson & Gaudet, 1944; Orum, 1976). In the structural dimension, they showed the influence of social environment by assessing aggregate measures such as neighborhood income and educational level (Huckfeldt, 1979). More recently, studies of political discussion networks have found some attributes of networks such as network size, discussion frequency and network heterogeneity are significantly correlated with the extent of political participation (e.g., Eveland & Hively, 2009; Jang, 2009), most commonly, either negatively or positively.

The debate over the effects of exposure to political difference on political participation generally revolves around two competing arguments. One argues for a negative effect whereas the other supports a positive influence on participation. The negative effects or demobilizing consequences of political heterogeneity are usually explained in three ways: 1) network heterogeneity increases cross-pressures, which result in individuals attempting to avoid politics and delaying voting decisions (Lazarsfeld, Berelson & Gaudet, 1944; Mutz, 2002a); 2) people tend to avoid conflict because they feel a need to be accountable to conflicting constituencies (Mutz, 2002a; Ulbig & Funk, 1999); and 3) exposure to adverse political information induces

attitudinal ambivalence in regard to issues or election candidates, which can make individuals less likely to take political action (Huckfeldt, Johnson & Sprague, 2002, 2004; Mutz, 2002a). In *The People's Choice* (1944), the first study to address heterogeneity and its effects on political participation (for discussion see Scheufele, Hardy, Brossard, Waismel-Manor & Nisbet, 2006), Lazarsfeld, Berelson & Gaudet observed that when individuals' idiosyncratic, heterogeneous political preferences become socially visible during election times due to more frequent political discussions, cross-pressures among individuals build up, inducing discomfort in political discussion. Because of the discomfort, people avoid discussing politics and delay their voting decisions. In effect, people become less likely to engage in political activities. This disabling consequence is bolstered by a number of later scholars (e.g., Grober & Schram, 2006; McClurg, 2006a, 2006b; Mutz, 2002a, 2002b).

The second explanation has to do with people's tendency to avoid conflict. This argument has been empirically supported by Mutz (2002a; 2006), who finds that individuals exposed to "cross-cutting" political experiences tend to stay away from politics so as not to induce conflict with their discussion partners and disturb the harmony in their social relationships. Individuals' sense of social accountability, coupled with the tendency to avoid conflict, further depresses political participation. Her research also confirms an earlier study that showed negative relationships between conflict avoidance and participation (Ulbig & Funk, 1999). The third explanation by which heterogeneity may discourage political participation is ambivalence. Ambivalence is defined as "higher levels of attitude intensity coupled with lower levels of attitude polarization" (Huckfeldt, Johnson & Sprague, 2004, p. 212). For example, in a situation of voting, one may have high interest in voting and willingness to participate (higher attitude intensity), but at the same may not be able to decide easily which candidate to vote for because

he likes or dislikes the two candidates equally (lower attitude polarization). Put differently, ambivalence is a conflict in an individual's feelings and thoughts prompted by the internally present competing values and considerations. In comparison to social accountability, ambivalence speaks to intrapersonal conflict within one's own thoughts and feelings, while social accountability attends to interpersonal conflict between one's own views and those of others (Mutz, 2006, pp. 119-120).

In contrast, a number of studies have found a positive effect of political network heterogeneity on participation (Cappella, Price & Nir, 2002; Gastil & Dillard, 1999; Huckfeldt, Sprague & Johnson, 2002, 2004; Huckfeldt, Mendez & Osborn, 2002; Jang, 2009; Kwak et al, 2005; Leighley, 1990; McLeod, Scheufele & Moy, 1999; Scheufele, Hardy, Brossard, Waismel-Manor & Nisbet, 2006; Scheufele, Nisbet, Brossard & Nisbet, 2004). They posit that exchange of diverse viewpoints through heterogeneous networks lets "public dialogue" take place, which contributes to deliberative democracy (McKuen, 1990). The processes through which the contribution is made usually revolve around three explanations: 1) political influence of a particular discussion partner is not final but can be further strengthened or weakened depending on other opinions in the network (Huckfeldt, Johnson & Sprague, 2002, 2004). Thus, any demobilizing effect occurring from heterogeneous discussion with a particular discussion partner may not be so strong; 2) heterogeneous political discussion enhances individual as well as network political knowledge, which in turn is positively related to political behaviors (Cappella et al., 2002; Gastil & Dillard, 1999; Huckfeldt, Johnson & Sprague, 2004; McClurg, 2003; McLeod et al., 1999); and 3) the exchange of heterogeneous political information among people is indirectly and positively related to people's participation through news media use (Eveland &

Hively, 2009; Kwak et al, 2005; Scheufele, Hardy, Brossard, Waismel-Manor & Nisbet, 2006; Scheufele, Nisbet, Brossard & Nisbet, 2004).

The first explanation sees each single discussion not in the isolation from other discussions that take place within the same network. For example, Huckfeldt, Johnson & Sprague (2002, 2006) looks at how an individual's political decision and evaluation of candidates can be altered by introducing additional discussants into the initial dyad. Through this examination, they demonstrate that the effect of being exposed to disagreement in a discussion with a particular discussion partner may not be final to influence one's participation decision but may well be further strengthened or weakened by factors that are related to the network where the individual and the discussion partner are located. Their finding of network effect is bolstered by the research of Nir (2005), who observes higher levels of participation as a consequence of higher "network ambivalence." For her, network ambivalence represents the balance of opinion distributions in the individual's network as opposed to individual ambivalence, which is intrapersonal. She found that intrapersonal ambivalence was discouraging for participation, while the interpersonal network ambivalence encouraging.

The second explanation is that diverse social interaction creates opportunities for people to gather information about politics, enhance one's understanding of political issues (McClurg, 2003), reflect upon one's own and alternative perspectives to refine one's position (Gastil & Dillard, 1999) and create a larger "argument repertoire" (Cappella et al., 2002) through the process of political learning. These processes increase individual political knowledge and promote political sophistication, which exert a positive influence on participatory outcomes. In fact, in his argument of "network knowledge" or the aggregate amount of and expertise in

political knowledge in a network, McClurg (2006b) empirically demonstrates that the average level of political sophistication in networks has a positive consequence for participation.

For the third explanation, a number of studies report a positive link between network heterogeneity and news media use, which in turn is positively related to diverse forms of political involvement (Eveland & Hively, 2009; Kwak et al, 2005; Scheufele, Hardy, Brossard, Waismel-Manor & Nisbet, 2006; Scheufele, Nisbet, Brossard & Nisbet, 2004). While quite a few studies treat news media use as controls in their models of political participation (e.g., Eveland & Hively, 2009; Huckfeldt, Mendez & Osborn, 2002), some studies focus on the factor on its own right (e.g., McLeod et al., 1999; Moy & Gastil, 2006; Scheufele et al., 2006). In their structural modeling, McLeod et al. (1999) find that local media use was indirectly related to both network heterogeneity and participation in discussion forums.

In support of this finding, Scheufele et al. (2006) show that heterogeneity is positively related to hard news use, which in turn is positively, indirectly related to political participation through increased factual political knowledge. Their interpretation of the links between network heterogeneity, media use and political participation is that heterogeneous networks are likely to increase individuals' motivation to seek information about the diverse topics and viewpoints encountered in the network. Being exposed to contradictory opinions in their social environment compels people to look for more information in the media to support or even alter their initial positions (Scheufele et al., 2006). Moy & Gastil (2006) confirm a positive impact of news media use, print media in particular, and interpersonal talk on "deliberative conversation." For them, deliberative conversation is characterized by openness to political conflict, logic in political talk and comprehension of opposing views. News media use increases these qualities. Kwak et al. (2005) add to the support of the argument of news media use. They examine what they call

“integrative discussion,” or the extent to which individuals incorporate media news in their political discussion, and demonstrate how news media use is integrated into individuals’ political conversations and further contributes to political participation.

Social Context and Individual Attributes

While the debate over the consequence of exposure to difference is still in effect, some investigators began to notice some social contextual factors are less manifest for people with certain individual characteristics (e.g., conflict avoidance) than others, suggesting that some contextual influences on participatory behavior “are not monolithic, with different elements of social organization potentially pulling individuals in multiple directions” (McClurg, 2006a, p. 362).

In his examination of environmental determinants of political participation, Huckfeldt (1979) suggested that the effect of the social environment might be partially mediated by individual attributes such as individual political loyalties indicating that some environmental influences are exerted because they are related to certain individual characteristics, which directly affect participation. More relevant to the purpose of this study, at least three studies have documented limited effects of political network heterogeneity, a social context, that is contingent upon certain individual characteristics. First, in his “conditional model of social influence,” McClurg (2006a) demonstrates that network disagreement demobilizes people who are the political minority in their neighborhood but has no influence on people in the majority concluding that network heterogeneity is, but not always, an important factor. Second, for Mutz (2002a), the disabling consequence of cross-cutting exposure for political participation is particularly more pronounced among the conflict avoidant who also tend to be less educated and low-income (Ulbig & Funk, 1999). Third and more recently, Jang (2009) showed that the

demobilizing effect decreases as the levels of “indifference” and “alienation” increase. Indifference and alienation capture the extent to which individuals do not support a particular election candidate. “Indifference” is operationalized as “the extent to which one candidate is closer to the respondent’s own ideological position than is the other candidate,” capturing the strength of support for one candidate in comparison to the other. “Alienation” is operationalized as “the extent to which the respondent is not attracted to either candidate because both the candidates are too distant from his or her own ideological position,” indicating the strength of support for the both candidates on a negative scale. In essence, he found that the negative consequence of exposure to political difference is higher for voters who support a particular candidate and lower for voters who are not decided or do not support either candidate. In particular, for those who are disinterested in the both candidates, encountering heterogeneous political discussion actually encouraged participation.

As varied the research findings on the consequence of political network heterogeneity for participation are, scholars have attempted understand them in various ways including some methodological approaches (e.g., Eveland & Hively, 2005). In the next section, this dissertation gleans from some of the models of communication process and offers a theoretical interpretation of these findings. It also suggests why political tolerance might explain the association of political network heterogeneity and participation.

Applying to the Models of Communication Process

The “Second O” in the O-S-O-R Model

One of the useful ways to understand the research on the consequence of exposure to difference for participation is to glean from the models of communication process. Indeed, scholars have attempted to theorize the effects of media and political discussion and some studies

of political communication base their research on communication models (e.g., Eveland, 2001; Eveland, Shah & Kwak, 2003; Kwak et al., 2005). Drawing from the models, some of them build their own models of political communication process (e.g., Eveland, 2001; Shah, Cho, Nah, Gotlieb, Hwang, Lee Scholl and McLeod, 2007). Perhaps one of the more frequently used models of communication process is the O-S-O-R model. Originally developed in the area of psychology (Markus & Zajonc, 1985), this model was an attempt to move further from the previous, rather simplistic S (stimulus)-R (response) model. The O-S-O-R model has been widely applied in the research of media affects (e.g., Eveland, 2002; Eveland, Shah & Kwak, 2003; Kwak et al., 2005; McLeod et al., 1994). The basic tenet of the model is that communication stimulus (S) and their effects (R) are conditional rather than uniform and should be understood as a process (Kwak et al., 2005; McLeod et al., 2005). The first “O” represents pre-reception orientation, which includes “structural, cultural, cognitive and motivational characteristics the audience bring to the reception situation that affect the impact of the message,” while the second “O” means reception activity orientation, which includes “what is likely to happen between reception of the message and the response of the audience member” (McLeod et al., 1994, pp. 146-147).

The research efforts on political participation can be evaluated in the context of the O-S-O-R model. The traditional SES model of political participation focused on individual attributes such as demographic characteristics as the pre-reception orientation, (the first “O”), which individuals “bring to the reception situation” of political message consumption (S). Political message reception (S) will then directly affect audience’s response or participation (R). Individual characteristics were deemed to be significant predictors of participation. In the earlier social contextual models of participation, structural and aggregate factors such as neighborhood

characteristics, group membership, recruitment and interpersonal communication (through the two-step flow) were considered. These “structural, cultural and motivational” aspects can be represented by the first “O,” which pre-conditions the reception of political messages. Quite obviously, the SES and earlier social contextual models of political participation focus on the first “O” or “S” itself (Kwak et al., 2005). Consequently, the second “O” or reception activity orientation receives little attention in these models of participation.

Figure 2-2 illustrates these models of political participation in the O-S-R model of communication.

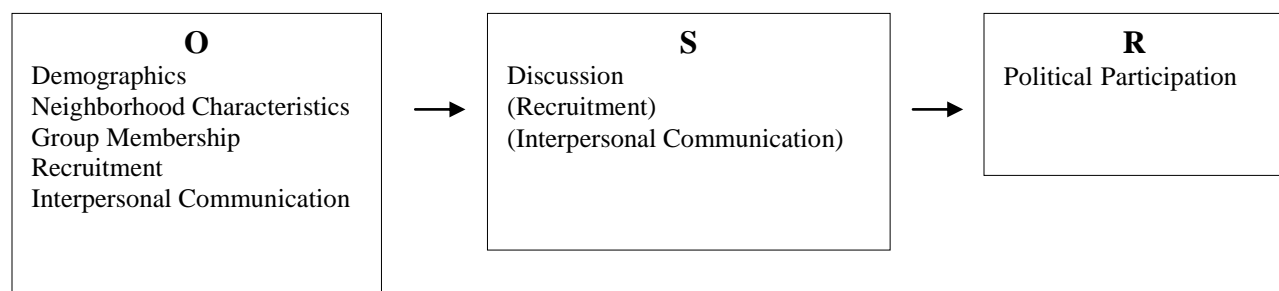


Figure 2-2: SES and Earlier Social Contextual Model of Political Participation Presented in O-S-R Model

In addition to socio-economic characteristics and other individual attributes such as political attitudes and news media use, studies of consequences of exposure to difference for political participation attend to the ways in which individuals engage with political messages. They examine various contextual characteristics of discussion networks such as network size, discussion frequency and network heterogeneity. Assuming that discussion and its effects are not universal and are not explained solely by conditions that are antecedent of information reception, they attend to the qualities of the political information received (network heterogeneity) and the external factors of the situation where the reception occurs (network size and frequency) that

might affect the reception of political messages (Kwak et al., 2005). In other words, rather than on what kind of people individuals are (the first “O”) or how political messages are sent (S), they focus on how individuals receive or engage with political messages (the second “O”). Examining these aspects, which take place after or concurrently with the reception of political information, fills in the missing second “O” of the O-S-O-R model. In other words, the second “O” or reception activity orientation is represented by the structural features of discussion networks (Kwak et al., 2005). Most of the research efforts that have revealed either demobilizing or mobilizing consequences of political network heterogeneity for participation can be demonstrated in this context (e.g., Cappella, Price & Nir, 2002; Gastil & Dillard, 1999; Grober & Schram, 2006; Huckfeldt, Sprague & Johnson, 2002, 2004; Huckfeldt, Mendez & Osborn, 2002; Jang, 2009; Kwak et al, 2005; Leighley, 1990; McClurg, 2006a, 2006b; Scheufele, Hardy, Brossard, Waismel-Manor & Nisbet, 2006; Scheufele, Nisbet, Brossard & Nisbet, 2004; Ulbig & Funk, 1999).

Figures 2-3 illustrates the research of consequence of political network heterogeneity for participation in the O-S-O-R model of communication process.

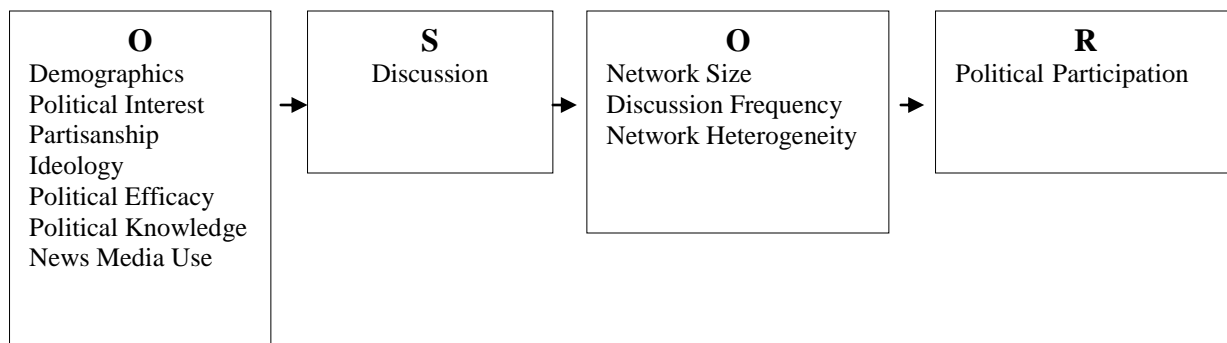


Figure 2-3: Consequences of Political Network Heterogeneity for Participation Presented in O-S-O-R Model

Information Processing and Cognitive Reflection

Yet some studies on political network heterogeneity and political participation have moved further from the context of characteristics of discussion networks and attempted to investigate what additional reception activity orientation factors might influence the ways in which individuals receive political messages. Assuming that the consequence of political network heterogeneity is not uniform across all individuals, they focused on some individual attributes and how those attributes alter the ways in which individuals are affected by political network heterogeneity in their political participation decisions. The attributes included conflict avoidance (Mutz, 2002a, 2006), minority status (McClurg, 2006a) and indifference and alienation (Jang, 2009). They moderated, or in some cases, changed the direction of, the effects of political network heterogeneity on participation. In the context of the O-S-O-R model, these arguments add to the reception activity orientation or the second “O” since the attributes operate once reception of political messages occurs and engage with the other reception activity orientation attributes. To be more specific, they moderate the effect of other factors of the second “O,” which include political network heterogeneity.

With closer attention, it could be understood that these attributes operate at the psychological or cognitive level. For example, conflict avoidance amplified the negative consequence of political network heterogeneity for political engagement because it induced greater intrapersonal ambivalence. The minority status aspect (McClurg, 2006a) is closely related to the theory of spiral of silence, which contends that perceived minority status would affect political preferences by discouraging the expression of political viewpoints that are perceived to be unpopular (Noelle-Neumann, 1974). Individuals in minority status were more likely to be discouraged to participate by political network heterogeneity, while those in majority

were not affected (McClurg, 2006a), which indicated that minority status could not only affect political expression but also discourage political involvement when exposed to political difference. Indifference and alienation (Jang, 2009) demonstrated that the demobilizing effect of political network heterogeneity could be larger for voters who support a particular candidate than voters who are undecided or do not support any particular candidate. The essence of this finding was that political network heterogeneity could encourage greater ambivalence for voters with stronger strength of support for a particular candidate. These three arguments indicate that there is intrapersonal processing of the conflicting political information at work following the reception of the information.

Indeed, cognitive processing of information is far from new in the study of communication process. In fact, the “emphasis on cognitive process, which began in the mid-1970s, has dominated the field with researchers searching for cognitive mechanisms that are engaged with by an active audience” (Kwak et al., 2005, p. 90). Among the many research efforts on active audience or audience involvement, Eveland (Eveland, 2002; Eveland et al., 2003) provides a useful explanation of the ways in which cognitive mechanisms take place in the process of communication with his model of “cognitive mediation.”

The cognitive mediation model starts from the assumption that the influence of political messaging might not only be a function of interpersonal exchange of messages but also a product of intrapersonal influences, emphasizing the self-reflective activity underlying the effect of news consumption (Eveland et al., 2003). This focus on self-reflective activity is primarily based on the audience activity literature such as reflective integration (Kosicki & McLeod, 1990) and cognitive elaboration (Perse, 1990). The model locates the self-reflective activity as a process of learning in the O-S-O-R framework. Therefore, the final effect the model is looking into is

knowledge acquisition or learning rather than political engagement. Nevertheless, it provides an insightful perspective to understand the ways in which cognitive processes are involved in individuals' participation decision making. Moreover, several studies have employed the model successfully to predict political participation (e.g., Kwak et al., 2005; Shah et al., 2007). In the model, the process of learning comprises three components in a sequence: motivation (surveillance motivation in particular), processing of news information and knowledge acquisition. The central logic for the sequential placement is that motivation and the effect of news use (knowledge) are channeled through intrapersonal information processing or reflection activity. In other words, motivation leads to reflection, which in turn leads to learning. The argument for channeling or mediation of intrapersonal information processing differentiates the cognitive mediation model from the older uses and gratification theory although the former draws heavily from the latter (Eveland et al., 2003). The uses and gratification theory assumes that motivation (or gratification sought) mediates the effect of media (Blumler, 1979). The cognitive mediation model argues that motivation does not have any direct role in media effect, rather "the role of motivation is only to activate information processing behaviors that are the central determinants of cognitive media effects" (Eveland et al., 2003, p. 362). This argument was demonstrated by the near-complete mediation of news attention and elaboration (as two forms of information processing) between surveillance motivations (gratification sought) and knowledge (Eveland, 2001; Eveland et al., 2003). Figures 2-4 and 2-5 illustrate the different assumptions of the uses and gratification theory and the cognitive mediation model.



Figure 2-4: The Uses and Gratification Theory

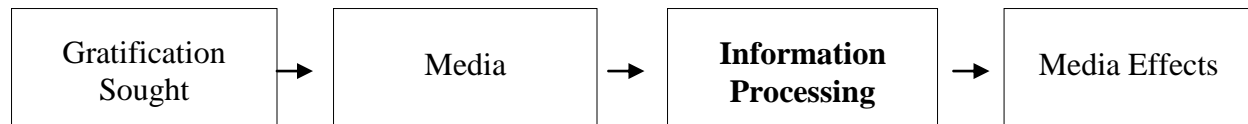


Figure 2-5: The Cognitive Mediation Model

In the context of the consequences of political network heterogeneity for participation, it can be understood as that gratifications sought (political interest, partisanship, ideology, etc) prompts exchange of political messages through discussion and also activates processing of the political messages received. Message processing then mediates the effect of heterogeneous discussion. What particularly draws our attention is information processing. As individuals encounter conflicting political messages from their political discussion networks, as the cognitive mediation model suggests, they go through the processing of the messages mostly in the forms of attention and elaboration (Eveleand, 2002). The message processing could be psychologically and cognitively affected by, among others, their individual tendencies and attributes such as conflict avoidance, minority status, and indifference and alienation. For example, individuals with higher levels of indifference and alienation (meaning weaker or no support or interest for any particular election candidate) may not pay much attention to the heterogeneous discussion of the election candidates. Also, they may not be able to elaborate (recall) much of the discussion they had on the upcoming election. For another example, conflict avoidant individuals may be uncomfortable with counter-attitudinal messages occurring in a discussion, so become less

attentive, and thus, may not recall much of the discussion. These attributes or tendencies affect the intrapersonal processing of the heterogeneous political messages received. The message processing influences the level of their learning of the information, based on which individuals make decisions for political participation. Ultimately, the information processing, affected by those attributes, alters the ways in which political network heterogeneity influences individuals in their participation decisions. This cognitive mediation effect can be presented in the O-S-O-R model as in Figure 2-6.

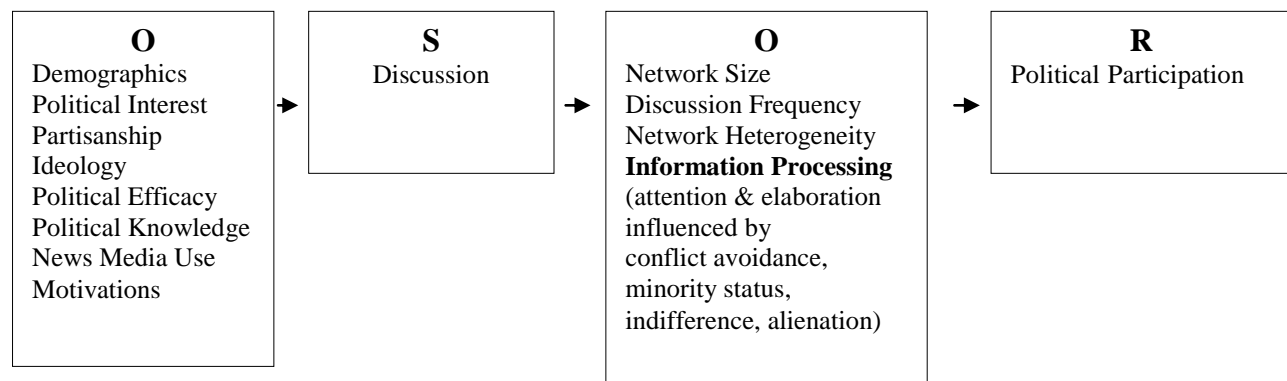


Figure 2-6: Consequences of Political Network Heterogeneity for Participation Presented in Cognitive Mediation Model

In extension of the cognitive mediation model, attempts have been made to theorize various reasoning processes that mediate the influences of news consumption and campaign exposure on political participation. One of the attempts places the interpersonal (discussion) and intrapersonal (reflection) reasoning processes (R) in the tradition model of O-S-O-R, thereby proposing the O-S-R-O-R model (Shah, Cho, Nah, Gotlieb, Hwang, Lee, Scholl and McLeod, 2007). Essentially, it is the traditional O-S-O-R model reinforced with collective and individual reasoning processes. This model has been tested successfully to predict political participation in

subsequent studies (e.g., Cho, Shah, McLeod, McLeod, Scholl & Gotlieb, 2009; Jung, Kim & Gil de Zúñiga, 2011). What draws our attention in this model is the intrapersonal reasoning process or cognitive reflection (the first “R”). The cognitive and psychological aspects of conflict avoidance, minority status, indifference and alienation could affect the process of cognitive reflection. Alternatively, the reception activity (the second “O”) of heterogeneous messages may be influenced by the different intrapersonal reasoning processes based on the individual attributes working at the cognitive and psychological level. In other words, the consequence of being exposed to diverse political information for individuals’ participation decisions may be affected by the reflection process with influences of some individual characteristics. Figure 2-7 illustrates this relationship in the O-S-R-O-R model of communication process.

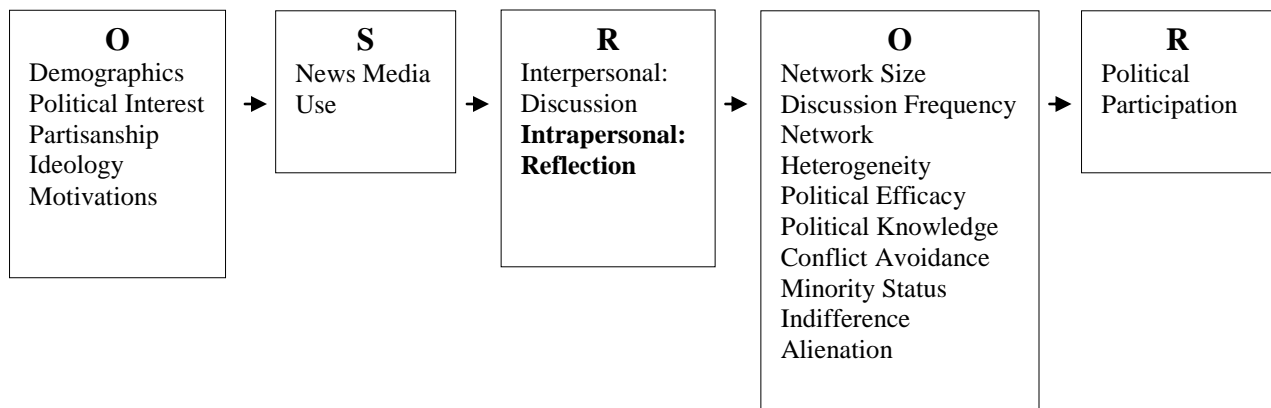


Figure 2-7: Consequences of Political Network Heterogeneity for Participation Presented in O-S-R-O-R Model

In sum, the reinterpretation of the association of political network heterogeneity and participation in the process-oriented context of the cognitive mediation model and the O-S-R-O-R model informs us that the consequence of political network heterogeneity for participation (either positive or negative) may not be uniform across all individuals. The consequence may be

amplified or moderated based on different information processing strategies and cognitive reflection processes. Certain attributes can have cognitive or psychological influence on individuals' processing of conflicting political messages received from their political discussion network. This prompts us to consider what other factors might influence individuals' processing of conflicting messages encountered.

This dissertation examines political tolerance, one of the core values in pluralistic democracy in part because it is inseparable from political heterogeneity. The next section discusses political tolerance in the context of political heterogeneity and participation, and elaborates why information processing might differ between tolerant and less tolerant people and what specific cognitive mechanisms or strategies might be involved in the processing of conflicting political messages for the tolerant and the less tolerant.

Political Tolerance in the Context of Political Network Heterogeneity and Participation

Who Are Tolerant People?

Political tolerance is generally defined as willingness to extend democratic norms and values to least-liked groups. Corbett (1982) sees it as “support for political freedoms and social equality” (p. 3). Sullivan and his colleagues (1982) suggest, “tolerance implies a willingness to ‘put up with’ those things that one rejects” (p. 2). Similarly, Gibson & Bingham (1982) write that tolerance is “a willingness to permit the expression of those ideas or interests that one opposes” (p. 604). Socio-demographic characteristics such as age, gender, income, education and ideology have been identified as significant predictors of political tolerance (Corbett, 1982; McClosky & Brill, 1983; Mutz, 2002b; 2006; Nunn, Crocket & Williams, 1978; Sullivan et al, 1993; Stouffer, 1955). Generally, younger age, male, higher income and education, and more liberal ideology signal higher political tolerance (e.g., Dineen, 2001; Mutz, 2002b, 2006; Stouffer, 1955;

Sullivan, Piereson & Marcus, 1982). Stouffer (1955) found strong evidence of the association of tolerance with elite groups of society.

Political interest and political knowledge have also been found to be significant predictors of levels of political tolerance (Mutz, 2002b; 2006). As can be intuitively predicted based on these correlations, research findings agree on a positive relationship of political tolerance in association with political participation. Political participation can “broaden perspectives” and therefore positively influence tolerance (McClosky & Brill, 1983). Stouffer’s (1955) finding of a positive association between political tolerance and elite groups of society also suggested that elite groups of society, who tend to be more tolerant, could be more participatory than regular citizens. Sullivan, Piereson & Marcus’s (1982) research based on a national survey from 1978 echoed this finding. More recently, Dineen (2001) observed from a broader representative sample that tolerant people are more participatory, affirming the positive relationship between tolerance and participation.

Another important observation in the literature is the correlation between tolerance and the number of weak ties in people’s relationships (Gibson, 1999). In fact, political heterogeneity has been found to contribute to tolerance (Mutz, 2002b, 2006). It is quite likely that people encounter difference, which fosters tolerance, more through weaker relationships or the “marginals” than through strong relationships, who tend to share more similarities. Diverse political perspectives provided by weak relationships facilitate greater awareness of rationales for opposing viewpoints, which in turn fosters tolerance (Mutz, 2002b). One interesting addition to the relationship between political heterogeneity and tolerance is from Mutz (2002b, 2006). She found that more intimate relationships between discussants mediate the association between political heterogeneity and tolerance. In other words, exposure to difference is more likely to

foster tolerance when it is encountered in a strong relationship than in a weak relationship. She has also found that tolerant people tend to have more politically dissimilar people in their strong relationships. Together, these findings suggest that, while political difference is more likely to be encountered in weak relationships, once it is encountered in strong relationships, it has a stronger positive influence on levels of tolerance. Thus, to the extent that social networks facilitate increased tolerance, they tend to do so through a critical mass of both “weak” and “strong” yet politically and socio-demographically diverse ties.

In sum, tolerant people tend to be higher in socio-economic status, more interested in politics and thus more politically sophisticated. They also tend to be more politically participatory. They may be more politically diverse as they tend to maintain close and weak relationship with politically and socially heterogeneous individuals.

Political Tolerance, Cognitive Complexity and Information Processing

Research on political tolerance has recognized that tolerance takes place only in the presence of disagreements (Sullivan et al, 1982). Earlier, Stouffer (1955) contended that, through education (schooling), individuals are exposed to values and views that are different from one’s own, which lead them to be more tolerant, asserting the contribution of heterogeneity to political tolerance. The relationship between political tolerance and heterogeneity has been dealt with within the context of democratic theories. Following the tradition of liberal democratic theory, Sullivan et al. (1982) hypothesized that the gradual increase over time in the levels of participation and some socio-demographic factors such as education increases tolerance. In the tradition of the federalist democratic theory, the investigators assumed that it is not individual socio-economic circumstances that is informing of changes in the levels of tolerance but the diversity of the least-liked groups and institutional arrangements such as constitution. Quite

surprisingly, their multivariate model showed no significant effect of age and education, which is in partial support of the federalist approach that assumes heterogeneity of target groups as a social source of tolerance.

In a more empirical vein, Mutz (2002b, 2006) has found that experiences of encountering cross-cutting perspectives indirectly foster political tolerance. She examined the impact of heterogeneous networks of political discussion on people's awareness of legitimate rationales for oppositional viewpoints, on their awareness on their own viewpoints, and on levels of their political tolerance. Her findings showed that, while there is no direct relationship between political heterogeneity in people's discussion networks and tolerance, political heterogeneity increases people's awareness of rationale for oppositional viewpoints, which, in turn, contributes to political tolerance. The more aware of legitimate rationale for opposing political perspectives, the more tolerant people are. This indirect effect of exposure to political difference on political tolerance was more pronounced among individuals with higher perspective-taking ability. As discussed earlier, intimacy relates political heterogeneity to political tolerance. Closer relationships across lines of political difference can promote greater knowledge of rationales for oppositional viewpoints. In other words, being exposed to political difference through discussion with a close friend promotes greater understanding of oppositional rationales than exposure to difference through discussion with a not-so-close neighbor. It suggests that interpersonal intimacy may moderate the potential discomfort of encountering difference and promote greater learning of oppositional perspectives.

While the contribution of exposure to political difference to political tolerance by increasing understanding of opposing perspectives seems encouraging for pluralistic ideals, studies of cognitive complexity inform us that the cognitive mechanism operating between

political heterogeneity and awareness of oppositional rationales may not be always beneficial for democratic outcomes. The basic argument for cognitive complexity is that as the number of attributes and cues a person uses in thinking about an issue, the consistency in the perception of the issue decreases. Differently put, the more perspectives and aspects one has to consider when thinking about an issue, it is less likely that the issue is perceived as consistently good or consistently bad (Linville, 1982). A higher number of perspectives and aspects induce more complex thinking and processing of existing and new information, which reduces the consistency of perception of the issue. The reduced consistency results in the moderation of the attitude toward the issue. The moderation effect of cognitive complexity appears to be relevant particularly for tolerant individuals. Those with higher levels of tolerance are more likely to be aware of rationales for opposing viewpoints and have higher perspective-taking ability, which provide them with more attributes and cues to reflect upon when processing information especially when stimulated by exposure to political difference (Mutz, 2002b; 2006).

Applied to the context of political communication, it may be interpreted as that more thoughtful, complex consideration of a political issue from several different sides leads to ambivalence, perplexity, equivocation, vacillation and “intellectual paralysis” in people’s political attitudes (Barker & Hansen, 2005, p. 322). There is an ample deal of research to support this interpretation. Fishkin (1995) observed a much more nuanced and complex attitudes of citizens after considerable discussion on several issues. Wilson et al. (1989) found that people’s decisions became less predictable when they thought about reasons. Tetlock (1993) documented evidence of moderation of attitudes by induced complexity (Tetlock, 1993). More recently, Barker & Hansen (2005) showed that systematic internal processing of information about political issues induced with several different angles to think about resulted in greater

“integrative complexity” and “analysis paralysis” particularly for the politically more knowledgeable group of people. Their conclusion was that “while it may be possible that greater complexity of thought ultimately leads to more thoughtful votes, it may also lead to fewer, weaker, and less consistent votes – at least among voters processing enough information about the various criteria under consideration to feel conflicted” (Barker & Hansen, 2005, p. 323).

On the other hand, there are instances where cognitive complexity strengthens, rather than destabilizes, political attitudes. This can be explained with the help of the amplification hypothesis. When people are less knowledgeable about politics, they are less likely to have the motivation or tools to process different ideas in a complex, systematic way (Barker & Hansen, 2005). In other words, when thoughts are induced, they are less likely than those with higher levels of political knowledge to engage in complex processing of the thoughts. Rather than complex thinking, they rely on heuristics cues to make a choice and justify themselves for the choice. Perhaps the most common and convenient heuristic cues people could rely on would be partisanship and ideology. For example, when thoughts are induced by discussing an election candidate with a colleague, a politically less knowledgeable person is less likely than a more knowledgeable person to evaluate the candidate in various perspectives with diverse and, in some cases, competing criteria (for instance, fiscal austerity as well as government spending to stimulate the economy), and more likely to base his or her judgment upon partisanship and ideology. Numerous studies have documented that people with stronger partisanship and ideology (in particular, conservatism) tend to have higher levels of selective exposure, which lead them to maintain or strengthen their initial positions when difference is encountered (e.g., Brundidge, 2010; Mutz, 2002a, 2006; Stroud, 2007). Thus, they are less responsive to induced

thoughts and more likely to maintain their initial positions, resulting in amplification of their preexisting values and attitudes (Barker & Hansen, 2005; Tesser & Conlee, 1975).

Higher cognitive complexity may lead to nonparticipation, while, in contrast, lower cognitive complexity may entail amplification of existing positions. The discussion thus far suggests the possibility that tolerant individuals and less tolerant individuals adopt different strategies to process information to make participation decisions when encountering conflicting political messages. As evidence suggests, tolerant people tend to be higher in the levels of income and education, and more politically sophisticated (Sullivan et al., 1993) They are also likely to have higher perspective taking ability and be more aware of rationales for oppositional viewpoints (Mutz, 2002b, 2006), and thus, have more tools and cues to engage in a systematic processing of the thoughts induced by exposure to difference. Consequently, due the cognitive complexity prompted by the systematic processing of thoughts, they may experience ambivalence, perplexity, equivocation and vacillation in making decisions about their political attitudes and choices. In effect, they are less likely to take political participatory actions.

In contrast, less tolerant individuals are less likely than the tolerant to be aware of opposing rationales and may be lower in perspective-taking ability. Not having many informed cues and attributes to engage with, they are more likely to rely on heuristic cues such as partisanship and ideology rather than to adopt systematic information processing when exposed to novel and conflicting political messages. Such heuristic cues could amplify their preexisting values and positions. Thus, encountering less or no cognitive complexity, less tolerant individuals could be less affected or affect in a different direction in their participation decisions by exposure to political difference. At least, less tolerant individuals would be influenced differently than tolerant people in the level of their political participation.

The next section discusses the conceptual and methodological approaches to political participation and network attributes in the literature as many different approaches have posed a set of issues involved with inconsistent findings in the existing research. Following the discussion, the hypothesis and research question are posed.

Political Participation and Network Attributes: Conceptual and Methodological Consideration

What Forms of Political Participation Are We Talking About?

As we examine consequences of exposure to political difference for political participation, it is necessary to clearly identify what forms of political participation we are interested in. It becomes more so when considering the research finding that some forms of participation are more likely to be affected by exposure to political difference than others (e.g., Huckfeldt, 1979; Giles & Dantico, 1982).

In his examination of the contribution of neighborhood social context to political participation (1979), Huckfeldt groups a number of political activities into two categories based on the context in which the act is carried out. Individually-based participation is acts that are performed in isolation such as voting, writing letters to political leaders or editors of newspapers. Socially-based participation includes acts that are conducted in public or with knowledge of other people, which often involve social interaction such as recruitment and solicitation. Examples for socially-based participation are joining and participating in a political party and campaign, donating and working to get people registered to vote. His conclusion is that contextual characteristics influence socially-based, but not individually-based forms of participation. This conclusion was successfully replicated by Giles and Dantico (1982).

However, the distinction between the two categories is not clear cut. For example, Huckfeldt assumes that all acts of donating money are solicited, i.e., people donate money only when they are asked. But people can donate out of self motivation or as a reaction to an advertisement, which do not necessarily involve social interaction. In this case, donating money may be more of individually-based than socially-based (Leighley, 1990). In this regard, the research by Leighley (1990) adds a more sophisticated attempt to the literature to define different forms of participation. Her perspective rests on the resources or information an individual must have to engage in a particular political activity, whereas Huckfeldt's individually-and-socially-based model attends to the location in which the political act is performed. She assumes that certain political acts such as campaign activities require a higher level of information whereas voting needs information that is relatively easily available. Based on the level of information required, she orders actions from low to high voting, contacting, campaigning and cooperative activities. What is more meaningful in her study is the contrast of her finding from other research. She finds that "discussant conflict" or political heterogeneity affects not only individually-based political act (voting) but also socially-based behaviors (contacting and campaigning).

McLeod et al. (1999) also adds to the understanding of different criteria of political participation with their investigation of network heterogeneity and public forum participation. They see forms of participation as traditional and nontraditional, where the former represents such acts as voting and donating money and the latter includes such behavior as taking part in a deliberative forum. Although there is an inherent overrepresentation of White, high-status males in deliberative fora, they assert that deliberative participation is a "problem-solving" conversation that triggers intrapersonal reasoning at the micro level and social blending of

diverse opinions at the macro level (McLeod et al., 1999, pp. 744-745). Their finding of a positive influence of heterogeneity on public forum participation supports this assertion. Another contribution to the forms of participation comes from Mutz (2002a, 2006). She examines the effect of cross-cutting exposure on two sets of political activities: 1) confrontational acts include convincing other people to vote for/against certain candidates or working for a party or campaign; and 2) non-confrontational activities include attending meetings and rallies, donating money and wearing stickers and buttons. However, this distinction is not free from the grey area: participating in a rally may very well be a confrontational act as it could provoke a counteraction from groups assuming different positions. Her finding shows a disabling effect of cross-cutting exposure on confrontational participation and voting, which was treated separately.

A summary of different criteria for participatory forms discussed thus far is presented in Table 2-2.

Table 2-2: Forms of Political Participation and Relation with Political Heterogeneity

Study	Categorization	Activities	Relation with Heterogeneity
Zipp & Smith (1979)	Voting	Voting	0
	Extra-voting	Campaigning	+ (Social Context)
Huckfeldt (1979)	Individually-based	Voting, sending protest messages, making my views known, writing letters to editors	0
	Socially-based	Participating in a party, giving money, getting people to vote, campaigning, joining community groups, informing others about politics, supporting a party	+ (Social Context)
Giles & Dantico (1982)	Individually-based	Voting, sending protest messages, making my views known, writing letters to editors	0
	Socially-based	Participating in a party, giving money, getting people to vote, campaigning, joining community groups, informing others about politics, supporting a party	+ (Social Context)
Leighley (1990)	Information/resource Requirement (low to high)	Voting	+
		Contacting	+
		Campaigning	+
		Cooperative activities	0
McLeod et al. (1999)	Traditional	Voting, donating money	
	Nontraditional	Participating in public fora, town hall meetings	+
Mutz (2002a, 2006)	Confrontational	Convincing other people to vote for/against a candidate, working for a party/candidate	-
	Non-confrontational	Attending meetings/ rallies, displaying a yard sign/ sticker/ button, donating money	0
	Voting	Voting	-

As suggested by these studies, political participation must be defined in the way that best captures what is under study in the context of interest. For this reason, voting as the dominant

form of political engagement needs particular attention in the definition of political participation as well as in analysis involving it. It becomes more so particularly for this study, which has defined political network heterogeneity within social context, when considering the argument that voting is a product of a systemic and political process that could be affected by social conditions including social networks even though it is carried out individually in the isolation of a voting booth (Huckfeldt & Sprague, 1995). Voting was seen as an individual act in earlier studies (e.g., Campbell, Gurin & Miller, 1954). Increasingly, however, it is seen as an act that is explained by not only individual attributes such as demographic information but also social contextual aspects such as network heterogeneity (e.g., Berelson et al., 1954; Huckfeldt & Sprague, 1995; Jang, 2009; Mutz, 2006; Orum, 1976). While the act of voting itself might take place in the isolation of a voting booth, individuals' decisions as to whether or not to head for the voting booth may be influenced by what kind of political information they encounter in their everyday social and political lives. Therefore, the current study observes voting in addition to other fourteen more socially-engaging activities of political engagement, as will be described in detail in Chapter 3.

Addressing the Issues of Network Attributes

The current study is interested in the level of political diversity of individuals' everyday social and political lives. It is captured by observing the extent to which individuals expose themselves to political difference through their social networks. The concept of political network heterogeneity this study employs involves not only politically heterogeneous discussion partners, but also all close friends, neighbors and coworkers with different political perspectives, who may be chosen by the individual or imposed by the social setting. Political network heterogeneity in this study observes the percentage of the people whose political perspectives are different from

the individual in each entire network of close friends, neighbors and coworkers. Therefore, in essence, the assessment of heterogeneity is based on proportional size, which is most similar to Jang's (2009) study. The overall size of the networks is direct measure, which is not limited as in many of the previous studies (Scheufele et al., 2006). Discussion frequency is a direct measure, which is free from the issue involved when frequency is embedded in the process of network generation. Network size and discussion frequency have been consistently found to be significant predictors of political participation (Eveland & Hively, 2005). In order to prevent these predictors potentially driving up the association between political network heterogeneity and participation, this study holds the two network attributes constant.

This methodological approach has two technical advantages. First, it removes to a certain extent the selection bias that may be present when networks are limited to individuals' selected discussion partners.¹ As it observes the each entirety of the networks of close friends, neighbors and coworkers, it could resolve to a certain extent the issue involved with "artificiality," which may pose the selection bias. Second, while allowing an open number of interaction partners, the measurement approach can still evaluate the strength of relationship in terms of close friends (strong), neighbors and coworkers (weak), which this study calls strong-tie diversity and weak-tie diversity respectively.

¹ Due to the process of selective exposure, people generally prefer discussing politics with those who share viewpoints even when they are surrounded by those with different demographic backgrounds (Huckfeldt & Sprague, 1995). Mutz & Martin (2001) confirm this finding by demonstrating lowest levels of disagreement with primary discussion partners compared to higher levels with secondary discussion partners. For a full review, see Eveland & Hively (2009).

Hypotheses and Research Question

The motivation for this part of the study was to understand how political diversity in different relationships are related to political tolerance, and if tolerant people are different from less tolerant people in their participation decisions when encountered political difference in different social relationships. Put differently, this dissertation examines what which of strong-tie diversity and weak-tie diversity contributes more to political tolerance, and whether or not political tolerance alters the consequence of political network heterogeneity for political participation.

Discussing politics with people who do not share political viewpoints provides perspectives that are different from one's own and thus tends to facilitate increased tolerance (Gibson, 1999; Mutz, 2006). As discussed earlier, Mutz (2002b) has found that more intimate relationship between non-likeminded discussion partners mediate the relationship between exposure to political difference and tolerance, suggesting that a closer relationship with a disagreeing discussion partner could facilitate translating difference into tolerance through affective mechanism. Thus, political difference experienced in strong interpersonal relationships fosters political tolerance.

It was also identified that people in weak tie relationships are more likely to be dissimilar from an individual than those in strong associations. Indeed, Gibson (1999) found a positive relationship between political tolerance and the number of weak ties individuals maintain, suggesting that weak interpersonal relationships contributes to political tolerance by bringing more diverse political perspectives to individuals. In addition to contributing to tolerance in this quantitative sense, political diversity experienced in weak tie relationships may also offer qualitative tools with which the process of "agreeing to disagree" can be facilitated. Often times,

strong-tie relationships are more casual and informal than weak-tie associations. People share personal matters with family and close friends and tend to present themselves in relaxed selves rather than in a consciously prepared way. In contrast, weak-tie relationships are more likely to be formal than casual, and individuals often have social distance with people in weak relationships. They may prefer presenting themselves prepared in the way they should be, rather than in a fully relaxed way. Indeed, individuals generally do not know the personal side of people in weak associations. When it comes to political conversation, individuals may be comfortable exchanging unprepared and less-informed ideas with close friends because they share greater understanding of each other as a person firmly rooted in deeper bonding. In comparison, individuals tend to make more prepared and informed remarks when interacting with people who are not very close with. In particular, people would not want to be considered less-informed or untrustworthy in workplace by making comments that are illogical or ungrounded in facts because they might fear that it negatively affects their credibility as a reliable coworker or a supervisor. They might also have the concern that it would hurt various kinds of evaluation of their job performance. It is more likely that individuals come under pressure to a certain extent to provide quality information by making logical, rational and informed comments. Thus, the quality of diverse political information exchanged in weak relationships could be higher than the same in strong associations. Consequently, the higher quality information may exert greater contribution to increasing individuals' awareness and understanding of rationales for opposing viewpoints, and expanding the "argument repertoire" (Cappella et al., 2002), thereby facilitating the "cognitive mechanism," through which political diversity may foster tolerance (Mutz, 2002b, 2006). Thus, political diversity in weak-tie associations is likely to foster political tolerance.

Given the possibility of both strong-tie diversity and weak-tie diversity for nurturing political tolerance, it is then uncertain which of strong-tie diversity and weak-tie diversity exerts a greater influence on political tolerance. Therefore:

RQ1: Which of strong-tie diversity and weak-tie diversity contributes more to political tolerance?

The cognitive mediation model and the O-S-R-O-R framework informs us that information processing mediates the effects of motivation and political information obtained from discussion. The assumption of the model is that, based on the strategies to process information, the effect of the information (discussion) could be different. Based on the model, we have examined how some individual tendencies and attributes such as conflict avoidance, minority status and, indifference and alienation might influence the processing of the information. In a similar sense, we have examined that how political tolerance might influence individuals' information processing and affect their participation decisions when exposed to political difference.

As to what specific cognitive and psychological mechanisms are involved in information processing of tolerant and less tolerant people, we gleaned from the cognitive complexity literature. Encountering conflicting political information can induce people to thoughts because opposing opinions provide an opportunity to think about an issue in a perspective that is different from one's own. As evidence suggests, more tolerant individuals tend to be more politically sophisticated and participatory, and may have more politically diverse individuals in their close social relationships. They are more supportive of civil rights and values of different social and

political groups even when those groups are not favored by themselves. They also tend to be more aware of rationales for opposing viewpoints and have higher ability for understanding different perspectives (Mutz, 2002b, 2006), which provide them a higher number of attributes to relate to and cues to reflect upon when conflicting information is encountered. Those attributes and cues induce them to engage in systematic internal processing of the information, which involves a number of different angles to view an issue. The systematic processing inspires cognitive complexity for the tolerant individual, who, as a result, may develop hesitation, vacillation, “analysis paralysis” and ambivalence. Consequently, they may delay making participation decisions or choose nonparticipation.

Another explanation for predicting the reduced likelihood of political participation for tolerant people when exposed to political difference is by affective mechanism. Tolerant people tend to have more close relationships with people whose political views are different from their own (Mutz, 2002b, 2006). They may also stay away from actively participating in political activities so as not to make those close relationships uncomfortable. Essentially, tolerant people value other groups’ civil rights even when they disfavor those groups. Thus, it appears to make sense to assume that tolerant people would remain silent rather than actively voicing their opinions by engaging in political actions when there is a conflict between different political positions, which often happen to seek particular groups’ interests at the cost of others’.

On the other hand, less tolerant people tend to be politically less knowledgeable and less sophisticated, low in their perspective taking ability and less aware of rationales for oppositional viewpoints. When thoughts are induced by exposure to political difference through their social networks, they have fewer tools to engage in complex processing of thoughts. They tend to rely on heuristics cues such as partisanship and ideology. Thus, when exposed to political difference,

less tolerant people are likely to maintain or even strengthen their preexisting attitudes and positions, rather than experiencing cognitive complexity (Barker & Hansen, 2005; Tesser & Conlee, 1975). Less tolerant individuals, therefore, may not be affected by exposure to political difference as much as more tolerant individuals in their participation decisions, or even participate more due to the strengthened beliefs. In other words, political network heterogeneity may not be so discouraging for political engagement in the case of less tolerant people.

In sum, it can be concluded that tolerant people and less tolerant people could employ different information processing strategies, which lead them to making different participation decisions. Thus, the extent to which political network heterogeneity affects political participation differs between the more tolerant and the less tolerant. Therefore:

H6: The relationship between political network heterogeneity and political participation is moderated by political tolerance.

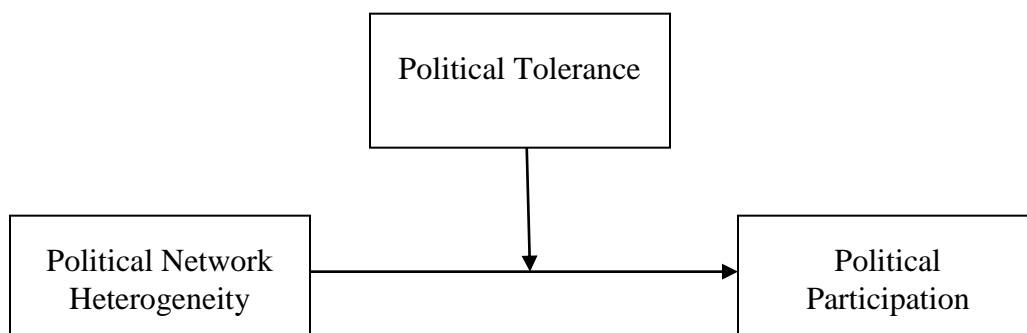


Figure 2-8: Political Network Heterogeneity and Political Participation Moderated by Tolerance

This dissertation is also interested in whether or not tolerant individuals (and less tolerant individuals) are affected by political network heterogeneity differently based on the strength of

the relationship with the people with whom the difference was encountered. Compared to strong-tie relationships, people in a weak-tie relationship are more likely to have dissimilar characteristics. Through these “marginal” relationships (Eveland & Hively, 2005), people may familiarize themselves with different political views, which in turn, may foster tolerance (Mutz, 2002b, 2006). Indeed, Gibson (1999) has found a positive correlation between levels of support for democratic institutions and the number of weak ties in people’s social networks, suggesting that weakly tied relationships may inspire tolerance. Interestingly, the literature also informs us that political network heterogeneity is indirectly related to political tolerance through intimate relationships with non-likeminded discussion partners (Mutz, 2002b, 2006). The higher the intimacy between non-likeminded discussion partners, the more likely it is that the political difference encountered in the discussion will help foster political tolerance. Thus, while weak ties foster tolerance by helping people learn diverse sets of political viewpoints, the learning can be further facilitated when the diverse viewpoints come from strong ties since close relationship could reduce the discomfort of encountering difference and the psychological burden of encountering unfamiliar information, and prepare people to be more open to different ideas. This affective mechanism may reduce the cognitive complexity tolerant people are likely to experience when exposed to political difference. It may also be the case of “expected difference.” Often times, people in close interpersonal associations know each other’s political leanings and perspectives, in which case encountering difference can be expected, hence expected difference. Individuals already know that they will encounter disagreement with particular people, with whom they are close, and are familiar with the content of the disagreement. Therefore, the disagreement encountered is already in their political knowledge and “argument repertoire” (Cappella, 2002) that can be easily accessed by the individuals

(Huckfeldt et al., 2002, 2004). This expected, familiar disagreement, thus, may not create so many cues for tolerant people to engage in systematic information processing, inducing less cognitive complexity. Therefore, when political difference is encountered in close relationships, the extent to which tolerant individuals experience cognitive complexity may not be as high as when difference is encountered in weak associations. Consequently, the negative influence of political tolerance on political participation may not be so strong for strong-tie diversity. In other words, the moderating effect of political tolerance is likely to be smaller for political difference encountered in strong ties than in weak ties. Therefore:

H7: The moderating effect of political tolerance is smaller for strong-tie diversity than for weak-tie diversity.

Summary

The first part of this chapter explored the ways in which the Internet may contribute to political diversity of individuals' everyday social relationships. It was argued that, while online selective exposure through selective online interaction occurs, Internet news nevertheless provides chances for encountering political difference through various structural and human psychological and behavioral mechanisms, which prepares individuals for political diversity in their social networks, thereby contributing to political network heterogeneity. It was also argued that selective and heterogeneous exposure on the Internet affects only strong-tie diversity, and not weak-tie diversity because of: 1) lesser desire for effortful selection for weak associations; 2) different motivations for forming and maintaining relationships that are not guided by political preferences; and 3) the structurally constructed nature of some weak relationships.

The second part of this chapter investigated what types of diversity contributes more to political tolerance, and whether or not tolerant individuals are different from less tolerant individuals in their political participation decisions when exposed to political diversity in different social relationships. It was argued that, because weak-tie diversity tends to provide better quality information about heterogeneous political perspectives, weak-tie diversity offers qualitative tools to facilitate increased tolerance, thus which types of diversity contributes more to tolerance is uncertain. Drawing from the cognitive mediation model and the O-S-R-O-R framework, it was identified that information processing cognitive reflection explain to a certain extent why the consequence of political network heterogeneity for political participation may not be uniform across all individuals, but may depend on information processing strategies, which could be affected by certain individual attributes. Focusing on political tolerance as one of those attributes, it was argued that tolerant and less tolerant individuals employ different information processing strategies due to their different levels of awareness of opposing rationales and abilities to take diverse perspectives, which provide the cues to engage with for systematic information processing for the tolerant, while yielding to heuristic cues such as partisanship and ideology for the less tolerant. Therefore, it was argued that, due to the different information processing strategies, political network heterogeneity discourages participation for the tolerant, and does not affect or encourages participation for the less tolerant. It was also predicted that the moderating effect would be smaller for strong-tie diversity than for weak-tie diversity because more intimate interpersonal relationships may reduce the cognitive complexity tolerant individuals are likely to experience.

The next chapter describes the data used in this study and explains the measurement methods of the variables. In the following plan of analyses, it discusses the analytic processes through which the hypotheses and research question proposed in this chapter are addressed.

Table 2-3: Empirical Studies on the Relationship between Political Heterogeneity and Political Participation

Study	Data Year	Sample Size	Heterogeneity in Terms of	Voting Included in Participation	Controls	Network Generation	Relation to Participation
Leighley (1990)	1976	724	Positions about politics	Yes (treated separately)	Socio-demographic, political efficacy, civic duty	Soliciting up to 5 discussion partners	Disagreement (+) related to voting, contacting, campaigning
McLeod et al. (1999)	1997	416	Age, gender, ideology, political information	No	Socio-demographic, media use, network size, discussion frequency	Soliciting main discussion partners	Heterogeneity (+) Discussion frequency (+)
Huckfeldt, Johnson & Sprague (2002)	1997	1,475	Vote intent	Yes (voting only)	Socio-demographic, partisanship	Soliciting up to 5 discussion partners	Disagreement (0) Low-density network affects disagreement
Mutz (2002a)	1996	780	Candidate preference, ideology, disagreement w/ discussants	Yes (treated separately)	Socio-demographic, partisanship, political interest, knowledge	Soliciting up to 3 discussion partners	Cross-cutting exposure (-) related to voting, confrontational participation through increased ambivalence and social accountability especially for the conflict-avoidant
Huckfeldt, Mendez & Osborn (2004)	2000	1,152	Vote intent	Yes (voting only)	Socio-demographic, media use, partisanship	Soliciting up to 4 discussion partners	Disagreement <i>between</i> discussant (0), <i>among</i> discussant (-)

Table 2-3 Continued

Scheufele, Nisbet et al. (2004)	2002	787	Gender, race political view (right/left), party preference (Reps/Dems)	Yes	Socio-demographic, structural heterogeneity, media use	Frequency of discussion w/ dissimilar others	Heterogeneity (+)
Kwak et al. (2005)	2002	392	Age, gender education, ethnicity, political views	No	Socio-demographic, media use	Frequency of discussion w/ dissimilar others	Heterogeneity (+) Moderation by discussion attention and frequency (+)
Grober & Schram (2006)		Lab experiment	Voting preference	Yes (voting only)		“Neighbors” consisting senders/receiver, allies/adversaries , early/late voters	Homogeneity (+) Heterogeneity (0)
McClurg (2006a)	1984	846	Vote preference	No	Socio-demographic, partisanship	Soliciting discussion partners	Heterogeneity moderated by neighborhood partisan (majority (0), minority (-))
McClurg (2006b)	1996 1997	1,537	Vote preference	No	Socio-demographic, partisanship	Soliciting up to 5 discussion partners	Homogeneity (+) Network political knowledge (+)
Scheufele, Hardy et al. (2006)	2003	781	Gender, race political view (right/left), party preference (Reps/Dems)	Yes	Socio-demographic, structural heterogeneity, media use	Frequency of discussion w/ dissimilar others	Heterogeneity (+)

Table 2-3 Continued

Eveland & Hively (2009)	2004	600	Party affiliations (Simpson's <i>D</i>)	Yes	Socio-demographic, media use, network size, discussion frequency	Number of dissimilar discussion partners	Diversity (-)
Jang (2009)	2000	3,142	Vote intent	Yes (voting only)	Socio-demographic, network size	Soliciting up to 4 discussion partners	Heterogeneity moderated by alienation and indifference (+)

Chapter 3: Methodology

The current study was interested in two discussions around the concept of political heterogeneity. Firstly, it attends to how the Internet might contribute to political diversity in individuals' social relationships of different strengths. More specifically, the present study investigates how Internet news use might provide chances for exposure to political difference, and in turn, contribute to political network heterogeneity by moderating the potential negative influence of selective exposure. It also examines the extent to which selective and heterogeneous exposure on the Internet affects strong-tie diversity and weak-tie diversity respectively. For the investigation, the present study established hypotheses, which test: 1) the moderation of the potential negative effect of selective online interaction on political network heterogeneity by Internet news use; 2) the negative effect of selective online interaction and positive effect of Internet news use on strong-tie diversity; and 3) non-effect of selective online interaction and Internet news use on weak-tie diversity.

Second, the current study examines which of strong-tie diversity and weak-tie diversity contributes more political tolerance, and whether tolerant individuals are different from the less tolerant in their participation decisions when exposed to political diversity in different social relationships. For this examination, this study posed a research question for a better contributor to political tolerance, and established hypotheses, which predict: 1) moderation of the relationship between political network heterogeneity and political participation by political tolerance; and 2) smaller moderating effect of tolerance for strong-tie diversity. This chapter describes the data and measures of this study and provides an outline of the analyses this study performs.

DATA AND MEASURES

Data

Data for this study is obtained from the U.S. Citizenship, Involvement, Democracy (CID) survey. The survey is a major American civic engagement study conducted by a collaboration of Center for Democracy and Civil Society (CDACS) at Georgetown University and the European Social Survey (ESS). It has been carried out biannually since 2002. Building on the modules from the 2002 ESS on Citizenship, Involvement and Democracy, the CID survey adds into their themes questions concerning informal social networks, the composition and diversity of ties and associations, democratic values and tolerance with the primary focus on civic engagement, social capital and democracy.

The survey was conducted between May and July, 2005, by door-to-door interviews with people 18 years old and older who were household members of occupied residential housing units. Thus, it excludes residents of institutions, group quarters and military bases. The survey used the classic cluster sample design method to provide an approximate self-weighting, or *epsem*, sample of households across the continental United States.² In order to ensure a representative selection of sampling units, the sample of the survey was stratified by four Census regions and metropolitan versus non-metropolitan status, i.e., metropolitan and non-metropolitan areas for each of the four Census regions resulting in eight strata. Primary sampling units were allocated in proportion to the number of households in each of the eight strata. They were then chosen according to criteria based on stratum size and number of households. Within a sample primary sampling unit, two block groups were randomly selected, and within a sample block group, all residential housing units were identified using the U.S. Postal Service Delivery

² See <http://www8.georgetown.edu/centers/cdacs/cid/methodology.htm> for a detailed explanation of the sample design and weighing procedures.

Sequence File (DSF) and one address was selected at random. The next fourteen residential addresses were then identified.³ The survey resulted in an N of 1,001 out of the total of 2,974 worked interviews and a response rate of 40.03% based on AAPOR's Response Rate #3 Formula. This rate can be generally considered above average if not of the highest quality.⁴ Based on this sample, the data provide estimates that are representative of the contiguous United States.

The cross-sectional data provided the sample can be considered appropriate because the present study is interested in investigating associations between variables at one time point, i.e., possible differential influences of a set of variables on dependent variables depending upon another set of variables at a given point of time. For example, this study examines how selective and heterogeneous exposure on the Internet might affect strong-tie diversity and weak-tie diversity differently. Thus, associations between the variables this study is interested in are cross-sectional. However, the cross-sectional nature of the data would not allow examining the influence of online exposure over time, as time-series data would. Nevertheless, because the current study investigates potentially differential influences of Internet exposure and political diversity based on such factors as tie strength and tolerance, rather than different time point, the data serve the purpose of the investigation.

The data used in this study include information about demographic characteristics, Internet use, news media use, political attitudes, political participation and characteristics of social networks. Questions in the dataset used in this study are reproduced in Appendix A. The present sample consists of all 1,001 respondents. Missing values on variables were handled by

³ For a detailed description of the survey design, see Howard, Gibson & Stolle (2006).

⁴ See http://www.aapor.org/Response_Rates_An_Overview/1493.htm and http://www.aapor.org/pdfs/standarddefs_3.1.pdf for a detailed discussion of the definition of response rate and the calculation methods.

the maximum likelihood estimation. Thus, the sample size for this study is 1,001 adults aged 18 and above.

Measures

The CID data contain information about socio-economic status, Internet news, news media use, political attitudes, political participation and characteristics of social networks. Characteristics of social networks include diversity in strong and weak ties, network size, frequency of political discussion.

Socio-demographic Variables

Information about socio-economic status was drawn from items on age, gender, education, income and race.

Age: Age in years was calculated by subtracting the year respondents were born from 2005, the year of the survey. Median age was forty four.

Gender: Gender was coded as: 0 = female; 1 = male. Fifty six percent of the sample was female and 43.7% male.

Education: Education is a variable simplified from a denser categorization of highest education level completed. It was coded as: 0 = none or grades 1-8; 1 = high school incomplete or grades 9-11; 2 = high school graduate; 3 = business, technical or vocational school after high school; 4 = some college, no 4-year degree; 5 = college graduate; 6 = post-graduate training or professional school. Three percent of the sample had none or education through eighth grade, 9% did not graduate high school, 30% was high school graduates, 10.8% attended vocational school, 23.6% attended some college, 14.4% was college graduates, and 8.9% had post-graduate training.

Income: Since the item directly asking respondents' income had a great deal of missing data, the income variable was constructed from imputations from several items on home ownership, the interviewer's estimate of the respondent's social class, the respondent's response to the question, "how do you feel about your household's income nowadays," and whether or not the respondent's income was under, equal to, or over \$50,000. This assessment reduced missing cases down to eighteen (for detail, see Howard, Gibson & Stolle, 2006). The income variable was coded as: 1 = less than \$15,000 through 11 = \$200,000 or more. Seventeen percent had income between \$40,000 and \$50,000, 16.8% between \$50,000 and \$75,000, 12.8% between \$30,000 and \$40,000, 11.5% between \$75,000 and \$100,000 and 10.4% under \$15,000.

Race: The survey contained several questions on respondents' racial identification. Respondents were asked to choose an option that best described their race. In the case respondents did not choose one, the interviewer chose the best fitting race. Race was identified in terms of Asian, Black, Hispanic, White and Other. The race variable was then dummy-coded as: 0 = nonwhite; and 1 = white. Seventy two percent of the sample was white, and the rest 27.6% was nonwhite.

Table 3-1 presents the summary of the demographic characteristics of the CID survey and the 2005 American Community Survey (ACS) from the Census Bureau. The comparison is not straight forward because, firstly, different units of measurement and categories were employed, and secondly, there is limited information in the ACS on the specific population of ages 18 and over. Particularly, since age was measured in different age brackets, median or mean ages could not be compared. Additionally, the Census Bureau recognizes race and Hispanic origin as two separate concepts. Thus, in the ACS, one can be Hispanic and white, or Hispanic and Black at the same time, while the CID survey sees Hispanic as one of the categories of race. Nonetheless,

Table 3-1 provides a sense of socio-demographic characteristics of the sample from the CID survey in comparison to 2005 ACS.

Table 3-1: CID Survey and 2005 American Community Survey

Variable	The CID Survey (18 years and over)	2005 American Community Survey (Age separately stated for each variable)
Age	Median: 44	<u>All ages</u> Median: 36.4
Gender	Male: 43.7%; Female: 56.3%	<u>18 and over</u> Male: 48.3%; Female: 51.7%
Education	Less than high school: 12% High school graduates: 30% Vocational school after high school: 10.8% Some college: 23.6% College graduates: 14.4% Graduate or professional degree: 8.9%	<u>25 years and over</u> Less than high school: 15.3% High school graduates: 29.6% Some college: 27.5% College graduates: 17.2% Graduate or professional degree: 10%
Income	\$15,000 but less than \$25,000: 14.3% \$25,000 but less than \$30,000: 9.2% \$30,000 but less than \$40,000: 12.8% \$40,000 but less than \$50,000: 17.2% \$50,000 but less than \$75,000: 16.8%	<u>15 years and over</u> \$15,000 but less than \$25,000: 12% \$25,000 but less than \$35,000: 11.5% \$35,000 but less than \$50,000: 15.1% \$50,000 but less than \$75,000: 18.9%
Race	White: 72.4% Nonwhite: 27.6%	<u>All ages</u> White: 74.7% Nonwhite: 25.3%

Age, gender, education, income and race, as exogenous variables, were included in analyses as covariates.

News Media Use

General Internet Use: General Internet use was based on the item asking frequency of respondents' use of the Internet, the World Wide Web or e-mail for personal, i.e., non-work-related, use at home or at work on an eight-point scale (1 = no access at home or work; 2 = never use; 3 = less than once a month; 4 = once a month; 5 = several times a month; 6 = once a week; 7 = several times a week; 8 = every day). Twenty five percent had no access, 15.3% never used the Internet, 12.9% used several times a week, and 29.9% used every day. This variable was included as a control because the following question assessing use of the Internet as a news source was worded in reference to this item.

Internet News Use: For those who answered they had used the Internet, the Internet news use question was asked. Internet news use was measured as assessing time spent online following politics and current events. Following the question on general Internet use, this item asks: *and, on an average day, how much of this time (general Internet use) is spent following politics and current events?* Hence, in the analyses of the current study, the variable is always used with the variable, general Internet use, controlled for. It was based on a four-point scale (1 = every time online; 2 = most of the time; 3 = some of the time 4 = almost never or never), and was recoded to a one-to-four point scale so that higher values indicated higher Internet news use. In order to include those who had no access or never used the Internet, those who answered no access or never used the Internet on the previous general Internet use question were coded as 1 (almost never or never). Sixty eight percent of the sample never or almost never spent their time online for political news, while 32% spent some of their time online for the purpose.

Television News Use: Television news use was measured using the item assessing time spent watching news or programs about politics and current events based on a nine-point scale (1

= no time at all; 2 = less than ½ hour; 3 = between ½ and 1 hour; 4 = between 1 and 1 ½ hours; 5 = between 1 ½ and 2 hours; 6 = between 2 and 2 ½ hours; 7 = between 2 ½ and 3 hours; 8 = between 3 and 4 hours; and 9 = more than 4 hours). Twelve percent of the sample did not watch news on television, 16.3% spent under half hour for watching news, 28% between ½ and 1 hour, and 20.8% between 1 and 1 ½ hours.

Online Interaction

Selective Online Interaction: Selective online interaction indirectly measures the extent of people's interaction online with others who share political views, religious views and who belong to same groups and organizations.⁵ It was created based on three items that asked on a four-point scale (1 = a lot; 2 = some; 3 = only a little; and 4 = not at all) the extent which respondents feel the Internet has helped interact with people or groups who (a) share political views and (b) religious views; and (c) belong to same groups and organizations. The variables were recoded so that higher values indicated greater degree of helpfulness of the Internet for homogeneous encounters online. In order to include those who had no access or never used the Internet, those who answered no access or never used the Internet on the previous general Internet use question were coded as 1 (not at all). Values for the three items were then added and divided to compute the mean ($\alpha = .79$). The item loadings for selective online interaction are presented in Table 3-2. Sixty one percent had the mean of 1, 21.2% higher than 1 but less or equal to 2, 14.6 higher than 2 but less or equal to 3, and 3.4% higher than 3.

⁵ Religious views and race were added with the assumption that interacting with people holding same religious perspective and of a same race would contribute to political selectivity in online interaction.

Table 3-2: Standardized Factor Loadings for Selective Online Interaction

Observed Indicators	Factor Loadings
Same political views	.86
Same religious views	.83
Same groups and organizations	.83

Extraction Method: Standard Component Analysis

Selective online interaction captures exchanges of homogeneous political messages on the Internet that are not limited to the more traditional online means of discussion boards, chat rooms and email, which previous studies focused upon (e.g., Mutz & Martin, 2001; Stromer-Galley, 2002, Brundidge, 2010). Alternative to those means, other forms of exchanges of messages may take place through blogs, online texting, instant messaging, YouTube, and social networking sites, which include Facebook in its relatively earlier stage and MySpace, the most visited social networking site in the data year of 2005 (Cashmore, 2006).

Heterogeneous (non-political) Online Interaction: The CID survey includes items indirectly assessing people's interaction online with others who are of a different race, age and country. Thus, heterogeneous online interaction does not capture any political dimension. Since it is possible that heterogeneous online interaction is highly correlated with selective online interaction, general Internet use and Internet news use, this variable is included in the analyses as control. On the same scale as selective online interaction, heterogeneous online interaction was based on three items asking the extent to which respondents feel the Internet has helped interact with people (a) of a different race; (b) of different ages or generations; and (c) from other countries. The variable was recoded so that higher values denoted greater degree of helpfulness

of the Internet for heterogeneous encounters online. Mean was computed from the three items ($\alpha = 0.89$).

Political Attitudes

Political attitudes explain a great deal political participation and are related to other variables assessing political aspects of individuals in many ways as numerous studies have documented (e.g., Mutz, 2002a, 2002b, 2006; Scheufele et al., 2004; Stroud, 2007). In order to examine the effect of the independent variables on the dependent variables of the analyses of the study without confounding with others', political interests, partisanship and ideology are entered as controls.

Political Interest: Political Interest was included in the analyses as control. It was created from the item asking how interested they were in politics on a four-point scale (1 = very interested; 2 = somewhat interested; 3 = not very interested; 4 = not at all interested). About twelve percent of the respondents answered that they were not at all interested, 20.5% not very interested, 48.4% somewhat interested and 19.4% very interested.

Partisanship: Partisanship was included as a control. The variable was created from the item asking if the respondents thought of themselves as a Republican, Democrat, Independent or something else (1 = Republican; 2 = Democrat; 3 = Independent; 4 = Other; 5 = No preference). The responses were then dummy-coded as 2 (partisan) for Republican and Democrat and 1 (nonpartisan) for other answers. Seventy three percent of the sample were partisan.

Ideology: Ideology was included as a control. It was created from the item assessing where on a one-to-eleven point scale respondents would place themselves with six in the middle (1 = liberal through 11 = conservative). Twenty seven percent of the respondents placed themselves on 6, 13.4% on 8, 10.1% on 9, 9.9% on 7, 8.6% on 5 and 8.2% on 4.

Political Tolerance

The level of political tolerance was measured by first identifying two least-liked groups by the respondent. The survey included a battery of questions to reveal the two groups. This method utilizes Sullivan, Piereson & Marcus's (1979) content-controlled technique whereby respondents specify groups they like the least, as opposed to Stouffer's (1955) measurement by using a set of target groups generally perceived unpopular by the public, for instance, communists.⁶ The method has been employed successfully in previous research (e.g., Mutz, 2002b; 2006). The battery of questions included an item assessing the extent to which the respondents like or dislike thirteen political groups, i.e., conservatives, the U.S. Communist Party, Christian Fundamentalists, the Ku Klux Klan, atheists, American Nazis, anti-abortionists, the Society for a New America, Liberals, abortionists, military government supporters, gay rights activists, and radical Muslims (1 = dislike a great deal through 11 = like a great deal). Next, it asked respondents if any other groups they dislike are not mentioned in the previous question. On the same scale, it then asked the respondent his or her liking or disliking of White, Black, Hispanic, Asian and Arab Americans. Questions followed to identify the two most disliked groups by the respondent out of all the groups that had been mentioned. In order to assess levels of tolerance for the two least-liked groups identified, a second set of questions were asked on a five-point scale (1 = strongly agree through 5 = strongly disagree) about the extent to which respondent agrees with statements about allowing or banning the groups: a) freedom of speech; b) right to run for public office; and c) right to hold public rallies and demonstrations. The items

⁶ In their study, Sullivan, Piereson & Marcus (1979) disagreed with the measurement method of political tolerance employed by the previous research where respondents were asked about groups preselected by investigators. They proposed that respondents themselves select a political group to which they were strongly opposed. Using this approach, they found little change in the levels of tolerance in the United States between the 1950s and the 1970s, a result contradicting much of the previous research.

were recoded so that higher values denoted higher levels of tolerance. The mean was then computed for the values for the items for the two groups ($\alpha = 0.89$). Ten percent of the respondents had the average of one, 29.7% higher than one and less than or equal to two, 29.2% higher than two and less than or equal to three, and 28.3% higher than three and less than or equal to four, and 2.5% above four.

Political Participation

Political participation is an additive index that was measured based on two items asking respondents: 1) if they had voted in the 2004 presidential election; and, in the past twelve months 2) if they had engaged in fourteen possible types of political activities (1 = yes; 2 = no). The variable was recoded so that positive responses (yes) were counted as 1 and negative (no) as 0. The variable was calculated by simply summing up the number of activities a respondent answered participated. Therefore, the highest possible score of this variable is fifteen. A higher number indicates a higher level of political participation. Apart from voting in the 2004 presidential election, the list of activities included contacting a politician or a local government official, working in a political party or an action group, working for a candidate's campaign, working in any other political organization, displaying a campaign badge/sticker, signing a petition, participating in a lawful demonstration, boycotting certain products, deliberately buying certain products for political reasons, participating in illegal protest activities, visiting websites of political organizations or candidates, forwarding electronic messages with political content, and participating in political activities over the Internet ($\alpha = 0.84$). Eighteen percent of the respondents had not engaged in any political participatory activities. Thirty three percent had participated in one activity, 11.7% two, 8.7% three, 7% four, 5.4% five, 5.4% six, and 11.6% seven activities and above.

Network Attributes

The CID survey integrated the elements of personal network and diversity into its theme of political engagement and social capital. It taps three important social contexts of personal networks, i.e., close friends, neighbors, and coworkers (McClurg, 2006a). Respondents who were in school or retired were asked about their colleagues in school or former workplace in place of coworkers at current workplace. Network size and discussion frequency were included as controls to assess the effect of network heterogeneity.

Network Size: Network size was measured for the each network of close friends and neighbors. Questions were, for the network of close friends, how many close friends respondents had, and for the network of neighbors, how many adults in their neighborhood respondents knew by name if they met on the street. It should be noted that the scales are different for the two items. The size of close friends' network was measured on a six-point scale in a range of the number of people (1 = none; 2 = 1 or 2; 3 = 3 to 5; 4 = 6 to 10; 5 = 11 to 20; 6 more than 20), while neighbors' network size was in terms of percentage (1 = one (0%); 2 = almost one (5%); 3 = a few (10%); 4 = some (25%); 5 = about half (50%); 6 = many (75%); 7 = most (90%); 8 = almost all (95%); 9 = all (100%)). Fourteen percent of the respondents had one to two close friends, 36.1% three to four, 28.2% six to ten. The survey does not have an item for the size of respondents' networks of coworkers.⁷

Discussion Frequency: Discussion frequency was measured for each of the three networks of close friends, neighbors and coworkers. Respondents were asked how often they discussed politics with their close friends, neighbors and coworkers based on a four point-scale

⁷ Any potential issues with the absence of a measure for coworkers' network size are discussed in detail in Chapter 5.

(1 = usually; 2 = sometimes; 3 = rarely; 4 = never). The items were recoded so that higher values indicated more frequent political discussion within each network.

Political Network Heterogeneity in Strong Ties: Strong-tie diversity was captured by political network heterogeneity in strong ties. For strong ties, the present study is interested in diversity in the entire networks of close friends, rather than in the limited network of political discussion partners. The survey asks the following heterogeneity question: *how many of your close friends are different from you in terms of:* 1) *political views*; 2) *religious views*; and 3) *race* (0 = none (0%); 2 = almost none (5%); through 8 = almost all (95%); 9 = all (100%)).⁸⁹ The responses for the three heterogeneity items, i.e., political views, religious views and race, were summed to calculate the mean, which denoted political network heterogeneity in strong ties.

Political Network Heterogeneity in Weak Ties: Weak-tie diversity was assessed by political network heterogeneity in weak ties. As in the case for strong ties, the same question was asked for the network of neighbors (*how many of your neighbors are different from you in terms of:* 1) *political views*; 2) *religious views*; and 3) *race*?) The mean of the three responses was recorded as political network heterogeneity in neighbors. The same question was asked for the network of coworkers and the mean of the three responses was denoted network heterogeneity in coworkers. Once values for network heterogeneity in the networks of neighbors and coworkers were obtained, they were summed to calculate the mean, which was recorded as network heterogeneity in weak ties ($\alpha = 0.7$).

⁸ In addition to the straight forward political heterogeneity item, religious views and race were included in the question with the assumption that interacting with people who have different religious views and who are of a different race is more likely to create religious and race heterogeneity.

⁹ The survey had initially included an education heterogeneity item. But the item was dropped before the political network heterogeneity variable was created because it did not load as strongly as other heterogeneity items. See Howard et al., 2006 for detailed discussion.

Political Network Heterogeneity in Overall Network: Finally, the overall network heterogeneity was computed by calculating the mean of network heterogeneity in strong ties (network of close friends) and in weak ties (networks of neighbors and coworkers) ($\alpha = 0.78$).

It should be noted that the measure of heterogeneity in this study relies on respondents' self-reports rather than direct answers from their friends, neighbors and coworkers, which may raise concerns about its reliability. However, previous studies have shown that perceptual accuracy in respondents' self-report on disagreement is relatively high (Huckfeldt & Sprague, 1995). Furthermore, for the purpose of investigating social influences on respondents, it makes more sense to operationalize difference as respondents perceive and experience it rather than as objective reality on the assumption that different views would have been clearly communicated when they had not (Mutz, 2002a).

PLAN OF ANALYSES

To reiterate, the present study investigates: 1) how the Internet affects political diversity in individuals' social networks of different strengths of relationships; and 2) which type of diversity (strong-tie or weak-tie) fosters political tolerance, and if tolerant people are different from the less tolerant in their participation decisions when exposed to strong-tie diversity and weak-tie diversity. These investigations are performed by OLS regression and hierarchical regression analyses using SPSS 18.

The Internet and Political Diversity

The effect of the Internet on political network heterogeneity was examined by hierarchical and OLS regression analyses. The first analysis examines if Internet news use moderates the effect of selective online interaction on political network heterogeneity. Political network heterogeneity was entered as the dependent variable. Selective online interaction and Internet news use were entered as main effect variables in the second block. In the third block, the interaction term between selective online interaction and Internet news use was entered. The two component variables were standardized prior to the formation of the interaction term in order to reduce the potential multicollinearity problem associated with the interaction term and its component variables (Cronbach, 1987; Eveland, 1997; Kwak et al, 2005).¹⁰ The first OLS regression analysis looks at the hypothesized negative relationship between selective online exposure and strong-tie diversity and the potential positive relationship between Internet news use and strong-tie diversity. The second OLS regression analysis examines if weak-tie diversity

¹⁰ A multicollinearity problem may occur when independent variables are highly linearly correlated. Generally, it does not affect much the overall predicting power of the regression model, but it may affect the estimation of individual variables or predictors.

has any relationship with selective online interaction and Internet news use respectively. Variables used for these analyses are presented in Table 3-3.

Table 3-3: Variables for Hypothesis 1 through Hypothesis 5

Hypothesis	Dependent Variable	Independent Variables	
		Main Effect Variables	Interaction Term
H1 H1a	Political network heterogeneity in overall network	Selective online interaction Internet news use	Selective online interaction \times Internet news use
H2 H3	Political network heterogeneity in strong ties	Selective online interaction Internet news use	-
H4 H5	Political network heterogeneity in weak ties	Selective online interaction Internet news use	-

Note: Controls include: 1) demographic: age, gender, education, income, race; 2) news media use: TV news use, general Internet use; 3) heterogeneous online interaction; 4) political attitudes: political interest, partisanship, ideology; 5) network attributes: network size (close friends, neighbors), discussion frequency (close friends, neighbors, coworkers).

Political Tolerance, Political Diversity and Participation

This part investigates the contribution of weak-tie diversity to political tolerance, and the moderating effect of tolerance between political diversity in different strengths of relationships and political participation. First, it performs an OLS regression analysis to examine the relationship between strong-tie and weak-tie diversity and political tolerance. Second, it executes hierarchical regression analyses to look at the moderating effect of political tolerance in the relationship between political participation, and overall political diversity, strong-tie diversity and weak-tie diversity. Control variables are entered in the first block of the regression model.

Political network heterogeneity in overall relationships, strong-tie and weak-tie relationships, and political tolerance are entered as main effect variables in the second block. The interaction term between the standardized main effect variables is entered in the third block. Variables used for the analyses are summarized in Table 3-4.

Table 3-4: Variables for RQ1, and Hypotheses 6 and 7

Hypothesis	Dependent Variable	Controls ^a	Independent Variables	
			Main Effect Variables	Interaction Terms
RQ1	Political tolerance	-	Political network heterogeneity in weak ties Political network heterogeneity in strong ties	-
H6	Political participation	-	Political network heterogeneity in overall network Political tolerance	Political network heterogeneity in overall network × political tolerance
H7	Political participation	Political network heterogeneity in weak ties	Political network heterogeneity in strong ties Political tolerance	Political network heterogeneity in strong ties × political tolerance
	Political participation	Political network heterogeneity in strong ties	Political network heterogeneity in weak ties Political tolerance	Political network heterogeneity in weak ties × political tolerance

^aControls in addition to: 1) demographic: age, gender, education, income, race; 2) news media use: TV news use, general Internet use, Internet news use; 3) political attitudes: political interest, partisanship, ideology; 4) network attributes: network size (close friends, neighbors), discussion frequency (close friends, neighbors, coworkers).

Next chapter reports the findings of the analyses conducted as per the plan presented in this chapter. Chapter 5 discusses the results and their implications, identifies the limitations of this study, and offers suggestions for future research.

Chapter 4: Results

DESCRIPTION OF KEY VARIABLES

The means and standard deviations for each variable are presented in Table 4-1. The variables include socio-demographic factors, news media use, online interaction, political attitudes, network attributes, political tolerance, and political participation.

Table 4-1: Means and Standard Deviations (N = 1,001)

Variables	Range	Mean	SD
Socio-demographic			
Age	18 – 90	44.92	16.60
Gender ^a	0 – 1	0.44	0.50
Education	0 – 6	3.22	1.58
Income	1 – 11	5.30	2.43
Race ^b	0 – 1	0.72	0.45
News Media Use			
Television News Use	1 – 9	3.57	1.87
General Internet Use	1 – 8	4.64	2.95
Internet News Use	1 – 4	1.44	0.76
Online Interaction ^c			
Selective Online Interaction	1 – 4	1.46	0.71
Heterogeneous (non-political) Online Interaction	1 – 4	1.61	0.86
Political Attitudes			
Political Interest	1 – 4	2.76	0.90
Partisanship ^d	1 – 2	1.71	0.44
Ideology ^e	1 – 11	6.49	2.21

Table 4-1 Continued

Network Attributes				
Network Size				
Close Friends ^f	1 – 6	3.63	1.19	
Neighbors ^g	1 – 9	4.11	2	
Discussion Frequency				
Close Friends	1 – 4	2.23	0.90	
Neighbors	1 – 4	1.60	0.78	
Coworkers	1 – 4	1.99	0.86	
Network Heterogeneity				
Overall	1 – 9	3.70	1	
Strong Ties (Close friends)	1 – 9	3.35	1.23	
Neighbors	1 – 7.75	3.28	1.05	
Coworkers	1 – 7	3.45	1.02	
Weak Ties (Neighbors and coworkers)	1 – 7	3.37	.91	
Political Tolerance	1 – 5	2.53	0.98	
Political Participation	0 – 15	2.74	2.86	

^a Female = 0; Male = 1

^b Nonwhite = 0; White = 1

^c The extent to which one feels the Internet has helped interact with people with politically similar characteristics (homogeneous interaction) and demographically dissimilar characteristics (heterogeneous interaction)

^d Non-partisan = 1; Partisan = 2

^e Liberal (1) to conservative (11)

^f The number of close friends

^g The percentage of neighbors in neighborhood respondents know by name

Descriptive information of news media use, online interaction, political participation and network attributes are presented. Table 4-2 shows how often respondents used the Internet and watch television to follow politics and current events. While a little less than ninety percent of the sample spent at least some time watching television everyday for news purpose, about thirty two percent spent at least some of their time online for Internet news. This is a contrast to about

sixty percent of the sample, who used the Internet for general purposes, while about twenty five percent had no Internet access at home or work and about fifteen percent never used the Internet.

Table 4-2: Frequency of News Media Use (%)

Internet News Use		Television News Use	
Almost never or never	68.3	12.1	No time at all
		16.3	Less than ½ hour
Some of the time online	23	28	Between ½ and 1 hour
		20.8	Between 1 and 1 ½ hours
Most of the time online	4.9	7.6	Between 1 ½ and 2 hours
		6.5	Between 2 and 2 ½ hours
Every time online	3.8	3.6	Between 2 ½ and 3 hours
		3.2	Between 3 and 4 hours
		2	More than 4 hours

The sample felt that the Internet had helped them interact with people who share political and religious views and who belong to same groups and organizations less than the level of “only a little.” Table 4-3 shows the frequency of the extent to which these adults felt the Internet had helped them interact with people similar to themselves with respect to political views, religious views and groups and organizations. About 25% of respondents said the Internet had helped them interact with people who share political views to some degree, while 23% said the same for interaction with people who share religious views. Slightly over 30% was the case for interaction with people who belong to same groups and organizations. Overall, this result shows that a large portion of the sample (over 70%) did not find the Internet helpful in interacting with people sharing political and religious views and people who belong to same groups and organizations. However, it should be noted that it does not necessarily mean that the Internet is not a useful tool

to engage with politically homogeneous people for most individuals. Over 70% of the sample who did not find the Internet helpful includes about 25% of the sample, who do not have Internet access at home or work. The disparity between Internet news use and general Internet use (about 32% used Internet news while about 60% used the Internet for general purposes) also suggests that it may not necessarily be about the Internet as a communication medium for politically homogeneous interaction but about varying levels of political interest and different Internet usages. Overall, it may be said that the general level of selective online interaction of the sample is rather low. The motivation for the variable selective online interaction was to assess the levels of exchanges of likeminded political messages in the traditional form of discussion as well as more contemporary forms such as blogs, online texting and social network websites. Considering higher Internet penetration and the recent sharp increase in the use of social network websites for obtaining political information (Pew Research Center for the People and the Press, 2008), the level of selective online interaction could be higher now than in the survey year of 2005.

Table 4-3: Selective Online Interaction (%)

	Selective Online Interaction ($\alpha = .79$) (Interaction online with people with similar:)		
	Political Views	Religious Views	Same Groups and Organizations
Not at all	75.2	77	69.5
Only a little	9.5	9.8	11.1
Some	12.5	9.4	13.7
A lot	2.8	3.8	5.7

Tables 4-4, 4-5 and 4-6 present frequencies of network size, discussion frequency and political network heterogeneity in the sample. About 64% of the sample maintained a circle of close friends of three to ten. Approximately 45% knew just a few or some of their neighbors by name. According to the sample, these American adults talked about politics with close friends

the most (74.9%) and more than half (54.8%) never discussed politics with neighbors. On the average, political network heterogeneity was highest among coworkers (3.45) and lowest among neighbors (3.28), a finding that is in support of Mutz's (2006) contention for higher likelihood of occurrence of diverse political discussions in workplace and Mutz & Martin's (2001) concern regarding growing residential balkanization. However, it should be noted that the difference may be small to be conclusive. In this regard, further discussion on higher likelihood of political diversity in workplace and residential balkanization is offered from the analyses of this study in Chapter 5.

Table 4-4: Network Attributes: Network Size (%)

	Network Size								
	None	1 or 2	3 to 5	6 to 10	11 to 20	More than 20			
Close Friends ^a	1.4	13.7	36.2	28.2	10.5	10.1			
Neighbors ^b	None	Almost None	A Few	Some	About Half	Many	Most	Almost All	All
	6.3	14.3	24.7	20.9	11.1	7.7	7.5	4.1	3.5

^a The number of close friends

^b The percentage of neighbors in neighborhood respondents know by name

Table 4-5: Network Attributes: Discussion Frequency (%)

	Discussion Frequency			
	Never	Rarely	Sometimes	Usually
Close Friends	25.1	33.4	34.7	6.9
Neighbors	54.8	29.8	13.8	1.6

Coworkers	33.6	33.4	28.4	4.6
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Table 4-6: Network Attributes: Network Heterogeneity (%)

	Network Heterogeneity ^c								
	None (0%)	Almost None (5%)	A Few (10%)	Some (25%)	About Half (50%)	Many (75%)	Most (90%)	Almost All (95%)	All (100%)
Close Friends	6.2	18.1	32.3	28.8	9.7	3.2	1.1	0.5	0.1
Neighbors	2.6	15.1	44.4	25.6	8.2	2.9	0.9	0.3	0
Coworkers	3.1	8.2	41.8	31.0	11.8	3.1	1.0	0	0
Overall	1.4	8.7	32.6	39.6	13.2	3.4	1.0	0	0.1

^c The percentage of people in respective networks of close friends, neighbors and coworkers who are different from oneself in terms of political views, religious views and race

Table 4-7 shows the frequency of political activities respondents answered that they participated in. The dominant form of participation appears to be voting as over seventy percent of the sample reported that they had participated in the 2004 presidential election. Signing a petition (34.3%), deliberate purchase of certain products for a cause (23.3%), displaying a badge/sticker (22.4%), contacting politicians (20.9%) and donating money (20.2%) are not uncommon. Some socially-based (Huckfeldt, 1979) and confrontational activities (Mutz, 2002a, 2006) such as working in a political party or action group (8%), taking part in a lawful (4.8%) and illegal (1.3%) demonstration activities seem to be relatively less prevalent forms of political engagement. As many as seventeen percent of the respondents participated through the Internet by visiting websites of political organizations and candidates.

Table 4-7: Political Participation

Activities	% Participated
Voted in the 2004 presidential election	71.9
Contacted a politician or a local government official	20.9
Worked in a political party or action group	8.0
Worked for the campaign of a candidate for office	8.2
Worked in another political organization or association	4.8
Worn or displayed a campaign badge/sticker	22.5
Signed a petition	34.3
Taken part in a lawful public demonstration	4.8
Boycotted certain products	18.4
Deliberately bought certain products for political, ethical or environmental reasons	23.5
Donated money to a political organization or group	20.3
Participated in illegal protest activities	1.3
Visited websites of political organizations and candidates	17.1
Forwarded electronic messages with political content	13.6
Participated in political activities over the Internet	7.6

In order to identify general characteristics of the more tolerant in the sample, correlations between political tolerance and demographic and political attitudinal variables are presented in Table 4-8. As shown in the second column of the table, political tolerance is significantly correlated with education, income and race. As Mutz (2002b, 2006) suggested, political tolerance is significantly correlated with political network heterogeneity. It is also indicated in the table that the more tolerant could be more interested in politics, less partisan and more participatory.

Table 4-8: Correlations Matrix of Political Tolerance

	Political Tolerance	Age	Gender	Education	Income	Race	Political Network Heterogeneity in Strong Ties	Political Network Heterogeneity in Weak Ties	Political Network Heterogeneity Overall	Political Interest	Partisanship	Ideology	Political Participation
Political Tolerance	1												
Age	-.023	1											
Gender ^a	.060	-.005	1										
Education	.286**	-.072*	-.038	1									
Income	.115**	-.034	.098**	.393**	1								
Race ^b	.058	.197**	.020	.086**	.176**	1							
Political Network Heterogeneity in Strong Ties	.093**	-.129**	.106**	.158**	.078*	-.118**	1						
Political Network Heterogeneity in Weak Ties	.154**	-.184**	.077*	.125**	.058	-.270**	.593**	1					
Political Network Heterogeneity Overall	.150**	-.141**	.080*	.161**	.095**	-.190**	.839**	.915**	1				
Political Interest	.208**	.087**	.123**	.222**	.166**	.076*	.046	.070*	.085**	1			
Partisanship	-.091**	.088**	-.053	.017	.035	-.030	-.102**	-.087**	-.077*	.083**	1		
Ideology	-.060	.082**	.052	-.099**	.040	.087**	-.063*	.000	.007	.045	.069*	1	
Political Participation	.233**	.017	.049	.372**	.208**	.106**	.082**	.091**	.108**	.431**	.039	-.066*	1

^a Female = 0; Male = 1

^b Nonwhite = 0; White = 1

** Correlation is significant at the 0.01 level.

* Correlation is significant at the 0.05 level.

THE INTERNET, AND STRONG-TIE AND WEAK-TIE DIVERSITY

The goal of this part of the study was to investigate the extent to which Internet news use may moderate the potential negative influence of selective online interaction on political diversity or political network heterogeneity. It also aimed to examine the effects of Internet news use and selective online interaction on strong-tie diversity and weak-tie diversity. To this end, hierarchical and OLS regression analyses were performed. Socio-demographic, media use, political attitude, network size and discussion frequency variables were entered as controls.

Moderation of Internet News Use

The first column of Table 4-9 presents the results of the hierarchical regression analysis predicting overall political diversity measured by political network heterogeneity in overall network. The moderation model shows results that are consistent with the hypotheses. Selective online interaction, which captured selective interaction with people sharing political and religious views and with people who belong to same groups and organizations, was significantly and negatively related to political diversity in overall network ($\beta = -.118, p \leq .05$). Therefore, Hypothesis 1 is supported. As expected, we may say that selective exposure on the Internet is likely to negatively affect political diversity in individuals' overall social networks.

The interaction term between selective online interaction and Internet news use is significantly related to political network heterogeneity in overall network ($\beta = .081, p \leq .05$). Therefore, Hypothesis 1a is supported. There was no significant direct relationship between Internet news use and political network heterogeneity. Selective online interaction, which had a negative coefficient ($\beta = -.118, p \leq .05$), was positively related to political network heterogeneity when it interacted with Internet news use. The positive relation suggests that Internet news use

reduces the negative relationship between selective online interaction and political network heterogeneity. This moderation effect of Internet news use is more effectively illustrated in Figure 4-1.

Table 4-9: Regression Models Predicting Political Diversity

Variables	Overall Diversity (Hierarchical)	Strong-tie Diversity (OLS)	Weak-tie Diversity (OLS)
<u>Block 1: Control Variables</u>			
Demographics			
Age	-.057 [#]	-.041	-.029
Gender ^a	.074*	.068**	.009
Education	.094**	.091**	-.001
Income	.031	-.004	.016
Race ^b	-.210***	.032	-.203***
News Media Use			
General Internet use	.046	-.007	.026
Television news use	.044	.041	-.004
Heterogeneous (non-political) online interaction	.157***	.138***	.042
Political Attitudes			
Political interest	.012	-.031	.032
Partisanship	-.073*	-.027	-.043 [#]
Ideology (conservative)	.054 [#]	-.060*	.075**
Network Attributes: Network Size			
Close friends	.112***	.086***	.012
Neighbors	-.001	.089***	-.097***
Network Attributes: Discussion frequency			
Close friends	.005	.016	-.005
Neighbors	-.029	.033	-.022
Coworkers	.038	-.061*	.055 [#]
Network heterogeneity in strong ties (strong-tie div)			.550***
Network heterogeneity in weak ties (weak-tie div)		.575***	
R ²	.142		
<u>Block 2: Main Effect Variables</u>			
Selective online interaction	-.118*	-.176***	.087*
Internet news use	-.037	.072*	-.047
R ²	.147	.407	.433
<u>Block 3: Interaction Term</u>			
Selective online interaction × Internet news use	.081*		
R ²	.151		

Note: Entries are standardized coefficients. N = 1,001

[#] $p \leq .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

^a Female = 0; Male = 1

^b Nonwhite = 0; White = 1

Figure 4-1 shows estimated marginal means of political network heterogeneity for four subgroups of the sample: 1) low selective online interaction and low Internet news use; 2) low selective online interaction and high Internet news use; 3) high selective online interaction and low Internet news use; and 4) high selective online interaction and high Internet news use. For the lower Internet news use group, the estimated marginal means dropped sharply as the level of selective online interaction increases. In contrast, for the higher Internet news use group, the slope of the line significantly decreased, indicating that the negative relationship between selective online interaction and political network heterogeneity is reduced for the higher Internet news use group. Therefore, Figure 4-1 confirms that the relationship between selective online interaction and political network heterogeneity is moderated by Internet news use. Therefore, we may say that Internet news use can indirectly contribute to individuals' political network heterogeneity in overall network by moderating the negative effect of selective exposure online.

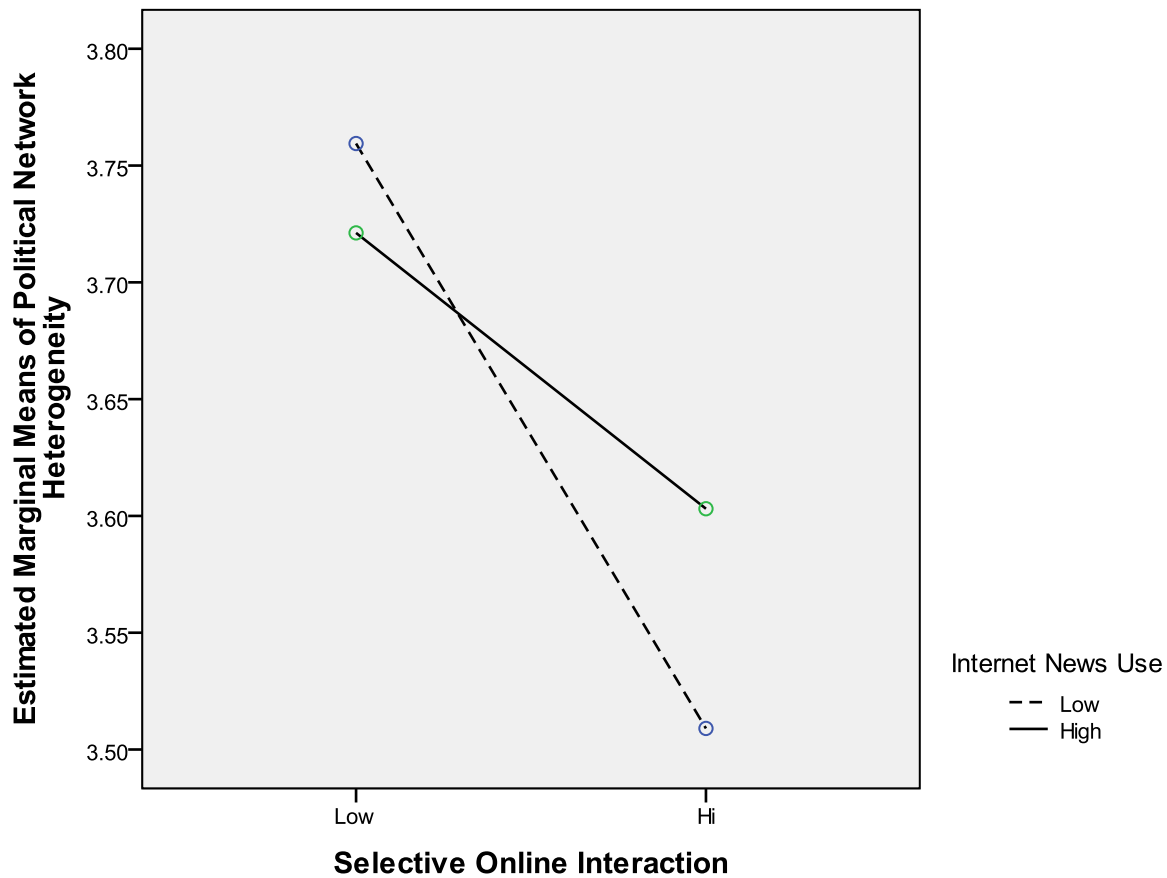


Figure 4-1: Estimated Marginal Means of Political Network Heterogeneity for Higher and Lower Levels of Selective online interaction and Internet News Use

The demographic indicators of younger age ($\beta = -.057$, $p \leq .10$), male ($\beta = .074$, $p \leq .05$) and higher education ($\beta = .094$, $p \leq .01$) were also significantly related to higher political network heterogeneity. Interestingly, race ($\beta = -.210$, $p \leq .001$) was strongly and negatively related, suggesting that nonwhite people tend to have higher political network heterogeneity. In contrast to selective online interaction, which was negatively related, the non-political heterogeneous online interaction was strongly and positively related to political network

heterogeneity ($\beta = .157, p \leq .001$), indicating the possibility that homogeneity and heterogeneity online may translate to offline social networks, and potentially vice versa. Though small, the negative relationship of partisanship ($\beta = -.073, p \leq .05$) suggests that partisan people are more likely to have lower political diversity in their social networks. We may say that partisanship is likely to provide fewer chances for exposure to political difference in social networks. Interestingly, more conservative ideology indicated higher political network heterogeneity at a marginal significance level. Network attributes were not found to be significant predictors of political network heterogeneity except for the size of close friends' network ($\beta = .112, p \leq .001$).

Strong-tie Diversity and Weak-tie Diversity

The second and third columns of Table 4-9 present the results of OLS regression analyses predicting strong-tie and weak-tie diversity. Selective online interaction was significantly negatively related to strong-tie diversity measured by political network heterogeneity in strong ties ($\beta = -.176, p \leq .001$). As expected, Internet news use was significantly positively related to political network heterogeneity in strong ties ($\beta = .072, p \leq .05$). Therefore, Hypotheses 2 and 3 are supported. In contrast, selective online interaction had, quite surprisingly, a significant positive relation with weak-tie diversity captured by political network heterogeneity in weak ties ($\beta = .087, p \leq .05$). As hypothesized, Internet news use was unrelated. Thus, only Hypothesis 5 was supported. Selective online interaction predicted political network heterogeneity in weak ties in the opposite direction from its relation with political network heterogeneity in strong ties. These findings might be understood as that selective exposure to political information on the Internet affects strong-tie diversity and weak-tie diversity in opposite ways. It could also be said that while Internet news use may increase strong-tie diversity, it may not affect weak-tie diversity.

Among demographic attributes, gender ($\beta = .068, p \leq .01$) and education ($\beta = .091, p \leq .01$) predicted political network heterogeneity in strong ties, while race ($\beta = -.203, p \leq .001$) negatively predicted political network heterogeneity in weak ties with high significance and magnitude. These relationships inform us that older and more educated persons are likely to be higher in political network heterogeneity in strong ties or strong-tie diversity, while nonwhite people tended to be higher in political network heterogeneity in weak ties or weak-tie diversity.

Non-political heterogeneous online interaction was strongly related to political network heterogeneity in strong ties ($\beta = .138, p \leq .001$) but had no relationship in weak ties. Interestingly, ideology, the network size of neighbors and discussion frequency with coworkers had significant relationships with political network heterogeneity in both strong ties and weak ties but in opposite directions. While more liberal ideology predicted higher political network heterogeneity in strong ties ($\beta = -.060, p \leq .05$), conservative ideology was related to higher political network heterogeneity in weak ties ($\beta = .075, p \leq .01$). Larger network size of neighbors was indicative of higher network heterogeneity in strong ties ($\beta = .089, p \leq .001$), but lower in weak-ties ($\beta = -.097, p \leq .001$). More frequent discussion with coworkers indicated lower network heterogeneity in strong ties ($\beta = -.061, p \leq .05$), but higher diversity in weak ties though at the marginal significance level ($\beta = .055, p \leq .10$).

The overall predictive power of the models was quite good with both models explaining over 40% of the variance ($R^2 = .407$ for network heterogeneity in strong ties; $R^2 = .433$ for network heterogeneity in weak ties). It is a significant improvement from the model predicting overall political diversity ($R^2 = .151$). In the respective models, political network heterogeneity in weak ties ($\beta = .575, p \leq .001$) and in strong ties ($\beta = .550, p \leq .001$) were the strongest predictors for each other, indicating a high association between the two variables. Despite the

significant association between the two, the results indicate that the predictors of strong-tie diversity and weak-tie diversity explain them in contrasting ways. It suggests that the sources of strong-tie diversity and weak-tie diversity might be different.

POLITICAL DIVERSITY, TOLERANCE AND PARTICIPATION

The goals for this part of the study were to identify which of the strong-tie diversity and weak-tie diversity contributes more to political tolerance, and to examine whether more tolerant people are different from the less tolerant in their participation decisions when exposed to political difference. This study was also interested in examining the moderating effect of tolerance in different strengths of relationships. To this end, OLS and hierarchical regression analyses were performed.

Political Tolerance, and Strong-tie and Weak-tie Diversity

The first column of Table 4-10 presents the OLS regression model predicting political tolerance. While political network heterogeneity in weak ties or weak-tie diversity had a strong significant relationship with tolerance ($\beta = .150, p \leq .001$), strong-tie diversity had no relation. Therefore, to answer RQ1, we may say that weak-tie diversity contributes more to political diversity.

Not surprisingly, higher education predicted greater tolerance ($\beta = .217, p \leq .001$). While news media use variables were not significant predictors, political attitudes were significantly related to tolerance. As could be expected, political interest was highly related ($\beta = .127, p \leq .001$). More liberal ideology ($\beta = -.050, p \leq .10$) and being nonpartisan ($\beta = -.088, p \leq .01$) indicated higher tolerance.

Table 4-10: Regression Models Predicting Political Tolerance and Political Participation

Variables	Political Tolerance (OLS)	Political Participation Predicted by (Hierarchical)		
		Overall Diversity	Strong-tie Diversity	Weak-tie Diversity
<u>Block 1: Control Variables</u>				
Demographics				
Age	.013	.045	.047	.045
Gender ^a	.046	-.003	-.004	-.003
Education	.217***	.167***	.165***	.167***
Income	-.027	.013	.013	.013
Race ^b	.047	.037	.045	.037
News Media Use				
Internet news use	-.019	.066*	.066*	.066*
General Internet use	.049	.148***	.145***	.148***
Television news use	-.038	.035	.034	.035
Political Attitudes				
Political interest	.127***	.236***	.235***	.236***
Partisanship	-.088**	.008	.011	.009
Ideology	-.050 [#]	-.065*	-.066*	-.065*
Network Attributes: Network size				
Close friends	-.013	.019	.016	.019
Neighbors	.067*	-.009	-.007	-.009
Network Attributes: Discussion frequency				
Close friends	.052	.086*	.086*	.086*
Neighbors	-.030	.054 [#]	.054 [#]	.054 [#]
Coworkers	.043	.092**	.091**	.092**
Network heterogeneity in strong ties	-.050			.002
Network heterogeneity in weak ties	.150***		.026	
R ²	.144	.330	.330	.330
<u>Block 2: Main Effect Variables</u>				
Network heterogeneity in overall network		.010		
Network heterogeneity in strong ties			-.015	
Network heterogeneity in weak ties				.027
Political tolerance		.064*	.063*	.063*
R ²		.333	.334	.334
<u>Block 3: Interaction Terms</u>				
Network heterogeneity in overall network × political tolerance		-.056*		
Network heterogeneity in strong ties × political tolerance			-.048 [#]	
Network heterogeneity in weak ties × political tolerance				-.052*
R ²		.337	.336	.336

Note: Entries are standardized coefficients. N = 1,001

$p \leq .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

^a Female = 0; Male = 1

^b Nonwhite = 0; White = 1

Moderation of Political Tolerance

The second column in Table 4-10 shows standardized Beta coefficients predicting political participation for overall political diversity measured by political network heterogeneity in all ties. The interaction term between political network heterogeneity in overall network and political tolerance is negatively related to political participation ($\beta = -.056$, $p \leq .05$). Therefore, Hypothesis 7 is supported. With this finding, we may say that more tolerant people are different from the less tolerant in their participation decisions when exposed to political difference in their social networks. The negative moderating effect indicates that tolerant people are more likely to avoid taking part in political activities than the less tolerant when exposed to political difference in their social networks. In order to present the moderating effect of political tolerance visually, the estimated marginal means of political participation were graphed for four subgroups: 1) low political network heterogeneity and low political tolerance; 2) low political network heterogeneity and high political tolerance; 3) high political network heterogeneity and low political tolerance; and 4) high political network heterogeneity and high political tolerance. Figure 4-2 shows that, for the lower tolerance group, the marginal means of political participation increases as the level of political network heterogeneity increases, suggesting that, for those with lower levels of tolerance, it is likely that the more exposed to political difference, the higher the level of political participation. In contrast, for the higher political tolerance group, the estimated marginal means of political participation drops sharply as the level of political network heterogeneity increases. The drop in the participation level shows that people with

higher levels of tolerance are less likely to participate when exposed to political difference through their social relationships. With this finding, we may say that exposure to political difference encountered in social relationships is likely to be demobilizing for more tolerant people, and at the same can be mobilizing for the less tolerant.

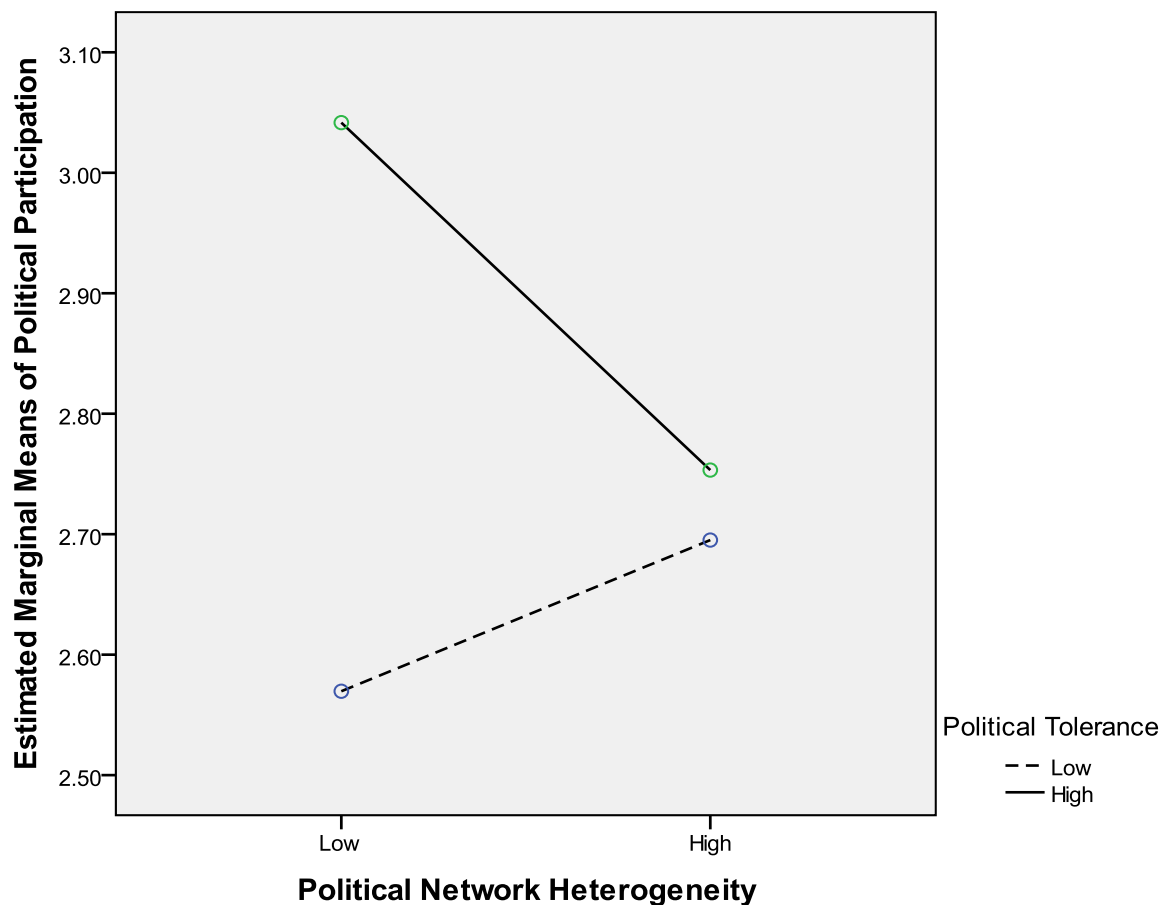


Figure 4-2: Estimated Marginal Means of Political Participation for Higher and Lower Levels of Political Network Heterogeneity and Political Tolerance

Not surprisingly, political tolerance was a significant predictor of political participation on its own ($\beta = .064, p \leq .05$). Also significant in the model were education ($\beta = .167, p \leq .001$),

Internet news use ($\beta = .066, p \leq .05$) and, interestingly, general Internet use with higher magnitude and significance ($\beta = .148, p \leq .001$) than Internet news. In addition to the significant political interest ($\beta = .236, p \leq .001$), more liberal ideology ($\beta = -.065, p \leq .05$) predicted higher participation. Among network attributes, network size was not significant predictors. However, discussion frequencies were significant: more frequent political discussion among close friends ($\beta = .086, p \leq .05$), neighbors ($\beta = .054, p \leq .10$) and coworkers ($\beta = .092, p \leq .01$) indicated higher likelihood of participation.

It was also hypothesized that the moderating effect of political tolerance would be smaller for strong-tie diversity because more intimate interpersonal relationship would reduce the cognitive complexity tolerant individuals are likely to experience. The third and fourth columns of Table 4-10 present political participation predicted by political network heterogeneity in strongly ties and weak ties respectively. The standardized coefficient of the interaction term between political tolerance and political network heterogeneity in weak ties was significant and negative ($\beta = -.052, p \leq .05$). The interaction term between political tolerance and political network heterogeneity in strong ties was only insignificantly smaller than the same in weak ties at a marginal significance level ($\beta = -.048, p \leq .10$). Though different, the strengths of coefficient for the two diversities did not vary much. Also in comparison with network heterogeneity in overall network ($\beta = -.056, p \leq .05$), no significant difference in strength of coefficient was detected. Therefore, no strong support for Hypothesis 8 was found. The results indicate that, however, we could be more certain about the moderating effect of political tolerance for weak-tie diversity than for strong-tie diversity.

No significant variance between the predictors in strong-tie model and the predictors in weak-tie model was found. Education, Internet news use, general Internet use, political interest,

ideology, and discussion frequencies were significant predictors of participation consistently across the two models. The predicting value of the model was also consistent across overall, strong-tie and weak-tie models with the moderate power of explaining about thirty four percent of the variance ($R^2 = .337$ for overall diversity; and $R^2 = .336$ for strong-tie and weak-tie diversity).

In sum, we found that selective interaction with people with similar political inclinations was negatively related to political network heterogeneity. Nevertheless, Internet news use moderated the negative relationship and indirectly contributed to individuals' overall political diversity. Strong-tie diversity (diversity in the network of close friends) was likely to be discouraged by selective online interaction and encouraged by Internet news use. In contrast, weak-tie diversity (diversity in the networks of neighbors and coworkers) could be encouraged by selective online interaction, but was not affected by Internet news use. Weak-tie diversity was found to be more likely than strong-tie diversity to contribute to political tolerance. We also found that more tolerant individuals were likely to be discouraged for participating in political activities when exposed to political difference through their social relationships. In contrast, the less tolerant could be encouraged to participate as they encounter political difference. More intimate interpersonal relationships did not seem to make much difference in the extent to which tolerant individuals were discouraged in political participation when exposed to political diversity.

The next chapter discusses the findings and their implications in light of existing research. It also identifies limitations of the current study and provides suggestions for future research.

Chapter 5: Discussion

The purpose of this study was: 1) to understand the ways in which the Internet contributes to overall political diversity despite the tendency of selective exposure, as well as the extent to which the Internet effects may differ for political diversity in strong and weak ties; 2) to identify which of strong-tie diversity and weak-tie diversity contributes more to political tolerance; and 3) to investigate the extent to which exposure to political difference in social networks can be demobilizing or mobilizing for political participation depending on the level of political tolerance. In order to examine the contribution of the Internet to overall political diversity, the current study examined how Internet news use might reduce the potential negative influence of selective online interaction on overall political diversity. To investigate differing Internet effects, this study examined the respective influence of selective online interaction and Internet news use on strong-tie diversity and weak-tie diversity. To identify the better contributor to tolerance, political diversity in strong ties (as with close friends) as well as in weak ties (with neighbors and coworkers) were compared. To assess the consequence of exposure to political difference for political participation for tolerant and less tolerant people, the present study examined how varying information processing strategies of the tolerant and the less tolerant may lead them to making different participation decisions by testing moderation effect of tolerance. In addition, the moderation effects in strong ties and weak ties were compared to examine if close interpersonal relationships helps reduce the potential disabling consequence of tolerance for participation in politically diverse conditions. This chapter discusses the findings in relation to previous research. It also addresses implications for existing research and society, and limitations of the present study. Suggestions for future research are offered.

DISCUSSION OF FINDINGS

The Internet, and Strong-tie Diversity and Weak-tie Diversity

As previous research cautioned (e.g., Sunstein, 2007), selective exposure to political information on the Internet exerts a negative influence on the overall level of individuals' political diversity. However, selective exposure is not the only way through which people consume political information. Internet news use provides chances for individuals to expose themselves to non-likeminded information. The broad exposure to diverse news offered by the Internet reduces the negative influence of selective online interaction and indirectly contributes to overall political diversity. Although the coefficient in this study is small (.08), considering that online interaction can be not only selective but also heterogeneous, which would add more diverse online experiences in the model, the result is meaningful. The positive role of Internet news use in facilitating increased political heterogeneity is consistent with many of previous studies (e.g., Benkler, 2006; Brundidge, 2010; Garrett, 2009). The finding suggests that Sunstein's (2007) concern over fragmentation and polarization of society as a consequence of higher selectivity on the Internet is exaggerated.

When examined in the context of different social settings or social circles, however, selective exposure and Internet news use did not have the same influence on individuals' political diversity. On one hand, they maintained the usual negative and positive effects respectively for individuals who had networks of close friends who were themselves diverse. On the other hand, selective exposure seemed to increase weak-tie diversity in environments of weak relationships, while Internet news use had no influence. As discussed earlier, relationships with weak-tie people such as neighbors and coworkers tend to be more formal, functional, and structurally imposed. Therefore, individuals often come under pressure to make a meaningful

contribution to discussion. In order to find stronger support for their positions, individuals may engage with people who share political perspectives on the Internet. In fact, it was found that political discussion leads to greater interest and desire to strengthen their positions through subsequent media use (Scheufele et al., 2006). Another explanation for the positive association of selective online interaction with weak-tie diversity could be defensive confidence (Albarracín & Mitchell, 2000). Those who have frequent interaction with politically similar people may become more knowledgeable about politics and confident about their positions with ample chances to strengthen their arguments, and thus, have less difficulty and higher motivations for engaging with non-likeminded neighbors and coworkers. Although selective exposure through homogeneous online interaction may discourage individuals' diversity in their close friends' network, individuals will continue to be exposed to political difference through their weak-tie networks of neighbors and coworkers. This finding also suggests that Sunstein's (2007) prediction is misguided. With respect to Internet news use, we may say that exposure to political difference experienced through use of Internet news exerts a positive influence on political diversity in strong relationships as previous research has predicted (e.g., Benkler, 2006; Sunstein, 2007), but not necessarily in weak associations.

In a similar pattern as in Internet news use, the non-political heterogeneous online interaction was strongly related to strong-tie diversity but unrelated to weak-tie diversity. It is noticed that television news use has no association with either types of diversity, suggesting the possibility of more influential role of the Internet than television in shaping our political diversity in strong ties, if not weak ties.

Strong-tie diversity and weak-tie diversity were significant predictors of each other even after controlling for network size and discussion frequency, meaning that individuals who have

politically diverse close friends are likely to have politically diverse neighbors and coworkers. Nonetheless, some individual characteristics and behaviors predicted the two types of diversity in different ways. Liberal ideology indicated higher strong-tie diversity, while conservative ideology predicted weak-tie diversity. Put differently, conservatives are more likely to surround themselves with close friends who share political perspectives, and engage with politically diverse neighbors or coworkers. Liberals, on the other hand, are more likely to have relatively many non-likeminded close friends, and similarly-minded neighbors and coworkers. This finding may mean that a liberal ideology is related with *modus vivendi* in their core networks, suggesting more conscious, as opposed to inadvertent, acceptance of political disagreement. Drawing from the findings of this study, it can therefore be said that higher strong-tie diversity is likely to be found among more educated liberal males.

Weak-tie diversity is found to be higher among nonwhite, nonpartisan conservatives. In particular, the high coefficient and significance of race draws attention ($\beta = -.203, p \leq .001$). Two points can be made with this finding. First, socio-demographic indicators inform us a great deal about the social position of an individual because they capture social and contextual dimensions. Thus, it seems to make sense to expect more significant associations of socio-demographic attributes to weak-tie diversity, which tends to be more structurally imposed, than to strong-tie diversity, which tends to be dispositional. Strong-tie diversity was significantly related to gender and education, while weak-tie diversity was predicted by only race, suggesting no particularly better prediction of weak-tie diversity by socio-demographic indicators. Therefore, the expectation is not supported by the finding.

Second, studies have found a significant positive relationship between socio-economic status and social diversity (e.g., Lin, 2001). That is, the higher an individual's social position is,

the more likely it is that the individual is surrounded by diverse sets of people. Lin (2001) illustrates it with the help a social triangle. Individuals in higher social positions, which constitute the higher echelons of the social triangle, have a good chance to interact with people with all sets of diverse backgrounds because people like themselves are few, while people unlike themselves are many. Conversely, individuals in the lower echelons of society have a better chance to interact with people like themselves as they are many, and a very slim chance to contact people in the upper echelons because those people are only few. The finding that white individuals, who are more likely to be associated with higher socio-economic status than nonwhite individuals, are significantly related to lower weak-tie diversity does not reflect this previous research. While this interpretation may be less than conclusive considering the non-relationship of weak-tie diversity to education and income, which also are important socio-economic indicators, the strong association between race and weak-tie diversity shows a result that is different from previous social network studies.

The size of neighbors' network was related to strong-tie diversity and weak-tie diversity in opposite directions. A larger neighbors' network was associated with higher diversity among close friends but lower diversity in the weaker associations of neighbors and coworkers. A number of previous studies indicate a positive relationship between network size and political heterogeneity (e.g., Kwak et al., 2005; Eveland & Hively, 2009; Scheufele et al., 2004, 2006). A larger network of neighbors provides more diverse perspectives, which contributes to higher awareness of oppositional rationales, and thus, moving the individual closer to non-likeminded friends (Mutz, 2006). However, the negative relationship between the number of neighbors and weak-tie diversity indicates that the more neighbors one knows, the more likely it is that his or her weak-tie diversity is lower. This finding provides evidence of what some scholars have

termed as “residential balkanization” that is said to be increasingly experienced by individuals in modern society (Mutz, 2006). Although individuals do not necessarily deliberately seek politically homogeneous neighbors, their pursuance of similar life style and neighborhood environment lead to residential communities populated by people with similar political viewpoints (Mutz, 2006). Therefore, it may be said that residential balkanization is a consequence of individual selection that is not guided by political preference; however, it nevertheless leads individuals to political homogeneity. One useful way for a confirmatory analysis of residential balkanization might be to examine levels of political diversity in different randomly-selected neighborhood-based settings and non-neighborhood-based settings.

Network size in close friends’ network was positively associated with strong-tie diversity confirming previous research (e.g., Kwak et al., 2005; Eveland & Hively, 2009; Scheufele et al., 2004, 2006). In contrast, it was not related to weak-tie diversity, supporting this dissertation’s assumption that weak-tie diversity is less likely than strong-tie diversity to be associated with individual selection since network size involves individuals’ different selection processes and strategies. With respect to coworkers’ network size, it should be noted that the current study has no measure of it since it is absent in the CID survey. As noted earlier, network size has been consistently found to be positively related to political diversity (e.g., Kwak et al., 2005; Eveland & Hively, 2009; Scheufele et al., 2004, 2006), and therefore, controlling network size might reduce the relationship between political diversity and its predictors. In order to assess the extent to which the absence of a measure for coworkers’ network size in this study might influence the findings, all of the hierarchical and OLS analyses in this part of the study were performed without control of the other two network sizes, i.e., size of network for close friends and neighbors. The results are reproduced in Appendix B. The results show no significant difference

from the original analyses of the study. Findings for the hypotheses remain primarily similar with only little non-significant difference. The results of this indirect assessment of influence of network size indicate that the absence of a measure for coworkers' network size is not likely to pose a major impediment in this study's analyses. Further discussion on this issue is offered in the Limitations section.

The frequency of political discussion with coworkers was positively related to weak-tie diversity and negatively to strong-tie diversity. This finding is in support of the conclusions of Mutz (2006), and Mutz and Martins (2001) that workplace has higher likelihood of discussing politics with diverse sets of individuals because it is a relatively apolitical environment that is not based on political preference. This conclusion has also been buttressed by other previous studies (e.g., Brundidge, 2010). The finding also supports this study's assumption that weak-tie diversity is more likely than strong-tie diversity to be influenced by the less controllable and less selectable environmental conditions.

Most previous studies measured political network heterogeneity in terms of the frequency of discussion with or the number of politically dissimilar people (e.g., Jang, 2009; Scheufele et al., 2004; 2006). Based on this operationalization of political heterogeneity, higher political diversity does not necessarily mean lower political homogeneity. Individuals who are politically diverse may as well have frequent discussion with politically likeminded people. In comparison, the current study measures political network heterogeneity in terms of the proportion of politically dissimilar people in their entire networks of close friends, neighbors and coworkers. Therefore, higher diversity indicates lower homogeneity, and vice versa. Hence, the negative relation between strong-tie diversity and discussion frequency with coworkers means a positive association between strong-tie homogeneity and discussion frequency with coworkers. The

weak-tie argument (e.g., Burt, 2001; Ganovetter, 1973) suggested that contacts with “bridges” or weak-tie people in structural holes tend to transfer non-redundant, new ideas into closely-tied networks. Based on this argument, more frequent discussion with coworkers, who are more likely to have dissimilar political views (Mutz, 2006; Mutz & Martin, 2001), should bring diverse perspectives and increase heterogeneity in the network of close friends. The result shows the other way around: frequent discussion with coworkers was negatively associated with strong-tie diversity. Rather, it was more likely to encourage homogeneity among close friends.

The significant improvement in the predicting power of the models from little over 15% of the variance in the overall model to over 40% in the two models that separate the types of networks with which one interacts inform us that strong-tie diversity and weak-tie diversity offer a better explanation of political heterogeneity as predicted by individual behaviors and characteristics. The overall political diversity model hints that Internet news use could reduce the negative influence of selective online interaction. However, the two different diversity models suggest that, though individuals who are politically diverse in close relationships are likely to be diverse in their weak associations, the source of the two diversities may differ. The literature has developed the notion that diversity among strong ties can be conditioned by individual selection: we select our friends and have some control over who is and is not in our close social circle. However, as residential balkanization increasingly characterizes where we live and who our neighbors are, and as inadvertent exposure to diversity in workplace develops, weak-tie diversity is more likely to be open to external influences that go beyond individuals’ specific intentions or predilections. Therefore, to say that Internet use leads society to fragmentation or polarization, or higher political diversity or homogeneity is exaggerated. The extent of selective and heterogeneous exposure on the Internet does not dictate political diversity in society. Overall

political diversity is shaped by both individual selection as well as the social conditions each individual is in. Consequently, individuals will continue to be influenced by and influence each other in the levels of their political diversity.

Political Diversity, Tolerance and Participation

The results show that political diversity in the weak interpersonal associations of neighbors and coworkers contributes to political tolerance. The finding is consistent with previous research attributing the source of tolerance to exposure to difference (Gibson, 1999; Mutz, 2006b, 2006; Stouffer, 1955). Strong-tie diversity, however, was not related to tolerance. Mutz (2002b, 2006) found that political discussion across lines of difference contributes to more intimate relationship with politically non-likeminded people, and that more intimate relationship with non-likeminded discussants was related to higher tolerance, suggesting an indirect relationship between political heterogeneity and tolerance through the affective mechanism of intimate associations with cross-cutting discussants. The result of this study does not support her conclusion. This may be understood as that political difference experienced in strong interpersonal relationships may not always translate to a better understanding of and support for least-liked groups since strong ties are less likely to be those target groups of disliking. While weak ties may as well not necessarily be least-liked groups, one may need more exerted effort to understand political difference experienced in weak ties, which in effect can help individuals develop greater tolerance for the disliked groups, with which individuals have no particular relationships.

The strong relationships of political tolerance to political interest and education echo previous research (Dineen, 2001; Mutz, 2002b, 2006). In particular, apart from providing knowledge, education (schooling) has been found as offering the opportunities to be exposed to

difference through interacting with people with diverse sets of backgrounds, attitudes and characteristics (Stouffer, 1955). The finding of the likelihood of higher tolerance for liberal ideology and non-partisanship is also consistent with existing studies (e.g., Dineen, 2001).

It may be that politically tolerant individuals are discouraged from participating in political activities when exposed to difference; such participation might create more dissonance within their own networks. For more tolerant individuals, at the least, political diversity and political participation may not be compatible. In contrast, less tolerant people could feel encouraged for political engagement. This finding provides additional evidence that exposure to political difference does not affect every individual in the same way, supporting earlier findings (e.g., Jang, 2009; McClurg, 2006; Mutz, 2002a, 2006). In particular, it demonstrates that some individual attributes not only alter the magnitude of the influence of exposure to difference but also its direction (Jang, 2009). Therefore, exposure to political difference can be mobilizing and demobilizing at the same time. As we drew from the cognitive mediation and O-S-R-O-R models of communication process, this finding demonstrates how some individuals are different from others in strategies for information processing and cognitive reflection, which in turn, lead them to making different participation decisions.

The comparison of moderation effect of political tolerance in strong-tie diversity and weak-tie diversity indicated that more intimate interpersonal relationship does not significantly reduce the demobilizing effect of exposure to political diversity for tolerant people. If closer interpersonal association help reduce the demobilizing effect for tolerant individuals, the coefficient of the interaction term between strong-tie diversity and tolerance would have been significantly smaller than the coefficient of the interaction term between weak-tie diversity and tolerance.

For the less tolerant, exposure to political difference could be encouraging political participation, as a number of studies have found (e.g., Cappella, Price & Nir, 2002; Gastil & Dillard, 1999; Huckfeldt, Sprague & Johnson, 2002, 2004; Huckfeldt, Mendez & Osborn, 2002; Jang, 2009; Kwak et al, 2005; Leighley, 1990; McLeod, Scheufele & Moy, 1999; Scheufele, Hardy, Brossard, Waismel-Manor & Nisbet, 2006; Scheufele, Nisbet, Brossard & Nisbet, 2004). The contrasting mobilizing influence of political diversity for less tolerant individuals, however, may not be conducive to democratic outcomes. As this dissertation has argued, the increased participation of the less tolerant could be facilitated by partisanship and ideology, which might have been amplified by exposure to difference. Participation motivated by increased partisanship and ideology may result in polarization of the electorate. Indeed, the negative relations of political tolerance to partisanship and ideology (meaning lower levels of tolerance for partisan and conservative individuals) found in the current research support this concern. This calls into question if higher political participation is necessarily beneficial to democracy. Studies on political polarization have long recognized how political polarization gives incentives to political parties by increasing people's support such as donation and voting, and chances of winning at the polls (e.g., Glaeser & Sunstein, 2007). Studies on media bias support this notion by proposing that political parties have incentives to present themselves as extremely different from the other when in actuality they are not (Polborn, 2008). Such partisanship-driven participation can eliminate the middle ground where political agreement is likely to happen, and lead politics to paralysis than to negotiation (Glaeser & Sunstein, 2007). Consequently, it may result in overrepresentation of one or two large groups based on the power structure, thereby threatening the democratic norm of political diversity, a condition feared by Madison in early America.

Therefore, both the mobilizing and demobilizing consequences of political diversity based on levels of political tolerance seem to pose further tasks for democracy.

Political tolerance and political diversity are two fundamental values of democracy. Studies have recognized that they are closely related to each other (e.g., Dineen, 2001; Huckfeldt, Johnson & Sprague, 2002). Political tolerance is also closely attached to political participation (e.g., Dineen, 2001; Stouffer, 1995; Sullivan et al., 1982). The results here confirmed these earlier findings. However, the interaction among the three democratic values, i.e., political diversity, tolerance and participation, does not yield desirable democratic outcomes. At least for tolerant individuals, deliberation and participation may not be compatible.

Political network heterogeneity had no direct relation with participation. Scheufele and his colleagues (2004) had shown that more frequent work-based discussion indirectly contribute to political participation through network heterogeneity. They suggested that work-based discussion networks provide individuals with more non-likeminded perspectives, which in turn leads to higher participation. While the results here show evidence that more frequent discussion at the workplace contributes to weak-tie diversity, the finding that higher diversity in the networks of neighbors and coworkers did not indicate higher participation is inconsistent with their study.

The network attribute of size had no association with political diversity in both strong ties and weak ties. As discussed earlier, in order to address any potential issues with the absence of a measure for coworkers' network size, all of the OLS and hierarchical regression analyses in this part of study were replicated without controlling for the available network size of close friends and neighbors. The results are reproduced in Appendix C. They show no significant difference in the findings for the hypotheses and research question. It may be said that the absence of a

measure of coworkers' network size does not pose any serious issue for the analyses in this part of the study.

The role of media use in facilitating higher participation is supported. A number of studies have recognized news media as increasing political knowledge, political efficacy, political interest and motivation for political discussion and encouraging participation (Cappella, Price & Nir, 2002; Gastil & Dillard, 1999; Huckfeldt, Sprague & Johnson, 2002, 2004; Kwak et al, 2005; McLeod, Scheufele & Moy, 1999; Scheufele et al., 2006). Interestingly, general Internet use had a stronger and more significant effect on participation than Internet news use. It has long been recognized by a great deal of research on the effects of the Internet that informational use of the Internet exerts positive influences, while recreational uses have negative effects (e.g., Kraut et al., 2002). In the current study, general Internet use was operationalized as "personal use of the Internet, the World Wide Web or email," which could include uses with entertainment purposes; consequently it is a less robust measure than one might desire and possibly blends several different types of uses and engagement goals. Internet news use, which is a specifically informational use, had a weaker association with political participation. The stronger coefficient of general Internet use could hint at the growing attention of politicians on the Internet as a direct, effective channel to reach their constituencies bypassing unwanted media framing on news, or it also could hint at the blending of entertainment and political information, and news and perspective, but the finding here are less than conclusive.

In comparison, TV news had no association with political tolerance and political participation despite it being the most important primary source of political information for most people (Pew Research Center for the People and the Press, 2008). It suggests the notion of passive consumption of political information through TV news. In contrast, people's use of

Internet tends to be more active as they deliberately and purposefully seek, search and select certain political information online.

IMPLICATIONS

The present study has several theoretical and methodological implications. First, the current study demonstrated that much of the discussion we have had on the Internet and political diversity in the literature thus far focused on close relationships, and that we might have been missing weaker associations. A great deal of previous research has predicted that selective exposure discourages diversity (e.g., Sunstein, 2007). While this prediction stands for strong-tie diversity, the opposite influence is found to be the case for weak-tie diversity. Selective online interaction on the Internet may actually increase weak-tie diversity. Many of existing studies have argued for the contributing role of online news in increasing political heterogeneity (e.g., Benkler, 2006; Garrett, 2009; McLeod et al., 1999; Scheufele et al., 2004; 2006). The argument is supported for strong-tie diversity, but not for weak-tie diversity. This study found no significant effect of Internet news use on weak-tie diversity. On one hand, the Internet's influence on strong-tie diversity was found to be same as argued by previous research. On the other hand, the influence of the Internet on weak-tie diversity was very different from previous studies' predictions of a negative effect of selective exposure online and a positive effect of Internet news use. Individuals have more room to exercise selectivity in forming and maintaining strong-tie relationships. In comparison, individuals are likely to have fewer choices for weak associations such as neighbors and coworkers because those interpersonal relationships tend to be governed by social structural factors, in addition to individual choices. Therefore, individuals' overall political diversity can be affected by both their own choices and the structure in which they live and work. The findings of existing studies suggest a focus on individuals' diversity as affected by their own choices. The finding here that weak-tie diversity may not be affected by homogeneous or heterogeneous exposure to political information on the Internet in the same way

as strong-tie diversity indicates that there is a gap in existing studies on the Internet and political diversity. Although we may shape our political diversity with our own choices by exposing ourselves to homogeneous or heterogeneous political information on the Internet, our diversity will continue to be affected by our choices guided by motivations that have little to do with political preferences, and by the social circumstances in which we live and work. Further, the extent of our political diversity will be less likely to be fully explained by the extent of our Internet exposure alone as long as we engage ourselves in society.

Second, the examination of individuals' political heterogeneity in two different types of social relationships offers a broader explanation of how political diversity is shaped in individuals' everyday lives as members of society. As the findings have shown, individuals' political diversity is influenced by their own actions of exposing themselves to homogeneous and heterogeneous political information on the Internet. Their diversity is also shaped inadvertently by their behaviors that are initiated by events in their lives that may have little to do with political preferences. Their own behaviors are not the only determinants of the extent of their diversity. It will also be influenced by the social circumstances such as neighborhood and the workplace they live and work, over which they have limited control. This finding mirrors classical sociological theories that assert that social structures exert great influences on individuals' lives (e.g., Durkheim, 1892; Tönnies, 2001(1937)), which has long been supported by later research in network studies (e.g., Blau, 1977; Blum, 1984; Feld, 1984; Verbrugge, 1977). Weak-tie diversity is less likely than strong-tie diversity to be predicted by the individual's action with the Internet. This distance between the consequence of individual choice and the influence of structural constructions on individuals reminds us of the classical sociological affirmation that individuals are increasingly recognized by group affiliations

(Simmel, 1903). The finding of the significant relation between strong-tie diversity and weak-tie diversity adds an additional piece of evidence for individuals' susceptibility to social structure. At the same time, the evidence of the differing characteristics of political diversity in the two different types of relationships, as shown in the opposite relations to quite a number of variables in the models, supports the argument for the different functions of strong ties and weak ties in individuals' political and social lives.

Third, political tolerance is an important ingredient for pluralistic democracy. The finding of this study identifies weak-tie diversity as a more significant source of political tolerance than strong-tie diversity. While weak-tie diversity had a strong significant relation with tolerance, strong-tie diversity had no association at all. This implies that it might not be just political diversity that helps nurture political tolerance, but some mechanism that creates political diversity in the form of social factors that are relatively more likely to be determined by individuals' social positions and the social circumstances in which they live and work. Therefore, it may be said that individuals have a higher chance of increasing tolerance through functionally engaging themselves in their "field" or their social domain, as well as through the processes of "externalizing the internal" and "internalizing the external" in the relationship between agency and structure as they live their lives (Bourdieu, 1977). Through externalizing the internal, individuals define their roles and relationships in the context of their positions in their neighborhood and workplace. Through internalizing the external, individuals internalize social expectations for such positions, for example, by maintaining good yet weak relationships with their neighbors or coworkers.

Fourth, despite political tolerance being one of the sacrosanct values for a healthy democracy, the present study suggests mixed implications of political tolerance for democracy.

On the positive side, higher levels of political tolerance may lead individuals to form and maintain more intimate relationships with people differing in political perspectives, which would then reciprocally further increase political tolerance by helping to deepen one's understanding of diverse sets of political viewpoints (Mutz, 2002b). Political tolerance may also influence people to be politically active. On the negative side, political tolerance is likely to induce cognitive complexity, which motivates attitudinal ambivalence, vacillation and hesitation in individuals' participation decisions when differing political viewpoints are encountered. In effect, tolerant individuals are likely to be discouraged to engage themselves to political activities in politically heterogeneous surroundings. Therefore, the democratic norm of political tolerance may create a tension between deliberation and participation.

Fifth, methodologically, the present research demonstrated that, while individual characteristics and actions may predict another sets of individual actions, they are not enough to predict some individual behaviors that are conditioned by structural constraints in addition to individual choices. As mentioned earlier, studies on political diversity have tended to measure political network heterogeneity in terms of the number of or the frequency of political discussion with dissimilar discussion partners (e.g., Jang, 2009; Scheufele et al., 2002; 2006). Some studies limited the number of discussants to three to five (e.g., Mutz, 2002a, 2006). Consequently, they constrained the discussion network to a limited number of preferred or "primary" discussion partners. These approaches to generate discussion networks tend to reflect individuals' deliberate choices rather than structurally imposed discussion partners. Indeed, individuals' actions with the Internet have successfully predicted political network heterogeneity operationalized in such approaches (e.g., Jang, 2009; Mutz, 2006; Scheufele et al., 2002; 2006). In addition, political network heterogeneity measured in such approaches successfully predicted another individual

behaviors such as political participation. This indicates that political network heterogeneity that taps individual choices can be predicted by and predict individual actions such as selective and heterogeneous Internet use and political participation. In contrast, the current study did not limit network to discussion partners. Broadening the examination to the entire social relationships of close friends, neighbors and coworkers generated the network of individual choices (strong ties), and the network of both choices and those produced by living and working structures (weak ties). While the network of choices echoed many of the arguments documented in previous research, the network of both choices and structural construction revealed different results. While we may be able to predict the consequences of individual actions (e.g., Internet use) manifested in another sets of individual behaviors (e.g., strong-tie diversity), the findings of this study suggest that it could be challenging to explain the consequences displayed within the social structure (e.g., weak-tie diversity) only with the initial individual actions (Internet use).

LIMITATIONS AND FUTURE RESEARCH

Limitations

The current study benefited greatly from the use of the CID data, which provided a representative sample with useful variables under the theme of democracy, diversity and citizenship. However, there were some issues associated with the data. Twenty five percent of the sample had no access to the Internet at home or work. In order to include those respondents, this study coded them as not using Internet news and answering that the Internet did not help them interact with politically homogeneous people. While this might decrease the overall levels of Internet news use and selective online interaction of the sample, one of the purposes of this study was to investigate the extent to which exposure to particular types of information on the Internet affects individuals' political diversity in social networks, rather than to examine how selective they are in Internet use itself. Thus, reflecting no access as non-use and no exposure served the purpose of this study. Apart from this issue, there were some limitations that need to be addressed in detail.

First, in regards to Internet use, there is quite a difference between present and the data year of 2005. As discussed earlier, MySpace was the most popular social networking website in 2005 with now-popular Facebook and Twitter in their early stages. Let alone the difference between the proportion of users and nonusers of social networking websites, it is not just a matter of which website is most popular in the two different points of time. The point that needs to be made rests on the extent to which the social networking online services penetrate into the political arena. For instance, according to a recent poll, 76% of candidates polled had a Facebook account appealing to younger generation, while MySpace had not been significantly tapped by

politicians in the earlier point of time. The context of Internet use in our political lives, therefore, is very different now than the data year of 2005.

Second, capturing politically diverse online interaction on the Internet was a challenge. Selective online interaction was comprised of items on the extent to which individuals felt the Internet has helped interact with people who share political and religious views, and belong to same groups and associations. Heterogeneous (non-political) online interaction included items on the extent to which individuals felt the Internet has helped interact with partners of a different race, age and country, hence non-political. The data did not provide information about the extent of politically heterogeneous interaction with the corresponding items used for selective online interaction, which were political and religious views, and same groups and organizations. While selective online interaction captures political and other attitudinal dimensions, heterogeneous online interaction measures only demographic dimension. Thus, the two variables are asymmetric. It could be envisioned that politically heterogeneous online interaction could have provided useful information for the analyses of the study. Another issue with these variables is that they are indirect estimates, rather than direct observation. Rather than relying on people's perception on the extent to which the Internet has helped interact with politically similar or dissimilar people, directly measuring the characteristics of partners on the Internet could provide more accurate information about exposure to political homogeneity or heterogeneity online.

Third, network size for the three social networks could not be fully controlled. The size of close friends' networks was rendered in the number of close friends, while the size of neighbors' networks was captured as the percentage of neighbors people knew in their neighborhoods. The size of coworkers' networks was not included in the CID survey, and thus not controlled in the analyses. It has been recognized by a number of studies that network size

contributes to political participation directly and indirectly (Eveland & Hively, 2005; Kwak et al., 2005). However, it should be noted that the measure of political network heterogeneity in this study might not be so sensitive to this issue because network heterogeneity was captured in terms of percentage, rather than the number of politically dissimilar people within those networks. In fact, the results of the replication of all of the analyses in this study with no control of close friends' and neighbors' network sizes (reproduced in Appendices B and C) show no significant difference from the original analyses, which controlled the two available network sizes. Nevertheless, the percentage term would not resolve the higher chance of encountering politically dissimilar people in bigger social networks of coworkers.

Fourth, tie strength as in strong-tie diversity and weak-tie diversity was based on the three social networks of close friends, neighbors and coworkers. Close friends' networks were captured as strong ties and the networks of neighbors and coworkers were observed as weak ties. In fact, most studies that examine tie strengths in relation to civic and political engagement capture relationships with family and close friends as strong ties and the rest associations such as coworkers and acquaintance as weak ties (e.g., Gil de Zúñiga & Valenzuela, 2011; Stromer-Galley, 2002). This approach may not be accurate in the case of overlap. Neighbors and coworkers are not necessarily weak relationships. For example, one could have a close friend, who is also a coworker. An alternative is to ask respondents directly the strength or intimacy of their association with certain individuals (e.g., Mutz, 2002b; 2006), but that method is practically limited in the number of relationships.

Future Research

Future research on the Internet could examine further the ways in which individual use of the Internet may influence weak-tie diversity. As the current study demonstrated, weak-tie

diversity is characteristically different from strong-tie diversity, and its relation to the Internet was also different from the association between the Internet and strong-tie diversity. Although Granovetter (1973; 1982) brought our attention to weak-tie relationships with his thesis of strength of weak ties, and much has been built upon it, weak ties are still relatively a less explored territory for studies of Internet effects. In this regard, it would be meaningful to attempt to find the causal relationship between weak-tie diversity and selective exposure on the Internet. It may validate the possibility that exposure to political difference could lead to subsequent media use to strengthen their argument (Scheufele et al., 2004), or explain how selective exposure actually contributes to weak-tie diversity.

It would be also important to understand better the contribution of the Internet to political participation. The current study found general Internet use as a stronger predictor of political participation than Internet news use. Past studies on political participation have tended to focus on news use. A growing number of recent studies are examining such online activities as online political messaging and online political participation in modeling political participation (e.g., Jung, Kim & Gil de Zúñiga, 2011). Future research can focus on the extent to which political messages are exchanged and political activities are conducted in non-political online spaces. Based on the arguments of inadvertent exposure (Brundidge, 2010; Mutz & Martin, 2001) and traversability (Brundidge, 2010), such examination may be able to add to the literature by identifying the extent to which political activities are embedded in our online lives. Possibilities with online political lives seem to be buttressed by the non-relationship of television news use to either political participation or political diversity, which suggests the growing role of the Internet as a source of and a space to exchange political information in contemporary democracy.

In order to investigate further the possibility of the unbalance between political diversity and political participation posed by political tolerance as this study identified, future studies can examine the moderating effect of tolerance with different samples. The present study did not find support for cognitive complexity, which is likely to be experienced by tolerant individuals when exposed to difference, reduced by more intimate interpersonal relationships. Further attempts could be made to identify what factors might reduce the potential ambivalence and cognitive complexity of tolerant individuals. Those attempts will help us address the ways in which democracy is sustained by members of society who deliberate, tolerate and participate. Additionally, it would be very useful to examine any mediation effect among political diversity, tolerance and participation. With the method of structural equation modeling in particular, a mediation analysis will be able to reveal the causal relationship among the three democratic norms. The current study identified that political diversity can discourage or encourage participation when the level of tolerance is higher or lower with a moderation analysis based on the theoretical framework of the models of communication process. A mediation analysis can statistically explain how and why political diversity may discourage or encourage participation (Baron & Kenny, 1986).

CONCLUSIONS

Political diversity is an essential value for a healthy democracy. Based on the findings here, the present study claims that the previous predictions of either detrimental or encouraging effect of the Internet on political diversity are largely about strong-tie diversity, with little attention on weak-tie diversity. Internet use is less likely to exert an influence on weak-tie diversity, and if so, in a way that is different than for strong-tie diversity. Selective exposure on the Internet could encourage, rather than discourage, weak-tie diversity. It is because, in comparison to strong-tie diversity, weak-tie diversity is shaped by not only our own choices based on political dispositions, but also our other choices that have little to do with political preferences as well as the social conditions in which we live and work. Therefore, our overall political diversity will not be dependent upon the extent of exposure to particular types of political information on the Internet alone. It will continue to be shaped by our selections based on political and non-political motivations and social circumstances, over which we have little control. This ensures chances for inadvertent exposure to political difference, an ingredient for creating common understanding and social glue that keeps society together. Though pessimistic in his predictions of Internet effects, Sunstein's yearning for Federalist ideals is supported by the findings here. While we may discuss on the Internet why Romney should be the Republican presidential candidate for 2012 election, we may as well run into a person, who happens to be a coworker, standing on a soapbox on the street advocating a second term for Obama on our way to work. The present study affirms that the both experiences shape our political diversity and that choices based on political preferences do not solely dictate the condition for political diversity.

This dissertation claims that it is not political diversity alone that facilitates increased political tolerance, but with contextual and external factors that require us to work in the

relationship between agency and structure. Ultimately, how we develop political tolerance is not just about how often we expose ourselves to non-likeminded political perspectives, but also about the extent to which we engage ourselves in society through such processes as Giddens' "structuration" and Bourdieu's "internalizing the external" and "externalizing the internal." Through such processes, we have a better chance of increasing our understanding of disliked groups of people, who we have no particular personal relationship with, and yet who we share society with, in the continuum of affecting and being affected by one another.

Finally, the present study claims that the democratic norm of political tolerance is not always conducive to democracy. It can discourage political participation for tolerant people in politically diverse circumstances, and encourage partisan participation by polarizing the electorate. While a polarized electorate gives incentives to political parties by increasing people's support such as donation and voting, it does not necessarily serve the democratic ideal of political diversity because it can undermine the quality of the public sphere, and enforce the power structure dominated by one or two large groups and silence the middle ground, a condition Madison cautioned about. Then, the dilemma rests on the social response to the divergence of political opinions and the entailing tolerance for those heterogeneous opinions. The disabling consequence of political diversity for tolerant individuals, as demonstrated by this study, directs us to attend to how we handle the democratic norms of political diversity, tolerance and participation within our system of politics and democracy.

Appendix A

Questionnaire

Internet News Use

On an average day, how much of this time is spent following politics and current events?

- (1) Every time you are online
- (2) Most of the time
- (3) Some of the time
- (4) Almost never or never

Selective Online Interaction

Please tell how much, if at all, the Internet has helped you do each of the following things?

- a. Become more involved with groups and organizations you already belong to
- b. Interact with people or groups who share your hobbies or interests
- c. Interact with people or groups who share your religious beliefs
- d. Interact with people or groups who share your political views
- e. Interact with people of a different race from yours
- f. Interact with people of different ages or generations
- g. Interact with people from other countries

- (1) A lot
- (2) Some
- (3) Only a little
- (4) Not at all

Political Network Heterogeneity

Of your close friends:

Of the people you interact with in your neighborhood:

Of the people you interact with in your workplace:

How many of them

- a. Are of a different race from
- b. Have different religious views from
- c. Have different political views from yours?

- (1) None (0%)
- (2) Almost None (5%)
- (3) A Few (10%)
- (4) Some (25%)
- (5) About Half (50%)
- (6) Many (75%)
- (7) Most (90%)
- (8) Almost All (95%)
- (9) All (100%)

Political Tolerance

Now I am going to read you a list of some groups that are currently active in social and political life. Here is a card showing a scale from 1 to 11. The number “1” indicates that you dislike the

group very much; the number “11” indicates that you like the group very much. The number “6” means that you neither like nor dislike the group. The numbers 2 to 5 reflect varying amounts of dislike; and the numbers 7 to 10 reflect varying amounts of like toward the group. The first group I’d like to ask you about is . . . [READ GROUP]. If you have an opinion about [GROUP] please indicate which figure most closely describes your attitude toward them. If you have no opinion, please be sure to tell me. What is your opinion of [THE GROUP]?

- a. Conservatives
- b. The U.S. Communist Party
- c. Christian Fundamentalists
- d. The Ku Klux Klan
- e. What about people who are against all churches and religion
- f. American Nazis
- g. How would you rate those who would prohibit all abortions
- h. The Society for a New America
- i. Liberals
- j. Those who would allow all abortions
- k. How would you rate those who advocate doing away with elections and letting the military run the country
- l. Gay Rights Activists
- m. Radical Muslims

Is there any other group not mentioned in the previous question that you dislike enough to rate at a “3” or a “2” or a “1” on this scale?

- (1) Yes
- (2) No

What is the name of the group?

Now let's consider the (GROUP X) a bit more. To what extent do you agree strongly, agree, are uncertain, disagree, or disagree strongly with the following statements about?

- a. Members of the (GROUP X) should be allowed to make a speech in our community
 - b. Members of the (GROUP X) should be banned from running for public office
 - c. Members of the (GROUP X) should be allowed to hold public rallies and demonstrations in our community
- (1) Agree
 - (2) Strongly agree
 - (3) Uncertain
 - (4) Disagree
 - (5) Strongly disagree

Political Participation

During the last 12 months, have you done any of the following?

- a. Contacted a politician or a local government official
- b. Worked in a political party or action group
- c. Worked for the campaign of a candidate for office
- d. Worked in another political organization or association

- e. Worn or displayed a campaign badge/sticker
- f. Signed a petition
- g. Taken part in a lawful public demonstration
- h. Boycotted certain products
- i. Deliberately bought certain products for political, ethical or environmental reasons
- j. Donated money to a political organization or group
- k. Participated in illegal protest activities
- l. Visited websites of political organizations or candidates
- m. Forwarded electronic messages with political content
- n. Participated in political activities over the internet

(1) Yes

(2) No

Appendix B

Regression Models Predicting Political Diversity Without Network Size Control

Variables	Overall Diversity (Hierarchical)	Strong-tie Diversity (OLS)	Weak-tie Diversity (OLS)
<u>Block 1: Control Variables</u>			
Demographics			
Age	-.041	-.016	-.041
Gender ^a	.069*	.060*	.014
Education	.086*	.083**	.000
Income	.044	.008	.016
Race ^b	-.203***	.047 [#]	-.212***
News Media Use			
General Internet use	.048	-.008	.031
Television news use	.038	.040	-.008
Heterogeneous (non-political) online interaction	.161***	.137***	.045
Political Attitudes			
Political interest	.020	-.029	.037
Partisanship	-.081*	-.038	-.040
Ideology (conservative)	.058 [#]	-.052*	.069**
Network Attributes: Discussion frequency			
Close friends	.009	.010	.005
Neighbors	-.028	.057*	-.045
Coworkers	.040	-.049	.043
Network heterogeneity in strong ties (strong-tie div)			.545***
Network heterogeneity in weak ties (weak-tie div)		.577***	
R ²	.130		
<u>Block 2: Main Effect Variables</u>			
Selective online interaction	-.111*	-.174***	.090*
Internet news use	-.031	.068*	-.048
R ²	.135	.392	.425
<u>Block 3: Interaction Term</u>			
Selective online interaction × Internet news use	.075 [#]		
R ²	.138		

Note: Entries are standardized coefficients. N = 1,001

[#] p ≤ .10, * p ≤ .05, ** p ≤ .01, *** p ≤ .001

^a Female = 0; Male = 1

^b Nonwhite = 0; White = 1

Appendix C

Political Tolerance and Political Participation Without Network Size Control

Variables	Political Tolerance (OLS)	Political Participation Predicted by (Hierarchical)		
		Overall Diversity	Strong-tie Diversity	Weak-tie Diversity
<u>Block 1: Control Variables</u>				
Demographics				
Age	.021	.046	.049 [#]	.047
Gender ^a	.043	-.003	-.005	-.003
Education	.216***	.166***	.164***	.166***
Income	-.027	.015	.015	.015
Race ^b	.051	.037	.045	.038
News Media Use				
Internet news use	-.019	.066*	.065*	.065*
General Internet use	.045	.150***	.146***	.150***
Television news use	-.035	.034	.033	.034
Political Attitudes				
Political interest	.123***	.238***	.237***	.238***
Partisanship	-.090**	.007	.010	.008
Ideology	-.046	-.065*	-.066*	-.065*
Network Attributes: Discussion frequency				
Close friends	.044	.088**	.088**	.088**
Neighbors	-.015	.052 [#]	.052 [#]	.052 [#]
Coworkers	.051	.091**	.090**	.091**
Network heterogeneity in strong ties	-.042			.004
Network heterogeneity in weak ties	.140***		.028	
R ²	.141	.329	.330	.329
<u>Block 2: Main Effect Variables</u>				
Network heterogeneity in overall network		.013		.
Network heterogeneity in strong ties			-.014	
Network heterogeneity in weak ties				.029
Political tolerance		.064*	.062*	.062*
R ²		.333	.333	.333
<u>Block 3: Interaction Terms</u>				
Network heterogeneity in all network × political tolerance		-.055*		
Network heterogeneity in strong ties × political tolerance			-.047 [#]	
Network heterogeneity in weak ties × political tolerance				-.050 [#]
R ²		.336	.336	.336

Note: Entries are standardized coefficients. N = 1,001

$p \leq .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

^a Female = 0; Male = 1

^b Nonwhite = 0; White = 1

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